

AMERICAN STATE PAPERS.

MILITARY AFFAIRS.

22D CONGRESS.]

No. 519

[1ST SESSION.]

ANNUAL STATEMENT OF THE EXPENDITURES AT, AND ARMS MADE IN, THE NATIONAL ARMORIES IN 1831

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES MARCH 15, 1832.

DEPARTMENT OF WAR, *March 10, 1832.*

SIR: In pursuance of an act of Congress of the 2d of April, 1794, concerning arsenals and armories, I have the honor to transmit herewith a statement of the expenditures of the United States armories, and of the arms, &c., manufactured therein during the year 1831.

I have the honor to be, very respectfully, your obedient servant,

LEWIS CASS.

HON. ANDREW STEVENSON, *Speaker of the House of Representatives.*

Statement of the expenditures made at the national armories, and of the arms, &c., manufactured therein, during the year 1831.

	Expenditures.					Arms, &c., manufactured.							Carbines repaired	
	For lands, buildings, canals, repairs, and other permanent improvements.	For the manufacture of arms.	For the manufacture of Hall's rifles.	For miscellaneous purposes, not embraced in the foregoing.	Total amount expended.	Muskets.	Cadet muskets.	Serew-drivers.	Wipers.	Ball screws.	Spring vices.	Flint caps.		Arm chests.
Springfield, Mass.....	\$9,244 86	\$183,336 51	.....	\$1,737 34	\$194,318 61	16,200	300	16,540	16,538	1,620	1,655	16,540	1,183	31
Harper's Ferry, Va....	18,237 33	129,919 67	\$38,745 23	608 85	187,511 13	11,160	.....	.....	.....	.....	.....	7,454	274	....
	27,482 19	313,256 18	38,745 23	2,346 19	381,829 74	27,360	300	16,540	16,538	1,620	1,655	23,994	1,457	31

Statement in detail of the operations of the armory at Springfield, Massachusetts.

ARMORY, DR.

To value of component parts of arms on hand 1st January, 1831.....	\$99,919 11
To value of unwrought materials on hand 1st January, 1831	50,982 86
To this amount expended during the year, comprising all the payments made by the paymaster	\$194,318 61
From which deduct amount of sales of refuse articles sold at auction	\$1,125 80
For rents of houses received from workmen.....	951 20
	2,077 00
	192,241 61
To value of 2,256 pounds of powder received from the storekeeper for proving musket barrels, at 20 cents	451 20
To value of 4,046 pounds of lead received from the storekeeper for proving musket barrels, at 4 cents	161 84
	\$343,756 62

Cr.

By amount expended in permanent improvements, per foregoing statement...	\$9,244 86
By arms and equipments made, viz:	
16,200 muskets, average cost of each \$11 44 ⁷⁸⁸ / ₁₀₀₀₀	185,335 68
300 cadet muskets, average cost of each \$30.....	9,000 00
31 carbines, repaired and fitted with bayonets, average cost of each \$5...	155 00
16,540 screw-drivers, average cost of each 8 cents.....	1,323 20
16,538 wipers, average cost of each 12½ cents.....	2,067 25
1,620 ball-screws, average cost of each 15 cents.....	243 00
1,655 spring-vices, average cost of each 30 cents.....	496 50
16,540 flint-caps, average cost of each 1 cent.....	165 40
1,183 gun-boxes, average cost of each \$2 20.....	2,602 60
By value of supplies furnished the Harper's Ferry armory.....	338 82
By amount expended in preserving arms, and for miscellaneous purposes, not incidental to the manufacture of arms.....	1,737 34
By amount of supplies furnished for inspecting contract arms.....	165 53
By amount of arms and appendages furnished the Ordnance office as samples	252 50
By value of component parts of arms on hand 31st December, 1831.....	31,919 66
By value of unwrought materials on hand 31st December, 1831.....	48,709 28
	<u>\$343,756 62</u>

Statement in detail of the operations of the armory at Harper's Ferry, Virginia.

ARMORY, DR.

To the value of the component parts of arms on hand 1st January, 1831.....	\$49,890 09
To the value of unwrought materials on hand 1st January, 1831.....	52,445 07
To this amount expended during the year, comprising all the payments made by the paymaster.....	\$187,511 13
From which deduct amount of rents of houses received from the workmen.....	2,226 58
	<u>185,284 55</u>
To value of supplies received from the Springfield armory.....	338 82
To value of 3,000 pounds of powder received from arsenals for the use of the armory, at 20 cents.....	600 00
	<u>\$288,558 53</u>

Cr.

By amount expended in permanent improvements, per foregoing statement..	\$18,237 33
By arms and equipments made, viz:	
11,160 muskets, average cost of each \$11 09 ³⁴⁷⁵ / ₁₀₀₀₀	123,799 15
7,454 flint-caps, average cost of each 1 cent.....	74 54
274 gun-boxes, average cost of each \$2 02 ⁷⁴ / ₁₀₀	553 62
By value of supplies furnished to arsenals.....	87 60
By amount expended in preserving arms, and for miscellaneous purposes, not incidental to the manufacture of arms.....	608 85
By amount expended in inspecting contract arms.....	71 60
By amount on Hall's rifles, which are not yet completed.....	38,745 28
By value of component parts of arms on hand 31st December, 1831.....	51,388 36
By value of unwrought materials on hand 31st December, 1831.....	54,992 20
	<u>\$288,558 53</u>

NOTE.—Cost of the muskets manufactured at the national armories, viz:

	At Springfield.	At Harper's Ferry.
For the year 1829.....	\$10 02	\$15 13
For the year 1830.....	10 99	11 25
For the year 1831.....	11 44	11 09
	<u>32 45</u>	<u>37 47</u>
Mean cost at each.....	10 81 ² / ₃	12 49

Statement in detail of the expenditures on Hall's rifles.

DR.

To value of component parts of arms on hand 1st January, 1831.....	\$66,533 96
To value of unwrought materials on hand 1st January, 1831.....	8,110 94
To amount expended during the year, comprising the total amount of payments made by the paymaster on account of the rifles, viz:	
For materials.....	\$12,272 69
For pay of workmen.....	26,472 59
	<u>38,745 28</u>
	<u>\$113,390 18</u>

Or.	
By amount expended in permanent improvements.....	\$11, 847 15
By value of component parts of arms on hand 31st December, 1831.....	90, 294 09
By value of unwrought materials on hand 31st December, 1831.....	11, 249 04
	\$113, 390 18

GEORGE BOMFORD, *Brevet Colonel, on Ordnance service.*

ORDNANCE OFFICE, *Washington, March 8, 1832.*

22D CONGRESS.]

No. 520.

[1ST SESSION.]

STATEMENTS OF THE OFFICERS, ARSENALS, AND DEPOTS UNDER THE DIRECTION OF THE ORDNANCE DEPARTMENT.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES MARCH 19, 1832.

Statements from the Ordnance department in relation to the number of officers, arsenals, and depots belonging to that department.

ORDNANCE OFFICE, *Washington, March 19, 1832.*

SIR: In answer to the resolutions of the House of Representatives of the 15th instant, referred to this department, I have the honor to enclose herewith two statements, marked A and B, embracing part of the information called for by the resolution.

In regard to such part of this information as is not therein referred to, I beg leave to state, in answer to so much of the second resolve as directs the Secretary of War "to state the number and rank of the commissioned officers and other agents which, in his opinion, the public service requires, and no more, to be stationed at each of the public arsenals," that the public service of this department requires the following officers, viz: one colonel, one lieutenant colonel, two majors, ten captains, eighteen lieutenants, and five storekeepers; making a total of thirty-seven commissioned officers and storekeepers.

In reference to so much of the second resolve as directs the Secretary of War to report "whether, in his opinion, there be any arsenals which might not, consistently with the public good, be abandoned or transferred to the State in which it is located," I beg leave to remark that, as public business is necessarily transacted at all the United States arsenals and depots, either in the repairs of arms, the preparation and delivery of supplies of ordnance stores to the army and the militia, or in the construction of gun-carriages and the manufacture of all the implements and machines of artillery; the abandonment, therefore, of any of these arsenals, or their transfer to the State wherein they are located, is considered by this department as a measure which would be injurious to the public service.

I have the honor to be, sir, respectfully, your obedient servant,

G. BOMFORD, *Brevet Colonel, on Ordnance service.*

HON. LEWIS CASS, *Secretary of War.*

Statement in answer to the first resolve of the Hon. Mr. Williams, of March 15, 1832.

Number of officers on duty in the Ordnance department, December 31, 1831.	Rank.					Regiment of artillery.	Period of service in the Ordnance department up to Dec. 31, 1831.	Particular duties they severally performed on December 31, 1831.
	Lieutenant colonel.	Majors.	Captains.	First lieutenants.	Second lieutenants.			
George Bomford, (brevet colonel)...	1					1st regiment...	From March 2, 1821.....	Chief of the Ordnance department.
W. Wade, (brevet major).....		1				4th regiment.....	.....do.....	On furlough.
W. H. Bell.....			1			.....do.....	*From August 1, 1823.....	Assistant to the chief of the department.
J. A. de Laguel.....				1		2d regiment.....	From February 9, 1826.....	Making drawings of arsenals, magazines, gun-carriages, &c.
J. L. Lock.....				1		.....do.....	From August 20, 1831.....	Do. do. do.
H. K. Craig, (brevet major).....		1				3d regiment.....	From June 1, 1831.....	In command of the arsenal at Watertown.
George Talcott, (brevet major).....		1				2d regiment.....	From March 2, 1821.....	In command of the arsenal at Watervliet.
D. H. Vinton.....		1				3d regiment.....	From March 31, 1831.....	On duty at the arsenal at Watervliet.
R. C. Smead.....			1			4th regiment.....	From March 6, 1823.....	Do. do.
J. S. Abeel, (brevet captain).....			1			2d regiment.....	.....do.....	In command of the arsenal at Rome.
R. L. Baker, (brevet major).....		1				1st regiment.....	†From March 2, 1821.....	In command of the arsenal at Pittsburg.
E. Harding.....			1			2d regiment.....	From March 6, 1823.....	On duty at the arsenal at Pittsburg.
A. Beckley.....			1			4th regiment.....	.....do.....	Do. do.
J. B. Walbach, (brevet colonel).....	1					1st regiment...	From December 3, 1830.....	In command of the arsenal at Frankford.
D. Van Ness.....			1			.....do.....	From March 6, 1823.....	On duty at the arsenal at Frankford.
J. Bankhead, (bvt. lieut. colonel).....		1				3d regiment.....	From July 17, 1826.....	In command of the arsenal at Pikesville, and inspector of ordnance.
R. D. A. Wade.....				1		.....do.....	From April 16, 1831.....	On duty at the arsenal at Pikesville.

* Except a few months in 1831.

† Except a few months in 1823 and 1824.

Statement in answer to the first resolve of Hon. Mr. Williams—Continued.

Number of officers on duty in the Ordnance department, December 31, 1831.	Rank.					Regiment of artillery.	Period of service in the Ordnance department up to Dec. 31, 1831.	Particular duties they severally performed on December 31, 1831.
	Lieutenant colonel.	Majors.	Captains.	First lieutenants.	Second lieutenants.			
J. Symington.....				1		1st regiment...	*From March 2, 1821....	In command of the arsenal at Washington city, and assistant inspector of ordnance.
J. Child.....				1		3d regiment....	From December 30, 1828..	On duty at the arsenal at Washington city.
R. Anderson.....				1		do.....	From March 6, 1828.....	In command of the arsenal at Baton Rouge.
C. Mellon, (brevet captain).....				1		do.....	do.....	In command of the arsenal at Augusta, Me.
J. M. Washington.....				1		4th regiment...	From January 31, 1827...	In command of the arsenal at Vergennes, Vt.
R. B. Lee.....				1		3d regiment....	From March 6, 1828.....	On leave of absence.
W. Wheelwright.....				1		1st regiment...	From July 23, 1826.....	In command of the arsenal at St. Louis.
W. Smith.....				1		do.....	From December 30, 1828..	In command of the arsenal at Mount Vernon.
J. H. Cooke.....				1		do.....	From April 20, 1826.....	On duty at the arsenal at Mount Vernon.
B. Huger.....				1		3d regiment....	From March 31, 1831.....	In command of the depot at Fort Monroe
J. Howard.....				1		1st regiment...	From June 14, 1830.....	On furlough.
T. C. Legate.....			1			2d regiment....	From April 20, 1829.....	Superintendent of the United States lead mines.
D. Tyler.....				1		1st regiment...	From January 14, 1830...	Assistant superintendent of inspections of contract arms.
T. B. Linnard, (brevet 2d lieut.).....				1		2d regiment....	From October 29, 1830....	Making draughts of the public grounds, buildings, and machines, at the Springfield armory.
F. L. Jones.....				1		4th regiment...	From March 31, 1831....	Under orders for Baton Rouge arsenal.
	1	2	5	14	10			

* Except a few weeks in 1824.

Statement in answer to the second resolve of the Hon. Mr. Williams, of March 15, 1832.

Number of United States arsenals and depots.	Number of commissioned officers, storekeepers, and men stationed at each, December 31, 1831.				Arsenals garrisoned.	Arsenals used for deposits of munitions.
	Commissioned officers.	Storekeepers.	Enlisted men.	Hired men.		
ARSENALS.						
Watertown, Mass.....	1		5	3		All of these arsenals are used for deposits of arms and munitions.
Watervliet, N. Y.....	3	1	8	39		
Rome, N. Y.....	1		1	7		
Pittsburg, Penn.....	3	1	8	31		
Frankford, Penn.....	2		4	7		
Pikesville, Md.....	2		5	3		
Washington city, D. C.....	2		10	31		
Richmond, Va.....		1		12	Richmond.....	
Augusta, Ga.....				8	Augusta.....	
Baton Rouge, La.....	2		1	10		
Augusta, Maine.....	1			4		
Vergennes, Vt.....	1		1	5		
St. Louis, Mo.....	2		2	8		
Mount Vernon, Ala.....	2			72		
Fort Monroe, Va.....	1		3	20		
DEPOTS.						
New York.....		1	1	3		
Detroit, Michigan Territory.....	1			3		
Charleston, S. C.....		1				
Lead mines, Illinois.....	1			3		
Springfield armory, Mass.....	2					
Ordnance office.....	5		1			
Total.....	32	5	50	269		

REMARKS.

The arsenals at Watervliet, Washington, and Pittsburg, are considered the most important. In these the construction of field artillery carriages, both for the army and militia of the United States, is carried on to a considerable extent, as also the repairing and preservation of small arms and military stores, and the fabrication of all kinds of ammunition designed for the use of the army and the fortifications.

At the arsenals at Augusta, Me., Watertown, Frankford, Richmond, Augusta, Ga., Mount Vernon, Ala., Baton Rouge, and St. Louis, the repairing of small arms, the fabrication of ammunition, and the preservation of military stores, are carried on to a considerable extent; and also the supply of all military stores to the militia of the United States, under act of 1808.

Vergennes, Vt., Rome, N. Y., Detroit, Pikesville, and Charleston.—These arsenals are considered as minor depots, and are used for the depositing of the military stores to be distributed to the army and militia of the United States.

At Fort Monroe the construction of gun-carriages for that work is carried on equal in extent to the available means of the appropriation allotted for its armament.

At Galena, Ill., an officer is engaged in the superintendence of the lead mines, in collecting and receiving the amount of rents, and transporting and distributing the lead to the several arsenals and depots under the control of this department.

22^d CONGRESS.]

No. 521.

[1st SESSION.]

PRICES OF MATERIALS AND WORKMANSHIP AT FORT HAMILTON, NEW YORK, AND
FORT ADAMS, AT NEWPORT, RHODE ISLAND, IN 1828-'29-'30.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES MARCH 23, 1832.

DEPARTMENT OF WAR, *March 22, 1832.*

SIR: In compliance with a resolution of the House of Representatives of the 15th instant, I have the honor to enclose a report of General Gratiot, chief engineer, containing "the prices paid during the years 1828, 1829, and 1830, by the superintendent of Fort Hamilton, in the harbor of New York, for lumber, stone, lime, brick, and labor, purchased and employed in the erection of said fort; and also the prices paid the same years by the superintendent of Fort Adams, in the harbor of Newport, Rhode Island, for the same articles, and the labor employed in the erection of Fort Adams."

I have the honor to be, very respectfully, your obedient servant,

LEW. CASS.

HON. ANDREW STEVENSON, *Speaker of the House of Representatives.*ENGINEER DEPARTMENT, *Washington, March 20, 1832.*

SIR: The accompanying statement furnishes the information relative to prices of materials and workmanship at Forts Adams and Hamilton, which is required by a resolution of the House of Representatives of the 15th instant.

Respectfully, sir, your obedient servant,

C. GRATIOT, *Brigadier General.*HON. LEWIS CASS, *Secretary of War.*

A statement of the average prices paid for certain materials and workmanship at Fort Adams, Rhode Island, and Fort Hamilton, New York, in the years 1828, 1829, and 1830, taken from the annual statements of the superintending engineers.

Designation.	Fort Adams.				Fort Hamilton.				Remarks.
	1828.	1829.	1830.	Average for three years.	1828.	1829.	1830.	Average for three years.	
Stone, per perch.....	\$2 71	\$2 54	\$2 12	\$2 45 $\frac{3}{4}$	\$2 74 $\frac{1}{2}$	\$2 43 $\frac{1}{2}$	\$2 46 $\frac{1}{2}$	\$2 55	The difference in the price of this article at the two places is attributable to a difference of quality. Purchased in very small quantities.
Bricks, per M.....	8 28	7 50	6 39	7 39	7 33	7 35 $\frac{1}{2}$	7 21	7 30	
Hydraulic cement, per cask....	3 30	2 73	2 57	2 86 $\frac{3}{4}$	2 74	2 40	2 46	2 53 $\frac{1}{4}$	
Lime, per cask	1 35 $\frac{1}{2}$	1 26	1 01 $\frac{1}{2}$	1 21	1 22	1 08	1 02	1 10 $\frac{3}{4}$	
Scantling, pine, per M. feet....	15 00	10 00	11 00	12 00	.....	14 53	22 48	18 50 $\frac{1}{2}$
Timber, oak, per cubic foot ...	25	.....	10 $\frac{1}{2}$	17 $\frac{1}{2}$	12 $\frac{1}{2}$	16	12 $\frac{1}{2}$	13 $\frac{3}{4}$
Masons' wages per day.....	1 56 $\frac{1}{2}$	1 52	1 78 $\frac{1}{2}$	1 62 $\frac{1}{2}$	1 63	1 40	1 47	1 50	
Carpenters' wages per day	2 00	2 00	1 56	1 85 $\frac{1}{2}$	1 76	1 76	1 52	1 68	
Smiths' wages per day	95	1 02 $\frac{1}{2}$	1 09	1 02	1 45	1 48	1 49	1 47 $\frac{1}{2}$	
Laborers' wages per day	93	93	86	90 $\frac{3}{4}$	95	94	94	94 $\frac{1}{2}$	

22^d CONGRESS.]

No. 522.

[1st SESSION.]

APPLICATION OF MAINE FOR A MORE PERFECT AND UNIFORM ORGANIZATION OF THE
MILITIA OF THE UNITED STATES.

COMMUNICATED TO THE SENATE MARCH 27, 1832.

STATE OF MAINE.

RESOLVES relative to the organization of the militia of the several States.

Resolved, That our senators in Congress be, and they are hereby, instructed, and our representatives requested to use their exertions, both by their votes and their influence, to procure the passage of a law providing for a more perfect and uniform organization of the militia of the several States of the Union, in pursuance of the Constitution of the United States.

Resolved, That the governor be requested to transmit to each of our senators and representatives in Congress a copy of these resolves.

IN HOUSE OF REPRESENTATIVES, *March 9, 1832.*

Read and passed.

BENJAMIN WHITE, *Speaker.*

IN SENATE, *March 9, 1832.*

Read and passed.

ROBERT P. DUNLAP, *President.*

Approved, *March 9, 1832.*

SAMUEL E. SMITH.

22d CONGRESS.]

No. 523.

[1ST SESSION

ON THE APPLICATION OF THE CORPORATION OF SAVANNAH, IN GEORGIA, FOR THE ERECTION OF BARRACKS AND LOCATION OF REGULAR TROOPS IN THAT CITY.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES MARCH 22, 1832.

Mr. DRAYTON, from the Committee on Military Affairs, to whom was referred the memorial of the mayor and aldermen of the city of Savannah, relating to the expediency of erecting barracks in that city for the United States troops who are stationed in its vicinity, reported :

That they have had communications with the War Department upon the subject of the above memorial, as will be seen upon an inspection of the papers herewith filed, marked A, B, and C, from the tenor of which they are of opinion that it would be inexpedient, at this time, to authorize the erection of barracks in the city of Savannah. They therefore submit to the House the following resolution:

Resolved, That the committee be discharged from the further consideration of the memorial of the mayor and aldermen of the city of Savannah.

To the honorable the Senate and House of Representatives of the United States in Congress assembled :

The memorial of the mayor and aldermen of the city of Savannah respectfully sheweth: That it has been the practice of late years to remove the United States troops from cantonment Oglethorpe, near Savannah, to a distant post for several months in summer. Your memorialists are informed, and have reason to believe, that this course has been pursued solely in consequence of the extreme unhealthiness of that situation; and the permanent location of United States troops among them being of importance to the community they represent, they respectfully invite the attention of Congress to this subject. Your memorialists do not ask for the continuance of the troops at the post they now occupy to the imminent hazard of their lives, but they would with due deference submit to the consideration of Congress the expediency and necessity of forming another military establishment, to be located in this city. For years past Savannah has been favored with as much health as most of our Atlantic cities, and has been exempt from any malignant disease; and the professional gentlemen who have been consulted on the occasion are decided in the opinion that, under proper restrictions, the troops might enjoy a good degree of health in a position within its limits. An eligible site for barracks could be obtained at a fair valuation; and your memorialists respectfully and earnestly solicit your honorable bodies to authorize the purchase of ground, and the erection of buildings of durable materials, within the city of Savannah, sufficient for the accommodation of at least one hundred men, in order that this community might be benefitted by the residence of United States troops among them, and particularly at a time when, from the periodical emigration of many of our white population, a military force is most needed. And your memorialists will ever pray.

WM. R. WARING, *Mayor.*

DEPARTMENT OF WAR, *March 23, 1832.*

SIR: I have the honor to transmit a letter from Major General Macomb, which contains the views of this department in relation to the subject referred to in your letter of the 4th instant.

With great respect, I am, sir, your obedient servant,

LEW. CASS.

HON. WILLIAM DRAYTON, *Chairman of the Military Committee, House of Representatives.*

HEADQUARTERS OF THE ARMY, *Washington, March 19, 1832.*

SIR: In pursuance of your directions to report as to the expediency of abandoning the barracks lately built near Savannah, and erecting new quarters within the city, as proposed by the mayor and aldermen, as set forth in their memorial addressed to Congress and transmitted to you by the honorable chairman of the Military Committee of the House of Representatives in his letter of the 4th instant, I have to state

that, although some years since the present position of the quarters of the troops stationed near Savannah for the protection of that city was visited with disease, it is possible that, owing to the newness of the station, or to some accidental cause which might not occur again, the unhealthiness may be attributed, as well as to the fact that the troops were unaccustomed to the climate. As the erection of the barracks in the city would be attended with great expense, and as it is doubtful whether, taking all things into consideration, the troops would enjoy better health in the city than in their present position, I would respectfully recommend that they continue to occupy the barracks in which they are now quartered, with a view of ascertaining whether there be any improvement in the salubrity of the position; but should it turn out to be sickly the commanding officer may be authorized to hire quarters in the city in case there should appear among the troops any disease of a character to render the removal to the city proper, or quarters in the city might be hired immediately and the troops stationed in them. Then should the city, after a year or more experience, prove to be more healthy than the present barracks, a suitable lot might be purchased and permanent barracks built.

I am, sir, your obedient servant,

A. MACOMB, *Major General.*

HON. SECRETARY OF WAR.

QUARTERMASTER GENERAL'S OFFICE, *March 14, 1832.*

SIR: I return you the letter of the honorable Mr. Drayton, chairman of the Military Committee of the House of Representatives, covering a memorial from the city council of Savannah, Georgia, praying for purchase of a site and the erection of permanent barracks at that place, and have the honor to state, in reply to the inquiry as to the cost of complying with the request, that the expense of erecting barracks and quarters for the accommodation of two companies would be about fifty thousand dollars. With respect to the cost of the necessary ground I have no means of forming an estimate. The memorial represents that an eligible site could be obtained at a fair valuation, but what that would be it is impossible at this time to say.

I am, sir, very respectfully, your obedient servant,

TH. S. JESUP, *Quartermaster General.*

HON. LEWIS CASS, *Secretary of War.*

22D CONGRESS.]

No. 524.

[1ST SESSION.]

ON THE CLAIMS OF OFFICERS OF THE ARMY FOR EXPENSES INCURRED IN DEFENDING SUITS FOR ACTS DONE IN THE PERFORMANCE OF THEIR OFFICIAL DUTIES.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES APRIL 9, 1832.

Mr. E. WHITTLESEY, from the Committee of Claims, to whom was referred the bill from the Senate for the relief of Major [Lieutenant Colonel] David E. Twiggs, Joseph M. Street, and Stephen W. Kearney, reported:

That the first section of the bill provides "that for defraying the expenses incurred by Major David E. Twiggs in defending suits brought against him for certain acts done in performance of his official duties, and in obedience to orders from the President of the United States, one thousand and eighty-six dollars and fifty cents be, and hereby is, appropriated to be paid out of any money in the Treasury not otherwise appropriated."

Six different accounts are presented, whose aggregate amount is that contained in this section of the bill. The first is an account stated by Joseph W. Torney, in which he charges Major Twiggs for attending two terms of the court at Green Bay, in the Territory of Michigan, retaining fees in two suits instituted by one Whiting, and for arguing a demurrer, and one of the suits before a jury, and his expenses, the sum of \$250.

There is no evidence before the committee that any part of this account has been paid, and the payment is in no way acknowledged by Mr Torney.

The second account is for attorney's fees in one of the suits, charged by Henry S. Beard, amounting to \$100.

This account is receipted in full by Mr. Beard, but is unaccompanied by any affidavit that the money was paid.

The third account is in favor of P. B. Grignon, amounting to \$5 75, and is for postage paid, expense of copies of pleadings, certificates, and seals.

Mr. Torney certifies the services were rendered at his request.

The fourth account amounts to \$2 75, and is an omission in the preceding account.

Neither of the two last accounts is receipted, nor is there any evidence of either having been paid.

The fifth account is in favor of Henry S. Beard for postage, amounting to \$2, and is receipted.

The sixth account is as follows:

The United States to Lieutenant Colonel D. E. Twiggs, Dr.

Expenses and transportation of Lieutenant Colonel D. E. Twiggs, 4th infantry, in attending the district court in Brown county, Michigan Territory, in June, 1829.....	\$198 00
Expenses and transportation of Lieutenant Colonel D. E. Twiggs, 4th infantry, in attending the district court in Brown county, Michigan Territory, (from Augusta, Georgia,) in June, 1830.....	330 00
Expenses and transportation of Lieutenant Colonel D. E. Twiggs in attending the district court in Brown county, Michigan Territory, in June, 1831.....	198 00
	726 00
	726 00

The six accounts, as stated above, amount to \$1, 086 50.

It is due to the House to state (from the conclusion to which this committee has arrived) that it is understood the claim was favorably recommended to the attention of the Committee of Ways and Means by the War Department; that provision was made by that committee, in a general appropriation bill, for paying the account, which received the sanction of this House; that the Committee on Finance in the Senate struck it out of the general appropriation bill, and reported the bill now under consideration, which, having passed the Senate, was committed to the Committee of Claims.

It is with reluctance this committee feels itself bound to dissent from those who have heretofore examined this claim, and a careful and vigilant examination is asked in its behalf, with the most entire confidence, if this committee has erred, that the error will be discovered by the House and corrected.

Where an officer in the line of his duty, or in obedience to orders from a superior officer, has committed a trespass, (not wantonly,) and judgment has been recovered against him, after a full defence conducted in good faith, or where he has incurred cost in making such defence, there are many precedents where officers, both in the land and naval service, have been saved harmless. The amount of damages recovered by a judgment, where the cause has been carried to the court of dernier resort, and has been defended in good faith, is not the subject of investigation, for a very clear and obvious reason that, however exorbitant the damages may be, a trial having been had, the officer is bound to pay them, and Congress cannot sit as a court of errors, and review and reverse the judgment. But all costs and expenses not included within the judgment are as properly the subject of investigation as any other claim that can be presented. In the suits mentioned, the plaintiff was nonsuited; of course no judgment was recovered against the defendant. If the money has been paid to discharge the first five accounts, it is within the power of Colonel Twiggs to prove it. Some exception might be taken as to the reasonableness of the attorney's fees, but this is waived for the present, as there is no evidence as to a part of the accounts, and as to the other accounts the evidence is not satisfactory that any part of them have been paid. These accounts are admissible, if Colonel Twiggs shall prove he has paid them, the reasonableness of them to be decided by the committee and Congress, provided the case on investigation shall appear to be one where Colonel Twiggs was acting in the line of his duty, or under the order of a superior officer.

The account for expenses and transportation for attending three terms of the court, amounting to seven hundred and twenty-six dollars, appeared to the committee to be a very high charge, and one that required to be fully investigated. The committee know of no allowances made to officers for transportation of baggage while attending court to defend suits commenced against them for violating private rights. It is not believed, in this case, that any expense was incurred in transporting baggage, and it is not perceived that any such transportation was necessary. The greatest allowance, under any circumstances, that should be made to officers who are sued for their official acts, is the amount actually and necessarily expended; otherwise, an inducement, too strong to resist by some, would be held out to them to commit depredations, as a source from whence they would derive lucrative perquisites. No stronger case need be put to illustrate this position than the one now before the committee. A letter was addressed to Adjutant General Jones, requesting him to state where Major [Lieutenant Colonel] D. E. Twiggs was stationed from March, 1829, to the 1st of July, 1831. These dates were fixed on because the first suit was commenced in March, 1829, and both of them were ended in June term, 1831. The second suit was commenced at June term, 1831, and was discontinued or dismissed without any pleadings having been filed. The answer of Adjutant General Jones, dated March 29, 1832, is referred to, and made a part of this report.

It appears that Lieutenant Colonel Twiggs was present commanding Fort Winnebago, from March to July, 1829; that he was then absent on furlough until the 24th of June, 1830, when he returned to his station, Fort Winnebago, and continued on duty there until the 23d of June, 1831.

This communication from Adjutant General Jones was accompanied by the copy of a special order from General Macomb, extending the furlough of Colonel Twiggs "until the adjournment of the district court at Green Bay, some time in the month of June next, when he will join his proper station." This special order is dated on the 2d of February, 1830.

The committee having obtained information that Lieutenant Colonel Twiggs had been absent on furlough, within the time which was the subject of the inquiry, and that the furlough had been extended, another letter was addressed to Adjutant General Jones, requesting him to furnish the committee with the letters that had passed between Lieutenant Colonel Twiggs and the officers with whom he had corresponded on the subject of his furlough, and the extension of it. This request was complied with, and the committee will refer to the letters of Lieutenant Colonel Twiggs, dated May 23, 1829, to General Atkinson, soliciting a furlough from the following October through the winter, that he might be present in January, when an estate of considerable amount was to be divided, of which he was one of the heirs. He presented this further consideration, that he might, by his personal attendance at Washington, induce the payment of the costs at Green Bay. It appears from the copy of the furlough, also furnished by General Jones, that Lieutenant Colonel Twiggs was permitted to be absent from his station for six months, commencing at his departure from Fort Winnebago in October. Lieutenant Colonel Twiggs wrote to Adjutant General Jones from Augusta, Georgia, on the 18th of January, 1830, stating that his furlough would expire in March; that the navigation of the lake would not probably be open until April; that he was obliged to attend the session of the district court at Green Bay, in June; and he requested that his furlough might be extended until after the adjournment of the court. It was in consequence of this application that the special order of February 2, 1830, was issued, extending the furlough as requested, and as has been heretofore noticed. By recurring to the account, as stated above, it will be seen that,

for returning from Augusta, Georgia, to Green Bay, to attend the trial of his cause, Lieutenant Colonel Twiggs has charged, under the head of expenses and transportation, the sum of three hundred and thirty dollars. Green Bay is directly on the route to Fort Winnebago, by way of the lake through which he contemplated to pass, as appears from his letter to Colonel Jones, of January 18. After recapitulating the different items of the account, he annexes the following certificate: "The above account is correct and just. D. E. Twiggs, lieutenant colonel 4th infantry." If an account is correct and just, containing in it a charge for expenses and transportation under the pretence that he attended the session of the court at Green Bay from Augusta, Georgia; whereas, in truth, he was returning to his post at Fort Winnebago, from which he had been absent on furlough, at his own solicitation, the committee suppose the account would have been equally correct and just if he had gone to Europe, or any other part of the world, and had charged expenses and transportation from thence to Green Bay. This item is wholly inadmissible, and, from its extraordinary character, casts a suspicion over the whole account. The committee will not, at present, examine the question whether the official acts of Lieutenant Colonel Twiggs were such as to impose on the United States the obligation of saving him harmless from the costs incurred, as he does not satisfactorily prove that he has paid any of the accounts presented. The committee recommend that said bill be amended by striking out the first section, saving the enacting clause.

The second section of said bill provides "That the sum of one thousand three hundred and seventy-four dollars seventy eight and three-fourths cents be, and the same is hereby, appropriated, for discharging, under the direction of the Secretary of War, a judgment rendered against Joseph M. Street and Stephen W. Kearney, at the October term of the United States circuit court for the counties of Crawford and Iowa, in the Michigan Territory, for and on account of a procedure in discharge of their official duties."

It appears from an authenticated transcript, signed by the clerk of the United States circuit court for the counties of Crawford and Iowa, Michigan Territory, that, at the October term, 1831, Jean Brunett recovered a judgment against Joseph M. Street and Stephen W. Kearney, for his damages, to the amount of \$1,200, and for his costs, both amounting to \$1,373 56 $\frac{1}{4}$. There was another suit between the same parties, in which no decision was made, but in which costs were taxed against the defendants to the amount of \$1 22 $\frac{1}{2}$, which, added to the sum last mentioned, amounts to the sum contained in the second section of the bill above recited. A copy of the record has not been presented to the committee. Understanding that the cause was tried before Judge Doty, and that he was in the city, the committee requested him to state the facts as they appeared before him on the trial. A summary of the evidence taken down by him on the trial, together with the points of law involved in the case, with the opinion of the court thereon, have been furnished, and to which the committee refer. The suit was brought to recover damages for a trespass and false imprisonment committed by the defendants on the body of the plaintiff.

It is stated, in a report made by Governor Clark to the Secretary of War, dated February 25, 1832, that Mr. Street was Indian agent at Prairie du Chien, under whose directions Major Kearney, an officer of the army, acted in giving orders to arrest a party of men who were with said Brunett, a foreigner, on their way into the Indian country, in violation of the intercourse act of 1802 and of 1816.

Governor Clark supposes the judge decided that inasmuch as Brunett and his party were on an island in the Mississippi river, which river was a public highway, they could not be arrested. Judge Doty states that this was adverted to in the argument, but it appears, from his statement, that it was not the point decided.

He held that the defendants, in order to make out their justification, should produce an order from the President, as the authority to remove intruders from the Indian lands was specially delegated to him, and not vested in an Indian agent, nor in an officer of the army. Judge Doty further says the defendants did not produce any order from the President in support of their justification under the act of 1816, nor did they produce any evidence that Brunett was a foreigner.

It does not appear, from any of the papers before the committee, that the President or Secretary of War gave any orders for removing intruders from the Indian lands in that section of the country to which Jean Brunett and his party were bound; nor that they, or either of them, gave any orders for the arrest of said Brunett. And no such order having been produced on the trial, is evidence of a very satisfactory character that no order of the kind was given.

There is among the papers the copy of a letter of the following tenor:

"DEPARTMENT OF WAR, *Office of Indian Affairs*, March 26, 1829.

"SIR: I transmit herewith, by direction of the Secretary of War, a copy of a letter from Major Twiggs, giving information of a trespass about to be committed on the Indian lands by the cutting and carrying off timber therefrom, and call your attention to the subject, that the trespass referred to may be prevented.

"THOS. L. McKENNEY.

"General WILLIAM CLARK, *Indian Office*."

On comparing dates, it is very satisfactorily ascertained that the arrest of Brunett was before the date of the letter above recited. James M. Street, on the 2d of March, 1829, in a letter addressed to Major Twiggs, says: "The decisive course adopted by myself and Major Kearney, I believe, has effectually stopped timber parties in this quarter." The committee suppose this has reference to the arrest of Brunett. In this conclusion they are confirmed by the report made by Governor Clark to the Secretary of War of this transaction, on the 25th of February, 1832, in which he speaks of the arrest of Brunett to have been in March, 1829. The committee will make another extract from the letter of Mr. Street to Major Twiggs, for the purpose of drawing the attention of Congress to an instance where the civil authority has been put down and set at defiance by military power, at a distant post, from a belief that it has a bearing on the case now under examination. He proceeds to say: "A few days past a large quantity of walnut plank was seized by me and delivered into the care of Major K. Mr. Lockwood, from Galena, came up; the timber has been claimed, and an attempt to replevy it out of the possession of Major K. The sheriff was *guilty*, (*quietly*, as he has mentioned in another letter referring to the same transaction,) walked out of the fort, and no attention paid to his writ. Thus it will remain until the will of the government is known."

The 6th section of the act of April 29, 1816, vol. 6, page 145, under which act the defendants are justified, is as follows: "That the President of the United States be, and he hereby is, authorized to use the military force of the United States whenever it may be necessary to carry into effect this act as far as it relates to seizure of goods to be sold to, or articles already purchased from the Indians, or to the arrest of persons charged with violating its provisions." It is very clear, from this section, that Congress has delegated

the power to arrest, by military force, those who are charged with violating the provisions of that act with very great caution. The President was thought to be the *only* person to whom this power might be safely delegated. There is no doubt much mischief may be and has been occasioned by the intrusion of the whites upon the Indian lands; and to guard against the consequences that might follow from a violation of the act of March, 1802, and April, 1816, there may be instances where the Indian agent, or an officer of the army, may justify himself to the government in proceeding to remove intruders; but the assumption of this power should at all times be watched with jealousy by Congress for the security of the people; and, when wantonly assumed, the offending agent, or officer, should be subjected to the payment of such damages as the civil tribunal may award against him, without any hope or prospect that he will obtain relief by applying to Congress.

The case now before the committee is not free from doubt. It is very apparent that Brunett was going into the Indian country with a party of men to cut timber, and that he was not acting under any license or permit even to trade with the Indians. Governor Clark, in his report of the circumstances attending the arrest, says: "Mr. Brunett was known not only to be an *alien*, but had left Prairie du Chien with his party in the night without asking for a license or permission from any one." This circumstance would naturally awaken suspicion in the minds of the Indian agent and of the officer commanding in that quarter. Indian hostilities had not existed long previous, and had brought with them the usual distress and massacres attending a savage and border warfare. To avert future collisions between the Indians and the frontier settlers was proper and commendable. The committee, in the absence of proof to the contrary, believe that Major Kearney and Mr. Street supposed the movements of Brunett would endanger the peace of the frontiers, and that it was necessary to remove him before the order of the President could be received. It does not appear that he was treated with any unnecessary rigor. He was arrested, as appears from Judge Doty's statement, on the evening of the 3d, and detained in custody until the 5th, when he was delivered over to the civil authority.

It is stated in the report made by Governor Clark, and heretofore referred to, that a bill of exception was filed to the opinion of the judge as to the points of law decided in the case.

It is evident, from the remarks made by Governor Clark, that he was not correctly informed as to the points of law decided by the court. The only questions of law involved, as appears from the statement of Judge Doty, were, 1st, whether, under the act of April, 1816, the defendants should show that they acted under an order from the President to make out their justification? The court decided that they must. 2d, whether, when power is given by a statute to the military to arrest a citizen, it deprives him of his constitutional right to have a warrant previously issued upon probable cause, supported by oath or affirmation? The court decided this question in the negative. The committee think both points were decided correctly. The last might admit of some qualification. If there were reasonable grounds to apprehend that the judgment would be reversed, and no further proceedings had in the case, the granting of relief might with propriety be suspended. Entertaining a different opinion, the committee cannot see any good reasons for accumulating costs in bringing the cause before the Supreme Court. After weighing all the evidence, and duly considering all the circumstances connected with the transaction, the committee recommend that relief be granted to Joseph M. Street and to Stephen W. Kearney, as contemplated by the second section of said bill.

22d CONGRESS.]

No 525.

[1ST SESSION.]

MODE OF ACQUIRING TITLE TO THE LAND ON WHICH THE BARRACKS AT PRAIRIE DU CHIEN STANDS.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES APRIL 13, 1832.

QUARTERMASTER GENERAL'S OFFICE, *Washington City, March 31, 1832.*

SIR: In compliance with your instructions of yesterday, I have the honor to report that Judge Doty did grant to the United States a part of the lot of ground on which the new barracks have been erected at Prairie du Chien, which, it appears, he had previously conveyed to the county of Crawford as a site for a court-house and other public buildings for the county.

Old Fort Crawford, but a short distance from the new barracks, has been abandoned, and is no longer of any value as a military site. Perhaps the best use that could be made of it would be to transfer it to the county of Crawford for county purposes, on the condition that the acceptance of it be considered as a surrender by the county of all claim to the site of the new barracks. It is extremely probable that the county would, in a suit in equity, recover the ground, with the buildings on it, which have been erected at an expense of many thousand dollars.

I return the letter of the honorable Mr. Hunt, with the petition of the citizens of Prairie du Chien; and I am, sir, respectfully, your obedient servant,

TH. S. JESUP, *Quartermaster General.*

Hon. LEWIS CASS, *Secretary of War, Washington City.*

22D CONGRESS.]

No. 526.

[1st Session.]

APPLICATION OF MARYLAND FOR THE INCREASE OF THE TOPOGRAPHICAL ENGINEERS,
FOR AN EFFICIENT ORGANIZATION OF THE ORDNANCE DEPARTMENT, FOR THE
ERECTION OF FORTIFICATIONS, AND THE ESTABLISHMENT OF A NATIONAL FOUNDRY.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES APRIL 13, 1832.

By THE SENATE, *March 5, 1832.*

Whereas it is the admonition of the Father of his Country "that we should in peace prepare for war," remembering that timely disbursements to "prepare for danger frequently prevent much greater disbursements to repel it;" and whereas, in his message to Congress, he declared it advisable to provide and lay up materials of war, in proportion as our resources should render it practicable, without inconvenience, so that in future wars we might not be found destitute of every necessary means of defence; and, in pursuance of these views, he recommended the establishment of national works for manufacturing such articles as were necessary for the defence of the country; and whereas the experience of the late war fully demonstrated the wisdom of that policy which his solicitude for our welfare recommended, and the loss of blood and treasure which this republic suffered have proved the value of these precepts; and whereas it belongs to the general government, under the Constitution of the Union, "to provide for the common defence and to promote the general welfare:" Therefore—

Resolved by the general assembly of Maryland, That a knowledge of the topography of the country is of essential importance, as well for the promotion of works of internal improvement as to give effect to military operations, and that this knowledge should be gathered by repeated surveys and proper maps and charts deposited in our archives; and as the acquisition of such information (alike useful in peace and war) can only be made by those who, devoting their talents and energies to the duty, become skilled in scientific principles and accurate in practical details, the topographical corps of the United States should be fostered and gradually increased.

Resolved, That the Ordnance department is of peculiar importance, requiring fidelity and practical skill and scientific knowledge in its administration. Its efficient organization is therefore demanded, as well to insure the fabrication and preservation of our arms in sufficient abundance as to render the ingenuity and science of those to whom these duties are intrusted available and beneficial to the country.

Resolved, That the establishment of fortifications throughout our borders should be persevered in as essential to the security of the important outlets of our commerce, and at the same time to give additional maritime strength to the Atlantic States.

Resolved, That the establishment of a national foundry for the fabrication of cannon is required, as well to provide for the armament of our fortifications as to furnish proper field trains, to be distributed throughout the different States; and that, by such an establishment, not only would artisans be drawn together, but the true principles of economy be preserved by the government commanding, at all times, the means of supplying the most important arm of defence in quantity and quality, as the emergency may demand.

Resolved, That our senators be instructed, and our representatives in Congress be requested, to advocate the views and measures recommended in the foregoing resolutions.

Resolved, That the governor be requested to transmit a copy of the above resolutions to each of our said senators and representatives.

By order :

JOS. H. NICHOLSON, *Clerk.*

By THE HOUSE OF DELEGATES, *March 6, 1832.*

Read the second time by special order, and unanimously assented to.

By order :

G. G. BREWER, *Clerk.*

22D CONGRESS.]

No. 527.

[1st Session.]

ON THE CONSTRUCTION OF A MILITARY ROAD FROM MATTANAWCOOK TO MAR'S HILL,
IN MAINE.

COMMUNICATED TO THE SENATE APRIL 17, 1832.

DEPARTMENT OF WAR, *April 16, 1832.*

SIR: In compliance with the resolution of the Senate of the 9th instant relative to "the military road in Maine from Mattanawcook to Mar's Hill," I have the honor to transmit a report of the quartermaster general, which contains the information required.

I have the honor to be, very respectfully, your obedient servant,

LEWIS CASS.

The PRESIDENT of the Senate of the United States.

QUARTERMASTER GENERAL'S OFFICE, *Washington City, April 13, 1832.*

SIR: In compliance with a resolution of the Senate of the 9th instant, referred by your order to this office on the 11th, directing the Secretary of War to inform that body "what portion of the military road in Maine, from Mattanawcook to Mar's Hill, has been completed according to the original design, and in the manner other military roads have been constructed; what alterations in the original design are recommended; and to transmit an estimate of the expense of completing the road in the manner originally contemplated, and also according to the proposed alterations, as far as the boundary line of the United States, near Houlton, with such information as he may be able to communicate relative to the importance of said road, and the manner of constructing the same," I have the honor to report that the whole distance from the Mattanawcook to Houlton is *sixty-eight miles*; that it was originally intended to construct the military road between those points thirty-three feet wide, and that a section of sixteen miles was completed according to the original design; but in consequence of the difficulties presented by the nature of the country to the rapid construction of a road, which were discovered, after the work had been commenced, to be much greater than had been anticipated, together with the necessity for an immediate practicable communication between our depot of supply at Bangor and the military post at Houlton, I recommended a reduction in the width of the remaining sections to twenty-two feet, which is rather more than the ordinary width of the military roads in the southern and western States and Territories of the United States. The Secretary of War approved of the reduction, and the last appropriation was made on an estimate prepared in reference to the reduced width of the road.

To complete the road according to the original design would require at least \$45,000—a greater expenditure than could be warranted by any advantage likely to accrue, in a mere military point of view, in time of peace; but if it be proper at this time to consider the road in relation to the defence of the north-eastern frontier in the event of war, that expenditure would be trifling compared with its great military advantages. From information recently received, I am decidedly of opinion that the width of the road should be increased from twenty-two to twenty-eight feet; and, for the reasons for my opinion, I beg leave to refer to the annexed copy of a report from Lieutenant Thomas, the superintendent of the road, (see paper marked A;) and I have the honor to submit an estimate of the amount required to complete the road as proposed by Lieutenant Thomas.—(See paper marked B.)

The fourth item of \$1,750, for making a road from Houlton to the British line, might be omitted. Should the government consider it good policy to extend the road to the line, the troops could perform the work with no other expense than the per diem of 15 cents allowed to them by law. There would be no advantage obtained by extending the road from Houlton to Mar's Hill; consequently no estimate has been presented or appropriation made for that section.

The road is necessary to the supply of the garrison at Houlton in time of peace, and its importance in that view alone may be estimated by the effect which it has already had on the cost of the transportation of military stores. The cost of transportation from Bangor to Houlton, in summer, has been reduced from \$120 to \$65 per ton of 2,000 pounds; and, in winter, from \$49 to \$20 per ton of 2,000 pounds.

I return the resolution; and have the honor to be, sir, your obedient servant,

THOMAS S. JESUP, *Quartermaster General.*

Hon. LEWIS CASS, *Secretary of War.*

A.

WASHINGTON CITY, *April 9, 1832.*

SIR: In obedience to your order directing me to make a further and more detailed report in relation to the military road now being constructed in the State of Maine, with a view to the completion of the same to the British line near the United States garrison at Houlton, on the plan originally commenced, or with the greatest reduction possible to have it efficient and durable, and suitable for the purpose intended and required, I beg leave to report, and in so doing must of necessity state many facts which you are already acquainted with, and which I have heretofore mentioned.

The law of 1832 contemplated the construction of "a military road from Mattanawcook to Mar's Hill, Maine," a distance of about one hundred miles. A resolve, passed March, 1829, "authorized the President of the United States to survey and mark it from any intermediate point to the mouth of the Madawasca river." A military post having been established at Houlton, it has not been opened further than that point, a distance of about seventy miles. This, under existing circumstances, has been deemed sufficient for the present, and probably will be for all purposes originally designed.

It is almost useless to state the absolute necessity of having a good road from Bangor to the United States garrison at Houlton. Any one examining the map of the country will at once perceive the importance of it, and that it ought not to be considered in any other light than purely a military one. It was located with no other object in view, and does not pass through a section of country which, had the State of Maine been consulted, would have been selected. There are no settlements for about fifty miles on it, and the middle section, about thirty miles, is generally barren and entirely unfit for cultivation. It connects with the State road by the nearest and safest route, Bangor and the United States garrison at Houlton, and is the only road which leads to the frontier of the northern part of the State.

The road, you are aware, was originally designed to be built thirty-three feet wide, which I believe is the width of all the military roads that have been constructed by the United States on the frontiers. It was commenced on that scale, and about sixteen miles of it completed. On account of the difficulties and delays consequent upon opening a road through a wilderness, the want of sufficient funds for continuing it the original width, and the necessity there was of having an immediate communication opened between Bangor and the United States garrison at Houlton, it was thought advisable to reduce it to twenty-two feet. This width, at that time, it was supposed, would be sufficient for all ordinary purposes; but three years' experience in superintending the construction of it has convinced me to the contrary, and I have no hesitation in stating that I believe it is not possible to render it sufficiently permanent and durable unless constructed a greater width. The road being composed almost entirely of earth, the country being heavily timbered and generally level, and interspersed with swamps, it is difficult and tedious to

drain, and it requires so long a time for the water to pass off and the road to become dry and firm that I find it impossible to give it, when constructed only twenty-two feet wide, including the ditches, as this is, sufficient and proper firmness and consistency, without raising it so high as to render it extremely dangerous for carriages passing each other; but if constructed twenty-eight feet wide, as recommended, it will admit of two travels, and allow of loaded wagons passing each other with perfect safety. Less than this width it will not; and in several instances I have been compelled to make it that width to render it at all safe or useful. This might not be necessary through a settled country, but it must be borne in mind that this road passes through a wilderness where the sun has little power.

I was always of opinion that the principal road ought to be constructed at least thirty-three feet wide; and when I advocated the reduction of this to twenty-two feet, you will recollect, it was considered only as a temporary or branch road, supposing that the principal road would be made to the Madawaska. This being abandoned, and the station at Houlton being thought equal, if not superior, to the point above as a military one, it now becomes necessary to make it permanent and durable by constructing it at least twenty-eight feet, if not of the width commenced. I am aware that the present road, if used for no other purposes, would answer for the transportation of supplies for the use of the United States garrison at Houlton, but, in addition to this, it must be recollected that it is severely tried by heavy teams continually travelling over it, unconnected with the service of the United States. This will, at its present width, render it nearly impassable in a few years.

A strict regard to economy has been always preserved in the construction of this road, but it may be extended too far, and it certainly will be if it should not be completed of the width recommended. While the road constructed thirty-three feet wide, part of which has been completed three seasons, is now and will continue in good repair, many parts of that made twenty-two feet wide (although equally well constructed) but two seasons, is already out of repair in many places, and will be nearly impassable without extensive repairs in the course of a few years. And I again repeat that, from an experience of three years in the construction of this road, I am decidedly of opinion that a basis of earth less than twenty-eight feet in width cannot be relied on for loaded teams through such a country as this is over, but will be continually giving way and needing extensive repairs.

I have made the necessary inquiries, and have ascertained to a certainty that it will require, to complete the road on the plan recommended, (say twenty-eight feet wide,) the sum of \$20,165; and to complete the bridges, and for contingent expenses, a further sum of \$2,835—making in the aggregate the sum of \$23,000.

For this sum the road and bridges can be finished in each and every particular, and, when completed, will be equal to any earth road in the country.

All of which is respectfully submitted by your obedient servant,

CHAS. THOMAS, *Assistant Quartermaster United States Army.*

Major General THOS. S. JESSE, *Quartermaster General U. S. Army, Washington.*

B.

Estimate of funds required to widen and extend the military road, Maine, from the second mile beyond the mouth of the Matawamkeag river to the British line, about one and a half mile east of Hancock barracks, (Maine,) and for finishing the bridges on the same.

1. For widening the road six feet, from two and a half miles beyond the mouth of the Matawamkeag to about one mile beyond the Molunkus—say, 2,600 rods, at \$1 per rod.....	\$2, 600
2. For widening the road six feet, from the above point to the forks of the Matawamkeag—6,124 rods, at \$1 25 per rod.....	7, 655
3. For widening the road six feet, from the above point to Hancock barracks—8,160 rods, at \$1 per rod.....	8, 160
4. Constructing a road from Hancock barracks to the British line—about 500 rods, at \$3 50 per rod.....	1, 750
5. Finishing bridge over the Matawamkeag river, near its mouth, being additional work required on abutments, piers, ice-breakers, &c.....	2, 000
6. For a bridge over a new channel on the Mitopitlock stream, extending it to present bridge..	200
7. Contingencies.....	500
	22, 865

NOTE.—The last three items will be required, whether the road is widened or not, to meet the expenditures which will necessarily be incurred.—(See accompanying report.)

CHAS. THOMAS, *Lieutenant and Assistant Quartermaster U. S. Army.*

BANGOR, *Maine, December 27, 1831.*

22D CONGRESS.]

No. 528.

[1ST SESSION.]

ON THE CLAIM OF A PROFESSOR OF THE MILITARY ACADEMY, WHO LOST HIS EYE-SIGHT IN THE SERVICE, TO A PENSION.

COMMUNICATED TO THE SENATE APRIL 17, 1832.

Mr. DALLAS, from the Committee on Military Affairs, to whom was referred the petition of Joseph Du Commun, reported:

That the petitioner, in the year 1817, was employed, by authority from the Executive of the United States, as a teacher of the French language at the Military Academy, and was allowed the pay and emoluments of a captain in the line of the army. He continued to be thus employed until late in the year 1831, having, during all this service of fourteen years, ably and faithfully discharged his duties. His great devotion, however, to these duties caused him to contract a disease of the eyes which rendered him totally blind, and, in the month of December, 1831, he was thereby wholly disqualified. He has been, of course, obliged to surrender the appointment he held to a successor, and is thence left destitute and helpless. Deeming his case to be one fairly within the principle of the invalid pension act, and that he may claim the allowance granted to a captain in the line of the army who has been disabled in service, he applies for that purpose to the justice and generosity of Congress.

The material facts in support of the petitioner's application are stated in the certificates of Colonel Thayer, the superintendent of the Military Academy, and of W. F. Wheaton, a surgeon in the army stationed at that post, both of which are annexed to his petition.

The committee report a bill for his relief.

22D CONGRESS.]

No. 529.

[1ST SESSION.]

ON AN APPEAL OF COLONEL D. E. TWIGGS THAT INJUSTICE HAD BEEN DONE HIM IN A REPORT OF A COMMITTEE OF THE HOUSE OF REPRESENTATIVES.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES MAY 28, 1832.

Mr. E. WHITTLESEY, from the Committee of Claims, to whom was recommitted its report on a bill from the Senate for the relief of D. E. Twiggs, reported:

That, soon after said report was recommitted, Colonel Twiggs met a part of the members of said committee, and was informed that any explanation or evidence which he might wish to offer must be in writing, and, when presented, would be laid before the House. He afterwards addressed a letter to the chairman, which has been examined and duly considered by the committee, and will accompany this report. He produced no evidence to remove any of the exceptions taken in the former report to an allowance of the claim. The committee refer to that report for the principles which governed its decision. In the letter that Colonel Twiggs wrote, as mentioned, he appears to feel aggrieved that he was not informed of the objections against his account, and he intimates that the report as necessarily implicates the Secretary of War, the Committee of Ways and Means, the Committee on Finance in the Senate, and the Senate itself, as it does the claimant. Colonel Twiggs's case was before the committee for investigation, and, on examination, the committee thought his account was not proven as it should have been. He was not in the city, and it was apparent from the account itself, so far as he claimed remuneration for money paid, or for his liability to pay money on account of the suits that he defended, that the witnesses were at Green Bay, at a distance so remote that their testimony could hardly have been expected within the time that Congress has ordinarily closed its session. His claim, it will be seen by the report, was not unceremoniously rejected without assigning the reasons; but the principles that govern the committee in such cases were laid down, and the defects in the testimony clearly pointed out, so that he might be enabled to show hereafter that he was entitled to relief. The committee take great pleasure, when the claimant is in attendance, to point out informally any chasms in the testimony, where it is believed they can be readily filled. But if he is not in attendance, or if his proof is not at hand, the usual course has been, and experience has proven it to be correct, to lay down the principles that govern the case, and show in what particulars the testimony is deficient. The committee are not conscious that Colonel Twiggs has any just cause to complain that he was not notified that, in the opinion of the committee, his accounts were not proven. It was stated in the former report that the first five items in the account were not allowed, because there was no satisfactory evidence that he had paid the amount they contained to the persons who rendered the services. The committee, however, reserved the right of deciding on the reasonableness of these charges, and drew a distinction between those cases when, on a trial, judgment was recovered after a full defence, and when the claimant sought for indemnity for cost and expenses not included in the judgment; and, in the former case, it was conceded that the judgment concluded the committee as to the amount contained in it, whereas, in the latter case, the reasonableness of charges was a proper subject for the examination of the committee. Colonel Twiggs combats the soundness of this distinction, and refers to some cases to sustain his views. In those cases judgments had been recovered, and sums of money were appropriated to discharge them.

The proof on which the committee acted cannot be known by consulting the law. There may be evidence in the cases referred to that the claimants had paid the money, but it is more probable that the judgments were discharged by the payment being made by the Secretary of the Treasury directly to the plaintiffs.

The case before the committee has no analogy to those referred to by Colonel Twiggs. He asks to be remunerated for money expended in defending suits, and this without exhibiting any proof that he has paid a cent in the cases referred to—judgments had been recovered and money was appropriated to pay them. There are cases where the Secretary of the Treasury has been directed to liquidate claims for attorney fees, and for expenses incurred by an officer in defending suits; and it cannot be believed he has not required other evidence than an account from the person said to have rendered the services.

As to the censure which Colonel Twiggs intimates that this committee have imputed to the Secretary of War, and to two other committees, and to the Senate, needs no further notice than that no such censure can be inferred from the report, except that this committee differed from the Secretary of War, the two committees mentioned, and from the Senate, in its views of the merits of the claim as presented. Such opinion it had a right to express, and that opinion is now maintained after another patient investigation of the case.

WASHINGTON, April 25, 1832.

SIR: It is with no ordinary feelings of surprise and mortification that I have seen the report submitted by you from the Committee of Claims, upon the bill from the Senate providing for my relief. Had the committee, previously to presenting a report wounding to my feelings, and, without full explanation, derogatory to my character, deemed it important to suggest to me the objections which were entertained, and the difficulties which existed, in relation to any of the circumstances attending it, I cannot but believe that some of the comments of which I complain would have been withheld; and even now I cannot refrain from indulging a confident hope that, upon a fuller examination, the committee will take pleasure in affording to me ample justice.

The general language of the report would seem to convey the imputation that I had not frankly communicated all the circumstances of the case submitted to the consideration of Congress, but had either suppressed or given a color to facts which, when investigated, essentially change the character of the claim. A reference to the Secretary of War will, I apprehend, entirely remove every such impression from the minds of the committee. My original application was addressed to the War Department; the subject was fully examined by the Secretary, and an inquiry addressed to that functionary would have led to the satisfaction of the committee that the various items which compose it were investigated by him, and that all the facts now in the possession of the committee, and indeed others, were well understood. The result of the investigation then made was, as the committee are apprised, a favorable recommendation of the case to the consideration of the Committee of Ways and Means of the House of Representatives. The report of that committee in favor of the allowance, the sanction given to that report by the Committee on Finance of the Senate, and the subsequent approval of the Senate, expressed by the passage of the bill in question, are all well known to the committee over which you preside, for they are distinctly referred to in your report.

Under these circumstances, it appears to me that any imputation upon me for having presented a view of the circumstances attending my claim, which a fuller investigation of its merits shows to be erroneous and deceptive, must necessarily implicate not merely the Secretary but the two committees, and the Senate itself, in the charge of having incautiously, and without examining evidence so easy of access, recommended my case to the favorable consideration of Congress. I feel a strong assurance that had this view of the case been distinctly propounded to the committee, an inquiry would have been made which would have relieved all who may be implicated from any degree of just censure.

May I be permitted very respectfully to suggest some matters for the consideration of the committee in relation to some of the views presented in their report? A distinction appears to be drawn between cases in which a judgment has been recovered against an officer acting within the sphere of his official duty, and thereby subjected to prosecution, and those in which he has successfully defended himself against the suit. With great deference to the better judgment and more mature experience of the committee, it appears to me that no such distinction, if it actually exist, can have any application, however remote, to the present case. Even had a judgment been recovered, it could have done no more than simply ascertained the amount of damages in which the officer was mulcted, but could throw no light upon the inconvenience, labor, or expense, to which he had been subjected in defending the suit. Of these items of charge, essentially necessary to a complete remuneration and indemnification, there can be no record evidence. The amount of them must be established by testimony extrinsic to the record. All that it was necessary for me to do, I had apprehended, was to show to the satisfaction of the Congress that suits had been instituted against me for acts which my obligations to the government made it incumbent upon me to perform. The proof of these facts I had presumed would entitle me to indemnification against the consequences of my acts at the hands of the government.

It had never occurred to me, nor was I advised by my friends, that it was important, much less essential, that I should show that I had, in point of fact, paid out of my own pocket what I claimed as an indemnification, as a preliminary to the presentation or even payment of my demand. The precedents of similar allowances by statute did not inform me that such a requisition had ever been made. The instances are numerous, and need not be specially brought under the view of the committee, in which, upon the mere presentation of the record of the suit, before any liquidation of the judgment, a bill has been passed authorizing full indemnification. The party liable to pay has been enabled, by the funds obtained from Congress, to discharge his liability. This has been the case as well in regard to the sum ascertained by the judgment, as for the collateral expenses to which the defendant has been subjected. It never was required of Mr. Gelston, as preliminary to the appropriation of \$130,000 to his indemnification in the general appropriation act of April, 1818, that he should show he had paid that sum, for, by the terms of the appropriation, it was for the purpose of discharging the judgment obtained against him. The recent cases of the marshal of the eastern district of Pennsylvania must be fresh in the recollection of the committee.

I cannot, however, while on this point, refrain from referring to the act for the relief of Lieutenant

Robert F. Stockton, passed in March, 1823. That act was passed before all the money was paid, and all the expenses incurred, for which it was designed to provide. Future expenses are expressly included in the provisions of the act, and no limit was fixed for the allowances. The committee appear to rest their principal objection to the claim which I have presented on the single ground that the evidence is not satisfactory that any of the first five items of charge have been paid. They further say that "these accounts are admissible if Colonel Twiggs shall prove he has paid them," &c.

I have never undertaken to prove or to assert that all these moneys have been paid; and had the committee thought proper to propose the inquiry, they would have learned that some of the accounts have been forwarded to me to this place, as evidence not of what I had paid, but of what I was liable and called upon to pay. If I have been mistaken in the supposition that the proof of actual payment was not essential, such an error is, I trust, an excusable one, and I disclaim all idea of designing to impress upon the committee the opinion that such payment had been made.

As the committee have glanced at the amount of the attorney's fees, I shall barely remark that my experience upon these subjects has fortunately been too limited to justify me in entertaining any confidence in my own judgment when in opposition to that of the committee, but I cannot but indulge the belief that a consideration of the distance to be travelled by the counsel whom I retained, and the effective service rendered at three separate terms of the court, have not been exorbitantly estimated.

Upon the subject of items of charge for transportation, it appears to me that the difficulty which the committee has raised may possibly have originated in a mistake committed by myself in the designation of the ground of claim. Being a military man, and habituated to military phraseology, and designing my account for the action of the War Department, I employed a term well known to all who it was presumed would have to act upon the case. In ordinary cases, the same meaning would perhaps be more accurately indicated by the phrase "travelling expenses." Most cheerfully would I acquiesce in the application of the principle sanctioned by the committee, by which the proper allowance in such cases is limited to the sums "actually and necessarily expended." The amount stated in my account would fall short of that sum. Had I submitted, as has been done in other instances, to allowing judgment to be rendered against me; had I withheld my personal exertions, and omitted to employ competent professional aid, the amount recovered would have been much enhanced. But had not I felt impelled by a sense of public duty to encounter this labor, and incur these responsibilities in resisting what I conceived an unjust claim through me upon the government, I could easily have postponed an execution upon the judgment which would have been had, until indemnification was provided by Congress.

What are the particular circumstances to which the committee refer, and which they state give to one of the items so extraordinary a character as to cast a suspicion over the whole account, I am unable to conjecture; nor does it distinctly appear what kind or degree of suspicion has been awakened. The manner in which the item is charged precludes the idea that any concealment was designed, for it specifies the points between which the travel occurred; the presentation of a claim to the very department where alone existed the fullest information upon all the matters elicited by the committee, is equally conclusive to show that any such attempt would have been instantly met and exposed. An imputation of so serious a character ought not to be made without ample grounds and full inquiry; and I submit to the committee that common justice would appear to require that, before such an accusation is publicly preferred, I should have been apprised of the doubts which the committee entertained. I trust further consideration and inquiry will induce the committee to believe that I have been unjustly assailed. Such inquiry will also probably satisfy the committee of the perfect truth of my assertion, that the allowance of every item of my account would not fully indemnify me for the expenses and liabilities incurred in consequence of this prosecution against me.

In concluding this appeal to the committee, I cannot but indulge the hope that the language employed in the report calculated so seriously to affect my character and to wound my feelings, will appear to have been unjustly applied to me; and the confident assurance that the gentlemen of the committee who have sanctioned it will relieve me from the imputations which have been cast upon me.

D. E. TWIGGS.

HON. E. WHITTLESEY, *Chairman of the Committee of Claims of the House of Representatives.*

22D CONGRESS.]

No. 530.

[1ST SESSION.]

APPLICATION OF OFFICERS OF THE ARMY THAT BREVET RANK MAY NOT BE ABOLISHED.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JUNE 5, 1832.

To the House of Representatives of the United States:

The memorial of the undersigned, officers of the United States army, respectfully sheweth: That they have seen with deep regret the introduction into the House of Representatives of a bill to repeal the law which authorizes the conferring of brevet rank on officers of the army who shall have served ten years in any one grade. Lest their silence should be construed into an acquiescence in the expediency or justice of this measure, they deem it due to themselves, and to the army generally, to express the hope that the bill will not become a law.

The institution of brevet rank, conferred for continuous faithful service, is, in the opinion of the undersigned, peculiarly adapted to a state of peace and to a military organization such as that of the United States. In time of war, such a provision would be almost, if not entirely, inoperative. The casualties of service will lead to regular promotion for those who survive, or gallant conduct in the field will give a claim to the distinction conferred by brevet rank, which the bill under consideration does not

propose to impair. But in time of peace this system of promotion happily supplies a stimulus to exertion, without which, in the military service as in all other conditions of human life, advancement in knowledge and usefulness cannot be expected. Under the operation of this system, an officer who enters the army in its lowest grade at the age of twenty has, according to the present rate of promotion, the prospect of seeing himself advanced only to the grade of lieutenant colonel at sixty years of age—a prospect calculated to gratify but a very moderate share of ambition. This consideration shows also the fallacy of the idea entertained by some, that the army will, in time, be composed entirely of officers of high grade.

The additional expense to government, caused by this system under the present law relative to pay of brevet officers, is not thought worthy of consideration in comparison with the benefits of the system. In consequence of the peculiar distribution of our small army, rendered necessary by the extent of territory and the character of the service, about half of the officers (say thirty) holding brevets now draw their brevet pay; but this number can increase but little with the increased number of brevets, since the arrangements and exigencies of the service will remain nearly the same.

The peculiar adaptation of this system to the military organization of the United States is also worthy of serious consideration. Our regular force being so small, and distributed over so great an extent of territory, the defence of the country and protection of our citizens in any sudden emergency, such as experience has shown may arise even in time of peace, must depend, in a great measure, on the co-operation of the militia; and whilst none will deny the importance of experience in those entrusted with military command, the benefit of a system by which rank and eligibility to command go hand in hand with experience must be obvious. Abolish this system, and a major of the local militia, elected perhaps but yesterday, and possibly without reference to any contingency that may call for his services, may be to-day associated with, and would command, a captain in the army of fifteen years' standing, whose whole life has been devoted to the military profession. To which of these officers the lives and fortunes of his fellow-citizens may with most confidence be entrusted there can be little doubt.

Reference has been above made to the *justice* of the proposed measure. The law which it is designed to repeal has been in force since the year 1812. All the present officers, in retaining or receiving their commissions, have, therefore, had a right to regard the prospect of brevet promotion as one of the considerations for their services; and to snatch the reward from those especially who seemed to have it almost in their grasp, whilst others, not more meritorious, enjoy its benefits, must be regarded as an excessive hardship and injustice; to abolish *all* brevets, an impracticable measure; and to give the proposed repeal a distant prospective operation, seem to be the only alternatives consistent with good faith.

The undersigned are happy to have it in their power to appeal, in support of their views, to the opinions of the Secretary of War as expressed in his last annual report, to which they respectfully refer.

C. GRATIOT, *Brevet Brigadier General.*

R. JONES, *Colonel.*

WM. B. DAVIDSON, *Lieutenant United States Artillery.*

J. H. HOOK, *Major United States Army.*

R. B. MASON, *Captain Artillery.*

G. BOMFORD, *Brevet Colonel.*

JAMES KEARNEY, *Lieutenant Colonel and Topographical Engineer.*

WASH. HOOD, *2d Lieutenant 4th Infantry.*

THOMAS J. LEE, *2d Lieutenant 4th Artillery.*

W. H. SWIFT, *Lieutenant 1st Artillery.*

ALEX. D. MACKAY, *2d Lieutenant 1st Artillery.*

WM. H. C. BARTLETT, *2d Lieutenant United States Engineers, &c.*

THOMAS HUNT, *Captain United States Army.*

T. CROSS, *Major United States Army.*

THOS. F. HUNT, *Captain United States Army.*

J. A. D'LAGNEL, *Lieutenant United States Artillery.*

J. L. LOCKE, *2d Lieutenant 2d Artillery.*

T. B. W. STOCKTON, *2d Lieutenant 1st Infantry.*

WM. H. BELL, *1st Lieutenant United States Army.*

WM. TURNBULL, *Captain and Assistant Topographical Engineer.*

L. McCLELLAN, *Lieutenant and Adjutant 1st Regiment Artillery.*

S. EASTMAN, *2d Lieutenant 1st Infantry.*

GEO. D. RAMSAY, *Lieutenant Artillery.*

A. MORDECAI, *Lieutenant Corps of Engineers.*

S. TUTTLE, *Lieutenant Corps of Engineers.*

WASHINGTON CITY, June 2, 1832.

22D CONGRESS.]

No. 531.

[1ST SESSION.]

ON THE APPLICATION OF AN OFFICER OF THE ARMY THAT THE PROCEEDINGS OF A COURT-MARTIAL IN HIS CASE MAY BE INVESTIGATED BY CONGRESS.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JUNE 16, 1832.

Mr. DRAYTON, from the Committee on Military Affairs, to whom was referred the memorial of Lieutenant John Williamson, of the United States army, reported:

That the memorialist sets forth that he is suffering under the sentence of a general court-martial, of which Colonel Arbuckle was president, convened at Fort Monroe, in Virginia, on the 3d of May, 1832; that the evidence adduced at the trial did not sustain the charges against him; and that the court punished him for a crime of which he was not accused. The memorialist, therefore, prays that the whole proceed-

ings of the court may be investigated by Congress, and that they be published, together with the defence of the memorialist.

The committee being of opinion that Congress has no power either to revise or to reverse the judgment of a court-martial, they therefore recommend the adoption of the following resolution:

Resolved, That the memorialist have leave to withdraw his memorial and the papers which accompany it.

22d CONGRESS.]

No. 532.

[2d SESSION.]

ANNUAL REPORT OF THE SECRETARY OF WAR SHOWING THE CONDITION OF THAT DEPARTMENT IN 1832.

COMMUNICATED TO CONGRESS WITH THE PRESIDENT'S MESSAGE DECEMBER 4, 1832.

DEPARTMENT OF WAR, *November 25, 1832.*

SIR: In conformity with your instructions, I proceed to lay before you a brief statement of the various operations of this department for the past year, and such suggestions for the improvement of the several branches of the public service committed to its care as experience has dictated; and in executing this task it is due to the services, exertions, and fidelity of the officers at the head of the respective bureaus of the department that I should acknowledge their able assistance, and the important benefits I have derived from their counsel and co-operation in the administration of the concerns of this highly responsible office.

During the past season the hostile aggressions of the Sac and Fox Indians upon the borders of Illinois and Michigan required and received the prompt attention of the government. The executives of the States of Missouri, Illinois, and Indiana, and of the Territory of Michigan, co-operated zealously and efficiently in the measures of protection. The regular troops in the vicinity of the theatre of hostilities were concentrated under Brigadier General Atkinson and brought into the field; and the militia of Illinois, and of that part of the Territory of Michigan exposed to danger, promptly repaired to the defence of the frontier. Such was the nature of the warfare and of the country, that it was difficult immediately to protect the long line of scattered settlements and to bring the enemy to action. As a precautionary measure, and to place the result of the campaign as far beyond the reach of accident as possible, the garrisons at some of the posts upon the sea-board and upon the lakes were ordered to Chicago, under the command of Major General Scott, to co-operate with the force already employed under Brigadier General Atkinson. The celerity with which these troops moved is creditable to their character and discipline. One of the companies reached Chicago in eighteen days from Old Point Comfort, a distance by the route necessarily travelled of more than eighteen hundred miles; and the movement of the whole was marked by the greatest despatch. Unfortunately, their hopes of being useful to their country were suddenly arrested when highest by the appearance of the cholera; and probably few military expeditions have presented scenes more appalling in themselves or demanding the exertion of greater moral courage. The occasion was met by Major General Scott in a manner worthy of his high character, and the example he gave to the American army in that period of trying responsibility is not less important than was his gallant bearing in the presence of the enemy during the late war. His efforts were well seconded by the officers, and no practicable method seems to have been omitted to stay or to cure the pestilence. Of about fifteen hundred officers and men of the regular troops ordered to the northwestern frontier not less than two hundred died by the cholera.

General Atkinson, with the regular troops and militia under his command, pursued the Indians through a country very difficult to be penetrated, of which little was known, and where much exertion was required to procure supplies. These circumstances necessarily delayed the operations, and were productive of great responsibility to the commanding officer, and of great sufferings and privations to all employed in this harrassing warfare. The Indians, however, were driven from their fastnesses, and fled towards the Mississippi, with the intention of seeking refuge in the country west of that river. They were immediately followed by General Atkinson with a mounted force, overtaken, and completely vanquished. The arrangements of the commanding general, as well in the pursuit as in the action, were prompt and judicious, and the conduct of the officers and men was exemplary. The campaign terminated in the unqualified submission of the hostile party, and in the adoption of measures for the permanent security of the frontier; and the result has produced upon the Indians of that region a salutary impression, which it is to be hoped will prevent the recurrence of similar scenes.

The extensive operations rendered necessary by these events have demonstrated the able organization and efficiency of the various staff departments of the army, and their capacity to meet any exigency which may require their exertions. They have also shown that the *morale* and discipline of the troops are well preserved, and that whenever or wherever their services may be wanted the expectations of their country will not be disappointed.

An act of the last session of Congress authorized the raising of six companies of mounted rangers for the defence of the frontiers. Five of these were organized without delay, immediately after the passage of the law; but owing to the absence of the person selected for the command of the sixth with the troops employed under General Atkinson, that company was not brought into service during the active portion of the season. It is now, however, filled, and under orders.

I have caused a comparative view to be appended to this report, showing the difference of cost between the maintenance of this corps of rangers and of a regiment of dragoons. It will be perceived that the former exceeds the latter by \$153,932. The rangers costing annually \$297,530, and the dragoons \$143,598; an access of expenditure well worthy of consideration, unless there are circumstances connected with the

nature of the duties of these corps which give to the rangers, as at present organized, a decided preference over the dragoons. It is my conviction that there are no such circumstances, and that a regiment of dragoons would be more efficient as well as more economical. From the constitution of the corps of rangers, and from the short periods of their service, their organization is but little superior to that of the ordinary militia. Every year there must be a great loss of time in the reconstruction of the corps and in the acquisition of the necessary experience and knowledge. And its constitution is so dissimilar from that of any other branch of the army that a perfect union of sentiment and action between them can scarcely be expected. The want of these must frequently be injurious to the public service.

Regular cavalry are fully competent to the discharge of all the duties required of mounted rangers. In celerity of movement, they will, of course, be equal, and if, (which, however, is doubtful,) the rifle is considered the most efficient arm for mounted troops, operating against the Indians, this weapon can be placed in the hands of such cavalry, and they can easily be trained to its use.

Besides other important objects, it is desirable to preserve in our military system the elements of cavalry tactics, and to keep pace with the improvements made in them by other nations. The establishment of a regiment of dragoons would complete the *personnel* of our army, and would introduce a force which would harmonize with and participate in the *esprit du corps* so essential to military efficiency, and so easily and certainly created by military principles.

It seems to be now conceded, and it surely may well be, that mounted troops are absolutely necessary for the defence of that part of the inland frontier in contact with the Indian tribes. Our permanent military posts, garrisoned by infantry, exert a moral influence over the Indians, and protect important and exposed positions. But to overtake and chastise marauding parties and, in fact, to carry on any serious operations against an Indian foe in the level regions of the west, horsemen are indispensably necessary. Presuming, therefore, that some force of this description will be retained, I have the honor to suggest the propriety of the conversion of the corps of rangers into a regiment of dragoons.

The report of the officer at the head of the Engineer department presents a comprehensive view of the operations assigned to the corps under his superintendence, in its three great divisions, of fortifications, internal improvement, and military education.

In the construction of the various works of defence upon the maritime frontier the progress has been as rapid as was compatible with a proper and economical administration of this important duty, and with the numerous calls upon the officers of that department. So much delay and loss are experienced, not only in this branch of the public service but in almost all others requiring the disbursement of money, by the late period at which the appropriations are sometimes made, that I am led to introduce the subject here, in the hope that it will engage the attention of Congress. The pecuniary loss is not the only injury, particularly in all the works of fortification and internal improvement. The operations are necessarily discontinued during one part of the working season, and too rapidly prosecuted during another, and the result is, consequently, more or less unfavorable.

The numerical strength of the engineer corps is not now sufficient for the performance of the duties required of its officers. They have all been actively and zealously engaged, and their scientific and practical attainments eminently qualify them for the discharge of the various functions they are performing, whether belonging appropriately to their profession or assigned to them by this department. For the facts connected with this subject I refer to the report of the chief engineer, contenting myself with observing that there is no economy in keeping this establishment below the numbers demanded by the exigency of the service. Either the duty will not be performed, as has happened this season in some instances, or, as happened in others, it will be worse performed, and at a greater expense; for it is impossible to transfer from civil life, or from other departments of the army, persons possessing the requisite attainments, without previous experience, to insure science and skill in the execution of these duties, and a system of vigilant supervision in the administration of their fiscal concerns. To acquire these qualifications, time and experience are necessary. And the responsibility imposed by a permanent attachment to the department, and the *esprit du corps* created by it, are both favorable to a more faithful and efficient discharge of the duties appertaining to it. For these reasons, and from the clearest conviction that such a measure is demanded by the public interest, I venture to renew the recommendation contained in my last annual report for a moderate and gradual increase of the engineer corps, and to express my full concurrence in the views presented by the chief engineer upon that subject.

The Military Academy, as will be seen by the report of the board of visitors, is steadily pursuing its course of usefulness. As an institution national in its objects, its administration, its support, it merits the fostering care of the government and the kind regard of the public. For a series of years it has undergone the rigid examination of the most respectable citizens, selected from every part of the country, many of whom have arrived there with strong prejudices against it, but all of whom, I believe, have returned with a deep conviction of its importance and admirable management. As a school where the various sciences auxiliary to the art of war are taught, and taught most thoroughly, as a camp of instruction, where the practical duties of the soldier are acquired, and where the difficult art of governing is learned, by learning first the duty of obedience; as a place of deposit, where all the improvements in military knowledge, throughout the world, are ascertained, preserved, and investigated; and as a point of concentration, where young men are brought into friendly contact and emulation, from every part of the Union, and are sent out to defend their country, with their sectional prejudices diminished and their views enlarged, it is among the most valuable possessions of the republic.

I coincide in opinion with the board in the suggestions they have made, and commend them to your favorable notice. From personal inspection I am satisfied that the additions to the buildings, pointed out in the report, are required by the public interest, and that they are essential to the comfort of the professors and pupils, and to a due prosecution of their duties and studies. And especially am I impressed with the importance of a proper place of public worship, where all the persons attached to the institution, amounting, with their families, to more than eight hundred individuals, can assemble and unite in the performance of religious duties. In a Christian community the obligations upon this subject will not be questioned; and the expense of providing a suitable place of worship, especially as a chaplain is maintained there, cannot be put in competition with the permanent advantages of a course of religious instruction to such a number of persons, a large portion of whom are at that critical period which determines whether the future course of life shall be for evil or for good.

The reasons heretofore urged for an augmentation and more efficient organization of the topographical corps still exists in full force. The duties assigned to that branch of the staff require extensive scientific attainments, together with much experience. They are productive of important advantages, as well in

peace as in war, and therefore address themselves with peculiar force to the favorable consideration of the government. This corps is not sufficiently numerous for the discharge of the duties required of it, and the additional expenditures rendered necessary by this state of things exceed the amount demanded by the proposed augmentation. Independently, however, of the absolute economy which would result from the adoption of this measure, it is called for by other and not less forcible considerations. All experience proves that a corps organized upon military principles is more responsible, more efficient, and better governed than individuals can be, who are united by different and ordinary associations. Causes are put in operation which necessarily produce emulation, professional pride, and united action. The character of the corps is dear to every individual, and each becomes identified with its prospects and reputation. Officers temporarily assigned to topographical duties cannot be expected to feel the same interest in the prosecution of these labors which they would do if they were constituent members of the corps, and looking forward to it for advancement in professional standing as well as in military rank. Many officers, however, are thus occasionally employed, and were they not so much of this branch of the public interest would remain unexecuted. An efficient and increased organization, fully adequate to the duties of the corps, may be effected without any addition to the public expenditure. For the details of such a plan I beg leave to refer to the report of the officer temporarily in charge of that bureau.

There is probably no class of officers under the government whose compensation is more inadequate to their services than that of the medical staff of the army. There are but two grades, surgeon and assistant surgeon, in this corps; and the pay of the former is forty-five dollars, and the pay of the latter is forty dollars per month.

The prospect of gradual and continued promotion held out to the other officers of the army is a powerful incentive to good conduct, and when realized becomes its just reward. Of this the medical officers are deprived, for the slight difference of rank and pay at present existing is scarcely worthy of consideration. The nature of their profession, requiring time, experience, and pecuniary means for its acquisition; the responsible and arduous services demanded of them; the relation, not always a pleasant one, in which they stand to the line of the army; and I may add, in justice to this meritorious class of officers, their general capacity, respectability, and good conduct, entitle them to a higher rate of compensation; and I indulge the hope that their claims will be favorably considered.

In the subsistence of the army an important change has been made, which, I trust, will prove salutary to the health and morals of the troops. In lieu of the spirituous liquor, which formerly composed a part of each ration, a commutation was some time since established, by which its value was paid to each soldier in money; but at the same time he had permission to purchase this destructive article from the sutler of the post. The regulation you have recently authorized substitutes coffee and sugar for the commutation previously established. Four pounds of coffee and eight pounds of sugar are hereafter to be issued with every one hundred rations. And at those posts where the troops prefer it ten pounds of rice are allowed to the same number of rations, instead of the beans, which have formed a constituent portion of the subsistence of the soldier. From a comparative estimate furnished by the commissary general, it appears that this alteration in the component parts of the ration will add but two mills and four-tenths to its cost, and will increase the whole amount of the army subsistence by a sum not exceeding six thousand dollars—an expenditure not to be regarded when the benefits resulting from it are taken into view. Simultaneously with this arrangement a regulation was adopted prohibiting the sale of spirituous liquor by the sutlers to the troops, and its introduction, under any circumstances, into the camps and forts of the United States, with the exception of the hospital stores, and of the quantity necessary to issue under that provision of the law which allows an extra gill to every soldier engaged in fatigue duty. No authority to dispense with this is vested in the Executive, and Congress alone can interpose the necessary remedy. I am satisfied the great cause of public morals, as well as the discipline and efficiency of the army, would be promoted by an entire abolition of these issues, and I cannot but hope that the legislative authority will be exerted for that purpose. An addition of three cents to the sum allowed for extra daily labor would be more than an adequate pecuniary compensation for the deprivation herein recommended, and would increase but in a very inconsiderable degree the public expenditure.

A very partial knowledge of the actual condition of our army is sufficient to satisfy the most superficial observer that to habits of intemperance may be traced almost all the evils of our military establishment. These need no enumeration that an adequate conception may be formed of their nature and consequences. But it is time that an enemy so insidious and destructive were met and overcome; that all palliatives were abandoned, and that a system of exclusion—of entire, unconditional exclusion—were introduced and enforced. Every just consideration of policy and morality requires this measure, and public opinion is certainly prepared for, and would approve it. I earnestly recommend the subject to your most favorable consideration.

I beg leave to refer you to the accompanying report of the officer in charge of the bureau of Indian Affairs for a detailed statement of the operations and condition of that branch of the public service.

Among the southern and southwestern Indians no event has occurred to disturb the relations existing between them and the United States. The settled policy of the government to induce the Indians to remove beyond the limits of the respective States and Territories, where this can be done upon reasonable terms, and with their free consent, has been steadily kept in view. The objects and necessity of that policy are so clearly stated in the message of the President of the United States to Congress of December 2, 1828, that I take the liberty of drawing your attention to those remarks:

“In the practice of European States,” says President Adams, “before our revolution, they (the Indians) had been considered as children, to be governed; as tenants at discretion, to be dispossessed as occasion might require; as hunters, to be indemnified, by trifling concessions, for removal from the grounds upon which their game was extirpated. In changing the system, it would seem as if a full contemplation of the consequences of the change had not been taken. We have been far more successful in the acquisition of their lands than in imparting to them the principles, or inspiring them with the spirit, of civilization. But in appropriating to ourselves their hunting grounds we have brought upon ourselves the obligation of providing them with subsistence; and when we have had the rare good fortune of teaching them the arts of civilization, and the doctrines of christianity, we have unexpectedly found them forming, in the midst of ourselves, communities, claiming to be independent of ours, and rivals of sovereignty within the territories of the members of the Union. This state of things requires that a remedy should be provided—a remedy which, while it shall do justice to these unfortunate children of nature, may secure to the members of our confederation their rights of sovereignty and of soil. As the outline of a project to that effect,

the views presented in the report of the Secretary of War are recommended to the consideration of Congress."

"While some of our citizens," says General Porter, in the very able report here referred to, "who are the advocates of primitive and imprescriptible rights, in their broadest extent, contend that these tribes are independent nations, and have the sole and exclusive right to the property and government of the territories they occupy, others consider them as mere tenants at will, like the buffalo of the prairies, to be hunted from their country whenever it may suit our interest or convenience to take possession of it. These views of their rights and disabilities are equally extravagant and unjust; but the misfortune is, that the intermediate line has never been drawn by the government. Nothing can be more clear to one who has marked the progress of population and improvement, and is conversant with the principles of human action, than that these Indians will not be permitted to hold the reservations on which they live, within the States, by their present tenure, for any considerable period. If, indeed, they were not disturbed in their possessions by us, it would be impossible for them long to subsist, as they have heretofore done, by the chase, as their game is already so much diminished as to render it frequently necessary to furnish them with provisions in order to save them from starvation. In their present destitute and deplorable condition, and which is constantly growing more helpless, it would seem to be not only the right but the duty of the government to take them under its paternal care, and to exercise over their persons and property the salutary rights and duties of guardianship.

"The most prominent feature in the present policy of the government, as connected with these people, is to be found in the efforts that are making to remove them beyond the limits of the States and organized Territories.

"A very extensive tract of country, lying to the west and north of the Arkansas Territory, has lately been set apart for the colonization of the Indians."

"Let such of the emigrating Indians as choose it, continue, as heretofore, to devote themselves to the chase in a country where their toils will be amply rewarded. Let those who are willing to cultivate the arts of civilization be formed into a colony, consisting of distinct tribes or communities, but placed contiguous to each other, and connected by general laws, which shall reach the whole. Let the lands be apportioned among families and individuals in severalty, to be held by the same tenures by which we hold ours, with perhaps some temporary and wholesome restraints on the power of alienation. Assist them in forming a code of laws adapted to a state of civilization."

In regard to such Indians as shall still remain within the States and Territories, and refuse to emigrate, let an arrangement be made with the proper authorities of the States in which they are situated for partitioning out to them in severalty as much of their respective reservations as shall be amply sufficient for agricultural purposes. Set apart a tract proportioned in size to the number of Indians to remain, in common, as a refuge, and provision for such as may, by improvidence, waste their private property, and subject them all to the municipal laws of the State in which they reside. Let the remainder of the reservation be paid for by those who hold the paramount right at such prices as shall be deemed, in reference to the uses which Indians are accustomed to make of it, reasonable, and the proceeds be applied for the benefit of those of the tribe who emigrate after their establishment in the colony, or be divided between those who emigrate and those who remain, as justice may require."

To the views herein presented of the condition of the Indians, of the prospects which await them, and of the only efficient remedy in their power to seek, or in that of the government to apply, I take the liberty of adding my own testimonial, founded on an intimate intercourse with them of eighteen years, both personal and official, under every variety of circumstances, in peace and war, and in very remote regions, as well as within our own settlements. The principles laid down in these extracts are substantially the same as those which now regulate the government in all their transactions with the Indians, when the question of their permanent establishment or removal is brought under discussion. So far as respects the emigrating Indians, this will clearly appear by reference to the instructions of the commissioners now engaged in the adjustment of all the unsettled matters connected with the great plan of colonization. With regard, however, to those Indians who refuse to remove, it has not been deemed expedient for the government, by its own act, either to partition out to them the land necessary for their support or to decide upon the consideration to be allowed for the residue, and to direct its appropriation. This, so far as regards the general government, has been and continues to be the subject of conventional arrangement, in which the parties, by mutual discussion and compromise of opinion, arrive at a satisfactory result. In these arrangements, where the parties desire it, adequate tracts of land in fee, with "temporary and wholesome restraints," upon the right to sell, are secured to all who desire to remain. That this system of "guardianship" is, however, founded upon a just and intimate knowledge of Indian character, no one acquainted with that character will question. I need not now inquire whether a practical resort to the principles resulting from it will ever become necessary. If it should, no doubt every arrangement which justice and humanity call for will be liberally made.

In your message to the Senate of February 22, 1830, you explained your views of the question of jurisdiction over the Indian tribes living within the respective States and Territories, and stated that, in your opinion, and in the words of the above report, they were "subject to the municipal laws of the State in which they reside," in all cases where such laws were extended over them.

The progress of events since 1828 has confirmed, if confirmation were wanting, the correctness of these principles, and their adaptation to the actual and prospective condition of the Indians. The circle of civilization and improvement has extended, and various tribes have retired, or are retiring, before it. The experience of the four years which have intervened does not furnish one consolatory hope that the insulated bands who have reserved and occupy tracts surrounded by our settlements can permanently retain these positions and prosper. There are moral, political, and physical causes, all in operation, which cannot be controlled, and which forbid such an expectation. And, in fact, the whole history of our intercourse with our primitive people teaches no one lesson more important than this; and it will be fortunate for their prosperity and for our responsibility if, in its practical application, both parties should become satisfied that the system provided by the act of May 28, 1830, offers the only rational prospect of a durable and happy residence for the Indians. A few individuals, almost always half-breeds and their connexions, engrossing the intelligence and means of each of these small communities, and too often without regard to the rights or fate of others, may become assimilated to our institutions, and eventually planted among us with safety. But this should never be permitted at the sacrifice of more important interests and to the utter disregard of the fate which awaits the unfortunate mass of these tribes, persuaded or almost compelled to remain where they must rapidly decline and at length disappear. And the causes

which enact this law are not less obvious in their origin than they are certain in their operation. Their progress is onward, and, regret them as we may and must, no human power can arrest their march or avert their consequences. The effort has been made for generations, and in every mode that wisdom or philanthropy could suggest, and yet in not one solitary instance has it produced any permanent and general beneficial effect. And we may survey our whole cultivated territory in the vain expectation of discovering one aboriginal community, however small, which has withstood the ceaseless pressure of civilization, and which holds out the slightest prospect of moral or physical improvement, or even of eventual subsistence, for the great body of the individuals composing it. If such a community exists it is unknown to me; and, in fact, if one is believed to exist, it is only by those who are acquainted with its actual condition, and with the internal history of its wants, its dissensions, and its oppressions.

The act of Congress of May, 1830, created a barrier beyond which the dispersed remnants of our various Indian tribes may be collected and preserved. The provisions of that act are plain, salutary, and comprehensive. It is a solemn national declaration, containing pledges which neither the government nor the country will suffer to be violated. It secures to the Indians for ever the undisputed possession and control of the region allotted to them, and makes such arrangements as are essential to the subsistence, safety and comfortable establishment of the colonists. No similar attempt has ever been heretofore made, and therefore no unfavorable deductions can be drawn from the failure of preceding efforts, having in view the same general object, but endeavoring to attain it by far different means. No organized government exists, or can exist, to assert jurisdiction over these tribes; and treaties of cession are incompatible with the whole basis of the plan of settlement.

All the testimony before this department concurs in representing the country assigned for a land of refuge as abundantly extensive and fertile for the support of the Indians, and as presenting in its climate, its animal and agricultural productions, and its general circumstances, features admirably adapted to their situation and wants. Important benefits are anticipated from the act of the last session, authorizing the appointment of commissioners to visit the several tribes west of the Mississippi, and to arrange the various interesting and unsettled questions arising out of the new relations which the system of emigration has created. A majority of these commissioners, it is supposed, is now in that region, engaged in the performance of their duties; but the time which has intervened since their arrival there has been too short to enable them to communicate to the department the progress and prospects of their mission. The accompanying copy of their instructions will show the general nature of their duties and the great importance of an able and faithful discharge of them. These duties embrace the settlement of conflicting claims, the arrangement of disputed boundaries, the juxtaposition of kindred bands, the commutation of permanent for temporary annuities, the reconciliation of hostile tribes, the redemption of the solemn pledge of protection offered by the act of May 28, 1830, the establishment of a system of government over them, and of intercommunication among them; and, generally, the examination and suggestion of any topics calculated to improve their condition, and to enable the government the better to discharge the great moral debt which circumstances and the situation of this helpless race have imposed upon them. Every facility in the power of the Executive has been granted to aid the operations of the commissioners, and it is to be hoped that their report will be full and satisfactory, and that the measures founded upon it will introduce a new era into the history of our Indian intercourse.

In my report of November 21, 1831, I stated it "had been suggested that a considerable portion of the Cherokees were desirous of availing themselves of the provisions of the treaty of May 6, 1828, for their removal." And that "with a view to ascertain this fact, and to afford them the aid offered by that treaty, if they were inclined to accept it, a system of operations had been adopted, and persons appointed to carry it into effect." But that "sufficient time to form a judgment of the result of this measure had not then elapsed."

Under this system about seven hundred Cherokees have claimed the benefit of the treaty of 1828, and have been removed, in conformity with its stipulations, to the country west of the Mississippi. But the operations have, for the present, been suspended. And, until recently, there was reason to hope that their resumption would have been rendered unnecessary by an arrangement for the cession of the whole Cherokee title east of the Mississippi, and for the emigration of that tribe to the country offered for their permanent residence. With this view the liberal propositions authorized by you were made to them, a copy of which is annexed to this report. It will be seen, by reference to it, that the offers were conceived in a spirit of kindness and liberality which justified the expectation of their prompt acceptance. They contained ample security for the permanent establishment of the Cherokees, and for the perpetual occupation of the country allotted to them. They provided the means for their moral, social, and political improvement; and they offered all the pecuniary aid necessary to their present and future subsistence and support. Their acceptance would have terminated the difficulties in which the Cherokees are involved, would have united the dispersed portions of the tribe, and would have laid the foundation of their permanent improvement and prosperity. But it will be seen, by the answer herewith submitted to you, that this effort has been unavailing, and that, unless there is a change in their councils, no favorable change in their condition can be expected.

The Choctaw treaty of 1830 allowed that tribe three years to emigrate. In 1831 about 5,000 of them removed to their new possessions between the Canadian and Red rivers. They are highly gratified with the climate and country, and satisfied with the exchange they have made. From the returns which have been received, it is estimated that about 7,000 more will cross the Mississippi this season, and the residue of the tribe, amounting to about 6,000 will follow during the next.

General Coffee has succeeded in concluding a treaty with the Chickasaws which will lead to their entire removal and to their location in the west. The basis of this treaty is different from any heretofore assumed in our negotiations with the Indians. The whole value of the country ceded is assigned to the Chickasaws, and the United States become, in fact, trustees to make the necessary arrangements for their benefit.

It is stipulated that the ceded territory shall be surveyed and sold, and the whole proceeds, deducting only the actual expenses, applied to the various objects enumerated, connected with the temporary subsistence, removal, and permanent establishment of these Indians. A residuary fund is to be vested in some productive stock, and the income to be annually appropriated for the public and private objects stipulated in the treaty. A country for the residence of the tribe is to be procured by themselves; and it is probable they will be able to make a satisfactory arrangement for that purpose with the Choctaws, a kindred people, who are in possession of a much larger district than is required by their numbers.

No pecuniary benefit will result to the United States from this treaty; but, should it be ratified, it will

constitute an important era in our Indian relations. It will probably lead to the establishment of the principle that, in future cessions of land, the full value shall be secured to the grantors, with such deductions only as may be necessary to carry into effect the objects of the treaties. The advantages to be derived by the United States from these arrangements will be limited to the removal of the Indians from their present unsuitable residences, and to their establishment in a region where we may hope to see them prosperous, contented, and improving. And it cannot be doubted but that a course so consistent with the dictates of justice, and so honorable to the national character, would be approved by public sentiment. Should we hereafter discard all expectation of pecuniary advantage in our purchases from the Indians, and confine ourselves to the great objects of their removal and re-establishment, and take care that the proceeds of the cessions are appropriated and applied to their benefit, and in the most salutary manner, we should go far towards discharging the great moral debt which has come down to us as an inheritance from the earlier periods of our history, and which has been unfortunately increased during successive generations by circumstances beyond our control. The policy would not be less wise than just. The time has passed away, if it ever existed, when a revenue derived from such a source was necessary to the government. The remnant of our aboriginal race may well look for the full value, and that usefully applied, of the remnant of those immense possessions which have passed from them to us, and left few substantial evidences of permanent advantage. One great objection to a removal which has been urged by the more discreet Indians, and by many of our own citizens who are honestly seeking their improvement, is the prospect, judging by the past, that their location west of the Mississippi would be temporary, as they would be soon pressed for new cessions, and would yield, as they have heretofore yielded, to successive applications for this purpose. Although the nature and objects of their removal, and the spirit of the act of Congress which introduced the system, are opposed to such attempts, still the apprehension is entertained, and has proven injurious. Probably no course would better satisfy them upon this subject than the introduction of a principle which would secure to them the full value of the property under all circumstances, thus lessening the probability in their view of any wish on our part to acquire it, and insuring on theirs, if not the power and disposition to retain it, at least the means of converting it to the greatest advantage.

The treaty negotiated with the Creeks in March last is in process of execution. As soon as the census is completed, and the necessary surveys made, each person entitled to land will receive his tract, and he will then be allowed to sell or retain it. If he chooses to sell, the treaty provides him a residence and secures him his just privileges with his countrymen who have crossed the Mississippi. But if he prefer remaining and retaining his land, he becomes a citizen of Alabama, amenable to its laws, and entitled to their protection. All danger of future collision is therefore at an end.

A treaty has been formed with the Seminoles of Florida, upon just and satisfactory terms, by which they cede their possessions in that Territory, and agree to migrate to the region west of the Mississippi. The treaty, however, is not obligatory on their part until a deputation sent by them shall have examined the country proposed for their residence, and until the tribe, upon their report, shall have signified their desire to embrace the terms of the treaty. In conformity with this stipulation, an exploring deputation has proceeded to the Arkansas country for the purpose of examining it, and reporting its adaptation to the objects of Indian life. When they return, the determination of the tribe will be made known to the government; and it is hoped in time to enable the department to submit the treaty to you, that it may be laid before the Senate at the ensuing session.

With the Appalachicola bands an arrangement has been made, under the act of Congress of May 28, 1830, for the relinquishment of the largest portion of their claims in Florida, and for their removal. This arrangement is unconditional, and will be immediately executed. And it is confidently anticipated that the small party which has not yet assented to the arrangement will soon accept similar terms for the very limited reservations held by them.

It will thus be seen that with the Creeks, the Choctaws, the Chickasaws, and the principal Appalachicola bands, certainly, and with the Seminoles, probably, such arrangements have been made as will prevent the occurrence of any difficulties resulting from the assertion of jurisdiction by the State or territorial governments, on the one hand, and the unfounded claims of exemption from their authority by the Indians, on the other. These tribes embrace all the aboriginal population now remaining in the country east of the Mississippi and south of the Ohio, with the exception of a few individuals, too unimportant for recapitulation, and with the exception, also, of the Cherokees. Of these latter Indians it is computed that about thirty-five hundred reside west of the Mississippi, and about eleven thousand within the chartered limits of Georgia, and in the States of Alabama, Tennessee, and North Carolina. All the embarrassments arising out of the anomalous situation of the Indians which have engaged the public attention, and occasioned much anxiety to the government, are confined in their operation to that portion of this small band living within the State of Georgia. Could they be induced to pursue the only course which promises them stability and prosperity, and to remove to and re-establish in the west their political and social systems, with such modifications as experience and the change of events have rendered necessary, the country might soon look forward to an entire removal of the whole Indian race east of the Mississippi, and to a termination of all those perplexing difficulties which inevitably result from the existing relations established with them.

Treaties of cession and removal have also been formed with the Shawnees, Delawares, Peorias, and Kaskaskias, by which their territorial claims in Missouri and Illinois have been extinguished; and with the Potawatomies for the cession of extensive districts in Illinois and Indiana.

The recent hostilities, commenced by the Sac and Fox Indians, may be traced to causes which have been for some time in operation, and which left little doubt upon the minds of those acquainted with the savage character that they were determined to commit some aggression upon the frontier.

The confederated tribes of the Sacs and Foxes have been long distinguished for their daring spirit of adventure, and for their restless and reckless disposition. At the commencement of the eighteenth century one of these tribes made a desperate attempt to seize the post of Detroit; and, during a period of forty years subsequent to that effort, they caused great trouble and embarrassment to the French colonial government, which was only terminated by a most formidable military expedition, sent by that enterprising people into the then remote regions west of Green Bay.

During the last war with Great Britain this confederacy entered zealously into the contest, and was among the most active and determined of our enemies. After the peace their communication with the Canadian authorities was preserved; and every year large parties of the most influential chiefs and warriors visited Upper Canada and returned laden with presents. That this continued intercourse kept alive feelings of attachment to a foreign power, and weakened the proper and necessary influence of the

United States, is known to every one who has marked the progress of events and the conduct of the Indians upon the northwestern frontier. The tribes upon the Upper Mississippi, particularly the Sacs and Foxes and the Winnebagoes, confident in their position and in their natural courage, and totally ignorant of the vast disproportion between their power and that of the United States, have always been discontented, keeping the frontier in alarm, and continually committing some outrage upon the persons or property of the inhabitants. All this is the result of impulse, and is the necessary and almost inevitable consequence of institutions which make war the great object of life. It is not probable that any Indian seriously bent upon hostilities ever stops to calculate the force of the white man, and to estimate the disastrous consequences which we know must be the result. He is impelled onward in his desperate career by passions which are fostered and encouraged by the whole frame of society; and he is, very probably, stimulated by the predictions of some fanatical leader, who promises him glory, victory, and scalps.

In this state of feeling, and with these incitements to war, the Sacs and Foxes claimed the right of occupying a part of the country upon Rock river, even after it had been sold to the citizens of the United States and settled by them. In 1829, and in 1830, serious difficulties resulted from their efforts to establish themselves in that section, and frequent collisions with the inhabitants were the consequence. Representations were made to them, and every effort short of actual hostilities used by the proper officers to induce them to abandon these unfounded pretensions, and to confine themselves to their own country on the west side of the Mississippi river. These efforts were successful with the well disposed portion of the tribes, but were wholly unavailing with the band known by the name of the "British party." In 1831 their aggressions were so serious, and the attitude they assumed so formidable, that a considerable detachment of the army and of the militia of Illinois was called into the field; and the disaffected Indians, alarmed by the preparation for their chastisement, agreed to reside and hunt "upon their own lands west of the Mississippi river;" and that they would not "recross this river to the usual place of their residence, nor to any part of their old hunting grounds east of the Mississippi, without the express permission of the President of the United States or the governor of the State of Illinois."

This arrangement had scarcely been concluded before a flagrant outrage was committed by a party of these Indians upon a band of friendly Menomonies, almost under the guns of Fort Crawford. Twenty-five persons were wantonly murdered and many wounded while encamped in the village of Prairie du Chien, and resting in fancied security upon our soil and under our flag. If an act like this had been suffered to pass unnoticed and unpunished a war between these tribes would have been the consequence, in which our frontiers would have been involved, and the character and influence of the government would have been lost in the opinion of the Indians.

Apprehensive, from the course of events already stated, and from other circumstances, that the disaffected band of Sacs and Foxes would again harass and disturb the settlements upon our borders, and determined that the murderers of the Menomonies should be surrendered or taken, the department ordered General Atkinson, on the 7th of March last, to ascend the Mississippi with the disposable regular troops at Jefferson barracks, and to carry into effect the instructions issued by your direction. Still further to strengthen the frontiers, orders were given for the reoccupation of Chicago.

The demand for the surrender of the Menomonic murderers was entirely disregarded; and the "British party" of the Sacs and Foxes recrossed the Mississippi, and, assuming a hostile attitude, established themselves upon Rock river. The subsequent events are well known and the result has already been stated in this report.

To Major General Scott and Governor Reynolds, of Illinois, was assigned the task of pacification; and by their joint exertions treaties of cession were formed with the Winnebagoes, and with the Sacs and Foxes, by which the title of the former is extinguished to all the country south of the Wisconsin and east of the Mississippi, and the title of the latter to an extensive region west of this river.

These cessions are highly important to the peace and security of that frontier, and will soon be followed by such settlements as will place it beyond all danger of Indian hostilities. And it is to be earnestly hoped that the severe lesson which the events of the late campaign have taught the Indians will insure the preservation of tranquility, and render a resort to similar measures on the part of the United States unnecessary.

The removal of a number of the tribes, and other changes which are taking place in our Indian relations, have enabled you to direct the discontinuance of several of the agencies, and a considerable reduction in the expenditures of the Indian department. The agencies of Michilimackinac and the Sault Ste. Marie have been consolidated, and those of the Ohio Indians, of the eastern Choctaws, and of the eastern Creeks, have been limited to the 31st of December next, after which they will be discontinued. A corresponding reduction has been made in the expenditures, amounting, as the estimates will show, to the annual sum of twelve thousand seven hundred and fifty dollars in the ordinary operations of that branch of the public service. The progress of the system of emigration will enable the department to carry into effect your instructions with relation to a further diminution of these expenses, and no opportunity will be omitted consistently with the public interest to accomplish this desirable object.

The important duties imposed upon the department by the act of Congress of June 7, 1832, entitled "An act supplementary to the 'Act for the relief of certain surviving officers and soldiers of the revolution,'" have been executed as far as possible. As will be seen by a report of the officer in charge of the Pension bureau, upwards of twenty thousand applications have been presented under that act. Of these more than six thousand have been examined, and have been admitted, rejected, or returned for supplementary action. The number of cases so far exceeded the anticipations which had been formed, that the strength of the office was wholly inadequate to a prompt examination of them, and a system of procedure was therefore adopted, involving some additional expense, to meet which, it is hoped, an appropriation will be made, but calculated greatly to facilitate the execution of the business. Additional clerks were employed, and a division of labor was established among them, by which each case could be thoroughly examined, and a brief analysis submitted in a prescribed form. By assigning to particular persons the duty of deciding whether these condensed statements present such claims as come within the established regulations, every reasonable facility, compatible with a proper investigation, is given to the progress of the business, and yet the important action upon the whole is intrusted only to five principal clerks in the bureau, who, from their experience, or other qualifications, are fully competent to the discharge of this duty, and who act under the more immediate direction of the faithful officer who has so long presided over the Pension bureau.

It is certainly very desirable that all these claims should be investigated and decided with the least

possible delay. The bounty or the justice of their country has come late enough to the remnant of that heroic band who laid the foundations of our national prosperity, without the occurrence of further unnecessary delay in the administration of the law; and I have felt it my duty to cause the most prompt and vigorous measures within the reach of the department to be taken in order to effect this object.

Still, a just regard to the public interest, and the exercise of proper precautions to guard against fraudulent claims, necessarily interpose delays in the management of this business which, without a knowledge of the circumstances, may have appeared unreasonable. But they are not so. They could not and cannot be avoided. The regulations adopted to give effect to the act, and reported at the last session to the pension committees of both houses, proceeded, in some measure, upon new principles, in the system of evidence required to be submitted. It was manifest that if the plan adopted with great propriety fourteen years ago, when the first pension act was passed, were adhered to in all cases arising under the recent law, but few would be found who could claim its benefits. Since that period death has reduced the numbers of the revolutionary patriots, and advanced age and infirmity have enfeebled the powers of the survivors. Direct positive evidence, therefore, of identity and service cannot be procured in many cases, nor without difficulty in scarcely any. In this state of things, and where no documentary evidence exists, (and this has been preserved in but few of the States,) the applicant is allowed to state, in detail, the nature, extent, and duration of his service, and all the important facts connected with it, which he can recollect. The regulations prescribe the general mode in which this declaration must be made, and the questions to be put to the applicant. The proceeding must take place before some court of record, except in cases of peculiar infirmity; and the favorable opinion of the court is indispensable to the success of the application. The declaration must also be corroborated by the testimony of respectable individuals acquainted with the applicant, and bearing evidence to the traditional belief of his revolutionary services, in the neighborhood where he has resided.

It is obvious that the mere preparation and transmission of these papers ought not to entitle the party to the relief he seeks. If it did, great frauds would be practiced. The general form of the proceedings is an important auxiliary in that administration of these duties, but it is not all, nor is it indeed the principal element in the process of investigation. The narrative of the applicant, referring to the names of officers; to the numbers and stations of regiments and corps, and to marches, battles, and other historical events, is carefully examined and compared with the records in the department, and with such facts connected with the revolutionary annals as have been collected during a series of many years of constant labor and attention in the Pension office. It is believed that this course of investigation and comparison is as free from objection as any plan which could have been adopted, and that a just medium has been preserved between that severity of administration which would have rendered nugatory the provisions of the law, and that laxity which would have opened the treasury to false and fraudulent claims.

But the labor of investigation which this course of proceeding imposes upon the department is apparent, and it is without remedy. An appropriation is requested, in order to increase the number of clerks, as far as is prudent and compatible with a safe execution of the law. Should this be granted, the whole subject will be disposed of with as little delay as possible, agreeably to the intentions of the legislature, and to the expectations of the country.

Very respectfully, sir, I have the honor to be your obedient servant,

LEWIS CASS.

The PRESIDENT of the *United States*.

WAR DEPARTMENT, *July 14, 1832.*

GENTLEMEN: You will receive herewith a commission appointing you to visit and examine the country set apart for the emigrating Indians west of the Mississippi, a copy of the law authorizing the appointment, and a map of the country referred to. To one of you will also be sent a volume of Indian laws and treaties.

You will please to notify the department, without delay, of the acceptance or non-acceptance of this appointment; and, if you accept, you will proceed to Fort Gibson, on the Arkansas, and reach that place by the 1st of October, at which period your duties will commence.

You will make yourselves acquainted with the claims of the western Creeks and Cherokees. The principal men of these tribes you will call together. On investigation, it will be found that there are interfering claims arising under the treaties with them, and from the settlements they have made, without a previous adjustment of their respective boundaries, which can best be accommodated by procuring the assent of these parties. The nature and ground of these claims I need not state here, as you will better understand them by an examination of the treaties and the explanations of the parties. It is the wish of the President that the subject should be satisfactorily arranged, if possible; and this will best be done by a full and public investigation of the whole matter, and by inducing both Creeks and Cherokees to yield some part of their conflicting claims. I feel confident that the country extending from the Red river north of the reservation called the Perpetual Outlet, and bounded on the east by the Territory of Arkansas, and on the west by the Mexican line, is amply sufficient for all the Creeks and Cherokees in the United States. The Indians generally have a very incorrect idea of the superficial extent of a country, or of the quantity of land required for their subsistence, and I am apprehensive that there are among both of these tribes individuals who endeavor to take advantage of this ignorance, and to induce the Indians to ask much more than is necessary. This effort you will strive to counteract, and, by candid explanations, to satisfy the Indians upon this subject. There are probably 20,000 Creeks in Alabama, 4,000 Seminoles in Florida who are connected by consanguinity and manners with the Creeks, and about 10,000 Cherokees in Georgia, Alabama, Tennessee, and North Carolina, who are yet to emigrate. It is the intention of the government that the different parts of the same tribe should be united together in their new country, so that the Creeks and Cherokees should each form but one people. You will keep this object in view, and make it the basis of your operations with these Indians.

The Chickasaws, amounting to about 4,000, are yet to emigrate; but the site of their location is not determined upon, though it is believed an agreement will be made with the Choctaws for the reception of all the Chickasaws among them in the country assigned to the former, between the Red river and the Canadian. Still, the attempt may fail, and therefore it becomes necessary, in your permanent arrangements, to have in view a proper site for the eventual location of the Chickasaws

A deputation from the Seminoles will probably visit the country west of the Mississippi during the present season, and while you are there. They have ceded their possessions in Florida upon the condition that a suitable country can be found for their residence in the tract set apart for the emigrating Indians. The person in charge of them will be instructed to conduct the delegation to you, and their satisfactory establishment will form one of the objects committed to you.

The Ohio Indians, with the exception of the Wyandots, amounting probably to near 1,500 persons, are under treaty stipulations to emigrate this fall. It is not known that any difficulty will occur in their establishment, as their places of residence are fixed in the treaties. Should, however, any dissatisfaction arise, you will investigate the subject, and make the best arrangement you can to dispel it. There are probably yet about 500 Indians in Ohio who will ere long remove. You will point out also a proper place for their establishment near their kindred tribes.

There may be, perhaps, 1,500 Indians—possibly 2,000—in Indiana, Illinois, and Michigan, who are yet to emigrate. Provision has been made at the present session of Congress for holding a treaty with them, and for procuring their removal. The commissioners authorized to conduct this negotiation have been instructed to stipulate that the government will furnish them with a suitable and sufficiently extensive country for their residence, to be selected under the direction of the President. That this stipulation may be carried into effect, should it be made, you will point out a place for their location. Those commissioners have been further instructed, if these Indians are unwilling to cede their possessions without a previous examination of the country, to make with them a conditional arrangement, allowing them to proceed to the region west of the Mississippi, and to satisfy themselves concerning its advantages, leaving the treaty to become absolute should they eventually report favorably. If a deputation for this purpose should arrive while you are in the performance of your duties, you will endeavor to make a selection for them which will be agreeable.

A treaty will also be held with the Kickapoos, Shawnees, and Delawares, of Missouri, and with the Piankeshaws, Weas, Peorias, and Kaskaskias, of Illinois, for the cession of their lands in these States respectively. The commissioners appointed to hold this treaty will be directed so to provide for the location of these Indians, in the event of a successful issue to their negotiation, as to interfere as little as possible with the various important subjects committed to you. General Clark, who will be one of them, has a perfect knowledge of all the affairs relating to the Indians, and the government has great confidence in his experience and judgment. He will be requested to correspond with you, and to give you the benefit of his views. A copy of your instructions will be sent to him.

These constitute all the tribes or portions of tribes for whom it is necessary to make provision in the district assigned for the permanent residence of the Indians.

You will perceive that the general object is to locate them all in as favorable positions as possible, in districts sufficiently fertile, salubrious, and extensive, and with boundaries, either natural or artificial, so clearly defined as to preclude the possibility of dispute. There is country enough for all, and more than all; and the President is anxious that full justice should be done to each, and every measure adopted be as much to their satisfaction as is compatible with the nature of such an arrangement.

With a view not only to make room for the adjustment of existing difficulties, and for the location of some of the tribes who are yet to emigrate, but also to bring together bands which are connected by language and habits, I consider it expedient to effect a removal of the Osage Indians from their present reservation to a district adjoining the Kansas.

You will open a negotiation for that purpose, and endeavor to procure an exchange upon reasonable terms. By the 5th article of the treaty concluded with the Osages June 2, 1825, certain reservations were granted to the individuals therein mentioned. As these reservations interfere with the permanent location of the Indians, and as complaints upon that subject have already been made, it is desirable to extinguish the titles thus created. You will therefore endeavor to obtain the assent, for a reasonable consideration, of these persons to a transfer of their claims to the United States.

Should the Osages require it, you can make provision for carrying into effect the arrangement authorized to be made by General Clark, with the sanction of this department, for the removal of the Hopefield band, and for the payment of their improvements. Copies of the papers relating to this matter are enclosed.

It is an important object with the government to establish a permanent peace among all the tribes, indigenous or emigrant, west of the Mississippi. The fear of hostilities arises from the habits and dispositions of the Panis, Comanches, and their kindred tribes. It is impossible for the department, with the information before it, to point out the best mode in which these tribes can be approached, and a final termination put to their hostile and predatory incursions. The whole subject is referred to you. You will take the best measures to effect the object, after having procured all the necessary information. I consider this among the most important subjects committed to you. By the act of May 28, 1830, the government has guaranteed protection to all emigrating Indians, and the pledge thus given can only be redeemed by the employment of a sufficient protecting force, or by inducing all these tribes to live in amity with one another. This latter course is, in every point of view, the most advisable.

In any negotiation you may find it necessary to form with the Indians, the stipulations you may make will not be absolute, but will depend upon the final ratification of the Senate.

In the execution of the duty, respecting a plan for the government and security of the Indians, you will report in detail all the information you can procure concerning their present and probable future condition which can be useful in the determination of the questions of their government and intercourse. Your own judgment, aided by such information as may be afforded you upon the spot, must guide you in your views of this matter. Its importance is apparent, as on its decision may rest the future fate of all these tribes; and, in the great change we are now urging them to make, it is desirable that all their political relations, as well among themselves as with us, should be established upon a permanent basis, beyond the necessity of any future alteration. Your report upon this branch of the subject will be laid before Congress, and will probably become the foundation of a system of legislation for these Indians.

I do not observe, in examining the act providing for your appointment, that there are any other clauses requiring particular remarks. The general objects of the law are plain, and I trust you will find no difficulty in carrying them into effect.

The great question of Indian education is one which has produced much diversity of sentiment. I am anxious you should investigate the subject thoroughly, and report your opinion thereon, together with any plan which may occur to you for the instruction and improvement of the tribes. In addition to this, it is desirable you should examine the amount of the funds which, by treaty stipulations, are applicable

to the purposes of education, and report the best mode in which they can be expended. A general and practicable plan for the accomplishment of this object is very much needed.

You will also ascertain whether any of these tribes are desirous of commuting their permanent annuities for a limited one—say not exceeding twenty years in duration. It is desirable to carry this measure into effect, if practicable, and if it can be accomplished without injury to the Indians. It appears to me that after they have commenced their agricultural operations, larger payments than are now made to them will be useful in clearing land and making improvements, and would soon enable them to support themselves comfortably; and I believe that this process would improve their condition more than the annual division of small sums among them for an indefinite period. The latter practice is injurious, as well in consequence of the mode in which the money is generally applied as by preventing the Indians from depending upon their own exertions.

I enclose you copies of communications from General Clark respecting a claim of the Panis to a tract of country which has been assigned to the Delawares. This subject you will investigate; and if you find the Panis claim correct, you will endeavor to make such an arrangement as will be satisfactory to them. The suggestions of Major Dougherty are entitled to weight, and the plan proposed by him is referred for your consideration. The measure intimated by Major Cummings, of concentrating the Delaware Indians, is also worthy of your notice. It is important, in the permanent establishment of the Indians, that the tribes should not be broken into fragments, but that the portions of each should be brought together. Your particular attention is requested to the existing difficulties between the Delawares and the Panis.

A part of the mounted rangers recently authorized to be raised by an act of Congress will be ordered to repair to Fort Gibson to attend you in the execution of your duties; and the commanding officer at that post will be directed to comply with any requisitions you may make upon him with respect to the distribution of the troops and the furnishing of such facilities as you may require during your continuance in the country.

The government has for some time had it in contemplation to display a force, and particularly a mounted one, in that region. Such a measure cannot but be useful; the impression it will make will be salutary and permanent.

The assistant commissary at Fort Gibson will be directed to issue such supplies of provisions to the Indians as you may demand; but it is not thought that these need be very extensive; as it will not be expedient to collect the Indians from a considerable distance at that point.

General Clark, superintendent of Indian affairs at St. Louis, and the different Indian agents upon that frontier, have been instructed to afford such aid as you may require and they can render towards the accomplishment of your mission.

Your compensation will be eight dollars a day for every day employed upon this business, excepting, however, the time engaged in travelling, during which you will be allowed eight dollars for every twenty miles of travel. A secretary will be appointed—five dollars a day will be allowed for his services, and five dollars for every twenty miles of travel. These accounts will be adjusted upon your vouchers stating the time and distance, and certified by you to be correct.

Should you find it necessary to purchase provisions or presents for the Indians, you will take bills of parcels therefor, regularly receipted, and you will accompany them with certified abstracts showing the distribution of the property purchased.

Enclosed you will receive a copy of the regulations which have been recently adopted. So far as these regulations apply in the execution of your duties you will please to observe them.

You can employ such interpreters and other persons to aid you as you may find necessary.

You may draw upon the department to the amount appropriated by law, but your expenditures, including your own compensation, will in no event exceed that sum.

You will keep a full journal of your proceedings, in which you will enter all your speeches, messages, and addresses to the Indians, and their answers to you.

From the information before me, I am inclined to think "the Perpetual Outlet," as such, useless; and that, in your arrangements, it will be expedient to include the reservation, so called, in the tract you may assign to one of the tribes, the consent of the Indians interested in the outlet being first obtained.

You will please to examine the condition of the several agencies you may visit, and report whether any reduction of the number of officers, or of the amount of expenses be, in your judgment, practicable.

If you have opportunity, you will also please to inspect the schools established on the funds of the government, and report a plan of management and instructions, and such improvements as may occur to you.

A number of medals and flags, for Indian chiefs and warriors, will be sent to the assistant commissary at Fort Gibson, to be placed at your disposal.

Colonel A. P. Chouteau has been for many years a resident in the Indian country, and is intimately and extensively acquainted with the condition of the tribes, their mutual relations and habits, and the government places great reliance in his integrity and general intelligence. I therefore recommend to you, on your arrival at the scene of your operations, to consult freely with him, and to avail yourself of the information he possesses and will cheerfully communicate. He has been written to upon this subject.

I have the honor to be, &c.,

LEWIS CASS.

Their Excellencies WILLIAM CARROLL, MONTFORD STOKES, and ROBERTS VAUX, Esq.

DEPARTMENT OF WAR, April 17, 1832.

To the Cherokees east of the Mississippi:

MY FRIENDS: Your great father, the President of the United States, has recently been informed that a change has probably taken place in the sentiments you have heretofore entertained on the subject of a removal to the country west of the Mississippi, and that propositions from the government, having that object in view, would be favorably received by you. Satisfied, as the President is, that this measure can alone secure to you permanent prosperity, and lay the solid foundations of your future improvement and civilization; and prepared, as he has always been, to make you offers which shall be not only just, but

liberal, he has instructed me to address you upon this subject, and to make known to you the stipulations he is willing to grant, so far as his authority extends. I have therefore to request that you will take the matter into your serious consideration, and communicate to me your ultimate decision.

The President is willing to enter into an arrangement for your removal west of the Mississippi, upon the following general principles:

1. That a country, sufficiently extensive and fertile, shall be distinctly marked out west of the Territory of Arkansas, for you and your brethren, where they now are.
2. That this country shall be conveyed to you by patent, under the provisions of the act of Congress of May 28, 1830, and that it shall be forever without the boundary of any State or Territory.
3. That you shall have all the powers of self-government, so far as may be compatible with that general supervisory authority which it is necessary Congress should exercise over you.
4. That you shall have the privilege of appointing an agent, who shall reside at Washington, to communicate to the government your claims and wishes, and who shall be paid by the United States.
5. That, if Congress assent to the measure, you shall be allowed a delegate to that body; and shall also, when your improvement and other circumstances will permit, and when Congress think proper, be placed in the relation of a Territory.
6. That all white persons, unless specially authorized by the laws of the United States, shall be excluded from your country.
7. That you shall remove to your new country at the expense of the United States, in either of the following modes you may prefer: First, by a commutation to be allowed to individuals or families. Second, by persons to be appointed and paid by the United States. Third, by an arrangement to be made among yourselves, by which some of those who are competent to the undertaking may remove all your people at a rate to be fixed.

8. That subsistence shall be provided by the United States for the term of one year after you reach your destination.

9. That an annuity, proportioned to the value of the cession you may make, be secured to you.

10. That all the improvements upon the ceded Territory, which add real value to the land, be appraised and paid for.

11. That ample provision be made for the support of schools and teachers; and of blacksmiths, &c., for the supply of steel and iron; and for the erection of mills, school-houses, churches, council-houses, and houses for a few of your principal chiefs.

12. That a rifle and equipments be given to each male adult; that a quantity of blankets be allowed to your families, together with axes, ploughs, hoes, wheels, cards and looms.

13. That your stock be valued and paid for by the United States.

14. That the annuities due to you by former treaties be paid to you west of the Mississippi.

15. That provision be made for your orphan children.

16. That protection be guaranteed to you against the hostile efforts of any other Indians.

17. It is the wish of the President that all your people should remove, and he is therefore unwilling that any reservations of land should be made in the ceded territory. Still, he would not make this an indispensable condition, but would agree, should it be found necessary, that reservations should be made for a few of your people in situations and under circumstances rendering such a measure proper and within the scope of his legal authority. But your people must distinctly understand that those who remain will become citizens of the State in which they may reside, and that all the relations between them and the United States, founded upon their previous circumstances as Indians, must cease.

These are the general terms I have been directed by the President to offer to you. They form the outline of an arrangement which can be filled up when you are prepared to enter into a negotiation. The details and any other stipulation you may ask will more properly be discussed and determined when your views of the matter are known and the ultimate mode of proceeding adopted.

If you are prepared to assume these propositions as the basis of a negotiation, you can appoint your agents to come on to this place clothed with authority to act, or the President will appoint commissioners to meet you in council, and to conclude the affair.

I cannot but hope that you will see, in this frank and liberal offer, full evidence of the desire of the President that the difficulty of your present situation may be removed, and your future destiny placed beyond the reach of those causes which have occasioned such misery to the Indian race.

Shut your ears, I entreat you, to bad counsels, if any such should be offered to you. Whatever may be told you, it is impossible you can remain where you now are and prosper; and if you persist in the effort, the time of regret will come, but will come, I am afraid, after the most serious injury to yourselves.

Your friend,

LEWIS CASS.

· IN GENERAL COUNCIL, CONVENEED AT RED CLAY, *Cherokee Nation*, August 6, 1832.

SIR: Your letter bearing date the 17th of April last, containing certain propositions as to the general terms upon which the President is willing to treat with this nation, has been received through the hands of Elisha W. Chester, esq. It is with much astonishment we learn from this letter the President has been informed that a change had probably taken place in the sentiments this nation heretofore entertained on the subject of a removal to the country west of the Mississippi, and that propositions from the government, having that object in view, would be favorably received.

The subject-matter has been fully considered, together with the peculiar embarrassments that now surround us, and, in compliance with your request, we proceed to communicate our reply.

In the first place, we wish to call your attention to the decisions of the nation on former occasions on this subject, and to inform the President that the true sentiments of the Cherokee people remain the same; that the basis of his propositions is objectionable; and that the nation is placed in duress from the illegal proceedings of Georgia in assuming to exercise jurisdiction over a large portion of our territory, and by placing a military force, with other officers of her own creating, in our country for the purpose of oppressing our citizens. She has also introduced a great many of her citizens among us to intrude on our lands; and, further, she has surveyed those lands and vested in her chief magistrate the power of drawing a lottery for the occupation of them. And, in this peculiar state of things, the protecting arm

of the President is withheld from the enforcement of the treaties and laws of the United States made for the protection of our national rights. And, moreover, divers agents of the general government have been commissioned for the purpose of enlisting our citizens as emigrants for the country west of the Mississippi, and in the prosecution of this business some of them have been seduced under circumstances calculated to create disquietude and disagreeable feelings. But let the President remove all the difficulty arising from these unjust measures, and afford us that necessary protection which is solemnly guaranteed to us by treaties, and then the exercise of that privilege which is so essential to the enjoyment of freemen would place us at liberty to reflect, speak, and act freely on the subject of our national interest and welfare.

In conclusion, we would respectfully call your attention to the frequent complaints which have been made to the department against the numerous intrusions on our lands bordering on the boundaries of the several adjoining States, and to urge the removal of the intruders.

Very respectfully, your friends and obedient servants,

RICHARD TAYLOR, *President of the Committee.*

Joseph Vaux.
Richard Fielding.
David Vaux.
James Daniel.
John Timson.
Thomas Foreman.
William Boling.
Alexander McDaniel, his x mark.
George Still, his x mark.
Fox Baldrige, his x mark.
Hair Conrad, his x mark.
Samuel Gunter, his x mark.
John Ridge.
Going Snake, *Speaker of the Committee*, his x mark.
Sleeping Rabbit, his x mark.
Chincumkah, his x mark.
Young Glass, his x mark.
Archibald Campbell, his x mark.
The Buck, his x mark.
John Foster.
Major Ridge, his x mark, }
George M. Waters, } *Executive Council.*

White Path, his x mark.
Te-sa-tes Kee, his x mark.
John R. Daniel.
Ed. Duncan.
Ruquah, his x mark.
John Watts, his x mark.
James Speaks, his x mark.
Chuvalosku, his x mark.
Hanging Charles, his x mark.
John Wayne, his x mark.
Sweet Water, his x mark.
Sit-u-akee, his x mark.
Peter, his x mark.
Bean Stick, his x mark.
Soft-shell Turtle, his x mark.
Walking Stick, his x mark.
William Roques, *Clerk of Committee.*
A. McCoy.
N. Connell.
John Ross.
George Lowry.

Hon. LEWIS CASS, *Secretary of War.*

No. 1.

REPORT FROM THE MAJOR GENERAL OF THE ARMY.

HEADQUARTERS OF THE ARMY, *Washington, November, 1832.*

SIR: I present herewith, in conformity with your instructions of the 2d of August, the following returns of the army, and statements connected with the military service for the present year.

1. A statement showing the organization of the army, marked A.
2. A return of the actual state of the army, marked B.
3. A return exhibiting the strength of the eastern department, designating the posts and garrisons, marked C.
4. A return exhibiting the strength of the western department, designating the posts and garrisons, marked D.
5. A statement showing the number of recruits enlisted in the army from January 1 to September 30, 1832, marked E.
6. An estimate of the funds required for the recruiting service for the year 1833, marked F.
7. An estimate of the contingent expenses of the headquarters of the army, including those of the office of the Adjutant General, for the year 1833, marked G.

In the month of March last, intelligence was received that the Menomonees, exasperated by a wanton and unprovoked attack and murder committed by the Sacs and Foxes on an unarmed party of their tribe, near the Prairie du Chien, in the month of August previous, meditated a descent on those tribes, with the intention of taking revenge for that outrage. Apprehending that this movement would lead to a general war among the Indians on the northwestern frontiers, General Atkinson was directed to proceed to Rock Island with the effectual force at Jefferson barracks, and demand of the Sacs and Foxes the surrender of the persons concerned in the murder of the Menomonees; at the same time to station troops, to be drawn from the posts on the Upper Mississippi and from Fort Winnebago, at points on the Mississippi, from which they might intercept the Menomonees in their contemplated descent, turn them back, and inform them that the government had determined to see that justice should be done. While these measures were in progress a large party of Sacs and Foxes under Black Hawk, among whom were those concerned in the attack and murder of the Menomonees, crossed the Mississippi at the Yellow Banks, and, uniting with the Prophet's band of Winnebagoes, in all about 800 or 1,000 strong, took a position on Rock river, and assumed an attitude of defiance. Under these circumstances it was not in the power of the friendly Sac and Fox Indians to surrender the murderers as demanded, although they had expressed a willingness so to do. Thus situated, General Atkinson did not conceive that the force under his command was sufficient to justify him in attacking the hostile party, lest an unsuccessful attempt should add to their numbers the wavering and disaffected, and especially as they had not as yet committed any act of hostility, although they evinced a desire to make war upon the whites.

The people settled on the frontiers of Illinois, alarmed at the appearance of so large a band of Indians in their immediate vicinity, with indications of no friendly feelings, fled from their farms into the interior

of the State. The governor of the State ordered out in haste, and for no definite period, a brigade of militia, to assemble on Rock river. These troops, after a march across the country to Ottawa in quest of the Indians, became anxious for their discharge, which the governor granted, retaining of those who were discharged, and volunteered for a further term of twenty days, enough to form six companies. In the meantime, however, instructions were sent to General Atkinson, authorizing him to call on the governor of Illinois for such a militia force as would, with the regular troops under his command, enable him to act efficiently. Accordingly, three thousand mounted volunteers were ordered into the field by the governor, on the requisition of General Atkinson, and assembled at Fort Deposit, near Ottawa, about the 18th of June, where they were organized. Towards the latter part of that month the campaign was opened with these troops and about four hundred regulars, then at Dixon's Ferry, on the Rock river. Black Hawk, finding himself unable to cope with so large a force, retired into the swamps and fastnesses, sending out at the same time parties of active warriors to pick up stragglers, and to attack defenceless settlements. In this manner he annoyed the people residing in that part of Michigan called the Mining District, and murdered a number of our citizens, men, women, and children. The people, in different directions of the exposed country, fortified themselves, and by occasional sallies inflicted punishment on these ruthless savages. With a view to cover the exposed settlements in the counties of Jo Daviess, in Illinois, and Iowa, in Michigan, and to intercept the Indians, should they attempt to cross in that direction, General Atkinson detached one brigade into that country; and, with the remaining force under his command, consisting of four hundred and fifty regulars and about two thousand mounted volunteers, moved in the direction of the Four Lakes in pursuit of the main body of the Indians, which was then understood to be encamped in a strong position in the swamps, about ten miles above Lake Goosh-we-hawn. General Atkinson halted his army on White Water creek for the purpose of ascertaining the exact position of the Indians. After being frustrated in his attempts to discover them, he was obliged to disperse his mounted volunteers on account of the low state of the supplies intended for their subsistence. One portion, under General Henry, was sent to Hamilton's, a distance of forty-five miles; and another, under General Dodge, to Fort Winnebago, a distance of thirty-five miles—two points where provisions were expected to be in deposit. Having received the supply of provisions, Generals Henry and Dodge returned to the swamp, on the west side of Rock river, with a view of obtaining some information concerning the enemy. At the same time General Atkinson, with the regular troops, and General Alexander's brigade of mounted volunteers, moved up on the east side of the swamp with the same intention. Black Hawk, finding himself likely to be pressed on all sides, and being no longer able to supply himself with the means of subsistence, broke up his camp and marched towards the Mississippi. The volunteers under Generals Dodge and Henry, discovering the enemy's trail, pursued it, and came up with him on the 21st of July, on the left bank of the Wisconsin, about twenty miles below Fort Winnebago, where an engagement ensued, which lasted until 7 o'clock in the afternoon, during which the Indians found means to convey across the Wisconsin their non-combatants and baggage. The volunteers having marched forty miles on the day of the action, exposed to the rain for more than six hours, and their arms being wet and out of order, were not in a condition to continue the pursuit that night. The next morning they found that the Indians had crossed the river in bark canoes, which they had on the emergency of the occasion prepared. The loss on the part of the volunteers was one killed and seven wounded; that of the Indians, it was found afterwards, amounted to sixty-eight killed, together with a large number wounded.

The moment General Atkinson was informed that the volunteers were on the trail of the enemy he marched in pursuit, and arrived at the Blue Mounds, near the Wisconsin, where he was joined on the evening of the 23d of July by the volunteers under Generals Dodge and Henry, who had retired to that place for a supply of provisions. The army being refreshed and provisioned, a select body, consisting of four hundred regulars under Colonel Taylor, of the first regiment of infantry, and detachments of Generals Henry, Dodge, Posey, and Alexander's mounted volunteers, amounting in all to thirteen hundred men, crossed the Wisconsin on the 27th and 28th of July under General Atkinson, took up the trail of the enemy, and pursued it by forced marches through a broken and difficult country until the morning of the 2d of August, when they came up with the main body on the left bank of the Mississippi, opposite the mouth of the Iowa, which they attacked, defeated, and dispersed, with a loss on the part of the Indians of upwards of one hundred and fifty men killed. Many were slain in attempting to cross the river; others escaped in that direction; while the remainder, among whom was Black Hawk, fled into the interior of the Winnebago country. Our loss in this engagement was comparatively small, being only five regulars killed and four wounded; of the volunteers, two officers and thirteen privates wounded.

On information being received by General Atkinson that the Indians had quitted the swamps in the neighborhood of the Four Lakes and marched towards the Mississippi, he despatched instructions to the commanding officer of Prairie du Chien to take measures to intercept them, should they attempt to descend the Wisconsin or cross the Mississippi. In consequence of these instructions a guard and an armed flat were stationed on the Wisconsin about twenty-five miles from its junction with the Mississippi; by which means a number of those who escaped from the engagement on the Wisconsin were killed or captured. A steamboat in the employ of the quartermaster's department, armed with a field piece, and manned with about twenty men, was despatched up the Mississippi to watch the motions of the Indians, and on the 1st of August discovered a large body of them on the left bank making preparations to cross the river. The Indians at first attempted to deceive our party by declaring themselves to be Winnebagoes, and displaying white flags, at the same time inviting them to land. But the officer in command being aware of their intentions fired upon them, and killed twenty-five of their number. The fire was smartly returned by the Indians, but without effect. This circumstance fortunately checked the Indians in their attempt to cross the river, and led to the action of the 2d of August.

The enemy being thus cut up and dispersed, General Atkinson conceived it unnecessary to pursue him further. He, therefore, fell down with his force to Prairie du Chien; from which place were despatched, on both sides of the Mississippi, parties of friendly Indians to follow the fugitives and bring them in; and it is believed that not an individual composing the band of Black Hawk has escaped being either killed or captured.

From the information which had been received at the seat of Government of the state of things on frontier, and with the desire of putting a speedy termination to the war, without calling for any additional militia force, orders were given on the 16th of June for all the force that could be spared from the seaboard, the lakes, and the Lower Mississippi, to repair at once to the scene of action, and Major General Scott was directed to assume the general conduct of the war. Under this order, nine companies of artillery, equipped as infantry, drawn from Forts Monroe and McHenry, and from the harbor of New York,

with a detachment of two hundred and eight recruits from the last-mentioned place, and nine companies of infantry from the posts on the lakes, amounting in all to upwards of one thousand men, took up their march for Chicago, near the head of Lake Michigan, the point of rendezvous. Besides this force, two companies of infantry from Baton Rouge, Louisiana, proceeded, by the way of the Mississippi, to the headquarters of General Atkinson.

From the promptness with which this movement was begun, and the rapidity with which it was conducted, reasonable hopes were entertained that the campaign would be of but short duration, and the hostile Indians completely subdued. Unfortunately, however, the cholera was just at this time making its way into the United States from Canada, and infected our troops while on board the steamboats in their passage up the lakes; and such was the rapidity with which this disease spread among them, that in a few days the whole of the force sent by the lakes was rendered incapable of taking the field. Some were landed at Fort Gratiot, others were stopped at Detroit, while the principal part reached Chicago in a most deplorable condition. Of the six companies of artillery which left Fort Monroe, five companies arrived at Chicago, a distance of eighteen hundred miles, in the short space of eighteen days—a rapidity which is believed to be unprecedented in military movements. The loss by cholera in that detachment alone was equal to one out of every three men. General Scott reached Chicago with the first detachment on the 10th of July, where he learned that General Atkinson, with his army, was at Lake Goosh-we-hawn, about eighty miles distant. Here the general found himself in a most perplexing predicament; only a part of his troops had arrived, and they dreadfully afflicted with the cholera. The remainder, which he daily expected, without knowing the cause of their delay, did not appear. He made General Atkinson acquainted with his arrival and orders, but dared not approach him with troops infected with a disorder that might, by being communicated to the army in the field, render the force of General Atkinson, like his own, unfit to prosecute the war, and thereby defeat the very object for the accomplishment of which he had come. Under this painful anxiety, General Scott directed General Atkinson to continue his operations without reference to him, professing, at the same time, the greatest confidence in his ability to bring the war to a successful issue, if the means at his disposal would enable him to do so. General Scott, however, after waiting a reasonable time, and not finding it possible to bring his troops into the field, left Colonel Eustis in command of them, with orders to march in the direction of the enemy as soon as it would be prudent to move, and proceeded himself to join General Atkinson. At Galena he received intelligence of the decisive action of the 2d of August. He thence proceeded to Prairie du Chien, and having made all the necessary arrangements for bringing the Indians who had commenced the war within his power, he retired to Rock Island to enter into negotiations with those of the Sac and Fox Indians, who took no part in the war, and the other tribes interested in the settlement of a peace. The troops under Colonel Eustis, in the meantime, marched across the country to Rock river, and were useful in making the necessary arrangements to give effect to the meeting of the Indians. Impressed with the folly of opposing the government, and convinced of the impropriety of the conduct of those who were the aggressors, the several tribes yielded to an accommodation, at once beneficial to themselves, and satisfactory, it is to be hoped, to the United States. Black Hawk and a number of chiefs are held as hostages under the treaty; the rest of the prisoners were returned to their respective tribes.

The war being concluded, the volunteers were discharged, and the several detachments of regular troops were ordered to their respective quarters, except two companies of the 4th regiment of artillery, which remain to garrison Fort Gratiot, on Lake Huron.

The corps of mounted rangers, authorized by the act of Congress of the 15th of June, 1832, has been raised, but not in time to partake of the campaign against the Indians. Three of the companies have been ordered to Fort Gibson to range the southwestern frontier, where the Indians of the interior have been restless for some time, and disposed to quarrel with those who have migrated thither. One company has accompanied the caravan to Santa Fé as an escort, and two companies, after ranging the frontiers of Michigan and Illinois, have orders to retire into quarters for the winter, where they will be in a position to act on those frontiers, if circumstances should require their being called out before the spring.

On the requisition of the governor of North Carolina two companies of the 2d regiment of artillery were ordered from the harbor of Charleston, South Carolina, into the district of country occupied by the Cherokees, in the northwestern corner of that State, where the Indian title is not yet extinguished, to drive out intruders on those lands, who had been attracted thither by the prospect of obtaining gold, and other unlawful purposes. These troops were replaced by others from Fort Monroe.

The army, according to its numerical force, is efficient and capable of performing, on correct military principles, any duty required of it. The officers are respectable in their habits and acquirements. While, however, I present the army in this favorable light, I am compelled, by a sense of duty, to make it known to you that the requisitions for officers for the performance of various duties not connected with regimental affairs are so numerous that it is seldom as many as two officers are present for duty with each company. It may, therefore, be conceived how difficult it is to afford the necessary instruction to our soldiers, or to maintain that discipline in the army which is requisite, in order to render it efficient for active operations. The line of the army can supply officers for the general and regimental staff, and for the Military Academy and Ordnance department, but it cannot bear the drafts made for assistants in the Engineer, Topographical, and Indian departments, without impairing the efficiency of the several battalions of artillery and infantry. If the corps of engineers and topographical engineers were so augmented by the authority of law as to enable them to furnish officers for their appropriate duties, without assistance from the line, it is believed the public would be better served, and the interest of all parties promoted.

The several departments of the staff have had in the late campaign an opportunity of exercising their functions, under circumstances that were calculated to test their capabilities, and it is highly gratifying to be able to state that the most satisfactory evidences have been afforded of their efficiency.

I have the honor to be, sir, your most obedient servant,

ALEXANDER MACOMB, *Major General, Commanding the Army.*

Hon. LEWIS CASS, *Secretary of War.*

A.

Organization of the army of the United States.

	Major general.	Brigadier generals.	Adjutant general.	Inspector generals.	Quartermaster general.	Quartermasters.	Commissary general of subsistence.	Commissaries.	Surgeon general.	Surgeons.	Assistant surgeons.	Paymaster general.	Paymasters.	Commissary general of purchases.	Military storekeepers.	Colonels.	Lieutenant colonels.	Majors.	Captains.	First lieutenants.	Second lieutenants.	Third lieutenants.	Sergeant majors.	Quartermaster's sergeants.	Sergeants.	Corporals.	Principal musicians.	Musicians.	Artificers.	Enlisted men for ordnance.	Privates.	Total commissioned.	Total non-commissioned officers, musicians, artificers, and privates.	Aggregate.
General staff.....	1	2	1	2	1	4	1	2																								14	14	
Medical department.....									1	12	55																					68	68	
Pay department.....												1	14																			15	15	
Purchasing department.....														1	2																	3	3	
Corps of engineers.....																1	1	2		6	6											22	22	
Topographical engineers.....																		6	4												10	10		
Ordnance department.....																1	1	2	10					44					250		14	294	308	
1st regiment of artillery.....																1	1	1	9	18	18		1	1	36	36		18	27		378	48	497	545
2d regiment of artillery.....																1	1	1	9	18	18		1	1	36	36		18	27		378	48	497	545
3d regiment of artillery.....																1	1	1	9	18	18		1	1	36	36		18	27		378	48	497	545
4th regiment of artillery.....																1	1	1	9	18	18		1	1	36	36		18	27		378	48	497	545
Aggregate.....																4	4	4	36	72	72		4	4	144	144		72	108		1,512	192	1,988	2,180
1st regiment of infantry.....																1	1	1	10	10	10		1	1	30	40	2	20			420	33	514	547
2d regiment of infantry.....																1	1	1	10	10	10		1	1	30	40	2	20			420	33	514	547
3d regiment of infantry.....																1	1	1	10	10	10		1	1	30	40	2	20			420	33	514	547
4th regiment of infantry.....																1	1	1	10	10	10		1	1	30	40	2	20			420	33	514	547
5th regiment of infantry.....																1	1	1	10	10	10		1	1	30	40	2	20			420	33	514	547
6th regiment of infantry.....																1	1	1	10	10	10		1	1	30	40	2	20			420	33	514	547
7th regiment of infantry.....																1	1	1	10	10	10		1	1	30	40	2	20			420	33	514	547
Aggregate.....																7	7	7	70	70	70		7	7	210	280	14	140			2,940	231	3,598	3,829
Battalion mounted rangers.....																		1	6	6	6	6			30	30					600	25	660	685
Grand aggregate.....	1	2	1	2	1	4	1	2	1	12	55	1	14	1	2	13	13	22	132	154	154	6	11	11	428	454	14	212	108	250	5,052	594	6,540	7,134

NOTE.—The law authorizes the appointment of fifty assistant commissaries of subsistence and twenty assistant quartermasters, to be taken from the line of the army; the former are confined to the rank of lieutenants.

HEADQUARTERS, Washington, November 30, 1832.

ADJUTANT GENERAL'S OFFICE, Washington, November 30, 1832.

ALEX. MACOMB, Major General, Commanding the Army.

R. JONES, Adjutant General.

B.—General return of the army of the United States—Continued.

	PRESENT.													ABSENT.										PRESENT AND ABSENT.							
	On extra or daily duty.						In arrest or confinement.							Commissioned officers.	Non-commissioned officers, musicians, artificers, and privates.	Detached service.				On furlough, or with leave.			Without leave.			Commissioned officers suspended.	Non-commissioned officers, &c., in confinement.	Non-commissioned officers sick.	Total.	Aggregate.	
	Field officers.	Captains.	Subalterns.	Non-commissioned officers.	Musicians.	Artificers.	Privates.	Field officers.	Captains.	Subalterns.	Non-commissioned officers.	Musicians.	Artificers.			Privates.	Field officers.	Captains.	Subalterns.	Non-commissioned officers, musicians, artificers, and privates.	Field officers.	Captains.	Subalterns.	Non-commissioned officers, musicians, artificers, and privates.	Field officers.						Captains.	Subalterns.	Non-commissioned officers, musicians, &c., &c.
General staff.....																														14	
Medical staff.....																														64	
Pay department.....																														15	
Purchasing department.....																														3	
Corps of engineers.....																														22	
Topographical engineers.....																														10	
Ordnance department.....																													66	79	
1st regiment of artillery.....			9	3	20				1	1	16	18	387		2	23	3										2	6	10	408	464
2d regiment of artillery.....		1	6	2	23				2	2	51	14	306	1	4	24											2	2	2	372	422
3d regiment of artillery.....	1	1	1	1	9				2		19	23	379	1	2	19	20													399	454
4th regiment of artillery.....	2	2	5		20				5		20	24	384			19	22										1	1	2	420	468
Aggregate of artillery.....	3	4	21	6	81				10	3	106	79	1,516	2	8	85	45									3	1	10	1,599	1,808	
1st regiment of infantry.....		3	10	1	54						24	21	312		3	10	33	2										6		356	394
2d regiment of infantry.....		2	11		45				2		19	24	430		2	8	3											2	5	443	486
3d regiment of infantry.....		4	14		87					1	37	27	457	1	4	4	5													463	505
4th regiment of infantry.....		2	8	1	36				1	3	50	23	382		3	11	15	2										2		399	439
5th regiment of infantry.....		2	3		35					1	6	21	328	1	2	10	26											1	1	360	398
6th regiment of infantry.....		5	6		24				2	1	28	21	302		4	9	8												2	375	416
7th regiment of infantry.....		1	5		67					1	21	16	488		2	12	16	1										2		507	540
Aggregate of infantry.....		19	57	2	348				1	9	185	153	2,759	2	20	64	106	5								11	8		2,903	3,187	
Battalion of mounted rangers.....												25	600																	600	685
Recruits and unattached soldiers.....																														215	215
Grand aggregate.....	3	23	78	2	429		1	19	7	2	291	257	4,935	4	28	149	151	5								1	9	1	5,443	6,102	

NOTE.—The major and one captain of the 2d regiment of artillery, the major of the 5th, and one captain of the 7th regiment of infantry, (being staff officers), are omitted in the "aggregate" of their respective regiments, because they are reported and included in the "aggregate" of the general staff.

HEADQUARTERS OF THE ARMY, Washington, November 30, 1832.
 ADJUTANT GENERAL'S OFFICE, Washington, November 30, 1832.

ALEXANDER MACOMB, Major General Commanding the Army.
 R. JONES, Adjutant General.

C.—Position and distribution of the troops of the eastern department, under the command of Brevet Major General Winfield Scott.

No.	Posts.	Situation.	Commanding officers.	Regiment.	Number of companies.	Present.																	Commissioned officers.	Non-commissioned officers, musicians, artificers, and privates.		
						Colonels.	Lieutenant colonels.	Majors.	Adjutants.	Surgeons.	Assistant surgeons.	Captains.	First lieutenants.	Second lieutenants.	Third lieutenants.	Bvt. second lieutenants.	Sergeant majors.	Quartermaster sergeants.	Sergeants.	Corporals.	Principal musicians.	Musicians.			Artificers.	Privates.
1	Fort Winnebago.....	Portage, Fox, and Wisconsin rivers, M. T. . .	Lieut. Colonel Cutler . . .	5th infantry..	4	1				1	2	1	1	3			11	13	7		107	9	138			
2	Fort Brady.....	Sault St. Marie, Michigan Territory.....	Bvt. Major Fowle.....	do.....	2					1	1	1	1	1			6	5	1		60	5	72			
3	Fort Mackinac.....	Michilimackinac, Michigan Territory	Bvt. Major Thompson... .	2d infantry..	2					1	2	1		1			5	6	6		87	5	104			
4	Fort Howard.....	Green Bay, Michigan Territory.....	Bvt. Brig. Gen. Brooke... .	5th infantry..	4	1		1		1	3		3		1		10	10	1	5		91	9	118		
5	Fort Dearborn.....	Head of Lake Michigan, Michigan Territory..	Major Whistler.....	2d infantry..	2			1		1	1	1	1	1			7	6	4		73	6	90			
6	Fort Gratiot.....	Outlet of Lake Huron, Michigan Territory..	Bvt. Major Payne.....	4th artillery..	2					1	1	1	1				6	5	2	2	72	4	87			
7	Fort Niagara.....	New York.....	Lieut. Col. Cummings... .	2d infantry..	2	2				1	1	2			1	1	4	2	1	2	22	5	33			
8	Hancock Barracks.....	Houlton Plantation, Maine.....	Bvt. Major Clarke.....	do.....	4					1	4	1	2	3			12	12	1	7		171	11	203		
9	Fort Sullivan.....	Eastport, Maine.....	Captain Childs.....	3d artillery..	1					1		1					3	3	2	3	49	2	60			
10	Fort Preble.....	Portland, Maine.....	Captain McClintock.....	do.....	1					1	1	1	1				4	4	2	2	33	4	45			
11	Fort Constitution.....	Portsmouth, New Hampshire.....	Captain Ansart.....	do.....	1					1	1	1					2	4	2	1	41	3	50			
12	Fort Independence.....	Boston, Massachusetts.....	Bvt. Lieut. Col. Brooks.. .	do.....	1			1		1			2				3	4	4	1	37	4	49			
13	Fort Wolcott.....	Newport, Rhode Island.....	Bvt. Major Lomax.....	do.....	1					1	1	1					2	2	2	3	42	3	51			
14	Fort Trumbull.....	New London, Connecticut.....	Captain Thurston.....	do.....	1					1	1	2		1			3	4	2	2	42	5	53			
15	Military Academy.....	West Point, New York.....	Bvt. Lieut. Col. Thayer.. .	Detachment..													3	4	1	3	39		50			
16	New York Harbor.....	New York, New York.....	Bvt. Lieut. Col. Crane... .	4th artillery..	3			1		2	3	2	3				8	8	6	7	106	11	135			
17	Fort McHenry.....	Baltimore, Maryland.....	Bvt. Col. Walbach.....	1st artillery..	1			1		1	1	1					3	3	1		44	4	51			
18	Fort Severn.....	Annapolis, Maryland.....	Bvt. Major Erving.....	4th artillery..	1					1	1	1	1				4	3	2	3	53	4	65			
19	Fort Washington.....	On the Potomac, Maryland.....	Bvt. Major Mason.....	1st artillery..	1					1	1		1				4	3	2	1	44	3	54			
20	Fortress Monroe.....	Old Point Comfort, Virginia.....	Bvt. Colonel Eustis.....	3d artillery..	3		1	1		1	3	3	5	1			16	17	9	7	258	16	307			
				4th artillery..	2																					
21	Bellona Arsenal.....	Near Richmond, Virginia.....	Captain F. Whiting.....	1st artillery..	1					1		1	1	1			3	4		3	20	4	30			
22	Fort Johnston.....	Near Smithville, North Carolina.....	Bvt. Major Churchill... .	do.....	1					1	1	1					4	4	2	3	33	3	46			
23	Beaufort.....	Beaufort, North Carolina.....	Captain Griswold.....	do.....	1					1	1	1					4	3	1	3	21	3	32			
				do.....	3																					
24	Charleston Harbor.....	Charleston, South Carolina.....	Bvt. Major Heileman... .	2d artillery..	1					2	3	2	2		1	1	15	15	8	11	203	9	254			
				4th artillery..	1																					
25	Augusta Arsenal.....	Augusta, Georgia.....	Bvt. Lieut. Col. Fanning..	2d artillery..	1					1	1	1					4	1	2	3	32	3	42			
26	Oglethorpe Barracks.....	Savannah, Georgia.....	Bvt. Captain Merchant... .	do.....	1					1		2	1				3	4	1	1	42	4	51			
27	Fort Marion.....	St. Augustine, Florida.....	Captain Drane.....	do.....	1					1	1	1					3	4	2	3	32	3	44			
28	Camp Armistead.....	Near Tellico Plains, Tennessee.....	Captain Belton.....	do.....	1					1	1	1					1	1	1	3	24	3	30			
					52	1	4	4	1	1	28	37	30	27	12	3	2	153	154	86	65	1,878	145	2,344		
	Danville.....	Danville, Illinois.....	Cpts. Beckes and Browne.	Mt'd rangers.	2						2	2	2	2			10	10	2	2	194	8	216			
					54	1	4	4	1	1	28	39	32	29	2	3	2	163	164	89	65	2,072	153	2,560		

D.—Position and distribution of the troops of the western department, &c.—Continued.

No.	Posts.	Situation.	Commanding officers.	Regiment.	Number of companies.	Detached service.					On furlough, or with leave.					Present and absent.		
						Field officers.	Captains.	Subalterns.	Total commissioned officers.	Non-commissioned officers, &c.	Field officers.	Captains.	Subalterns.	Total commissioned officers.	Non-commissioned officers, &c.	Commissioned officers absent without leave.	Non-commissioned officers, &c., in confinement.	Non-commissioned officers, &c., sick.	Total.	Aggregate.
1	Fort Snelling	Upper Mississippi	Lieutenant Vail	1st infantry	3	2	4	6	1	1	1	1	1	1	1	130	143	
2	Fort Crawford	Prairie du Chien, Michigan Territory	Colonel Taylor	do	5	7	7	15	1	1	1	1	1	3	174	194		
3	Fort Armstrong	Rock Island, Illinois	Bvt. Major Beall	do	2	1	1	3	1	2	3	4	2	2	52	61		
4	Fort Leavenworth	Right bank Missouri, near Little Platte	Bvt. Major Riley	6th infantry	4	1	2	3	5	1	3	4	1	2	150	167		
5	Jefferson Barracks	Near St. Louis, Missouri	Bvt. Brig. Gen. Atkinson	do	6	1	8	9	3	2	2	4	3	2	226	253		
6	Fort Gibson	Arkansas Territory	Col. Arbuckle	7th infantry	10	2	12	14	16	1	5	7	13	3	507	552		
7	Fort Jesup	Near Natchitoches, Louisiana	Bvt. Brig. Gen. Leavenworth	3d infantry	6	1	3	7	1	4	4	1	1	1	267	296		
8	Fort Towson	On the Kiamichi, Arkansas Territory	Lieut. Col. Vose	do	4	1	1	2	4	2	2	2	2	2	196	213		
9	Baton Rouge	Baton Rouge, Louisiana	Bvt. Lieut. Col. Foster	4th infantry	3	3	3	2	1	1	1	1	2	2	129	143		
10	New Orleans	New Orleans, Louisiana	Lieut. Col. Twiggs	do	2	1	4	5	5	1	1	1	1	1	62	72		
11	Fort Wood	Chef Montour, Louisiana	Bvt. Major Zantzinger	2d artillery	1	3	3	3	3	2	2	2	2	2	31	38		
12	Fort Pike	Petite Coquille, Louisiana	Bvt. Major Mountfort	do	1	3	3	3	3	1	1	1	1	1	42	48		
13	Fort Jackson	Near New Orleans, Louisiana	Captain Baden	do	1	4	4	4	4	1	1	1	1	1	48	54		
14	Fort Mitchell	Near Creek Agency, Alabama	Bvt. Major McIntosh	4th infantry	3	3	2	5	5	3	3	2	2	2	141	159		
15	Fort King	Alachua, Florida	Captain Graham	4th infantry	1	2	2	2	2	1	1	1	1	1	44	49		
16	Key West	Key West, Florida	Bvt. Major Glassell	do	1	1	1	1	1	1	1	1	1	1	58	63		
	Fort Gibson	Arkansas Territory	Captains Boon, Bean, and Foul	Mounted rangers	54	1	14	59	74	63	5	9	27	41	15	2,257	2,504	
	Fort Leavenworth	Right bank Missouri, near the Little Platte	Captain Duncan	do	3	1	1	1	1	1	1	1	1	1	320	332		
					1	1	1	1	1	1	1	1	1	1	110	114		
			Grand aggregate		58	1	14	59	74	63	5	9	27	41	15	2,687	2,950	

ADJUTANT GENERAL'S OFFICE, Washington, November 30, 1832.

R. JONES, Adjutant General.

No. 2.

REPORT OF THE QUARTERMASTER GENERAL.

QUARTERMASTER GENERAL'S OFFICE, *Washington City, November 29, 1832.*

SIR: In obedience to your order, I have the honor to report the operations of the Quartermaster's department for the 1st, 2d, and 3d quarters of the present year, and that the whole period, not heretofore reported, may be embraced, I include the 4th quarter of last year.

The balance remaining to be accounted for by the several officers acting in the department at the date of the last annual report amounted to.....		\$34, 490 71
To which is to be added—		
1. Remittances, viz: In the 4th quarter of last year.....	\$185, 903 00	
In the 1st quarter of present year.....	81, 840 20	
In the 2d quarter of present year.....	265, 443 45	
In the 3d quarter of present year.....	393, 381 06	
		926, 567 71
2. Proceeds of sales of public property no longer fit or required for public use, and of the rent of land and public buildings not required for military purposes, including \$344 79 received by officers of the department previously to the 30th of September, 1831, the account of which was received at this office subsequently to the last report.....		6, 100 73
3. Errors, overcharges, and disallowances, credited by officers in their accounts for the 3d quarter of 1832.....		178 40
		<u>967, 337 55</u>
Total to be accounted for.....		967, 337 55
Of which there has been accounted for—		
1. By disbursements, viz: In the 3d quarter of 1831, and not included in the last annual report.....	\$30, 566 05	
In the 4th quarter of 1831.....	193, 902 26	
In the 1st quarter of 1832.....	96, 440 38	
In the 2d quarter of 1832.....	183, 169 56	
In the 3d quarter of 1832, so far as accounts have been received.....	374, 264 33	
		878, 342 58
2. By deposits to the credit of the Treasurer of the United States.....	1, 764 83	
		<u>880, 107 41</u>
Leaving a balance in the hands of the various officers of the department on the 30th of September to be accounted for, of.....		<u>87, 230 14</u>

The accounts of eleven officers remain to be received, which will probably reduce this balance \$10,000.

Of the balance unexpended the sum of \$50,000 was in the hands of the quartermaster at Detroit. The large remittances made to that officer were to enable him to provide promptly for any unforeseen events or calls connected with the campaign against the northwestern Indians. \$10,000 have since been drawn out of his hands for disbursement by the quartermaster at New York, and the balance is applicable to the current service and to the payment of accounts for services rendered and supplies furnished during the campaign. The remaining \$27,000 is composed of small sums in the hands of more than fifty officers at the several posts in the Union, and of one on duty in Europe, and applicable to the service of the present quarter. The whole amount of the balances in the hands of all the officers of the department, it is confidently believed, will be faithfully applied to the public service and accounted for at the close of the present quarter.

The large amount of public property under the administration of the department, as well as in the hands of quartermasters, as company officers, is promptly and faithfully accounted for.

The balances remaining in the treasury of the several appropriations for the quartermaster's department proper, with the amounts due to those appropriations for expenditures made on account of other departments, will probably be sufficient for the wants of the service to the end of the year.

Of the works under the direction of the department, the road from Washington to Jackson, in the Territory of Arkansas, was reported by Lieutenant Collins, who superintended its construction, as entirely completed on the 1st of August.

The repairs on the road from St. Augustine to Pensacola, in Florida, are in progress, and will probably be completed, as far as the appropriation will permit, during the present year.

The military road in the State of Maine is not entirely completed; it is, however, in its present state, of great public utility. The appropriation already made will be sufficient, and I confidently believe it will be finished by the last of September, 1833.

In April last instructions were given to survey and open a road from Fort Howard to Fort Winnebago, but the reduction of the force at Green Bay prevented the execution of the instructions. An additional appropriation having been made by Congress late in the last session for this road, and to extend it to Fort Crawford, subsequent instructions became necessary; they were given by the quartermaster at Detroit by order of the Secretary of War. The civil commissioner appointed, jointly with Lieutenant Center, to explore and survey the route, not having arrived at Fort Howard on the 21st of October, Lieutenant Center commenced the duty alone on that day.

The difficulties experienced in the recent operations against the Indians in the movement of troops and the transportation of supplies prove the necessity of several good roads to intersect the extensive territory lying between the frontier settlements of Indiana and Illinois, Lake Michigan, and the Fox and Wisconsin rivers; and I respectfully recommend, as a most important measure for the protection and defence of the northwestern frontier, that roads be authorized from Chicago to Galena, from Chicago to Fort Winnebago, and from the latter to Galena, as well as from some suitable points on the Illinois river to Chicago, and to intersect the road thence to Galena.

The barracks and quarters at Fort Crawford and Fort Howard are not yet completed, and, in consequence of the troops at those posts being so employed as not to furnish the mechanics required, a further appropriation will be necessary for each post. I have estimated eight thousand dollars for Fort Crawford, and ten thousand dollars for Fort Howard.

Baton Rouge, in Louisiana, being an important position, and being the principal ordnance depot for the southwestern States, a thorough repair of the barracks and quarters is considered necessary, as well as the building of a suitable hospital. For both objects I have estimated that twenty-five thousand dollars will be required.

Pittsburg being an important entrepot between the principal depot at Philadelphia and the western posts, I would recommend that a storehouse and quarters for the storekeeper, with a stable for public horses, be erected on the public lot in that city. Five thousand dollars will be sufficient to complete the work, and for that sum I have estimated.

The season had so far advanced before the appropriations for quarters, barracks, and storehouses at New Orleans was made, that measures could not then be taken to carry into effect that object; and in consequence of the situation of New Orleans, from yellow fever and other fatal diseases, nothing has yet been done. So soon as favorable accounts be received of the health of the city, an officer of the department will be detached to select a suitable site and make arrangements to commence the work in the course of the winter.

The appropriation for the Delaware breakwater not having been made until the 3d of July, operations were not resumed there until the 11th of that month. The work has, however, been prosecuted with so much energy that we have succeeded in depositing about ninety thousand perches of stone from that time to the close of the operations on the 10th instant. The whole length of the foundation of the breakwater proper, on which deposits of stone have been made, is 1,893 feet, of which 1,419 feet is raised to the height of $3\frac{1}{2}$ feet above the plane of low water, and 474 feet to its destined height. The ice-breaker has been considerably enlarged during the season to an extent of 575 feet in length by 60 feet in breadth. This work has been raised from three to four feet above the plane of low water, 151 feet of which has been brought up nearly to its destined height.

Of the appropriation for the present season, it is estimated that from fifty to sixty thousand dollars will be applicable to the service of the ensuing year. This sum, with \$270,000, which I have estimated for the next year, will enable us so to extend the harbor as to furnish protection to forty or fifty vessels at a time.

The storms of the last winter were, perhaps, more severe than those of winters generally, and the fact of the work having resisted their power and afforded protection to all vessels that took shelter under it, gives assurance that the anticipations of the public will be entirely realized when the whole shall have been completed.

I have the honor to be, sir, your obedient servant,

TH. S. JESUP, *Quartermaster General.*

Hon. LEWIS CASS, *Secretary of War.*

No. 3.

REPORT OF THE CHIEF ENGINEER.

ENGINEER DEPARTMENT, *Washington, November 13, 1832.*

SIR: In compliance with your instructions of the 29th of August last, I have the honor to submit the following report of the operations of this department during the year ending on the 30th of September last, accompanied by statements marked A, B, and C; the first two relating to its fiscal concerns for the same period, and the last exhibiting the works projected by the board of engineers, which have not been commenced, and an estimate of their cost.

I. FORTIFICATIONS.

Fort Independence, Boston harbor, Mass.—It has been found to be impossible to execute the intentions of the law making appropriations for the repairs of this work and preservation of Castle island, as the services of an engineer could not be commanded for that object. It is proposed, however, to make some arrangement this winter, by which the whole of the repairs necessary to be made to this work may be completed in the course of the next year; and with this view an estimate of the funds which will be required, in addition to those already appropriated to make up the estimated cost of these repairs, has been submitted.

George's island, Boston harbor, Mass.—(The site of a fort of the first importance, projected for the defence of the harbor.) The sea-wall for the preservation of this island is completed, leaving a small amount of the funds appropriated for that purpose unexpended. This unexpended balance is retained to remedy, in the spring, any defect in that structure which the action of the coming winter may develop.

Fort Adams, Newport, Rhode Island.—The most satisfactory progress has been made in this work during the past season. The operations on it have been directed principally to the turning and roofing the casemate arches of the main work; to the completion of the scarp wall on the east front; to the construction of permanent galleries under the southwest bastion; the counterscarp walls of the southeast and southwest exterior fronts; and the permanent drains of the work generally.

Fort Hamilton, Narrows, New York.—The additions which were deemed necessary to complete this work, and which consist mainly of the means for draining the water from the roofs of the casemates, and in the construction of gun traverses, are in such a state of forwardness as to induce the expectation that the whole will be finished by the end of the present month.

Fort Columbus and Castle Williams, New York harbor.—The repairs of Fort Columbus have been prosecuted in the most efficient manner. The repairs of the scarp walls were commenced last fall, and before the operations were suspended by the approach of cold weather upwards of 458 cubic yards of heavy masonry were constructed; materials having been received and prepared during the winter, operations were resumed early in the spring, and continued without interruption till the month of August last, when

the work was abandoned in consequence of the alarm created by the malignant cholera, which was at that time raging with considerable violence among the workmen. The necessary measures having been taken to insure the health of the laborers, this interruption was of short duration, and, on the 4th of September last, the works were progressing with their usual vigor. The stone masonry laid within the year ending September 30, amounting to 2,470 cubic yards, extends about three-fourths around the work, two-thirds of which are finished and capped. The present barrack and quarters for the officers are in so bad a state of decay, independent of their want of comfort and room, as to require, to repair them perfectly, the entire removal of their floors, ceiling, and roofs; the mere shells that would remain not being worth preserving, it is deemed advisable to take advantage of the opportunity thus offered to remove these barracks to a situation within the work, which, besides offering the means of providing for the accommodation of a greater number of troops, would free its parade from a serious inconvenience arising from their present position. The cost of constructing the new quarters will be embraced in the estimate for the repairs of this work.

Nothing further has been done towards the repairs of Castle Williams than to construct a pier head for the accommodation of vessels engaged in the delivery of materials for that purpose.

Fort Monroe, Hampton Roads, Virginia.—The counterscarp wall of this work is finished, nearly 1,000 feet having been constructed within the year; the scarp walls on fronts 5, 6, and 7 are pointed, and a considerable portion of the casemated covertway was arched; the exterior revetment in part constructed; nearly 1,000 feet of slope wall in the ditch finished; the ditch on fronts Nos. 4, 5, and 6 nearly excavated; a half parapet placed on front 3; and about one-half of the counterscarp opposite fronts 1, 2, and 3, revetted with sods, when, in the month of August last, the malignant cholera made its appearance among the laborers, and compelled the engineer in charge of these works to suspend his operations. This suspension, the effects of which are still felt in the difficulty experienced in procuring workmen, will not only retard the completion of the unfinished parts of the works above referred to, but will also add to their cost. It is, nevertheless, believed that the available funds will be adequate to the completion of the covertway, the ditch, and the ramparts, though a part of the coming year will be necessary for their accomplishment. The funds already within the control of the department for this work are adequate to defray all its expenses during the present year and the first quarter of the next; and it is believed that the amount of the estimate for 1833 will be sufficient to complete it.

Fort Calhoun, Hampton Roads, Virginia.—The masonry at this work having been suspended for reasons stated in my last report, nothing of importance has been done at it, further than to receive the materials that will be required in its construction; distribute them over those parts of the site to be occupied by the walls in which they will be used, and to observe the degree of settling produced by the mass of materials already collected. In 1831 this settling amounted to six inches, and during the year ending 30th of September last it was but little more than three inches—indicating clearly a tendency in the pile to assume a fixed position, at the same time that it shows the necessity of loading the work and allowing time for the equilibrium to be established. To give to the work the relative relief contemplated in the original plan, it will require 20,000 tons of stone to compensate for the subsidence of the mole during the last two years. The estimate for this work for the next year is based upon the supposition that 26,000 tons of building and breakwater stone will be added within that year.

Fort Macon, Beaufort, North Carolina.—As anticipated in my last report, this work is nearly finished. The operations at present are principally directed to the construction of works for the preservation of its site, and the funds already available for them will be sufficient for their service during the next year.

Fort at Oak island, Cape Fear river, North Carolina.—This fort is reported as being ready to receive a garrison, though it is not entirely completed, in consequence of a want of funds for that object. The deficiency in the amount of funds necessary to complete this fort within the past year, as anticipated, is owing to a mistake in the estimate furnished last year by the local engineer having charge of the operations at Oak island—a mistake which had its origin in several circumstances explained by that officer. The parts of this fort which remain unfinished, and to the completion of which it is proposed to apply the funds asked for in the estimate already submitted, are the gun traverses, furnaces for heating shot, and the works for the preservation of its site.

Fortifications in Charleston harbor.—The operations at Charleston have been directed, during the past year, to the preservation of the site of Fort Moultrie, and to the formation of a mole on the shoal opposite to this fort, to be occupied as a foundation to the new work projected for the defence of the harbor. One hundred and eighty tons of stone have been added to the breakwater at Fort Moultrie, and, in July last, the site of this work was considered secure for some time to come, though the abrasions of the sand on the west side were considerable. As it is deemed essential to the preservation of Fort Moultrie that this encroachment of the sea should be arrested as soon as possible, it is proposed to apply a portion of the funds estimated for the service of the fortifications in Charleston harbor, during the next year, to this object. The mole for the new work has progressed as rapidly as could have been expected; upwards of 22,000 tons of stone have been added to it during the past year.

Fort on Cockspur island, Savannah river, Georgia.—From the date of my last annual report to the beginning of July last, when the engineer having the superintendence at Cockspur was assigned temporarily to duty on the Cumberland road, the progress in the construction of this fort was, in a high degree, satisfactory. The materials for the foundation of the work having been prepared, the grillage would have been entirely laid within that period but for an alteration in a part of the foundation, which a better acquaintance with the substrata of the ground suggested as being necessary to insure a uniform stability throughout the work. About one-half of the grillage, however, was laid and secured; the piles which are necessary for the southeast front were driven; the excavation for the entire rampart was made; the earth for the glacis of four fronts, and for the rampart of the outwork deposited; and considerable quantities of materials of various kinds were received and prepared for use when the work was left, at the time above stated, in a situation to resume operations with advantage as soon as the officer having the direction of it shall have returned to his post.

Fortifications at Pensacola, Florida.—The operations for the construction of the fort on Santa Rosa have been conducted with as much advantage as the limited amount of appropriation for the past year would allow. All the materials have been delivered agreeably to contract, and the condition of the work is in a high degree favorable; the most important parts that remain to be finished being of a nature to justify the belief that the whole work might be completed in the course of six months or less should occasion require it. The estimate for this work for 1833 contemplates its completion within that period.

Fort at Mobile Point, Alabama.—The operations at this work during the past year have been directed principally to the formation of the ramparts, banquettes, and glacis. Since my last report it has been

discovered that the *blindage* of the citadel, which was constructed of wood, was in so bad a state of decay as to require its entire removal; it has been accordingly removed, and the proper measures taken to replace so much of it as may be necessary for the immediate service of the work, omitting that portion which will not be required till the fort is in a state of siege. This will increase the amount of funds that, otherwise, would have been sufficient to complete the work, which, it is hoped, will be accomplished in the course of the coming year.

No estimate of funds having been received from the local engineer, the estimate submitted is based upon that furnished last year after allowing for the additional expense which will be incurred in rebuilding the *blindage*.

Battery at Bayou Bienvenue, Louisiana.—The repairs of this work were a good deal retarded in the early part of the year by the inclemency of the season and the difficulty of procuring laborers. The spring having been unusually rainy, not only impeded the progress of the masonry, but rendered it necessary to postpone the excavations till they could be resumed under more favorable circumstances. Notwithstanding these difficulties, the repairs were prosecuted with considerable success before the commencement of the sickly season, during which nothing has been done. They will be resumed as soon as the nature of the climate will permit.

Fort Wood, Chef Menteur, Louisiana.—Owing to a want of engineers, the repairs of this work were intrusted to the management of an officer who was already engaged in the discharge of important duties at another and distant post; and this officer not being able to leave the service with which he was occupied till late in the working season, it became difficult if not impossible to procure sufficient laborers and suitable materials, so that but little progress has been made towards completing those repairs.

Tower at Bayou Dupré, Louisiana.—This tower was so far completed during the past season as to require no further appropriation. The damages sustained during the hurricane of August, 1831, have been repaired, and the battery, in advance of the tower, nearly finished, as contemplated in the original plans of this work. The whole may be finished in a few weeks.

A portion of the funds provided by the appropriation for contingencies of fortifications has been applied to the repairs of Fort Jackson, Fort Washington, Fort McHenry, Fort Wood, Fort Moultrie, Fort Pike and Petite Coquille, Tower Dupré, Battery Bienvenue, to the construction of a wharf at Fort Monroe, and to defray the expenses of the survey of Provincetown harbor, with a view to its fortification, as required by a resolution of the House of Representatives of the 26th of January last, and which was referred by you to this office for execution. This survey is now in course of execution.

Before closing the subject of fortifications, I would call your attention to that part of my last annual report which suggests that, as several of the works already mentioned will be completed during the ensuing year, appropriations be recommended for commencing the forts projected at Throg's Point, New York; the reconstruction of Fort Delaware, in the Delaware river; Sollers's Point Flats, Maryland; Baid Head, North Carolina; the Barrancas or Foster's Banks, Pensacola harbor, Florida; and for Grand Terre, Louisiana; an estimate for which will be laid before you. I would also renew the representations, then made, of the expediency of suggesting that the appropriations for fortifications be made at as early a period of the approaching session of Congress as practicable.

2. INTERNAL IMPROVEMENTS.

La Plaisance bay, Michigan.—In compliance with your instructions, the officer having charge of the Detroit and Chicago road was directed to superintend the operations on the piers at this place; and, under the expectation that the pier formerly built could be repaired and placed in a state to meet the wants of the harbor, he was directed to make the necessary examination, and to report the result to this department. The presence of this officer having been required at the seat of Indian disturbances last summer, the examination could not be made before the beginning of September last, when it was found that the whole of the old pier, with the exception of about 200 feet, had been washed away and rendered useless by the storms and ice of last fall and winter. That part of the pier built by contract, before the work was placed under the direction of this department, has been completely carried away, leaving only a few stones and the foundation timbers to mark the place where it stood. Arrangements will be made for its reconstruction early next spring.

Huron river, Ohio.—The harbor at the mouth of this river is at present in good condition. No new works having been constructed during the past season, the funds thus far have been applied in such manner as was deemed necessary to place those already constructed in a condition to resist the effects of the tempestuous season, and to prevent their being injured by the spring freshets. Some additional works are yet necessary to complete this harbor, though no further appropriation will be required for that object.

Black river, Ohio.—The public works at this harbor are in good repair, and are believed to be secure against the recurrence of an accident which, in November last, deprived the east pier of about sixty feet of its length, to a depth of three feet below the surface of the water. This damage has been repaired, and the pier extended about forty yards into the lake. A part of the appropriation for the present year having been absorbed in the repairs rendered necessary by the accident above referred to, that appropriation will not be sufficient to complete the work at this harbor, as anticipated; and an estimate of the amount necessary to effect this object has therefore been submitted.

Cleveland harbor, Ohio.—The funds appropriated for the works at this harbor have been applied to their completion, by filling in the piers which had settled; driving piles to render the works more secure; and providing them with the necessary appendages to prevent injury from collision with vessels entering the harbor. These works, by the close of the season, will be rendered secure, and no further appropriation will be necessary for them.

Grand river, Ohio.—This harbor is in good condition, and no further provision for funds will be necessary to complete its works and place them in good order.

Cunningham creek.—The means provided for the erection of a pier head at this place are not sufficient to complete that structure according to the plan adopted. About two-thirds of it have been constructed and rendered secure, and an estimate of the funds requisite to finish it has been submitted.

Ashtabula creek, Ohio.—The operations at this harbor have been directed to the perfection of the works for its protection, and to the removal of obstructions at the mouth of the creek. These obstructions consist of rock, situated about 6½ or 7 feet below the surface of the water, and thus far but little progress has been made in removing them. Experiments, however, are now in progress, which it is hoped will

result in the suggestion of some plan for their speedy removal. An estimate has been submitted for widening the entrance to this harbor.

Conneaut creek, Ohio.—The pier at the mouth of this creek has been extended sixty feet into the lake since my last report, and it is believed that the funds already available for it will be sufficient for its completion.

Presque Isle, Pennsylvania.—The works at this place are in as good a state of preservation as can be expected under all the circumstances. The breach through the peninsula at the head of the bay is represented as having an injurious effect on the harbor. It is increasing in width, though not in depth; and fears are entertained that the whole of the peninsula will be removed, and that the sand from it will be washed into the harbor. To close this breach, or to confine it to a channel sufficiently large to allow the passage of vessels through it, would require an appropriation equal in amount to the whole sum already expended on this harbor. During the past season, besides paving 400 yards of the north breakwater, that structure has been extended 200 feet towards the main land, leaving a distance of 400 yards yet to be constructed, for which an estimate has been submitted. The space between the end of the breakwater and the main land has increased considerably since my last report, but it is confidently believed that when it is closed no other breach can be made.

Dunkirk, New York.—The pier erecting at this place has been extended from the main land 136 yards, and filled in with stone to the surface of the water, making the whole extent of this pier 416 yards. Should the weather prove favorable, ten additional cribs of thirty-four feet each will be sunk and filled, as above, this fall. No additional funds will be necessary to complete this pier to the distance contemplated, which will carry it to ten feet water.

Buffalo, New York.—The works for the protection of this harbor have the appearance of being strong and durable. An estimate of the funds necessary for their prosecution and completion has been submitted.

Black Rock harbor, New York.—The funds appropriated for the improvement of this harbor have been applied to the construction of an ice-breaker for turning the ice and current of water from the harbor, which, heretofore, have caused considerable injury to the piers at that place. No estimate having been received from the agent at these works, and having understood that the last appropriation will be sufficient to complete them, no funds in addition to those already available will be required.

All the harbors on the south shore of Lake Erie are in a situation to offer protection and safety to vessels navigating the lake, and to afford facilities in transferring the produce of the surrounding country to market. The application of the moneys appropriated by Congress for the improvement of these harbors has given to the people a spirit of enterprise and industry which is perceptible on the whole south shore of the lake. The plans adopted for deepening channels at the mouths of rivers which were choked up with sand have afforded in their execution a result far exceeding the expectation of all who were acquainted with their situation prior to the commencement of their improvement. The loose sand has been driven from the channels by the force of currents created by works for that purpose, and the water now rests upon a compact bottom, giving, except at Ashtabula, a sufficient depth for all vessels navigating the lakes. But as these works are in part constructed of perishable materials, and as their completion is near at hand, it is highly important that provision should be made by which the injuries to them, arising from decay and unforeseen accidents may be repaired, and their usefulness preserved.

Genesee river and Big Sodus bay, New York.—The progress made in the improvements at these places during the past year is of the most flattering character. Although the appropriation for these works became available late in the season, yet such had been the previous preparation of materials, and such the fitness of the weather for work, added to the unusual good health of the workmen, that the piers at both of these places have advanced beyond the most reasonable expectations. The number of cribs constructed during the past season, and put in place at the Genesee river, is twenty-eight, and at Big Sodus thirty; all of which have been well secured, both above and below the surface of the water. The resistance which these piers have opposed, thus far, to the action of the storms and large masses of ice, affords additional evidence in support of the opinion, before expressed, that they will accomplish the object for which they were intended, viz: useful and safe harbors of refuge for vessels engaged in the foreign and domestic trade. Recent examinations at Genesee, compared with previous surveys, show an increased depth of water from the mouth of the river to a point in the lake as far out as the ends of the piers. The channel, which at present affords not less than ten feet water, was formerly obstructed with sand bars, over which no vessel could pass having a draught of more than six feet. The action of the river currents upon the bed seems to indicate that 200 additional yards of pier work will complete the improvement of that river, which may be accomplished in the course of the coming year.

It is believed that all the operations at Big Sodus bay may be brought to a close during the approaching year, except that of bridging, which will be commenced as soon after the completion of the pier work as possible, with a view to connect the interior with the exterior channel.

Oswego, New York.—The improvements at this place have been prosecuted during the past year with much zeal and success. The piers, to an extent of several hundred feet, are already raised to the height required by the plans; and should the present fall prove favorable as to weather, they will be completed before its termination. Already many of the benefits which were anticipated from these structures have been realized in the perfect protection which they afford against the encroachments of the heavy sea experienced at this place. By the addition of nearly four thousand cords of stone, the mole has been raised for a distance of three hundred feet, to a level with the surface of the water; and experience thus far seems to place the question as to its permanency beyond all doubt. An estimate of the funds necessary to complete these works has been submitted.

Kennebec river, Maine.—The operations for removing the obstructions to the navigation of this river, at Lovejoy's Narrows, it is believed, are brought to a close before this time.

Kennebunk river, Maine.—The last appropriation for the repairs of the piers at the mouth of this river became available too late in the season to apply with advantage any portion of it to the object for which it was intended. The winter being the most favorable season for purchasing timber and other materials, it is probable that no work will be done on the piers until the commencement of the coming year. There being a considerable quantity of materials on hand, no additional appropriation will be necessary for this improvement for 1833.

Berwick branch of the Piscataqua river.—But a part of the small sum appropriated for improving the navigation of this river at Quamlegan rapids has been applied, in consequence of the unusual continuance of high water. This improvement will be completed, however, in the early part of next year, should the

stage of the water permit; and the funds already in the hands of the agent will be sufficient for that object.

Merrimack river, Massachusetts.—The effects thus far produced by the pier at the mouth of this river afford the most satisfactory indications that the object contemplated by its construction will soon be in part realized. The hillocks of sand at the bottom of this river, which greatly impede its navigation, are much reduced; the channel opposite Black Rock is both deepened and made wider, and affords a good and safe anchoring ground. No effect, however, is produced upon the bar at the entrance of the river.

Deer island, Boston harbor, Massachusetts.—The sea-wall which forms a part of the works now in course of construction for the preservation of this island, in several places, and to an extent of several hundred feet, is raised as high as originally contemplated, a part of the breakwater in front of this wall is constructed, and arrangements are made for the delivery of the materials necessary for the prosecution of these improvements during the remainder of the working season. The funds already available for these works will probably be sufficient to complete them, unless those portions of them which are already constructed sustain an injury during the approaching winter, which is not at present apprehended.

Plymouth beach, Massachusetts.—The operations at this place have been confined, principally, to the northeastern extremity of the beach, where a wall has been erected, to the extent of four hundred and fifty feet, in the most substantial manner. The planting of grass, and other means of protecting the beach, have also been continued. The general condition of the beach is very good, the grass is increasing and flourishing in a remarkable degree, and the works seem to have produced the desired effect.

Provincetown, Massachusetts.—The plan of improvement for the preservation of the harbor at this place contemplates the planting of beach grass to arrest the progress of the drifting sand which occurs there with almost every northerly wind, and which threatens, if not checked, to fill up this very important harbor, as well as to lay waste the town itself. The spring being the only season in which this grass can be planted with any hope of its being productive of the desired end, no part of the appropriation made at the last session of Congress has been applied, as it was not available before the middle of summer.

Hyannis harbor, Massachusetts.—The operations for the extension of the breakwater at this harbor have been prosecuted during the past season, but no report having been received from the agent, I am unable to state its exact condition.

Stonington, Connecticut.—As anticipated in my last annual report, the breakwater at this place is completed; the citizens of the borough of Stonington, and others interested in the navigation of that place, evince, however, a strong desire for an extension of this improvement by the placing of buoys at three or four points, to indicate the position of certain reefs and shoals in the immediate neighborhood of the harbor. By the projection of the pier into the channel the passage to the inner harbor is narrowed to such an extent as frequently to cause vessels, in their efforts to avoid the end of the pier, to ground upon the shoal which is immediately opposite. It seems, therefore, to be important that the position of this shoal should be well defined, and as the unexpended balance of the appropriation which was made for the pier is more than sufficient to accomplish this desirable end, it is respectfully recommended that it be applied for that purpose.

Mill river, Connecticut.—The breakwater and dike at this harbor having been finished agreeably to the original plans, they were found not to be of sufficient extent to answer all the purposes for which they were intended. An estimate was therefore submitted, and an appropriation made for their extension; contracts have been entered into for the necessary additions, both to the breakwater and dike; and, on the 30th September, the former was about one-fourth, and the latter about one-third executed. The contracts provide for their completion by the 1st of January next.

Harbors of New Castle, Marcus Hook, Chester, and Port Penn, Delaware river.—A dredging machine has been kept in operation at these harbors, but their precise condition is not known to me, as no report in relation to them has as yet reached this office.

Ocracoke inlet, North Carolina.—Ample preparations were made for the improvement of this navigation at an early period of the past season, but, for want of funds, operations were not commenced until late in July last, when the appropriation became available. Since the middle of August the dredging machine has been at work on the shoal at the junction of Wallace's channel with the Beacon Island sound, the common anchorage ground for outward-bound vessels. From this shoal nearly eight thousand cubic yards of sand have been removed within the period of six weeks, giving an increased depth over that shoal of from seven and a half to nine feet water at flood tide, and a channel about fifty yards wide. There only remains the obstruction presented by the bar of the Flounder Slue, which is the most extensive, but which has already a depth of little more than seven feet water over it at high water. It is intended to operate on this shoal during the remainder of the season, as an increased depth of six inches will render the channel of Flounder Slue superior to any other in that navigation, being the shortest by one mile, most favorable for the prevailing winds, and having a good harbor near Shell Castle.

The most gratifying circumstance attending the operations at Ocracoke is the apparent permanency of the work already accomplished, which is such as to induce a strong belief in the ultimate success of the experiment. A new boat, with machinery of greater power than that heretofore employed, was finished in the latter part of September, and is, before this, in operation in conjunction with the old boat. An additional appropriation being necessary for carrying on these operations during the year 1833, an estimate of its amount has been laid before you.

Cape Fear river.—The lower western jettee on this river has been completed during the past season, as also that near Barnhard's creek, on the opposite shore, with the exception of about two hundred feet which remain to be flanked. To prevent the effect of the strong currents of that river on these jetties, wings have been constructed at intervals along their whole extent. Other jetties have also been provided with wings to the extent of nearly one thousand feet, notwithstanding which, doubts are entertained as to their stability; the operations of the dredging machine have been greatly retarded during the same period, in consequence of the failure of many parts of its machinery, and of the difficulty, indeed impossibility, of having repairs of the nature required done nearer than Baltimore. A survey of this river will soon be made with a view to making a chart of it, which, it is believed, will exhibit an increased depth of water of about one foot in the channel.

Savannah river, Georgia.—Nothing has been done, thus far, towards applying the funds provided by Congress at its last session for improving the navigation of this river, between its mouth and the city of Savannah. The direction of the improvement has been assigned to the engineer having charge of the works of fortification now in progress of construction on Cockspur island. The services, however, of that officer having been required during the past summer on the Cumberland road, east of the Ohio, to super-

intend its repairs, he has been unable as yet to give his attention to this subject, but will, as soon as his other duties allow, make the necessary examination, and commence operations.

Inland navigation between the St. John's and St. Mary's, Florida.—An examination of this passage having been recently made by the assistant engineer under whose personal supervision the operations for its improvement were formerly conducted, and his report upon the subject being in accordance with the views of this department, an estimate of the funds necessary to accomplish the object of the report has been submitted.

St. Mark's harbor and river, Florida.—The operation of dredging in the harbor of St. Mark's is brought to a close, by which an increased depth of water of four feet has been attained in the channel leading to the town of St. Mark's, except in one place where this operation was interrupted by rocks, over which there is only a depth of eight and a half feet. Efforts were making on the 30th September last to deepen the channel over this rock, which the plan of operations adopted by the officer having charge of the work, and the very favorable report on these improvements just received from the assistant engineer, give every reason to hope will prove successful. The cut through the natural bridge over the St. Mark's river has been commenced; and the boats and machinery necessary to prosecute the improvement above this bridge having been transferred over it, and all the preparations accomplished, it is expected that operations will be carried on with despatch.

Apalachicola, Florida.—The improvement of this river has been completed so far as it is deemed practicable to expend funds for that object with any hope of success, there having been removed during the past season all the obstructions that were inaccessible last year in consequence of high water, and the banks having been cleared of all the heavy timber likely to fall into the river and present new obstructions. A part of the appropriation for this work is unexpended.

Harbor of Mobile, Alabama.—The operations for deepening the channel through Choctaw Pass, in this harbor, having been suspended for reasons stated in my last annual report, they were not resumed before the beginning of August last, in consequence of difficulties experienced in reclaiming the dredging machine, which was sunk in several feet water. Since August, however, this machine has been in successful operation.

Pascagoula river, Mississippi.—The works at this place have not as yet been resumed. During the suspension of his operations, caused by the transfer last year of the funds for this improvement to the surplus fund, the contractor removed the machinery which he had in operation at this river to New Orleans, and had not, at the last advices from the agent, been induced to resume the execution of his engagement.

Red river, Louisiana.—The appropriation for overcoming the obstructions presented to the navigation of Red river by the Great Raft became available at too late a period in the season to make the necessary preparations for continuing the works on that river during the past summer, as almost all the supplies for the support of the force requisite for their prosecution can only be forwarded to the point at which they would be required in the season of high water. Nothing has been done, therefore, at this improvement since operations were suspended for want of means. This is the less to be regretted, as it is believed from the reports received at this department, as well as from verbal information entitled to great credit, that the plan of operations heretofore pursued is not such as to afford, even in its accomplishment, any lasting benefit to the navigation of that river. Instead of deepening the bayous and connecting them by short canals, and thus opening a communication around the raft, it is the opinion of persons, who have had opportunities of judging, that the raft itself might be removed through the agency of one or two of the steamboats at present employed in improving the navigation of the Mississippi and Ohio rivers at an expense not exceeding that which would attend the execution of the plan already adopted. This being the opinion also of people residing in the neighborhood of the raft, it was deemed advisable to suspend further operations till one of the boats alluded to could be despatched, without injury to the service on which she is at present engaged, to ascertain by trial the possibility of effecting its removal. In addition to the benefit which the removal of the raft would confer upon the navigation of the river, it would reclaim by drainage an immense tract of valuable land which otherwise must lie waste till the water with which it is at present covered is carried off through its natural channels.

Arkansas river, Arkansas Territory.—Nothing has been done towards making the examination required on this river in consequence of the want of an officer of engineers whose services could be rendered available for that purpose.

Mississippi and Ohio rivers.—For information on the subject of the improvement of these rivers, I beg leave to refer you to the accompanying report of the superintendent for the year ending on 30th September last. A thorough inspection has just been made of the works for the improvement of this navigation, and the report of the officer in relation thereto will be submitted as soon as received at this office.

Cumberland river, Tennessee.—Captain Delafield, of the engineers, was directed in August last to make an examination of this river, and to devise, in conjunction with Mr. Shreve, the superintendent of the improvements on the Mississippi and Ohio, the proper measures for the removal of such obstructions to its navigation as this examination might suggest as being necessary. The examination having been completed, an agent was appointed and charged with the execution of the plan of operations on that river, who will be subject to the general direction and supervision of Captain Delafield and Mr. Shreve.

The experiments of deepening the channel at the entrance of Nantucket harbor, Massachusetts, and that for deepening the channel through Pass au Heron, Alabama, having failed to produce any satisfactory result, the works at those places have been entirely suspended, and the dredging machine employed at the former place will be transferred to the Savannah river, Georgia, and that used at the latter to Pascagoula river, Mississippi.

Cumberland road, in Ohio.—The officer of engineers who, in accordance with your instructions, was assigned to the superintendence of the construction of this road, commenced his duties on the 13th of August last. The operations on this road during the past year have been confined to that portion of it lying between Zanesville and Little Darby creek, which includes a distance of about sixty-six miles. From Zanesville west to the point where the Ohio canal crosses the road at Hebron, all the bridges and culverts have been built, and, with the exception of a wooden superstructure of ninety-five feet span over the south fork of Licking, are constructed of sandstone of various kinds, united with mortar, for the most part, of inferior quality, excepting the culverts, which are of dry stone masonry. These structures, however, are all in a good state of preservation, and require but slight repairs. The surface of the road for a distance of twenty miles west of Zanesville has received a covering of six inches of stone of various qualities, consisting principally of flint, limestone, slate, and sandstone. From the twenty-one miles west

of Zanesville to the Ohio canal the road has been graded, and is ready to receive the first stratum of metal. Between Hebron and Columbus, comprising twenty-seven miles, all the bridges and culverts have been contracted for, and, with the exception of the wooden structures for the canal feeder, Black Lick creek, Big Walnut creeks, and Alum creek, have been completed, in all probability, before this. The masonry on this section is also composed of different varieties of sandstone, with some limestone, and of a mortar of much better quality than that before mentioned.

Contracts were entered into last year for clearing and grubbing that portion of the road included between the twenty-seventh mile west of Zanesville and Columbus, but, in consequence of many parts of it having been received from the contractors in an unfinished state, and other parts having been abandoned by the contractors in the same condition, it will be necessary to place them again under contract before the operation of grading can be commenced. Measures having been taken to have the road graded between Hebron and Columbus, it is expected that a rough grade, sufficient for the passage of carriages, will be accomplished by the first of January, and that the full grade will be completed by the first of June next.

On that part of the road between Columbus and Little Darby many of the bridges and culverts have been constructed and the grade nearly completed. The interests of this portion of the road appear to have been almost entirely neglected. With the exception of the wooden bridges over Big and Little Darby, which are represented as having been well built, there is little on this section of the road that deserves commendation. The stone masonry, which is of an inferior limestone, is of bad quality, and altogether disreputable to the great national work of which it forms a part. Gravel has been placed on some parts of it, but of such kind, and in such condition, as to be injurious rather than serviceable; and many of the culverts which have been constructed will require to be enlarged, having been made entirely too small to satisfy the wants of the road.

Cumberland road, in Indiana.—The annual report of operations on the eastern division of this road is of so general a character as to render it impossible to state its exact condition, though it is believed that its affairs have been conducted with zeal on the part of the superintendent. The contracts which were entered into last year for the continuation of this road west of Indianapolis have all been executed, with the exception of those which provide for the erection of bridges over the Big White Lick and White river. Both of these structures, however, are now in progress and will soon be completed. The act of Congress making an appropriation for the service of the road in Indiana for the current year having provided specially for the erection of bridges over the east and west branches of White Water, and other small streams, with the view to bring the road into immediate use, the sum appropriated was divided into two portions, bearing to each other the proportion indicated by the respective wants, under this law, of the two divisions of the road, as ascertained from an examination of the estimates of masonry furnished by the commissioner who located the road through this State. The funds being thus divided, contracts were entered into for a continuation of the western division sufficient to absorb all the money that became available by this arrangement which was not pledged by former engagements. Contracts were also made for the erection of the bridges over the east and west branches of White Water in the eastern division, and these bridges are to be finished by the last of August next. An officer of engineers is now engaged in making an inspection of this road, whose report will also be submitted when received.

Cumberland road, in Illinois.—The superintendent of the national road through the State of Illinois, having experienced a good deal of sickness in the early part of the present fall, has been unable as yet to transmit his annual report of its condition. Judging, however, from the correspondence of the superintendent with this department, and the uniformly correct manner of rendering his accounts, as well as from the general character of his administration, it is believed that the interests of the road have been well attended to, and that it is in as good a condition as the means provided for its construction, and the circumstances attending the operations on it generally, would permit.

Cumberland road, east of the Ohio.—In obedience to your instructions of the 13th July last, an officer of engineers was assigned to the superintendence of the repairs of this road; and, with the view to meet the requirements of the law of Congress, passed at its last session, in reference to these repairs, as well as the immediate wants of the road, which were represented as being very great in consequence of its dilapidated condition, that officer was instructed to limit his operations to the portion of the road lying within the limits of Pennsylvania and Maryland; to divide the road in each of these States into as many equal sections as there are *toll-gates* provided for by the laws of these States, which are mentioned in the act of Congress above alluded to; to complete the repairs in the most permanent manner, commencing with that which was in the worst condition, and proceeding regularly through the sections from the worst to the best; and to turn over each section, as soon as finished, to the State in which it may be situated. An examination of this road was commenced in the latter part of July, and towards the last of September contracts were entered into for making repairs over 12,019 roads, which embrace the two worst sections in Pennsylvania, and the worst section in Maryland. It so happens that these three sections are all continuous, and have their commencement in Maryland at the end of the first section west of Cumberland. These contracts provide for the completion of the repairs by the first of July next. The officer in charge, in communicating to this department the result of the examination which he made of the road immediately after his arrival on it, says: "I find the road in a shocking condition, and every rod of it will require great repairs; some of it is now impassable."

In the course of my recent inspection of this road, which was made in accordance with the verbal instructions that I had the honor to receive from you on the 3d instant, I ascertained that, in making contracts for the repairs, the contractors were, in many instances, permitted to use the best of the stone composing the old covering of the road when none better could be procured in the neighborhood; and it is believed that advantage has been taken of the opportunity thus offered to introduce into the new covering material of inferior quality, and which had been previously condemned. I also found that the stone in general was not broken to the size prescribed by the contracts, and that the side drains had not been sufficiently attended to. The present superintendent, however, has been verbally instructed on this subject, and will adopt, without delay, the proper remedy for these evils.

The difficulty of procuring a suitable material for the covering has rendered the use of a perishable stone a matter of absolute necessity in the first two layers; these layers, together, form a thickness of six inches, and will, in all probability, be laid upon the road before winter, which will place it in a condition to admit of easy travelling. By spring the road will be in a state to receive the last layer, which will make up the nine inches, and will constitute its enamel, or wearing surface. This layer should be made of flint, granite, or limestone; for without the use of one of these materials the repairs must necessarily

be of a temporary nature, and not such as are contemplated by the act of Congress making appropriation for them. Limestone is the only one of the materials mentioned which is found upon the line of the road, and as this can only be procured with considerable difficulty and at great expense, it is believed that the only plan would be to haul the stone required for those parts of the road remote from the quarries which furnish it, the United States paying the difference of transportation, which would be necessary to place the contractors for those parts on a footing of equality with those having quarries in the immediate neighborhood of their work. The expenses of this transportation would be heavy; but, should the government choose to incur it, all the material of the best kind may be procured, deposited along the road, and be prepared for use in the spring, as soon as the frost leaves the ground; and, in anticipation that such will be its determination, verbal instructions have been given to the superintendent to take the proper measures for procuring this material agreeably to the plan suggested.

The grade of the road is in general good, and will require alteration in but few instances, and, in those, involving no great expense. At Cumberland I would recommend a change in the location of the road to turn Wills's hill, by which a lift of eight hundred feet in four and a half miles would be avoided, and one hour gained in each trip of the mail, besides greatly benefiting other transportation of a heavier character passing through Cumberland.

Lieutenant Mansfield, the officer who had the temporary management of the affairs of this road, has done all that zeal, aided by sound judgment, could effect. The quantity of work done, and the manner in which it is executed, afford the most satisfactory evidence of great industry, and entitle him to much credit.

The assistants on the road are industrious, and, as far as it is in their power, discharge their duty faithfully; but as much time is necessarily employed in passing over the line of their supervision, impositions are hourly practiced, which they can neither prevent nor detect. More aid is therefore required, and must be obtained, before a system of supervision suited to the wants of the road can be established, and this aid should be drawn from the army.

An estimate of the funds necessary to prosecute these repairs during the next year has already been submitted.

Road from Detroit to Chicago, Michigan.—The contracts entered into last year for the construction of twenty-seven miles of this road, beginning at the one hundred and fifth and terminating at the one hundred and thirty-second mile from Detroit, including the erection of bridges over Cold Water river, Flag creek, Swan creek, and Prairie river, have, in most instances, been complied with, and the work provided for by the whole of the contracts would, in all probability, have been executed had not many of the contractors been called upon, in the early part of the present year, to march towards the seat of the late Indian disturbances. These contractors are at present, however, actively engaged in fulfilling the terms of their contracts, and no doubts are entertained of the completion of their engagements within the present fall. An estimate of the funds necessary to complete this road as far as the northern boundary line of Indiana has been submitted.

Road from La Plaisance bay to the Detroit and Chicago road, Michigan.—The commissioners appointed under the act of Congress of 4th of July last, which provides for the location of this road, having accomplished the object of their commission, and furnished their report, accompanied by a plat, field notes, and an estimate of constructing this road, an officer has been directed to superintend its construction, with instructions to place that portion of it included between the bay and Tecumseh under contract, with as little loss of time as possible. The accounts rendered by the commissioners, as well as their report, show that the amount of expenditures on account of the location exceeds the sum appropriated for that object by \$608 76; which excess has been advanced by the commissioners under the expectation that Congress will relieve them by an additional appropriation of that amount. As an examination of the accounts shows that no unnecessary expenses were incurred, this amount is accordingly embraced in the estimate already furnished.

Road from Detroit to Saginaw, Michigan.—Contracts have been entered into for the construction of this road as far as the fifty-seventh mile from Detroit, including the erection of bridges over the Thread and the Flint rivers—the former on the fifty-eighth and the latter on the sixtieth mile. An estimate for the continuation of this road has been submitted.

Road from Detroit to the mouth of Grand river.—The commissioners appointed under the act of Congress of the 4th of July last, in reference to this road, are now engaged in making its location.

Road from Detroit to Fort Gratiot, Michigan.—The location of this road having been changed by virtue of the authority granted in the act of Congress of the 3d of July last, arrangements have been made for continuing its construction by contract as far as Black river, which is just below Fort Gratiot. The funds available for this road are sufficient for its completion, which will be accomplished in the course of the coming year.

No funds having been provided by the act of Congress of 14th July last, in reference to the northern boundary line of the State of Ohio, to meet the expenses incident to making the observations and examinations necessary to determine the lines specified in that law, nothing further could be done than to prepare an estimate of the funds that will be necessary, to designate an officer for the performance of the service, and to prepare the proper instruments. The estimate has been submitted.

BOARD OF ENGINEERS.

Since my last annual report a report has been received from the board of engineers submitting a summary of their operations during the preceding year, and a statement of the objects to which it was conceived most advantageous to the service that their attention should be next directed, which was submitted to Congress at its last session. In addition to this, the assistant engineer having made a reconnaissance of the site of Fort Moultrie, and of the inland passage between the St. John's and St. Mary's, has furnished projects for the preservation of the former and for completing the improvement of the latter. His report on the communication between the St. John's and St. Mary's is herewith transmitted.

MILITARY ACADEMY.

The report of the board of visitors who attended the last general examination of this institution affords unequivocal evidence that its affairs continue to be conducted in the most able and efficient manner. That report accompanies this communication, and in calling your attention to it I would respectfully recommend for your consideration the suggestions of the board in reference to the modifications in its organization,

and to the erection of the additional buildings, which experience has shown to be necessary to meet the wants of that institution. It was not in my power to make an inspection of the academy during the past year, in consequence of incessant engagements with the business of my office.

OFFICE OF THE CHIEF ENGINEER.

To facilitate the transaction of business in this office, and diminish its contingent expenses, I would suggest that a provision be recommended for extending the franking privilege to the chief engineer.

The embarrassments under which the engineer department has labored in its efforts to discharge the duties which have been assigned to it within the last year, compel me again to draw your attention to the subject of the increase of the corps of engineers. Although urgent necessity has long existed for the adoption of some measure by which the means of the department would be enlarged to a degree commensurate with its duties, yet this necessity has never been so great as at the present time, as must have appeared in the course of the preceding part of this report. It has been seen that in consequence of the special provisions of the laws passed at the last session of Congress, officers of engineers were withdrawn from the superintendence of fortifications to be placed in charge of the national road east and west of the Ohio river, and for other objects not immediately connected with the national defence, thus greatly impairing the efficiency of the corps for military purposes, and imposing upon the department, in consequence, the necessity of suspending operations at works previously commenced, and of postponing those for the commencement of others, which are provided for by law. Thus circumstanced, it is due to that part of the public interest intrusted to the care of this department, that I should now earnestly recommend for your consideration a measure which has been so frequently urged by your predecessors upon the favorable notice of Congress. The increase which is proposed, as being equal to subserve the wants of the service and to insure an efficient and beneficial discharge of the duties referred to this department, is that suggested by your immediate predecessor in his report upon this subject to the House of Representatives, of January 13, 1831, to which I beg leave to refer you.

All of which is respectfully submitted.

C. GRATIOT, *Brigadier General, Chief Engineer.*

HON. LEWIS CASS, *Secretary of War.*

Statement exhibiting the fiscal concerns of the Engineer department for the year ending September 30, 1832, in which the funds that had accrued within that period, and the manner of their accruing, are stated and accounted for by showing their application; and showing, also, the amounts expended upon the several works under construction

Designation of the appropriations.	Available for 1832, and whence derived.			Accounted for.				Cost of the several works Oct. 1, 1832.	Remarks.
	From appropriations for 1832.	From balances of appropriations undrawn from the treasury, and those remaining in the hands of the agents September 30, 1831, sums refunded, &c.	Aggregate.	Amounts applied, corresponding with accounts rendered to September 30, 1832.	Amount undrawn from the treasury October 1, 1832.	Balances in the hands of agents October 1, 1832.	Aggregate accounted for, and corresponding with the aggregate available.		
FORTIFICATIONS.									
Fort Adams, Newport, Rhode Island	\$100,000 00	\$73,238 04	\$173,238 04	\$87,520 81	\$81,606 41	\$4,110 82	\$173,238 04	\$677,177 71	
Fort Hamilton, New York, New York.....	10,000 00	369 68	10,369 68	4,723 73	1,450 00	4,195 95	10,369 68	487,323 13	
Fort Monroe, Old Point Comfort, Virginia	72,000 00	24,091 68	96,091 68	61,433 86	24,700 00	10,558 82	96,091 68	1,701,893 60	
Fort Calhoun, Virginia	80,000 00	898 86	80,898 86	50,446 05	30,200 00	252 81	80,898 86	1,207,312 74	
Fort Macon, North Carolina.....	30,000 00	34,433 61	64,433 61	39,742 46	23,661 62	1,029 53	64,433 61	321,723 73	
Fort at Oak island, North Carolina.....	7,000 00	27,642 03	34,642 03	31,717 16	.....	2,924 87	34,642 03	390,908 00	
Fortifications at Charleston, South Carolina	30,000 00	68,827 28	98,827 28	30,216 54	47,969 00	20,641 74	88,827 28	122,414 81	
Fort on Cockspar island, Georgia.....	46,000 00	35,855 79	81,855 79	51,694 31	24,400 00	5,761 48	81,855 79	120,838 52	
Fort at Mobile Point, Alabama.....	87,200 00	33,048 45	125,248 45	80,409 09	30,400 00	14,439 36	125,248 45	925,626 61	
Fortifications at Pensacola, Florida.....	100,000 00	.....	100,000 00	100,000 00	.....	.....	100,000 00	455,000 00	\$150 13 due agent.
Fort Jackson, Louisiana.....	.....	2,617 53	2,617 53	1,691 12	96 35	830 06	2,617 53	628,628 20	
Repairs of the battery at Bienvenu, Louisiana.....	.....	3,108 38	3,108 38	3,108 38	.....	.....	3,108 38	.....
Repairs at Fort Wood, Louisiana.....	.....	3,614 17	3,614 17	3,614 17	.....	.....	3,614 17	.....
Tower at Bayou Dupré, Louisiana .....	.....	2,052 21	2,052 21	2,052 21	.....	.....	2,052 21	16,684 45	
Preservation of George's island, Boston harbor, Massachusetts.....	9,000 00	1,161 68	10,161 68	9,487 19	220 00	454 49	10,161 68	75,608 61	
Repairs at Fort Lafayette, New York.....	.....	2,906 62	2,906 62	.....	.....	2,906 62	2,906 62	.....
Repairing Fort Columbus and Castle William, New York.....	50,000 00	21,203 71	71,203 71	42,182 84	27,724 00	1,296 87	71,203 71	.....
Securing the Pea Patch island.....	2,000 00	6,689 12	8,689 12	8,581 92	107 20	.....	8,689 12	.....
Preservation of Castle island and repairing of Fort Independence	20,000 00	.....	20,000 00	.....	20,000 00	.....	20,000 00	.....
Contingencies of fortifications.....	10,000 00	8,957 77	18,957 77	9,694 83	3,344 76	5,918 18	18,957 77	.....
	653,200 00	356,316 61	1,009,516 61	618,315 67	315,879 34	75,321 60	1,009,516 61	.....
INTERNAL IMPROVEMENTS.									
Repairs of the Cumberland road east of the Ohio river	150,000 00	.....	150,000 00	7,266 39	139,000 00	3,733 61	150,000 00	.....
Construction of the Cumberland road from Canton to Zanesville, Ohio .....	.....	225 27	225 27	225 27	.....	.....	225 27	597,700 00	
Construction of the Cumberland road west of Zanesville, Ohio.....	100,000 00	89,480 69	189,480 69	82,281 61	89,484 18	17,714 90	189,480 69	292,800 92	
Continuing the Cumberland road in the State of Indiana.....	100,000 00	101,840 29	201,840 29	79,193 66	86,255 00	36,386 63	201,840 29	162,353 37	

A.—Statement exhibiting the fiscal concerns of the Engineer department, &c.—Continued.

Designation of the appropriations.	Available for 1832, and whence derived.			Accounted for.				Cost of the several works Oct. 1, 1832.	Remarks.
	From appropriations for 1832.	From balances of appropriations undrawn from the treasury, and those remaining in the hands of the agents September 30, 1831, sums refunded, &c.	Aggregate.	Amounts applied, corresponding with accounts rendered to September 30, 1832.	Amount undrawn from the treasury October 1, 1832.	Balances in the hands of agents October 1, 1832.	Aggregate accounted for, and corresponding with the aggregate available.		
Continuing the Cumberland road in the State of Illinois.....	\$70,000 00	\$85,198 44	\$155,198 44	\$60,686 45	\$25,284 00	\$155,970 45	\$80,716 00	\$772 01 due superintendent.	
Continuing the road from Detroit towards Chicago, Michigan Territory.....	15,000 00	10,398 74	25,398 74	5,887 37	20,000 00	25,887 37	52,000 00	\$488 63 due agent.	
Continuing the road from Detroit to Fort Gratiot.....	15,000 00	11,355 51	26,355 51	5,802 45	15,000 00	\$5,553 06	24,446 94		
Continuing the road from Detroit to Saginaw bay.....	10,000 00	11,054 43	21,054 43	4,643 46	10,029 13	6,381 84	18,589 03		
Surveying and laying out a road from Detroit westwardly, by way of Sciavasse, to the mouth of Grand river, of Lake Michigan, Michigan Territory.....	3,500 00		3,500 00		3,500 00	3,500 00			
Surveying and making a road from La Plaisance bay to intersect the Chicago road, Michigan Territory.....	15,000 00		15,000 00		15,000 00	15,000 00			
Improving the navigation of the Ohio, Missouri, and Mississippi rivers.....	50,000 00	43,590 00	93,590 00	56,653 92	39,400 00	96,053 92	315,600 00	\$2,463 92 due superintendent.	
Improving the Ohio and Mississippi rivers from Pittsburg to New Orleans.....		106,520 46	106,520 46	54,074 77	32,500 00	19,945 69	97,554 31		
Improving the navigation of the Red river, Louisiana and Arkansas.....	22,628 00		22,628 00	356 13	21,663 00	608 87	22,728 13		
Improving the navigation of the Arkansas river.....	15,000 00		15,000 00		15,000 00	15,000 00			
Removal of obstructions to the navigation of the Savannah river, between the mouth thereof and the city of Savannah.....	25,000 00		25,000 00		25,000 00	25,000 00			
Improving the Cape Fear river below Wilmington, North Carolina.....	28,000 00	127 59	28,127 59	7,366 86	12,588 00	8,152 73	78,652 27		
Carrying on the work for the improvement of Ocracoke inlet, North Carolina.....	22,000 00	15,573 08	37,573 08	21,182 58	12,000 00	4,390 50	41,609 50		
Deepening the channel at Pascagoula river, Mississippi.....	15,900 00		15,900 00	247 70	13,900 00	1,752 30	9,847 70		
Deepening the channel through the Pass au Heron, Alabama.....	6,050 00		6,050 00	1,629 70	3,050 00	1,170 30	13,779 70		
Improving the harbor of Mobile.....		17,487 48	17,487 48	6,666 23		10,821 25	17,487 48		
Removing obstructions in the river Apalachicola, Florida.....		5,483 47	5,483 47	4,641 39		842 08	5,483 47		
Improving the harbor and river of St. Mark's, Florida.....	4,500 00	14,044 33	18,544 33	9,890 40	7,930 00	723 93	18,544 33		
Removing sand-bar at the mouth of Merrimack river, Massachusetts.....		6,857 14	6,857 14	3,240 00	2,500 00	1,117 14	48,589 58		
Preservation of Plymouth beach, Massachusetts.....	2,500 00	1,414 78	3,914 78	1,707 31	800 00	1,407 47	43,850 43		
Preservation of beach at Provincetown harbor, Massachusetts.....	4,600 00	95 64	4,695 64		4,695 64		5,454 36		
Removing the bar at the mouth of the harbor of Nantucket, Massachusetts.....	6,000 00	10,044 59	16,044 59	6,961 48	4,910 00	4,173 11	16,044 59		
Preservation of Deer island, Boston harbor, Massachusetts.....	60,000 00	3,558 63	63,558 63	8,994 47	54,300 00	264 16	104,825 84		
Breakwater at Hyannis harbor, Massachusetts.....	7,600 00	894 42	8,494 42	2,223 45	5,990 10	310 87	16,896 85		
Removing obstructions at Lovejoy's Narrows, Kennebec river, Maine.....	2,600 00	4,945 13	7,545 13	7,209 04	600 00		7,809 04	\$263 91 duo agent.	
Removing obstructions in the Berwick branch of Piscataqua river, Maine.....	250 00	392 90	642 90	207 09		435 81	7,814 19		
Repairing piers at the entrance of Kennebunk river, Maine.....	1,700 00	1,228 22	2,928 22	1,239 10	1,700 00		6,175 00	\$10 88 due agent.	
Piers at Stonington harbor, Connecticut.....		5,979 11	5,979 11	4,070 46	2,170 81		34,220 86	\$262 16 due agent	
Improving the navigation at the harbor of Mill river, Connecticut.....	4,490 43		4,490 43	548 60	3,710 43	231 40	6,645 60		

A.—Statement exhibiting the fiscal concerns of the Engineer department, &c.—Continued.

Designation of the appropriations.	Available for 1832, and whence derived.			Accounted for.				Cost of the several works Oct. 1, 1832.	Remarks.
	From appropriations for 1832.	From balances of appropriations undrawn from the treasury, and those remaining in the hands of the agents September 30, 1831, sums refunded, &c.	Aggregate.	Amounts applied, corresponding with accounts rendered to September 30, 1832.	Amount undrawn from the treasury October 1, 1832.	Balances in the hands of agents October 1, 1832.	Aggregate accounted for, and corresponding with the aggregate available.		
Improving the harbor of Saco, Maine		\$712 72	\$712 72	\$689 94		\$22 78	\$712 72	\$6,977 22	
Piers and mole at Osvego harbor, New York.....	\$10,000 00	11,157 73	30,157 73	24,381 88	\$5,600 00	175 85	30,157 73	85,645 02	
Piers at Buffalo harbor, New York	10,300 00	2,283 74	12,583 74	6,273 88		6,309 86	12,583 74	81,584 14	
Piers at Dunkirk harbor, New York.....	10,200 00	1,773 40	11,973 40	3,772 88	5,200 00	3,000 52	11,973 40	29,257 48	
Pier at Black Rock harbor, New York.....	5,100 00		5,100 00	1,199 72	2,600 00	1,300 28	5,100 00	36,197 72	
Improving the entrance to Genesee river, New York	16,000 00	2,989 82	18,989 82	15,538 95	1,700 00	1,750 87	18,989 82	52,554 13	
Removing obstructions at the mouth of Big Sodus bay, New York.....	17,000 00	2,886 74	19,886 74	15,846 06	2,500 00	1,540 68	19,886 74	58,189 33	
Surveys under the act of April 30, 1824		316 72	316 72	316 72			316 72		
Piers at La Plaisance bay, Michigan.....	8,000 00	123 07	8,123 07		8,123 07		8,123 07	6,172 74	
Removing obstructions at Ashtabula creek, Ohio.....	3,800 00	1,379 13	5,179 13	1,875 35	900 00	2,403 78	5,179 13	28,854 97	
Removing obstructions at Cunningham creek, Ohio.....	1,500 00	52 83	1,552 83	1,195 95		356 88	1,552 83	7,616 88	
Removing obstructions at Huron river, Ohio	1,500 00	955 68	2,455 68	1,460 00	730 00	265 68	2,455 68	21,213 03	
Removing obstructions at Grand river, Ohio.....	2,600 00	2,370 11	4,970 11	197 40	3,605 00	1,167 71	4,970 11	24,825 58	
Improving Cleveland harbor, Ohio.....	6,600 00	1,131 66	7,731 66	2,298 16	4,325 00	1,108 50	7,731 66	28,802 06	
Removing sand-bar at the mouth of Black river, Ohio.....	8,000 00	2,022 46	10,022 46	5,040 05	4,600 00	382 41	10,022 46	28,352 36	
Improving the mouth of Conneaut creek, Ohio.....	7,800 00	1,259 45	9,059 45	3,490 83	5,300 00	268 62	9,059 45	22,237 03	
Improving the harbor of Presque Isle, Pennsylvania	4,500 00	193 09	4,693 09	2,120 29	1,500 00	1,072 80	4,693 09	46,240 63	
Improving the harbors of Newcastle, Marcus Hook, Chester, and Port Penn, Delaware river ..	10,000 00	2,610 79	12,610 79	4,001 59	8,400 00	209 20	12,610 79	49,803 80	
Improvement of the navigation of the Cumberland river	30,000 00		30,000 00		30,000 00		30,000 00		
	919,218 43	582,009 48	1,501,227 91	535,021 99	823,013 36	147,454 07	1,505,489 42		
LIGHT-HOUSES.									
Light-house at the harbor of Buffalo, New York		5,756 86	5,756 86	1,731 24	2,500 00	1,525 62	5,756 86		
Beacon-light at the entrance of the harbor of Erie, Pennsylvania.....		158 52	158 52	109 42		49 10	158 52		
Light-house at Cleveland harbor, Ohio.....		1,746 85	1,746 85	1,405 65		341 20	1,746 85		
Beacon-light at Grand river, Ohio		364 59	364 59	212 67		151 92	364 59		
		8,026 82	8,026 82	3,458 98	2,500 00	2,067 84	8,026 82		

A.—Statement exhibiting the fiscal concerns of the Engineer department, &c.—Continued.

Designation of the appropriations.	Available for 1832, and whence derived.			Accounted for.				Cost of the several works Oct. 1, 1832.	Remarks.
	From appropriations for 1832.	From balances of appropriations undrawn from the treasury, and those remaining in the hands of the agents September 30, 1831, sums refunded, &c.	Aggregate.	Amounts applied, corresponding with accounts rendered to September 30, 1832.	Amount undrawn from the treasury October 1, 1832.	Balances in the hands of agents October 1, 1832.	Aggregate accounted for, and corresponding with the aggregate available.		
MILITARY ACADEMY.									
Defraying the expenses of the board of visitors	\$2,000 00	\$23,439 00	\$12,367 49	\$35,806 49	\$20,273 30	\$5,040 09	\$10,484 10	\$35,806 49	
Fuel, forage, stationery, printing, transportation, and postage.....	8,762 00								
Reconstructing out-buildings and improvements connected therewith	1,500 00								
Repairs to barracks, academies, messhouse, officers and professors' quarters, storehouses, wharfs, carts, boats, fences, roads, paints, and other objects	4,825 00								
Renewal and repairs of fire-grates	150 00								
Pay of adjutant and quartermaster's clerk.....	900 00								
Increase and expense of library	1,400 00								
Philosophical apparatus.....	790 00								
Models for department of engineering.....	600 00								
Models for the drawing department, repairs of instruments for the mathematical department, apparatus and contingencies for the department of chemistry.....	887 00								
Miscellaneous items and incidental expenses.....	1,625 00								

B.

Statement showing the amount of money drawn from the treasury and remitted to the officers and agents disbursing under the Engineer department, from October 1, 1831, to September 30, 1832, inclusive, and the amount of accounts rendered by each within the same period.

Names.	On what account.	Amount remitted.	Amount of accounts rendered.
Colonel J. G. Totten	Fort Adams, Newport, Rhode Island.....	\$87,000 00	\$87,520 81
Major R. E. De Russy.....	Fort Hamilton, New York.....	8,530 00	4,723 73
Captain J. L. Smith.....	Fort Macon, North Carolina.....	32,500 00	33,742 46
Captain George Blaney.....	Fort at Oak island, North Carolina.....	28,500 00	31,717 16
Do.....	Improvement of Cape Fear river, North Carolina.....	24,880 00	7,386 86
Captain W. H. Chase.....	Fortifications at Pensacola, Florida.....	100,000 00	100,000 00
Captain R. Delafield.....	Fort Jackson, Louisiana.....		1,691 12
Do.....	Contingencies of fortifications.....		96 35
Captain A. Talcott.....	Fort Monroe, Virginia.....	53,000 00	61,432 86
Do.....	Fort Calhoun, Virginia.....	59,800 00	50,446 05
Do.....	Contingencies of fortifications.....	385 00	502 22
Captain W. A. Eliason.....	Fortifications at Charleston.....	10,000 00	(*)
Do.....	Preservation of the Pea Patch island.....	2,000 00	8,581 92
Do.....	Harbors of Newcastle, &c., Delaware river.....	1,477 53	2,560 79
Do.....	Contingencies of fortifications.....		2,779 43
Lieut. C. A. Ogden.....	Fort at Mobile.....	81,800 00	80,409 09
Do.....	Mobile harbor.....	13,421 22	6,666 23
Do.....	Pass au Heron.....	3,000 00	1,829 70
Do.....	Pascagoula river.....	2,000 00	247 70
Lieut. H. Brewerton.....	Fortifications at Charleston.....	26,600 00	30,216 54
Do.....	Contingencies of fortifications.....	4,038 10	3,931 12
Do.....	Cumberland road west of Zanesville, Ohio.....	40,000 00	24,725 98
Lieut. S. Tuttle.....	do..... east of..... do.....		225 27
Do.....	do..... west of..... do.....	32,765 00	31,169 81
Do.....	Harbors of Newcastle, &c., Delaware river.....	16,900 00	1,440 80
Lieut. George Dutton.....	Ocracoke inlet.....	24,844 38	21,182 58
Lieut. J. K. F. Mansfield.....	Fort at Cocks spur island.....	51,475 00	51,694 31
Do.....	Cumberland road east of the Ohio river.....	11,000 00	7,286 39
Lieut. A. H. Bowman.....	Contingencies of fortifications.....	4,140 50	996 71
Do.....	Repairs at Battery Bienvenu.....		3,108 38
Do.....	Repairs at Fort Wood.....		3,614 17
Do.....	Tower at Bayou Dupré.....		2,052 21
Lieut. Col. S. Thayer.....	Military Academy.....	24,799 13	20,273 30
Major R. E. De Russy.....	Fort Columbus and Castle William.....	39,200 00	42,182 84
Major R. A. Zantzinger.....	Contingencies of fortifications.....	150 00	145 95
Captain A. W. Ripley.....	do..... do..... do.....	30 00	30 00
Major M. Mason.....	do..... do..... do.....	1,009 00	*470 42
Major J. Mountfort.....	do..... do..... do.....	950 00	
Captain N. Baden.....	do..... do..... do.....	1,000 00	669 26
James Hampson.....	Cumberland road in Ohio, west of Zanesville.....	25,000 00	26,385 82
John Milroy.....	do..... in Indiana, east division.....	47,100 00	*21,884 45
H. Johnson.....	do..... in Indiana, west division.....	56,480 00	57,314 21
W. C. Greenup.....	do..... in Illinois.....	61,500 00	60,686 45
Lieut. E. S. Sibley.....	Road from Detroit to Chicago.....	5,000 00	5,887 37
Major H. Whiting.....	do..... to Fort Gratiot.....	8,000 00	5,802 45
Do.....	do..... to Saginaw.....	8,000 00	4,643 46
H. M. Shreve.....	Improving navigation of the Ohio and Mississippi rivers.....	60,374 03	56,653 92
Do.....	do..... do..... from Pittsburg to New Orleans.....	41,500 00	54,074 77
Lieut. W. Seawell.....	Improving navigation of Red river.....	965 00	356 13
Lieut. G. W. Long.....	St. Mark's river and harbor.....	7,500 00	6,794 73
Do.....	Apalachicola river.....		4,641 39
Thomas M. Clark.....	Merrimack river.....	3,500 00	3,240 00
Peter Grant.....	Kennebec river.....	2,000 00	7,209 04
Joseph Bradford.....	Plymouth beach.....	1,700 00	1,109 15
S. Sampson.....	do..... do.....	490 00	598 16
B. Palmer.....	Kennebank river piers.....		1,239 10
T. Ferguson.....	Piscataqua river.....	250 00	207 09
T. B. Smith.....	Deer island.....	9,440 00	8,994 47
Do.....	George's island.....	9,809 86	9,487 19
Ezra Crowell.....	Hyannis harbor.....	2,500 00	2,189 13
Lot Gage.....	do..... do.....		34 32
Lieut. Jona. Prescott.....	Nantucket harbor.....	2,575 00	16,961 48
G. Trumbull.....	Stonington harbor.....	2,750 00	4,070 46
Lieut. D. D. Tompkins.....	Oswego harbor.....	23,650 69	24,331 83
Major W. J. Worth.....	Contingencies of fortifications.....		73 37
Major T. W. Maurice.....	Presque Isle harbor.....		25 43
Do.....	Buffalo harbor.....		1,368 43
Do.....	Dunkirk harbor.....		1,293 35
Do.....	Black river.....	809 25	2,503 06
Do.....	Light at Buffalo harbor.....		1,731 24
Do.....	Light at Cleveland.....	693 00	1,405 65
Do.....	Light at Presque Isle.....		109 42

* Third quarter not in.

The accounts for the third quarter of 1831 are the last rendered which were received within the fourth quarter of 1831.

B.—Statement showing the amount of money drawn from the treasury, &c.—Continued.

Names.	On what account.	Amount remitted.	Amount of accounts rendered.
Lieut. W. G. Williams.....	Surveys, &c.....	\$370 00	\$316 72
General J. G. Swift	Genesee river	15,970 00	15,538 95
Do.....	Sodus bay.....	16,550 00	15,846 05
A. Dart.....	Conneaut creek.....	2,870 00	3,490 83
J. Sturges	Mill river	780 00	548 60
J. Wright	Huron river	770 00	1,460 00
M. Hubbard	Ashtabula creek.....	4,740 00	1,875 35
Henry Phelps.....	Grand river		197 40
Do.....	Light at Grand river		212 67
Jesse H. Willis	St. Mark's river and harbor	2,000 00	3,095 67
D. Granger	Saco, Maine.....		689 94
J. D. Selden	Dunkirk harbor.....	5,000 00	2,479 53
Do.....	Black river.....	3,400 00	2,536 99
Do.....	Buffalo harbor.....	10,300 00	4,905 45
Do.....	Black rock.....	2,500 00	1,119 72
Do.....	Cunningham creek	1,500 00	1,195 95
Do.....	Presque Isle harbor	3,000 00	2,094 86
A. W. Walworth	Cleveland harbor	2,688 00	2,298 16
		1,226,041 74	1,177,069 94

C.

Statement exhibiting the works projected by the board of engineers, which have not been commenced, and the estimate of their cost.

FIRST CLASS—TO BE COMMENCED AS SOON AS POSSIBLE.

Designation of the works.	Estimate of cost.
Fort St. Philip, Louisiana	\$77, 810 79
Fort at Sollers's Point Flats, Patapsco river	673, 205 44
Fort Tompkins, New York.....	420, 826 14
Redoubt in advance of ditto.....	65, 162 44
Fort at Wilkins's Point, New York.....	456, 845 51
Fort at Throg's Point, New York.....	471, 181 53
Fort at Dumpling's Point, Rhode Island.....	759, 946 57
Fort at Rose island, Rhode Island.....	82, 411 74
Dikes across west passage, Narraganset roads	205, 000 00
For the defence of Boston harbor:	
Fort on George's island.....	458, 000 00
Fort on Nantasket Head.....	539, 000 00
Lunette in advance of ditto.....	79, 000 00
Redoubt No. 2, in advance of ditto.....	32, 000 00
Redoubt No. 1, (on Hog island,) in advance of ditto.....	29, 000 00
Dike across Broad Sound passage.....	140, 000 00
Cutting off the summit of Gallop island	2, 429 00
Works for the defence of Conanicut island, Narraganset bay, Rhode Island	220, 053 63
	4, 531, 873 10

SECOND CLASS—TO BE COMMENCED AT A LATER PERIOD.

Designation of the works.	Estimate of cost.
Fort at Grand Terre, in Louisiana.....	\$264, 572 52
Tower at Pass au Heron, Mobile bay	16, 677 41
Fort at Hawkins's Point, Patapsco river	244, 337 14
Fort at St. Mary's, Potomac river	205, 602 33
Fort opposite the Pea Patch, Delaware river.....	347, 257 71
Fort at the Middle Ground, outer harbor of New York.....	1, 681, 411 66
Fort at East bank..... do..... do.....	1, 681, 411 66
Fort Hale, Connecticut.....	31, 815 83
Fort Wooster, Connecticut.....	27, 793 34
Fort Trumbull, Connecticut.....	77, 445 21
Fort Griswold, Connecticut.....	132, 230 41
Fort on Fort Preble Point, Portland harbor, Maine.....	103, 000 00

SECOND CLASS—Continued.

Designation of the works.	Estimate of cost
Fort on House island, Portland harbor, Maine.....	\$32, 000 00
Fort Pickering, Salem.....	116, 000 00
Fort Naugus Head.....	35, 000 00
Fort Seawell, Marblehead.....	116, 000 00
Fort on Jack's Point, Marblehead.....	96, 000 00
Fort on Bald Head, North Carolina.....	120, 000 00
Fort on Federal Point, North Carolina.....	12, 000 00
	5, 340, 500 22

THIRD CLASS—TO BE COMMENCED AT A REMOTE PERIOD.

Designation of the works	Estimate of cost.
The rafts to obstruct the channel between—	
Forts Monroe and Calhoun.....	\$240, 568 00
Fort at Craney Island flats.....	258, 465 14
Fort at New Port News.....	244, 337 44
Fort on Naseway shoal.....	673, 205 00
For the defence of Patuxent river:	
Fort on Thomas's Point.....	173, 000 00
Fort on Point Patience.....	164, 000 00
Fort on the Narrows of Penobscot river, Maine.....	101, 000 00
	1, 854, 575 58

RECAPITULATION.

First class of works, (17).....	\$4, 531, 873 10
Second class of works, (19).....	5, 340, 500 22
Third class of works, (7).....	1, 854, 575 58
	11, 726, 948 90

REMARKS.

The classification in the statement, distinguishing three periods, exhibits the works enumerated in the order of their efficiency to meet the earliest possible emergency.

WASCISSA, Florida, September 25, 1832.

SIR: In the last communication I made you on the subject of the improvement of the navigation of the island passage between the St. Mark's and the St. John's rivers I stated that, at some future period, when better informed as to the operations of the tides and currents which seem to have formed most of the obstructions in the sounds along the seacoast of North America, I would report more fully on the means and additional funds necessary to secure the object for which the first appropriations were made and in part expended. In General Bernard's report the value of this navigation is estimated, not solely as a continuation of an inland passage along the Atlantic border of the United States, but as connected with the projected canal across the peninsula of Florida, so as to render more perfect the communication and to extend the security of canal and interior navigation between the eastern coast and the western waters. In this point of view the object becomes sufficiently enhanced to warrant, probably, a still further appropriation by government, more effectually to accomplish what has been but partially commenced. In my former report I stated that, instead of attempting to straighten and deepen the Amelia Narrows, (an exceedingly narrow and sinuous passage,) a canal has been substituted through the marsh, from a navigable point on Smith's creek, communicating with Bell's river, to a creek discharging into Amelia sound near the dividings or meetings of the tides flowing from contrary directions, by the Nassau and Amelia or Cumberland inlets. That by this project the distance was very considerably shortened, with a prospect of a deeper and more direct passage, and liable to fewer changes, than could possibly be obtained by the Amelia Narrows. In executing this work, however, it was found that, at a depth in the marsh corresponding very nearly with the level of low water, a semi-liquid of mud and water was encountered, not to be easily removed with the shovel, but when removed exposing the upper banks of the canal to cave in. Under these difficulties a greater width was given to the canal, and a greater slope to its banks; and, as the flood tide from Amelia inlet flowed to the northern mouth of the canal nearly one hour earlier than it did from the Nassau bar to the southern, so strong a current was created as to encourage the hope that from that cause the bottom of the canal would, in time, be washed to the depth desired. On two examinations of the cut at intervals the last year I found that I had not been disap-

pointed in this reasonable calculation. The canal had, in the course of a very few months, been widened and very considerably deepened, affording at high waters, according to the elevation of the tides, (which are very much influenced by the winds,) from six to eight feet water. Most of this mud, however, so removed (and which, from the widening of the canal, was greater than was expected) has been deposited at a point in the creek on the southern extremity of the canal where the current became too weak to force it into the deeper water of the sound, thus forming an impediment to the navigation which can only be passed by the larger vessels at high, and by the smaller vessels at half tide. Besides this, which is of a very inconsiderable extent, there are other mud-flat obstructions to a free navigation, which have been noticed by General Bernard, and which have not, as yet, been removed.

It is now proposed to perfect the whole navigation of the inland passage from the St. Mary's to the St. John's, by the use of one of those mud machines which have operated with so much success, under the direction of Lieutenants Ogden and Long, at Pass au Heron, in Alabama, and on the St. Mark's river, in Florida.

The sound between the St. Mary's and St. John's rivers passes generally through the low marsh lands subject to be flooded at very high tide. At no convenient place near either of the obstructions to be removed can accommodations for the workmen be erected, and as there are several of these mud-flats to be overcome, the erection or transfer of the sheds necessary would subject the work to be performed to additional contingent expenses; added to this, the constant flowings and recedings of the tides every six hours leave but a very small proportion of the twenty-four for the spademen to excavate, without advert- ing to the probable retardation of the work otherwise, from the sickness of the men so exposed in an almost tropical climate. By the aid of the mud machine, where the whole operation is performed by machinery, and where the men may live and be protected while at labor, alike from the inclemency of the weather and the heat of the sun, the work may progress regularly and more effectually than by the direct application of the spade and shovel, and which can only be used at intervals between the ebb and flood tides. A greater depth of water may likewise be obtained at the points at present obstructed, as the machine can operate to a considerable depth below the water. The machine will, on the completion of the operation, still be of service for any other work the government may direct. The cost of the improve- ment to this branch of the inland navigation may be fairly estimated at very little more than the repara- tion and expense of keeping the mud machine in operation. From the experience acquired on the St. Mark's river, and where, from the shelly and rocky character of the obstructions removed, the machinery was liable to greater injury and required more frequent reparations, it has been found that \$400 per month was fully equal to all the costs and expenses of keeping the machine in operation; and in this sum is included not only the wages of the laborers employed, but \$100 per month to a superintendent on board. Assuming therefore this monthly expenditure as necessary, and the whole expense of removing all the obstructions between the St. Mary's and St. John's rivers may be thus estimated:

Cost of mud machine, including steam power, flats, cables, anchors, &c.....	\$5, 000
Twelve months' constant use of the same, at \$400 per month.....	4, 800
Contingencies.....	700
	10, 500
Deduct unexpended balance of previous appropriations.....	1, 500
	9, 000

The above amount, if judiciously expended agreeably to the plan suggested, will be found, it is believed, fully equal to the accomplishment of the object contemplated by this report.

Respectfully, your obedient servant,

JAMES GADSDEN, *Assistant Engineer.*

Annual report of the work done in improving the navigation of the Ohio and Mississippi rivers, from the 1st of October, 1831, to the 30th of September, 1832.

From the 1st of October, 1831, to the 1st of March, 1832, the steamboat Helepolis removed 961 snags and felled 1,095 trees from the banks. In the same time the steamboat Archimedes removed 526 snags from the channel, and felled some hundred trees from the falling banks of the river. On the 1st day of March those boats were laid up at St. Louis, the river being too high for them to operate. They were repaired and refitted, and commenced operations on the 16th of June last. Since that time the Helepolis has removed from the bed of the river 585 snags, and felled from the falling banks of the river 2,889 trees. In the same time the Archimedes has removed from the bed of the river 685 snags, and felled from the banks of the river 1,960 trees. The total number of snags removed in the year by the two boats is 2,757; the number of trees felled by the crews of the same boats in the year is 5,944, besides the whole number felled by the crew of the steamboat Archimedes, from the 1st of October, 1831, to the 1st of March, 1832, not enumerated. By a reference to the monthly reports from the captains of the two boats the department may see the part of the river from which the snags above alluded to have been taken; also the daily operations of those boats during the year. The whole line of operation for the year has been from Bayou Plaquemine to the Missouri river, a distance of about eleven hundred miles.

Three companies of men, of about forty each, were employed from the 1st of October to the 19th of January last felling timber from the banks. Two companies, of about fifty men each, commenced at the same service about the 15th of August last, up to the 30th of September. The banks have been cleared of the dangerous timber in the last year a distance of about two hundred and seventy miles.

On the Ohio river four machine boats were worked from the 30th of September to the 1st of December. They were again put in operation on the 10th of August last. They have been engaged removing logs, roots, and snags from the low-water channels of the Ohio river. In that time those four boats have removed 1,120 logs, roots, &c., of different sizes (from great to small) from the bottom of the Ohio river.

The improvement of the Ohio river, under the act of Congress of the 2d of March, 1831, for deepening the channel over the bars in that river, was commenced about the 1st of October last year, the water

being too high to commence operations at an earlier date. The fall being cold and the high stage of the water operated so much against that work that but little was done, except quarrying stone, making preparations, &c. In July last that work was again commenced. Two wing dams have been completed at French island, measuring together over one mile and a half in length; two at Scuffletown bars, upwards of three-quarters of a mile long; three at the Three Sister Islands, in length one and one-eighth mile; and one at the Three Mile Island bar, about half a mile in length. At those four bars the greatest difficulty in the low water navigation was formerly met with; frequently there was not more than eighteen to twenty-four inches of water to be found over the bars. Since the wing dams have been completed there has not been less than four feet water in the channels over them, although the water has been within a few inches of its lowest stage.

At the head of Cumberland island, a dam has been built across the main channel of the river, for the purpose of changing the channel to the left side of the island, so as to pass the town of Smithland and the mouth of the Cumberland river, by which means the bar at the entrance of the Cumberland river will be removed. A shoal in the Ohio river, at the foot of the island known by the name of the Cumberland bar, will also be shunned by the channel of the river being changed to the left side of the island. Much benefit will also be felt from this improvement by a large portion of the boats that pass down the Ohio when the water is below a medium stage. A large portion of these boats have passengers and freight to land at Smithland, which could not approach previous to this improvement. The dam is now nearly finished; the work will be completed in a few days should the laborers employed continue healthy.

There will probably be three more dams finished this fall, which will so far improve the river that boats may navigate it from the falls to the mouth, with three feet draft of water at the lowest stage—at least one-third more water than could be carried through that part of the river previous to the wing dams being commenced. This work, which was formerly viewed as an experiment, is now reduced to a practical certainty. The bars throughout the whole extent of the Ohio river can be removed in such a manner as to produce a safe and uniform navigation at its lowest stage of water with steamboats drawing four feet of water. Those five bars that have been operated on were by far the most difficult and shoalest in the Ohio from the mouth of the Scioto to the Mississippi river. By that system of improvement, the channels over the bars are made permanent; no shifting can possibly take place by the drifting of the sand, but the channel must remain in the same track from year to year; consequently, the navigation of the river will be much better understood than it now is. In the natural situation of the sand-bars in the Ohio, they are liable to have channels washed through them in different places, at the various stages of the river. When the water falls and become scarce, the pilots are very much at a loss to find the best pass over the bars. This difficulty is entirely removed by the wing dams, as the channel will forever remain in the same line, without a possibility of a change, with at least double the depth at extreme low water mark, that is to be found on the shoalest bars in their original forms.

Previous to this work being commenced, many persons objected to the plan, fearing injury from the wing dams at a medium stage of water. This objection is now removed from the mind of every man who has witnessed the effect, and seen the dams, since they have been constructed.

On the Mississippi river there have been five steamboats sunk within the last year, viz: the Favorite, Amazon, New York, Lady of the Lake, and Louisville. The circumstances of the losses of those boats are as follows: the Favorite was sunk by striking a log or root in a shallow pass, known by the name of Bordeaux chute, when the river was evidently too low for the boat to have passed through the chute. If she had not have been stove she must have turned back and taken the main channel of the river. This boat filled with water, settled on a bar in about 7 feet water. In this situation the captain and crew, except the mate and one man, left the wreck. In a few days the boat was left dry by the fall of water. The damage to the hull was but trifling, being a fracture in a plank on the starboard bow, and no timbers or frames broken. In this situation, the citizens from the opposite shore of the river attacked the boat, drove the mate and man into the woods, broke open the hatches, took out and carried away the most valuable part of her cargo, and set fire to the boat, and burned her with the remnant of cargo they had left on board. The New York struck a log that lies on the bottom of the river at Riddle's point, 82 miles below the mouth of the Ohio river, which stove in the bottom, and she sunk in a few minutes in about 5 feet water. This accident took place in the winter, when the Ohio, Upper Mississippi, Missouri, and all their tributaries were frozen. Consequently the Mississippi was extremely low and unsafe to navigate. The steamboat New York was built of oak, and was not considered a safe boat. At the time she was lost, she was making the last trip she probably would have made, as the owners were preparing a new hull to take the engine. The Amazon was a boat that had been to the Amazon river several years, at Mobile several more, and was very frail. She was lost on a snag or log that lay within fifteen or twenty feet of the bank of the river, and much closer to shore than any boat can ever be run in the Mississippi river with any degree of safety, as the shores must forever be lined with logs, stumps, roots, and other dangerous obstructions, until the forests on its banks have been entirely cleared away. The "Lady of the Lake" was sunk in August last, by striking so slightly that the shock was not perceivable by many persons on board. This boat was seven years old, and must have been rotten and unworthy of credit. The Louisville was lost in the Upper Mississippi. She was a substantial good boat, and was descending the river laden with lead. From some cause unknown to me, the boat was run down a small pass or chute to the extreme left of a large cluster of islands, when the channel, at the time she was lost, was on the extreme right, and not within one mile, in a direct line, to where the boat was stove and sunk. By bad management and want of skill in the masters or pilots, or from the age and unsafe condition of the boats, every one of those losses have occurred, and are by no means chargeable to the danger or difficulty of the navigation. Not one flatboat or craft of any kind has been lost within the last year, that has come within my knowledge.

A large proportion of the most dangerous obstructions have been removed from the bed of the Mississippi river. However, there are yet remaining many dangerous logs and snags to be removed. Most of them must be taken out at low water, at which time alone they are dangerous. When the river is at a medium stage and higher, the navigation is comparatively safe as far as relates to snags, &c., which have been formerly so much the most formidable enemy to the navigator and passenger, that all other risks were lost sight of. At the present time the snags are a minor risk compared with the bursting of boilers, burning boats, and running foul of each other.

The whole operation of improvement on the Ohio and Mississippi, under the several acts of Congress,

is now in successful operation, and much benefit may be expected from the improvements of the present fall and winter.

I am, sir, very respectfully, your obedient servant,

HENRY M. SHREVE, *Superintendent.*

Brigadier General C. GRATIOT, *Chief Engineer, Washington.*

UNITED STATES MILITARY ACADEMY, *West Point, June 16, 1832.*

SIR: The undersigned visitors to the Military Academy have endeavored to discharge with fidelity the trust confided to them. For two weeks they have been assiduously engaged in attending to the examination of the cadets in the various branches of their studies. They do not consider it necessary to present any detailed statement of the course of studies pursued or the manner of prosecuting it, inasmuch as these have been sufficiently explained by former visitors, and particularly by those who attended in the two preceding years. They take great pleasure in saying that, on the whole, they have found, during their stay, much to approve, nothing to condemn. Generally the young gentlemen have given the most satisfactory evidence of unwearied assiduity in the performance of their duties, and flattering pre-
sages of the advantages which their country may expect to derive from their high qualifications. The benefits to be derived from this institution are gradually unfolding themselves, and time and accurate information only are wanted to satisfy the public that, for the general welfare, it should be cherished and sustained with a liberal hand. It is here that the science of engineering, with all its auxiliary branches, is thoroughly taught; conferring already important benefits on different sections of our country, and promising still greater. The young men educated here, from year to year, constitute the main reliance the country has for the successful prosecution of those great internal improvements which, in this enlightened age, the States are planning and executing. It is on this institution that dependence is to be placed for the elements of military science necessary for the defence and security of the country and its institutions in future times of war and danger. Nor are these all its benefits. Strong attachments and lasting friendships among the young gentlemen are here formed, which, carried with them to the different sections of our extensive territory, afford a happy guarantee of the stability and permanency of our Union. A moral influence like this may, in some future time of difficulty and threatened danger, restore harmony, stay the influence of angry passions, and prevent conflicts among ourselves. The expenses incurred in cherishing and sustaining so valuable an institution are, in the opinion of this board, of immaterial import, compared with the advantages which have been already conferred on the country, and the more important and lasting ones which are in promise.

Are these opinions correct? And if they are, wherefore is it that intelligent men should be found to disparage the institution? The answer is, because they have not the means and the information in relation to its detailed operations to enable them to judge correctly of the subject. Satisfied as to the impartiality of the opinions herein expressed, and as an evidence of our confidence in them, the propriety is respectfully suggested of selecting, annually, some persons as visitors who are known to be inimical to everything connected with the school. So soon as they shall learn the order, the intelligence, the moral deportment, and the useful acquirements of the young men here, that enmity, we are fully persuaded, will cease to exist. As it is not practicable, however, for the whole community to use the test of personal inspection, we will take leave, briefly, to reply to some of the objections which have been urged upon the public against the establishment. In the first place, party politics and sectarian religion have no place here; as between the professor and the student none other than official intercourse takes place between them. It is an imperative duty to attend church each Sabbath, where a sermon is preached. The door is never closed against respectable christian teachers of different persuasions who may happen to be here, and who may desire to preach. The minds of the cadets are not trammelled or attempted to be trammelled by the principles of any sect. Moral and religious truths and principles, in general, are inculcated; but the inculcation of the special tenets of particular sects is carefully excluded.

Prejudices and partialities entertained towards the cadets are charged upon the professors, who are said to act oftentimes under these influences. We do not hesitate to affirm that the allegation is gratuitous; that it is not supported by fact. The high character of the professors, and the absence of all motive to act thus, afford abundant refutation of the charge. But not content to rest our opinion on these circumstances alone, we have sought after information in other quarters, and feel ourselves, by the result, fully warranted in the assertion that there is no just foundation for the charge.

Every institution where the young are to be disciplined and trained to virtue must necessarily be governed by fixed and certain rules; and these should be strictly conformed to, or it is idle to enact them. They are bad legislators who would seek to waive an exact fulfilment of their laws; or, without adequate causes shown, to omit the enforcement of their penalties. The academic board, under the sanction of the Secretary of War, make known to each cadet confided to their care the rules and regulations of the school. These are plain and positive; and the penalties attached to any infraction of them are clearly defined. It is satisfactory to us to be able to state that very seldom do offences occur which come under the character of acts of immoral tendency. The correct principles of the cadets and their pride of character have operated as powerful restraints, and have made it hitherto scarcely necessary to prescribe any written rules of government, except such as relate to a proper attention to the studies which are pursued, and to the military discipline that is prescribed. The laws in regard to these matters and the penalties for any infraction of any of these laws are in the hands of every cadet. The first and principal offences are "mutinous conduct, absence from quarters after ten o'clock at night, breach of arrest, forcing a sentinel's post, gross disrespect to officers, irreverence at church, neglect of duty on post, profanity and other immoralities, refusing to do duty when ordered, ungentlemanly conduct, and the use of spirituous liquors." For the commission of any one of this class of offences, which it gives us great pleasure to repeat is of rare occurrence, the party is subjected to dismissal, or to receive, on the roll, ten marks of demerit. The next grade of offences subjects the cadet to eight marks, the next to five, the next to four, and so on. And for an offence of the seventh and last class, which consists "of being in bed after reveille or before tattoo, being out of order or late at inspections, bad order of rooms, or absent from the academy more than ten minutes without permission," the delinquent is subject to one mark on the demerit roll.

Thus it is shown that the rules impose no unreasonable restraints or burdens. A cadet who, in a

year, subjects himself to two hundred of these marks, as they are termed, and of which a regular register is kept, is liable to be dismissed from the institution. A list of offences charged in each week is regularly furnished on parade, that an opportunity may be afforded for such written defence and explanation as the delinquent may be able to offer. Upon this a decision is made, and the accusation is discharged or confirmed, agreeably to the circumstances of the case and the proof of delinquency. The whole proceeding is equitable and just, and nothing of prejudice or of unfairness influences the decision. It is the merit and demerit roll relative to the cadet's studies, his military duties, and his delinquencies which exclusively indicates his standing, his worth, and his claim to a continuance in the school. If prejudices exist, if partialities and dislikes influence the government and direction of the academy, we frankly assure you that our vigilance has not enabled us to discover them.

It may be said that most of these delinquencies are of light and trivial import, tending in nothing to affect moral standing, and therefore not meriting punishment so severe. That, in a moral aspect, they are trivial, is true, but this is no argument in favor of the offending cadet. The student who disregards the rules prescribed for his government gives an evidence that he is so constituted as to promise to be of little future utility to the country. He can never make a valuable and safe officer, well qualified to command, who does not first prove that he knows how to obey. To retain those who, for their own rule of action, would set up their own opinions and disregard the studies and course of duties prescribed to them, would be unjust to those who are disposed to act differently, a wrong done to postponed candidates, and eventually could not fail to impair, if not destroy, the high value of the institution. Wherefore was it established, and why has it been so long fostered by the government? Certainly not that it might dispense favors and charity; but rather to disseminate throughout the States military science and knowledge that, when war occurs and our institutions are threatened, the country may bring to her defence the arm which she has thus strengthened. It ought not and cannot be expected that those shall be retained and patronized who, being deficient in capacity, are unable to learn, or who, from habitual inattention, will not. From whichever cause arising, the consequence and the injury are the same to the country, and should therefore be avoided.

A further objection which has been advanced against the academy is that citizens are excluded from the army, because every vacancy that happens is to be supplied from the graduates of this institution. If this be a valid objection, it is the act of Congress that makes it so; and although, at first view, the objection may appear plausible, in reality it is not so. The industrious and regular habits and the scientific qualifications, which are required here in prosecuting the prescribed course of study, so pre-eminently fit the graduate for military service over others who have not had the same advantages, that it is difficult to believe any citizen could be associated with them in inferior commands without having such a feeling of inferiority as to make him dissatisfied with himself. The objection resolves itself into this: that it is a rule by which higher qualification claims, as it deserves, the ascendancy. And certainly that course of action cannot afford just cause of complaint which gives preference to a superior over an inferior claimant. In war the best means of defence and safety ought to be sought after, while in peace no wiser course of policy can be pursued than to prepare and treasure up the best materials, moral and intellectual, against the time when important exigencies may arise to require the use of them.

We take occasion to remark that the several professorships of this institution should be placed upon a better foundation. By the existing regulations assistants are assigned from the body of the army to take upon themselves the important task of instructing in their studies the young gentlemen of the academy. Lieutenants are selected as assistant professors and assigned to duty here. By the transfer they are not themselves benefitted; their condition is rendered nothing better than if they were to remain with their regiments. Their expenditures are in some degree increased, while their pay is not augmented. By remaining in the line an opportunity is offered of obtaining appointments in the staff, where an advance of pay is the consequence. Acting upon the universal rule of interest, it is reasonable to infer that, in peace, the preferences of junior officers will be for that service where substantial profit is more within their reach. A consequence of this is that, not unfrequently, assignments to the Military Academy are reluctantly accepted, and that reluctance produces a desire to be rid of the trust imposed as early as a favorable opportunity to do so can be found. Hence these appointments are frequently changed, and the mode of communicating instruction becomes variable and unsteady. Other inconveniences are felt. The experience of the past shows that so soon as an officer, by dint of application, renders himself useful and respectable, he is taken away by a higher inducement offered by some literary institution, which thus obtains his time and services. The only means by which to prevent this is for the professors and assistants, at least as regards their compensation, to be placed upon a better footing. From the superintendent down the pay and emoluments which are allowed by the government are quite an inadequate return for the trusts which are so ably and faithfully discharged. The bare means of subsistence is but a poor and humble remuneration for a life usefully employed in the service of the country. Unquestionably parsimony in such matters is the very worst sort of economy.

We would also suggest the propriety of having an additional building erected for the accommodation of the cadets. To put three or four young gentlemen in a small room must, in some degree, deprive them of the ability of prosecuting their studies to advantage.

A house for divine service is also much wanted. The place at present used for that purpose is a room in one of the buildings, of insufficient size and inconvenient construction. Adjoining this is another apartment used for chemical lectures and experiments. The hazard which necessarily attends some of the experiments in the lecture room, admonishes us of the propriety of making it a detached and separate place, so constructed as to be fire-proof. This being done, and a professorship authorized, this branch of useful science will be placed upon a respectable footing.

The buildings in which the cadets are quartered are not as comfortable as they should be. They are badly ventilated; there is but a single window to each room, which occasions humidity and unpleasant scents to arise through the buildings. Windows placed opposite to the exterior ones, opening into the passage, would cost but little and be highly serviceable. The plank partitions, too, which separate the rooms should be removed and walls of brick or stone substituted. This would greatly protect the occupants against the noise of adjoining apartments, and conduce essentially to health and comfort.

The age fixed for the admission of cadets we consider objectionable, and request to draw your attention to the subject. At fourteen years, the minimum age specified by law, the mind is not sufficiently matured and disciplined to undertake the complicated and difficult studies which are prescribed here. For the education gratuitously bestowed at this place by the government, it contemplates a fair equivalent through a return of service at some time and in some form. In making selections, then, for the

academy, the question should be, in what way this end can be best secured? If the candidate be too young, loss to the government follows in money and time wasted on those who fail, and, finally, because the greater the number of dismissals, (delinquents' places not being supplied, except annually,) the more reduced will be the number who receive an education. Between the ages of fifteen and nineteen seems to be the more advisable periods at which young gentlemen should enter the academy. They will then complete their course at a time when the judgment will, in a good measure, be matured, and when it may not be entirely unsafe to entrust them with command; besides, a better opportunity will be afforded to parents to prepare their sons for admission. None should be appointed after they have passed the age of nineteen. After that age their habits are, perhaps, too rigidly fixed to be readily conformed to the course of discipline and instruction pursued here. Another advantage to be derived from the proposed change will be, that the stimulus of emulation will act more equally upon all when there is a nearer equality in the ages of the cadets in the same class.

It is also respectfully submitted whether the academic course of instruction should not be modified so as to embrace, more effectually, the whole of what is prescribed in the 34th article of the published regulations. The time now allotted to that department is not sufficient for the whole course. Hence a portion of what is prescribed in the article referred to is omitted. To remedy this, there must be an increase of time allowed or an increase of the pre-requisites of admission into the academy.

While a paternal care is taken of the moral department of the cadets, their pecuniary interests are properly regarded. By an existing regulation, their reasonable and necessary expenditures are registered and settled by an agent appointed for that purpose. From parents or friends they are forbidden to receive money, or if received, they are required to make deposit of it, to be expended only by permission of the superintendent. Thus are they guarded against everything like useless expenditure and formed to habits of economy. The poor and the wealthy are rendered, in a good degree, equal in their moneyed facilities, and everything like mortified feeling which could arise from such inequality of condition is avoided. In their apparel and in the furniture of their rooms all is neat, plain, and uniform in quality. The store which furnishes them with goods keeps in public view, for the inspection of all, its articles of merchandise, with the prices attached, previously agreed to and authorized by the board, by which means the regular rate of selling is known to every cadet. Than this nothing could be fairer or better arranged. If, as sometimes is the case, cadets are found to be indebted beyond the amount of pay that is due to them, they are forbidden to purchase any article not absolutely necessary, that, by a more rigid economy, the debt may be adjusted. They are thus early learned that debts are to be avoided, and instructed as to the best mode of discharging them if imprudently contracted.

Such are the suggestions which, in compliance with the request contained in your letter of appointment, we have thought proper to make concerning this institution. They are offered in perfect candor, and are the result of our own observation of the conduct and management of the academy and of the best reflection we have been able to give the subject while engaged in the discharge of the duty you did us the honor to confide to us. All of which is respectfully submitted.

A. MACOMB, *United States army, President.*

FRANCIS PRESTON, *Virginia.*

JOHN H. EATON, *Tennessee.*

J. WHARTON, *Tennessee.*

JAMES CAMACK, *Georgia.*

ROBERT B. M'AFEE, *Kentucky.*

EM. SHOBER, *North Carolina.*

GEORGE C. DROMGOOLE, *Virginia.*

J. J. MOORMAN, *Virginia.*

SAMUEL B. SMITH, M. D., *U. S. army.*

PETER FRITZ, *Pennsylvania.*

H. PETREKIN, *Pennsylvania.*

WILBUR FISK, *Connecticut.*

W. S. HAYES, *Alabama.*

ISAAC DAVIS, *Massachusetts.*

H. L. ELLSWORTH, *Connecticut.*

A. G. HARRISON, *Missouri.*

HENRY WHITING, *Secretary to the Board.*

Hon. SECRETARY OF WAR.

No. 4.

REPORT FROM THE TOPOGRAPHICAL ENGINEER.

TOPOGRAPHICAL BUREAU, *November 9, 1832.*

SIR: In obedience to your instructions of the 29th of August last, I have the honor to submit to you—
1st. A statement marked A, exhibiting the amount drawn from the Treasury Department, and remitted to the disbursing officers under this office from the 1st of October, 1831, to the 30th of September, 1832, inclusive; and also of the amount of accounts rendered.

2d. A statement marked B, exhibiting the amount expended during the same period on account of the surveys and examinations in relation to the summit level of the contemplated canal across the Isthmus of Florida.

The topographical and civil engineers have been employed upon, and the funds appropriated for surveys for the year 1832, have been applied to the following objects, viz.

1st. In completing the report and drawing of the survey of a canal route from Connecticut river to Lake Winnipisseogee, New Hampshire, by the way of the valleys of the Oliverian and Baker's rivers.

2d. In completing the drawings of a canal route to unite the waters of Lake Champlain with those of the Connecticut, by the way of the valleys of the Onion and Will's rivers, in the State of Vermont.

3d. In completing the report, maps, and estimates, of the Taunton and Weymouth canal, Massachusetts.

4th. In making examinations and surveys in order to ascertain the practicability of making a railroad from Winchester to Harper's Ferry.

5th. In making a survey of a road from Potomac creek to Fredericksburg, Virginia.

6th. In completing the drawings of a reconnoissance of the sounds of North Carolina.

7th. In completing the drawings of a survey in order to ascertain the military defences of St. Mary's river, Maryland.

8th. In completing the drawings of a survey of Georgetown harbor, South Carolina, with a view to its military defence.

9th. In making a survey of a route for a railroad from St. Francisville, Louisiana, to Woodville, Mississippi.

10th. In making an estimate of the cost of constructing a canal to connect the waters of the Atlantic with those of the Gulf of Mexico.

11th. In surveying the route for a railroad between Williamsport, Pennsylvania, and Elmira, New York.

12th. In surveying the Neversink river, New York, with a view to its improvement.

13th. In surveying the Tennessee river, with a view to its improvement.

14th. In surveying the route for a railroad from the Hudson river to the portage summit of the Ohio canal.

15th. In surveying the route for a railroad from New London, Connecticut, to Worcester, Massachusetts.

16th. In surveying a route for a railroad from Stonington, Connecticut, to Providence, Rhode Island.

17th. In surveying the route for a railroad from Mad river to Lake Erie, in the State of Ohio.

18th. In surveying the Monongahela river, from Brownsville to Pittsburg, with a view to its improvement.

19th. In superintending the construction of the Boston and Providence, Baltimore and Susquehanna, and Patterson and Hudson river railroads.

20th. In superintending the construction of the Potomac bridge.

21st. In superintending the construction of the aqueduct across the Potomac river.

22d. In paying the salaries of the civil engineers and agents employed on several of the foregoing items of duties.

As regards the necessity of an increase of the corps of topographical engineers, I have to state that the views of the bureau have undergone no change since the submission of the annual report of the bureau of last year. The following extracts from that report will show the views of the bureau in relation to the necessity of an increase of the corps of topographical engineers, to meet the calls of the government for their services.

"The subject of an increase and better organization of the corps of topographical engineers, and of the inconveniences resulting from their present condition, has been so frequently alluded to in Executive communications, that I shall now only bring to your consideration such views as have not been previously presented. The able report on this subject from your predecessor, Mr. Eaton, fully exposes the military considerations of the case, and also the number and organization required by the present wants of the country. To this I have only to add, that the views therein unfolded are strengthened by every day's experience, and that the inconveniences resulting from a want of the organization proposed are continually increasing."

"The reasons which may be alleged in favor of the proposed increase in addition to those in the report alluded to, are such as apply to the survey of the coast."

"The law of the 14th of April, 1818, commits that duty to the army and the navy, and that part of the army to which this duty properly belongs is the topographical engineers. But owing to the few officers of this corps, and the pressing demand for their labors on other subjects, we have, as yet, done nothing under that law, except in such detail surveys of our harbors and bays, as were made with a view to their military defences, but which are highly valuable matter for purposes of filling up the cartoons of the general survey contemplated."

"The scientific education derived at our Military Academy furnishes the necessary elementary knowledge for this duty; and the military education acquired there, and in the army, establishes those habits of order, attention to duty, and subordination, necessary in every vocation of life, and without which no extensive operation can be judiciously or economically conducted. The government, therefore, has at its command valuable materials for filling up the proposed corps, in the officers of the proposed corps and those graduates of the academy who have been on duty with it, and others from that institution in the several corps of the army with officers capable at once of entering upon its duties and of rendering efficient services."

"In those services which would have to be performed in a survey of our coast, not only is mathematical knowledge requisite, but also a knowledge of, and a habit of accurately using the fine and delicate instruments required in the necessary observations. This last and valuable knowledge can be obtained by those only who possess the mathematical and mechanical information involved in the use and construction of the instruments; and with the elementary knowledge which, it is but fair to suppose, is already possessed by the class of individuals alluded to, there would only remain to be acquired a habit of accurately using the instruments."

"It is but just to state that the ability to use fine instruments, and to observe correctly with them, is a work of time and of careful attention. But if we are not adequately organized we cannot have officers to appropriate to that duty, and, of course, cannot say when the result of that time and careful attention will be possessed. If we have not, therefore, the necessary means we must continue defective in a correct knowledge of our own coast, and also defective in the practical skill of a branch of our own profession, the importance of which cannot be too highly estimated. In fact, everything depends upon it. It furnishes all the data for the calculations, and, if defective, all the calculations are but authentications of error."

"The requisite instruments have already been procured by the government at a great cost, and under the personal supervision of a gentleman highly gifted in those matters, and are now in deposit under the care of this office. It needs only means and time to apply them to their intended uses, and to reap from them the valuable results which they are so well adapted to yield."

"It appears to me entirely unnecessary to urge upon your notice the various commercial advantages which will result from an accurate knowledge of our maritime frontier, nor the value of this knowledge to its military defences. These considerations are self-evident, and need no argument to maintain them

But it may be urged that there is something due to our national character which requires that we shall be no longer entirely indebted to the imperfect efforts of other nations for information of our own coast, and that we should by our own labors add something to the general mass of scientific knowledge by at least correct determinations of the geography of our own country. The present effort may also be the origin of a school which may hereafter furnish individuals adequate, as well by their capacity to observe as to calculate the results of observations, to enter into fair and honorable competition with the distinguished astronomers of Europe, some of whom made their first essays while officers of a similar corps."

"The duties of a corps of topographical engineers are essentially military and scientific; hence the advantages of having military habits and education added to the scientific knowledge of its members."

"Its duties also benefit all the great interests of society, and eminently qualify its members for operations which might be considered as the peculiar province of the civil engineer. For instance, the survey of a country for military purposes furnishes also a good geographical map; the survey and construction of a road for military purposes, or for the transportation of the mail, is an equally good road for the merchant, the farmer, or the traveller; a canal for military purposes will serve equally well the wants of agriculture and commerce; and a survey of a bay or river, or harbor, in order to ascertain the military defences of either, furnishes also that precise knowledge of its shoals, bars, channels, tides, and currents, so valuable to the navigator. While a topographical officer, therefore, is collecting, in his military operations, the knowledge necessary for the military defences of the country, he also collects matter improving its geography and bearing essentially upon its commercial and agricultural prosperity"

"From the character of the duties of such a corps, it may be seen with what facility and advantage it may have its attention, when necessary, turned to objects purely civil; and that even while pursuing these purely civil objects, from its military knowledge, its labors will be enriched by all the military considerations which the operations may develop, so that the labors of this corps, if judiciously directed, cannot fail to furnish the government with the most correct knowledge of the resources of the country, civil and military; of its agricultural, commercial, mechanical, and mineralogical advantages; and of its military means of defence; as all these are subjects of investigation of a topographical engineer."

It will be seen by the statement B which accompanied the annual report of last year that of the amount of \$25,000, appropriated for surveys for the year 1831, 13,500 dollars was consumed in compensation to civil engineers. This expenditure was made necessary—1st, from the inadequate number of the present corps of topographical engineers, and, 2d, from the impossibility of supplying this inadequacy by detaching a sufficient number of officers from the army. Should the corps of topographical engineers, however, be enlarged, as proposed, the item of \$25,000 in the annual estimate of this bureau may be reduced to \$20,000, and admit of the execution of more duty than can be done with the present system with an appropriation of \$30,000.

Statement exhibited by the chief of the topographical bureau showing the amount which might be annually saved under an organization of the topographical engineers similar to that proposed by a bill reported to the Senate during its last session.

The corps to be composed of one colonel, one lieutenant colonel, two majors, ten captains, and ten first lieutenants, having the pay of the present corps of engineers.

The annual expenditure under which organization would be about \$24,300; and that sum divided by twenty-four, the number of officers of the proposed corps, gives the average annual cost of each \$1,013 nearly.

The annual cost of the present topographical engineers (10 officers) being..... \$13, 916
 And of seven civil engineers and assistants acting as topographical engineers..... 13, 500

Shows the total annual cost under the present system to be (or an average for each engineer of \$1,613) 27, 416
 Deducting from which the above sum 24, 300

There results—1st, an annual saving of 3, 116
 2d, a gain of seven engineers;
 3d, an average gain each per annum of \$600.

Respectfully submitted.

JAMES KEARNEY, *Lieut. Col. & T. E.*

Hon. LEWIS CASS, *Secretary of War.*

A.

Statement showing the amount of money drawn from the treasury and remitted to the officers and agents disbursing under the Topographical bureau, from the 1st October, 1831, to 30th September, 1832, inclusive, and the amount of accounts rendered by each within the same period.

Names.	On what account.	Amount re-mitted.	Amount of accounts rendered.
Lieutenant Colonel John Anderson, topographical engineer.	Surveys for roads and canals.	\$710	\$887 70
Lieutenant Colonel J. Kearney.....	do.....	1, 800	1, 789 22
Lieutenant Colonel S. H. Long.....	do.....	2, 570	2, 867 40
Major H. Bache.....	do.....	150	93 45
Captain J. D. Graham.....	do.....	320	720 83
Captain William Turnbull.....	do.....	1, 000	982 56
Captain William H. Swift.....	do.....	600	564 49
Dr. William Howard, civil engineer.....	do.....	1, 800	1, 659 21
De Witt Clinton.....	do.....	3, 197	4, 486 05
Howard Stansbury.....	do.....	668	1, 252 73
Henry Belin.....	do.....		1, 653 84
		13, 315	16, 957 28

B.

Statement showing the amount expended from the 1st of October, 1831, to the 30th September, 1832, on account of the Florida canal survey.

Lieutenant John Pickell, United States army \$186 27

JAMES KEARNEY, *Lieutenant Colonel and Topographical Engineer.*
TOPOGRAPHICAL BUREAU, November 9, 1832.

No. 5

REPORT OF THE PAYMASTER GENERAL.

PAYMASTER GENERAL'S OFFICE, November 30, 1832.

SIR: I have the honor herewith to submit a tabular statement of the operations of the Pay department for one year, commencing the 1st of October, 1831, and terminating the 30th of September, 1832.

From this statement it will be seen that the advances made to paymasters within the year amount to \$1,231,075 68, of which sum but \$4,500 remain to be accounted for. This is exclusive of \$34,942 91 deducted from the estimates for the fourth quarter of 1831, and of \$25,781 63, the amount of unsettled balances, as stated in my last annual report, all of which have been fully accounted for.

The troops have been paid, generally, to later periods than heretofore, with the exception of those within Paymaster Forsyth's district, which he states was caused, in part, by changing their position in consequence of the late Indian war. I have every reason to believe that they were paid to the 1st of October, within that month, and that his accounts will be received in a few days.

When the army was reduced, in 1821, to its present organization, it was believed that it would require at least fifteen officers to pay it, in consequence of the numerous stations and their dispersed situation. Since that time the posts have been increased and extended, and the duty of paying the troops has become much more difficult. To this duty is added, by the act of July 14, 1832, that of paying all other troops that may be called into the service of the United States, without regard to numbers. Before the passage of this act the militia were generally paid by the officers of this department, but it was considered extra duty; and as they were subject to heavy deductions in the settlement of their accounts in consequence of the irregularity of the service, and the informality of the rolls and vouchers, on which they were compelled to pay, extra compensation was allowed for performing it. Since the reduction of the department in 1821 the number of militia in service, at any one time, was never so great as to make their payment burdensome until the present year. The number now to be paid exceeds ten thousand, and the rolls furnished the department for that purpose so defective that it was impossible to prepare complete pay-rolls from them; of course the duty of paymasters now is not only very great, but extremely hazardous, and will, I fear, prove ruinous to some, unless Congress should authorize an allowance to be made to them sufficient to reimburse, at least in part, the losses that may follow a careful performance of it.

No time was lost in preparing rolls, so far as it could be done, and submitting them to the accounting officers after the returns were received at this office, agreeably to your instructions; and the paymaster of this district was ordered to Illinois, in advance of the examinations of the rolls by the accounting officers, to make preparatory arrangements, and to assist in paying the militia of that State. The rolls have been forwarded to him from time to time, as soon as received from the comptroller; and from the energy and industry of the officers to whom the duty is assigned, I am confident the payment will be effected in the shortest time possible, so far as the funds will extend.

Respectfully, your obedient servant,

N. TOWSON, *Paymaster General.*

HON. LEWIS CASS, *Secretary of War.*

Statement of the moneys drawn from the appropriations for the Pay department and remitted to the disbursing officers on account of payments for the fourth quarter of 1831 and the first three quarters of 1832; the amount unexpended and forming part of their estimates for the fourth quarter of 1832; the balances to be accounted for; the periods to which the troops have been paid, and accounts rendered.

Paymasters.	Amount of funds remitted in the fourth quarter of 1831 and the first three quarters of 1832.					Amount unexpended, and forming part of their estimates for the fourth quarter of 1832.					Balances remaining to be accounted for.		Periods to which the troops have been paid and accounts rendered.	Remarks.			
	Pay and subsistence.	Forage.	Clothing of servants.	Bounties.	Amount.	Pay and subsistence.	Forage.	Clothing of servants.	Bounties.	Amount.	Pay and subsistence.	Amount.					
Thomas Wright.....	\$84,400 00	\$800 00	\$800 00	\$88,000 00	\$1,613 44	\$1,613 44	July 1 and September 1.....	The troops on the Arkansas receive but two payments in the year, to wit, after the April and October musters. Balance of \$2,015 20, due paymaster. Balance of \$3,987 60, due paymaster. Sick; on furlough.
Asher Phillips	33,700 00	700 00	400 00	\$200 00	35,000 00	9,487 75	.....	.....	.....	9,487 75	.....	.....	.....	.....	.....	Sept. 1; some officers to Oct. 1.
Alphonso Wetmore	54,250 00	600 00	750 00	1,400 00	57,000 00	5,197 37	\$776 15	\$800 00	\$1,339 34	8,112 86	.....	.....	.....	.....	.....	May 1 and September 1.....
Benjamin F. Larned	57,670 00	2,080 00	950 00	.....	60,700 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Sept. 1; officers to Nov. 1 ..
David S. Townsend.....	68,343 00	2,055 00	1,109 00	993 00	72,500 00	4,680 29	337 13	511 50	414 00	5,933 92	.....	.....	.....	.....	.....	September 1.....
Charles B. Tallmadge.....	141,050 00	3,900 00	1,600 00	150 00	146,700 00	5,545 33	323 61	740 71	78 00	6,686 65	.....	.....	.....	.....	.....	..... do.....
Daniel Randall.....	92,864 00	2,600 00	1,710 00	1,826 00	99,000 00	9,380 74	.....	.....	.....	9,380 74	.....	.....	.....	.....	.....	..... do.....
Charles H. Smith.....	82,286 00	750 00	530 00	234 00	83,800 00	3,048 99	.....	.....	.....	3,048 99	.....	.....	.....	.....	.....	..... do.....
Al A. Massias	61,650 00	1,600 00	950 00	1,300 00	65,500 00	6,630 36	119 94	.....	434 00	7,184 30	.....	.....	.....	.....	.....	..... do.....
T. P. Andrews	149,300 00	1,250 00	750 00	200 00	151,500 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..... do.....
Edmund Kirby.....	60,368 00	1,456 00	776 00	900 00	63,500 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..... do.....
Lewis G. De Russy	49,850 00	600 00	350 00	200 00	51,000 00	6,447 02	.....	.....	.....	6,447 02	.....	.....	.....	.....	.....	..... do.....
William Platt.....	9,700 00	150 00	150 00	.....	10,000 00	2,878 74	.....	.....	.....	2,878 74	.....	.....	.....	.....	.....	..... do.....
Robert A. Forsyth	33,100 00	1,400 00	900 00	200 00	40,600 00	8,690 28	.....	.....	.....	8,690 28	.....	.....	.....	.....	.....	..... do.....
Thomas L. Leslie	134,080 00	1,810 00	1,470 00	240 00	137,600 00	5,630 11	147 44	180 69	120 00	6,078 24	.....	.....	.....	.....	.....	..... do.....
	1,117,611 00	21,751 00	13,195 00	7,843 00	1,160,400 00	69,230 42	1,693 27	2,232 90	2,385 34	75,541 93	.....	.....	.....	.....	.....	.....
MILITIA.																	
Thomas Wright.....	66,175 68	66,175 68	10,030 61	10,030 61 do.....
Robert A. Forsyth.....	4,500 00	.....	.....	.....	4,500 00	.....	.....	.....	.....	.....	\$4,500 00	\$4,500 00	.....	.....	.....	..... do.....
	70,675 68	.....	.....	.....	70,675 68	10,030 61	.....	.....	.....	10,030 61	4,500 00	4,500 00	.....	.....	.....	.....
Total of army and militia..	1,188,286 68	21,751 00	13,195 00	7,843 00	1,231,075 68	79,261 03	1,693 27	2,232 90	2,385 34	85,572 54	4,500 00	4,500 00	.....	.....	.....	.....

No. 6.

REPORT FROM THE SUBSISTENCE DEPARTMENT.

OFFICE OF THE COMMISSARY GENERAL OF SUBSISTENCE,
Washington, November 22, 1832.

SIR: The statement which I now have the honor to submit in duplicate, agreeably to instructions from the Department of War of August 29, ultimo, exhibits the moneys remitted and charged to contractors and to the disbursing officers of the department in the 1st, 2d, and 3d quarters of the year, together with the balances due by them on December 31, 1831, amounting to..... \$294, 083 23
To which is to be added this sum, due to them on the settlement of their accounts..... 557 11

Making an aggregate of..... 294, 640 34
The amount accounted for is..... 252, 210 77

Leaving a balance of..... 41, 729 57

From which is to be deducted—

This sum, charged to contractors, not as remittances out of the annual appropriation, but as charges between the contract prices and purchases made by agents of the department to supply deficiencies..... \$330 83

This sum, being part of the balance in the hands of Lieutenant E. V. Sumner, which he has been ordered to deposit in the Branch Bank of the United States, at Buffalo, New York, to the credit of the Treasurer of the United States, thus reverting to the treasury..... 8, 000 00

Balance in the hands of Brevet Captain James Monroe September 30, ultimo, when his resignation took effect, not yet settled..... 4, 304 66

Making together..... 12, 635 49

And leaving an actual balance of..... 29, 094 08
in the hands of the assistant and acting commissaries at the expiration of the 3d and applicable to the expenditures of the 4th quarter of the year.

It affords me great satisfaction to state that, of the moneys charged and remitted during the period embraced, no loss whatever has been sustained by the government; and of ninety-seven officers disbursing, there are only two at remote posts whose accounts have not been received, and which, if at hand, would not materially affect the result of the statement.

Very respectfully, your obedient servant,

GEO. GIBSON, *Commissary General of Subsistence.*

Hon. LEWIS CASS, *Secretary of War.*

Statement exhibiting the moneys remitted to contractors from January 1 to September 30, 1832; the sums charged to them on account of failures, and the amounts accounted for by them; the balances in the hands of the disbursing officers of the department December 31, 1831; the moneys remitted to them in the first, second, and third quarters of 1832; the sums charged to them as transfers from one officer to another, on account of sales to officers on the frontier posts, sale of empty barrels, boxes, &c.; and the amounts accounted for by them for the same period; together with the balances in their possession at the expiration of the third quarter of the year.

Names.	Balances on hand December 31, 1831.	Remitted.	Charged on account of failures, transfers, sales to officers, &c.	Total charged.	Accounted for.	Balances due to contractors and asst. commissaries Sept. 30, 1832.	Balances due by contractors and asst. commissaries Sept. 30, 1832.	Remarks.
John Hindman Barney.....contractor.		\$6,948 19	\$33 97	\$6,982 16	\$6,982 16			
H. & D. Cotheal.....do.....		1,478 63		1,478 63	1,478 63			
Hunter Crane.....do.....		765 36		765 36	765 36			
G. W. Dillingham.....do.....		2,280 60		2,280 60	2,280 60			
C. M. Gidings & Co.....do.....		1,219 95		1,219 95	1,219 95			
Hall, Shapter & Tupper.....do.....		524 55		524 55	524 55			
Cleon Hawkins.....do.....		3,077 91		3,077 91	3,077 91			
Hill & McGunnigle.....do.....		890 17		890 17	890 17			
Chauncey P. Ives.....do.....		465 48		465 48	465 48			
Johnson & Wetmore.....do.....		1,255 20	167 50	1,422 70	1,422 70			
George Loury.....do.....		882 82		882 82	882 82			
Daniel B. Miller.....do.....		7 80		7 80	7 80			
Ramsey & Strackler.....do.....		3,863 12		3,863 12	3,863 12			
William Stewart.....do.....		1,889 48		1,889 48	1,889 48			
J. G. Sise.....do.....		892 58		892 58	892 58			
M. V. Thomson.....do.....		14,752 17		14,752 17	14,752 17			
J. A. Townsend.....do.....		5,069 34	129 36	5,198 70	5,198 70			
Joel Turnham.....do.....		3,074 40		3,074 40	3,074 40			
G. B. Wilson & Co.....do.....		3,990 14		3,990 14	3,990 14			
Joshua Teaton.....do.....		361 22		361 22	361 22			
Baker & Burns.....cont'rs for recruits.		171 60		171 60	171 60			
E. S. Comstock.....do.....		210 05		210 05	210 05			
John K. Graham.....do.....		279 67		279 67	279 67			

Statement exhibiting the moneys remitted to contractors, &c.—Continued.

Names.	Balance on hand December 31, 1831.	Remitted.	Charged on account of failures, transfers, sales to officers, &c.	Total charged.	Accounted for.	Balance due to contractors and ass't commissaries Sept. 30, 1832.	Balance due by contractors and ass't commissaries Sept. 30, 1832.	Remarks.
Gurdon Huntington, cont'r for recruits.		\$89 32		\$89 32	\$89 32			
E. Iden		24 40		24 40	24 40			
R. Kirkpatrick		426 78		426 78	426 78			
J. Hargreave Lee		467 88		467 88	467 88			
John B. Lindsey		742 09		742 09	742 09			
R. W. Lookerman		199 22		199 22	199 22			
Samuel Moulson		349 19		349 19	349 19			
W. K. Potter		309 70		309 70	309 70			
Robetaille & Tarbé		230 89		230 89	230 89			
Jacob Ruth		96 05		96 05	96 05			
Michael Sunna		236 48		236 48	236 48			
William T. Ward		23 28		23 28	23 28			
Amos Wood, jr.		588 05		588 05	588 05			
E. A. & W. Winchester		8,939 91		8,939 91	8,939 91			
Lieut. Thos. B. Adams	A. A. C. S.	1,500 00		1,500 00	700 00		\$800 00	Disbursing.
Lieut. E. B. Alexander	A. C. S.	1,400 00	\$648 83	2,048 83	702 40		1,346 43	Do.
Lieut. Wm. P. Bainbridge	do	1,000 00	179 23	1,179 23	1,027 74		151 49	Balance due the United States on settlement.
Lieut. F. N. Barbarin	do	\$121 14	300 00	447 69	868 83	424 65	444 18	Disbursing.
Lieut. E. B. Birdsall	do	699 66		508 92	1,208 58	902 24	306 34	Do.
Capt. A. J. A. Bradford	A. A. C. S.		100 00		100 00	2 86	97 14	Do.
Lieut. John Bradey	do		300 92		300 92	2 91	298 01	Do.
Capt. J. B. Brant	do	14,000 00		14,000 00	13,404 91		595 09	Do.
Lieut. A. Brockenbrough	A. C. S.	101 72	200 00	32 12	333 84	316 13	17 71	Do.
Lieut. F. J. Brooke	A. A. C. S.			90 51	90 51	90 51		Closed.
Lieut. Harvey Brown	A. C. S.	109 98	450 00	1,056 14	1,616 14	1,425 34	190 80	Disbursing.
Capt. D. E. Burch	A. A. C. S.			76 15	76 15			Closed.
Lieut. N. B. Buford	do			43 98	43 98		43 98	Disbursing; no expenditures in the quarter.
Lieut. S. Burbank	do	430 37		700 04	1,130 41	440 11	690 30	Do.
Lieut. R. W. Burnett	do		400 00	327 50	727 50	394 15	333 35	Do.
Lieut. L. F. Cutler	A. C. S.	410 32	4,000 00	1,461 28	5,871 60	3,011 00	2,860 60	Do.
Capt. Isaac Clark	A. A. C. S.			35 90	35 90	35 90		Closed.
Lieut. R. E. Clary	do			45 77	45 77	19 57	26 20	Disbursing.
Lieut. J. A. Chambers	do			393 23	393 23	101 05	292 18	Do.
Lieut. M. M. Clark	do	138 43	650 00	41 65	830 08	697 16	132 92	Do.
Lieut. Joseph Clay	A. C. S.	682 29	500 00	66 24	1,248 53	1,248 53		Closed.
Major H. K. Craig	A. A. C. S.	41 98	200 00		241 98	241 98		Do.
Capt. Thomas Childs	do			216 75	216 75	216 75		Do.
Col. D. L. Clinch	do		700 00		700 00	700 00		Do.
Lieut. John Childs	do	43 84	1,500 00		1,543 84	1,454 62	89 22	Disbursing.
Lieut. J. T. Collinsworth	do			88 76	88 76	151 84	\$65 08	Do.
Lieut. R. W. Colcock	do			136 48	136 48	136 48		Closed.
Lieut. J. H. Cook	do		200 00	153 31	353 31	353 31		Do.
Lieut. O. Cross	A. C. S.	171 85	500 00	716 40	1,388 25	1,388 25		Do.
Lieut. J. F. Davis	A. A. C. S.	15 50		386 23	401 72	401 72		Do.
Capt. G. S. Drane	A. C. S.	55 47	700 00	19 00	767 47	767 47		Do.
Lieut. Justin Dimick	do		1,150 00	83	1,150 83	1,365 90	215 07	Disbursing.
Lieut. S. B. Dusenbury	do	612 47	3,100 00	41 00	3,753 47	3,628 36	125 11	Do.
Lieut. N. J. Eaton	do	115 60	2,600 00	2,921 03	4,936 63	3,785 24	1,151 39	Do.
Lieut. W. H. Emory	A. A. C. S.		300 00	154 18	454 18	454 18		Closed.
Lieut. James Engle	A. C. S.	354 80		164 70	519 50	519 50		Do.
Lieut. Geo. Fetterman	do		400 00	54 97	454 97	453 63	1 34	Balance due the United States on settlement.
Lieut. A. C. Fowler	do	35 72	350 00	298 15	683 87	309 53	374 34	Disbursing.
Lieut. J. S. Gallagher	do	360 13	400 00	113 98	874 11	696 46	177 65	Do.
Bvt. Capt. G. W. Gardiner	do		2,300 00	229 32	2,529 32	2,385 66	143 66	Do.
Lieut. Geo. S. Greene	A. A. C. S.	84 08	1,200 00	4 04	1,288 12	1,288 12		Closed.
Bvt. Capt. Timothy Green	A. C. S.	728 92	4,900 00	319 24	5,948 16	4,621 20	1,326 96	Disbursing.
Capt. H. W. Griswold	A. A. C. S.			238 87	238 87	238 87		Closed.
Lieut. Joseph W. Harris	A. C. S.		300 00	82 58	382 58	214 28	168 30	Disbursing.
Lieut. A. R. Hetzel	A. A. C. S.	175 96	700 00	85 98	961 94	961 94		Closed.
Lieut. R. Holmes	A. C. S.	1,851 69	42,520 92		44,372 61	33,191 30	6,181 31	Disbursing.
Lieut. Joshua Howard	A. A. C. S.		100 00		100 00	25 23	74 77	Do.
Lieut. Louis T. Jamison	A. C. S.		3,000 00	139 81	3,139 81	2,340 77	799 04	Do.
Capt. H. Johnson	A. A. C. S.	34 83	300 00	7 73	342 56	298 07	44 49	Do.
Doct. B. King	do		300 00		300 00	300 00		Closed.
Lieut. J. J. B. Kingsbury	A. C. S.	171 72	250 00		421 72	317 29	104 43	Disbursing; account for 3d quarter not received.
Lieut. J. W. Kingsbury	do	969 89		609 17	1,579 06	1,178 76	400 30	Do.
Lieut. M. Knowlton	A. A. C. S.		1,000 00		1,000 00	1,000 00		Closed.
Lieut. Edgar M. Lacey	do	425 15	1,900 00	651 04	2,976 19	2,354 67	621 52	Disbursing.
Lieut. R. B. Lee	do		100 00		100 00	100 00		Closed.

Statement exhibiting the moneys remitted to contractors, &c.—Continued.

Names.	Balances on hand December 31, 1831.	Remitted.	Charged on account of failures, transfers, sales to officers, &c.	Total charged.	Accounted for.	Balances due to contractors and ass't commissaries Sept. 30, 1832.	Balances due by contractors and ass't commissaries Sept. 30, 1832.	Remarks.
Lieut. John L'Engle.....A. A. C. S.			\$632 36	\$632 36	\$632 36			Closed.
Lieut. T. B. Linnard.....do.....		\$100 00	68 69	168 69	95 07		\$73 62	Disbursing.
Bvt Capt. Allen Lowd.....A. C. S.	\$265 04	4,450 00	621 82	5,336 86	4,920 27		416 59	Do.
Lieut. John Mackay.....A. A. C. S.	271 71			271 71	271 71			Closed.
Lieut. H. S. Mallory.....do.....			526 42	526 42	496 37		30 05	Disbursing.
Lieut. Wm. R. McKee.....do.....		800 00		800 00	800 00			Closed.
Lieut. J. B. Magruder.....do.....		1,500 00	1 16	1,501 16	1,501 16			Do.
Lieut. Wm. S. Maitland.....A. C. S.	27 23	100 00		127 23	127 23			Do.
Lieut. M. E. Merrill.....do.....	450 35		133 41	583 76	458 35		125 41	Disbursing.
Bvt. Capt. C. S. Merchant.....do.....	43 31	1,233 30	14 91	1,296 52	1,296 52			Do.
Bvt. Capt. James Monroe.....do.....	4,916 51	3,600 00	2,868 06	11,384 57	7,079 91		4,304 66	Resigned Sept. 30; balance due United States on settlement.
Lieut. Gouverneur Morris.....do.....		1,100 00	1,104 46	2,204 46	1,628 95		575 51	Disbursing.
Lieut. L. N. Morris.....do.....	1,254 70	2,600 00	1,039 52	4,894 22	4,474 10		420 12	Do.
Lieut. P. Morrison.....do.....	189 64	5,208 94	2 50	5,401 08	5,277 36		123 72	Do.
Lieut. A. H. Morton.....do.....		1,414 23		1,414 23	146 68		1,267 50	Disbursing accounts for 3d quarter not received.
Lieut. Geo. Nauman.....A. A. C. S.			267 25	267 25	267 25			Closed.
Lieut. F. D. Newcomb.....A. C. S.		2,800 00	29 74	2,829 74	3,166 70	\$276 96		Disbursing.
Lieut. Wm. Palmer.....do.....		750 00		750 00	679 43		70 57	Do.
Lieut. R. P. Parrott.....do.....	639 67	950 00	24 05	1,613 72	1,561 81		45 91	Do.
Lieut. M. A. Patrick.....A. A. C. S.		1,000 00	91 45	1,091 45	1,091 45			Closed.
Lieut. R. H. Peyton.....do.....		650 00	88 36	738 36	594 99		143 37	Disbursing.
Lieut. Benj. Poole.....do.....		250 00	24 25	274 25	274 15		10	Balance due U. States on settlement.
Lieut. G. S. Rains.....do.....	257 25			257 25	55 66		201 59	Disbursing.
Lieut. Samuel L. Russell.....A. C. S.	555 18		1,110 83	1,666 06	1,400 09		265 97	Do.
Lieut. J. B. Scott.....do.....	30 02	500 00	4 49	534 51	534 51			Closed.
Lieut. R. Sevier.....A. A. C. S.	569 75		559 94	1,129 69	673 42		456 27	Disbursing.
Lieut. R. C. Smead.....A. C. S.		5,500 00		5,500 00	5,411 06		88 94	Do.
Lieut. Cons'te Smith.....A. A. C. S.			632 46	632 46	632 46			Closed.
Major H. Stanton.....A. C. S.		4,000 00		4,000 00	3,145 94		854 06	Disbursing.
Lieut. E. V. Sumner.....do.....	159 20	29,500 00	40 13	23,699 33	20,573 67		9,125 66	Disbursing \$8,000 ordered to be deposited in Bank of the United States at Buffalo on account of the United States.
Capt. J. P. Taylor, commissary.....		15,500 00		15,500 00	15,133 51		366 49	Do.
Lieut. R. C. Tilghman.....A. A. C. S.			246 73	246 73	151 40		95 33	Do.
Lieut. A. W. Thornton.....A. C. S.	659 51	300 00	125 40	1,084 91	831 32		253 59	Do.
Lieut. D. Van Ness.....A. A. C. S.	103 41	100 00		203 41	129 62		73 79	Do.
Lieut. D. H. Vinton.....do.....	46 12	250 00		296 12	294 00		2 12	Do.
Lieut. J. R. Vinton.....A. C. S.			533 78	533 78	123 93		409 85	Do.
Col. J. B. Walbach.....A. A. G. S.		100 00		100 00	100 00			Closed.
Lieut. R. D. A. Wade.....do.....	27 11	100 00		127 11	63 40		63 71	Disbursing.
Lieut. George Webb.....A. C. S.	17 30	250 00		267 30	267 30			Closed.
Lieut. L. B. Webster.....A. A. O. S.	73 89	750 00		823 89	639 34		184 55	Disbursing.
Major H. Whiting.....do.....			49 00	49 00	49 00			Closed.
Lieut. E. Williams.....do.....			1,048 43	1,048 43	212 84		835 59	Disbursing.
Capt. Thomas Wright.....do.....			715 62	715 62	271 29		444 33	Do.
Total.....	19,500 41	248,006 06	26,576 76	294,083 23	252,910 77	557 11	41,729 57	

RECAPITULATION.

Total amount charged.....	\$294,083 23
Balances due to assistant commissaries on the settlement of their accounts.....	557 11
Accounted for.....	294,640 34
	252,910 77
	41,729 57
Deduct this sum charged to contractors, not as advances or remittances, but as the difference between the contract prices and the purchases made by the agents of the department to supply deficiencies.....	330 83
Leaving an actual balance in the hands of the assistant and acting assistant commissaries to be accounted for in the 4th quarter of the year	41,398 64

No. 7.

REPORT FROM THE ORDNANCE DEPARTMENT.

ORDNANCE OFFICE, *Washington, November 24, 1832.*

SIR: In obedience to your orders of 20th August last, I have the honor to transmit a report of the general result of the proceedings and operations of this department between the 1st of October, 1831, and the 30th September, 1832, embracing also a view of its fiscal concerns, as they have transpired during the greater period between the 1st of January, 1831, and the 30th September, 1832.

The papers marked A and B present a general view of these concerns during the last-mentioned period, as well in regard to the amounts of the expenditures under the several heads of appropriations as in reference to their objects, and to the various ordnance stations where they have been made.

The first of these (A) shows the whole amount of funds remitted from the treasury to disbursing officers and contractors in this department during the year 1831 to have been \$811,400 77; that the portion of that sum which was expended and accounted for during the same period amounted to \$752,458 65; and that at the close of that year there remained unexpended and in the hands of disbursing officers the sum of \$58,942 12, a balance which, it may be proper to remark, was promptly liquidated by the responsible disbursing officers early in the first quarter of 1832.

Statement B exhibits the total amount of funds remaining in the hands of disbursing officers at the close of the year 1831, and which have been remitted to them and to contractors during the first, second, and third quarters of the year 1832. This amount will be seen to have been \$648,737 49, and the portion of this sum expended, and for which accounts have been rendered during the same period, will be seen in the same statement to have amounted to \$602,831 81, the unexpended balance exhibited in the same statement as being in the hands of disbursing officers at the close of the third quarter of 1832 having been \$45,885 68.

Statement C presents a view of the general result of the operations at the several arsenals and armories of the United States in the manufacture, repair, and purchase of some of the principal articles of ordnance, ordnance stores, and building materials. It exhibits the result of these operations to the extent to which they have been completed during the year between the 1st of October, 1831, and the 30th September, 1832, indicating, among other articles of ordnance and ordnance stores which have been fabricated or procured, the following, viz: of artillery, 133 32-pounder iron cannon, 11 24-pounder casemate and barbette-carriages, with implements complete, and 93 field-carriages, with implements complete; of small arms manufactured at the national armories, 27,453 muskets, complete, 3,490 Hall's rifles; of accoutrements for small arms, about 3,000 sets for infantry, 4,000 sets for riflemen, and 1,000 sets for cavalry.

Statement D shows the extent of the operations during the year between the 1st October, 1831, and the 30th September, 1832, which have occurred in procuring ordnance and ordnance stores, under the act of 1808, for arming and equipping the militia of the States and Territories. This statement presents also a view of the expenditures under the act which have resulted during the same period in procuring the stores, amounting, for all objects, to \$173,569 26. It exhibits, among other articles of ordnance stores procured, 84 field-carriages, with their implements complete; 8,000 muskets complete; 740 Hall's rifles; about 2,400 sets of infantry accoutrements; 3,151 sets of rifle accoutrements, and 2,087 pairs of holsters.

Statement E exhibits the amount of ordnance and ordnance stores, valued in muskets, which have been apportioned for the year 1831 to the several States and Territories, under the act of 1808, for arming and equipping the militia, this apportionment being founded on the most recent returns of the strength of the militia, as made by the adjutants general of the militia of the States to the adjutant general of the army.

Statement F shows the several articles of ordnance and ordnance stores which have been distributed to the militia of the States and Territories during the year between the 1st of October, 1831, and the 30th September, 1832, the distribution being in accordance with the last apportionment, and with the balances due on apportionments made prior to that of the year 1831. In this statement will be perceived, among other articles distributed, 17 pieces of field artillery; 23 field-carriages and equipments, complete; 21,070 muskets, rifles, carbines, and pistols; 2,739 artillery and cavalry swords; 5,767 sets of accoutrements for small arms, and 1,100 sets of cavalry accoutrements.

Statement G presents a view of the amount of munitions of war issued by this department during the year between the 1st of October, 1831, and the 30th September, 1832, to the army, to the militia in the service of the United States, to the Engineer department, and to the State of South Carolina on the last war account. These issues, it will be perceived, have been unusually large, a circumstance which has proceeded principally from the necessity of arming and equipping considerable bodies of the militia acting in the service of the United States on the occasion of the late Indian disturbances on the north-western frontier.

Statement H presents a view of the result of the operations of the United States lead mines for a period of ten years, ending with the 30th September, 1832, during which time, it is perceived by the statement, that about 56,000,000 pounds of lead have been manufactured at the mines, and that in the year ending with the 30th September, 1832, there were manufactured but 4,281,876 pounds, an amount falling short of that of the preceding year by 2,167,204 pounds. This deficiency is explained partly from the fact that during the last year no lead had been drawn, as in preceding years, from the mines of Missouri, no leases having been granted in Missouri since the passage of the act of March 3, 1829, authorizing the sale of all the mineral lands in that State, and the amounts of all such as had not expired at the date of that act having been settled, and partly from the early commencement of the last winter, which arrested the operations on the Upper Mississippi much earlier in the season than usual. But the deficiency must be attributed mainly to the general derangement and interruption of business during the greater part of the last summer in consequence of the war with the Indians on that frontier.

I have the honor to be, sir, respectfully, your obedient servant,

GEORGE BOMFORD, *Colonel of Ordnance.*

HON. LEWIS CLASS, *Secretary of War.*

A.

Statement of the money expended through the Ordnance department in the year 1831.

Officers' names.	Stations.	AMOUNT OF SUMS REMITTED, INCLUDING THE BALANCES IN THE HANDS OF AGENTS JANUARY 1, 1831.										Amount expended and accounted for.	Balances remaining unexpended, in the hands of disbursing officers, December 31, 1831.	
		Appropriations.												
		National armories.	Current expenses of the ordnance service.	Arsenals.	Armament of fortifications.	Arming and equipping the militia.	For the purchase of land.	For building new arsenal.	For extending walls and embankm'ts.	Erecting forging and tilt-hammer shop.	Erecting dwelling-houses.			Total amount.
Charles Howard.....	Armory, Springfield, Massachusetts.	\$196,064 80				\$3,108 46		\$2,000 00			\$201,173 26	\$198,390 35	\$2,782 91	
D. Bedinger.....	Armory, Harper's Ferry, Virginia...	185,762 52	\$304 50			276 25			\$8,000 00	\$6,500 00	\$9,635 00	210,478 27	187,911 94	22,566 33
Captain C. Mellon and Lieutenant J. Hill....	Arsenal, Kennebec, Maine.....	3,000 00		\$4,031 24		40 00						7,061 24	6,907 93	93 31
Major H. K. Craig.....	Arsenal, Watertown, Massachusetts.....	1,940 00		71 45		11 12	\$25 01					2,047 58	1,954 62	93 96
Lieutenant J. M. Washington.....	Arsenal, Champlain, Vermont.....	764 39		500 00								1,264 39	1,171 41	93 98
Major G. Talcott.....	Arsenal, Watervliet, New York.....	9,625 84		16,358 02	\$2,271 00	17,900 00						46,154 86	42,953 73	3,201 13
Captain J. S. Abeel.....	Arsenal, Rome, New York.....	2,400 00										2,400 00	2,387 03	12 97
Major R. L. Baker.....	Arsenal, Alleghany, Pennsylvania...	6,654 00		10,130 00		11,333 24						28,116 24	23,439 78	4,676 46
Colonel J. B. Walbach.....	Arsenal, Frankford, Pennsylvania...	2,476 09		600 00		3,339 00						6,415 09	5,459 81	955 28
Colonel J. Bankhead.....	Arsenal, Pikesville, Maryland.....	880 00			300 00	20 00						1,200 00	1,075 10	124 90
Lieutenant J. Symington.....	Arsenal, Washington City.....	10,530 05		967 00	1,682 56	13,661 06						26,840 67	21,543 42	5,297 25
Lieutenant J. Williamson and M. C. Buck....	Arsenal, Bellona, Virginia.....	5,223 90			106 08							5,339 98	5,228 66	101 32
Colonel A. C. W. Fanning.....	Arsenal, Augusta, Georgia.....	4,752 10		53 10		235 56						5,040 76	5,040 76	
Lieut. R. B. Lee and Lieut. W. Wheelwright	Arsenal, St. Louis, Missouri.....	3,022 70		16,128 65		150 00						19,301 35	16,846 53	2,454 82
Lieutenant W. Smith.....	Arsenal, Mount Vernon, Alabama...			39,676 89								39,676 89	35,243 91	4,432 98
R. Anderson.....	Arsenal, Baton Rouge, Louisiana...	4,772 04		1,389 58		144 83						6,306 45	4,757 12	1,549 33
Lieutenant J. Howard.....	Depot, Detroit, Michigan Territory..	1,485 00										1,485 00	1,289 21	195 79
Capt. S. Perkins and Lieutenant S. Ringgold..	Depot, New York.....	1,580 91				11,450 00						13,030 91	7,807 79	5,223 12
Lieut. W. Maynadier and Lieut. B. Huger...	Fortress Monroe, Virginia.....	4,739 42			6,604 63							11,344 05	7,109 05	4,235 00
D. S. Gaillard.....	Depot, Charleston, South Carolina..	217 94										217 94	173 25	45 69
Captain T. C. Legate.....	Lead mines.....	5,668 57										5,668 57	4,880 98	807 59
Sundry contractors for cannon and small arms.					57,703 65	110,612 76						168,316 41	168,316 41	
Settlements on audited accounts.....			694 24		63 78	1,772 84						2,530 86	2,530 86	
Total.....		381,827 32	70,731 69	89,895 93	68,731 70	174,054 12	25 01	2,000 00	8,000 00	6,500 00	9,635 00	811,400 77	752,458 65	58,942 12

B.

Statement of the money expended through the Ordnance department during the first, second, and third quarters of the year 1832.

Stations.	Amount transmitted in the first, second, and third quarters 1832, and remaining in officers' hands at the close of the year 1831.	Amount of accounts rendered in the first, second, and third quarters of the year 1832.	Balances remaining in officers' hands October 1, 1832.
Armory, Springfield, Massachusetts	\$156,301 71	\$145,975 95	\$10,325 76
Armory, Harper's Ferry, Virginia	171,595 15	163,197 62	8,397 53
Arsenal, Kennebec, Maine	6,331 94	5,009 51	1,322 43
Arsenal, Watertown, Massachusetts	2,196 35	2,103 65	92 70
Arsenal, Champlain, Vermont	740 98	740 98	.....
Arsenal, Watervliet, New York	35,763 39	31,458 48	4,304 91
Arsenal, Rome, New York	1,468 09	1,469 09	.....
Arsenal, Alleghany, Pennsylvania	29,444 48	25,607 64	3,836 84
Arsenal, Frankford, Pennsylvania	8,427 91	8,427 91	.....
Arsenal, Pikesville, Maryland	805 10	805 10	.....
Arsenal, Washington City	23,253 26	19,160 84	4,092 42
Arsenal, Bellona, Virginia	2,728 32	2,320 73	407 59
Arsenal, Augusta, Georgia	1,850 00	1,427 01	422 99
Arsenal, Mount Vernon, Alabama	16,282 98	14,456 86	1,826 12
Arsenal, Baton Rouge, Louisiana	3,089 33	2,139 60	949 76
Arsenal, St. Louis, Missouri	7,947 19	5,418 54	2,528 65
Depot, Detroit, Michigan Territory	3,652 53	1,512 34	2,140 19
Depot, New York	18,473 12	14,103 64	4,369 48
Depot, Charleston, South Carolina	45 69	.....	45 66
Fortress Monroe, Virginia	11,295 00	11,146 63	148 37
Lead mines	2,637 59	1,993 31	644 28
Sundry contractors for cannon and small arms	143,345 46	143,345 46	.....
Sundry payments on audited accounts	1,061 92	1,061 92	.....
Total	648,737 49	602,881 81	45,855 68

ORDNANCE OFFICE, Washington, November 24, 1832.

GEO. BOMFORD, Colonel of Ordnance.

C.

Statement of work done and articles procured and repaired at the arsenals and armories of the United States, from October 1, 1831, to September 30, 1832.

MADE AND PROCURED.

42-pounder iron cannon	1	Linstocks	49
32-pounder iron cannon	133	Portfire stocks	86
Muskets, complete	26,453	Travelling forge, complete	1
Muskets, without bayonets	1,000	Cartridge-boxes	3,051
Muskets, for cadets	13	Cartridge-box belts	2,151
Rifles, (Hall's patent)	3,490	Bayonet scabbards	6,528
Screw-drivers	22,667	Bayonet belts	2,514
Wipers	21,452	Brushes and picks	4,623
Ball-screws	1,920	Rifle pouches and belts	4,550
Spring vices	12,791	Cavalry cartridge-boxes	1,184
Flint caps	39,332	Sabre belts	1,831
32-pound casemate carriage	1	Belt plates	7,491
6-pound field carriages	90	Holsters, pairs	1,388
24-pound howitzer carriages	3	Canister bottoms	143
24-pound sea-coast carriages	10	Canisters	900
10-inch mortar beds	2	Shot blocks	2,807
6-pound caisson	1	Portfires	1,930
Sponges and rammers	131	Fuses, filled	400
Worms and staves	158	Rockets	613
Tompions, assorted	121	Quick-match, pounds	10
Implement straps	183	Slow-match, pounds	54
Cannon wads, assorted	1,918	Flannel cartridges	4,491
Handspikes, assorted	24	Cartridge bags, flannel	4,257
Prolongs	46	Paper bags with flannel bottoms	783
Bricoles	713	Priming tubes, filled	21,819
Portfire cases	230	32-pounder cannon balls	395
Tube boxes or pouches	243	Strapped shot, fixed	1,024
Gunners' haversacks	326	Canister shot, fixed	504
Sponge buckets	32	Grape shot, loose, pounds	50
Sponge covers	109	Canister shot, loose, pounds	5,214

Statement of work done and articles procured and repaired—Continued.

Musket-ball and buck-shot cartridges	384, 395	Copper, pig, bar, and sheet, pounds	61, 129
Musket cartridges, blank	58, 979	Tin, block	12, 020
Bullets, musket, pounds	11, 322	Oak timber, feet	8, 200
Bullets, rifle, pounds	540	Cypress timber, feet	626
Elevating machines	4	Oak plank, feet	71, 460
Rimmers, assorted	11	Ash plank, feet	6, 054
Gins	2	Pine plank, feet	195, 034
Gin falls	3	Pine timber hewn, feet	67, 996
Sling-cart	1	Walnut plank, feet	4, 410
Shot gauges	33	Gun-carriage timber, sets	61
Shell gauges	16	Shingles	48, 250
Shot frames	13	Bricks	356, 000
Lacquer for cannons, gallons	78	Lime, bushels	4, 066
Rocket moulds	5	Junk, pounds	4, 312
Arm-chests	467	Copper pans	9
Ammunition kegs	463	Copper powder measures	36
Packing boxes	445	Copper scoops	14
Iron, bar and sheet, pounds	98, 147	Fire engines	13
Steel, pounds	1, 032	Pumps	2
Brass, pounds	765		

REPAIRED.

Muskets	3, 562	Spring vises	1, 784
Muskets cleaned and oiled	2, 330	Sets accoutrements	124
Rifles	550	Sponges and rammers	90
Hall's patent rifles	57	Ladles and worms	39
Pistols	206	Ammunition kegs	10
Gun-carriages	10	Powder barrels	80
Travelling forge	1	Water casks	5
Screw-drivers	17, 712	Arm chests	36
Wipers	17, 712	Wagon	1
Ball-screws	1, 771	Carts	

D.

Statement of the arms, accoutrements, &c., procured, and of the expenditures made, under the act for arming the militia, from October 1, 1831, to September 30, 1832.

ARMS, ETC., PROCURED.			
Muskets, complete	8, 000	Rifle accoutrements, sets	3, 151
Rifles, (Hall's,) complete	740	Rifle flasks	1, 600
Cartridge-boxes	2, 399	Holsters, pairs	2, 087
Cartridge-box belts	2, 374	Cavalry cartridge-boxes	1, 882
Bayonet scabbards	3, 639	6-pounder field carriages, with equipments complete	84
Bayonet belts	2, 514	Sets of timber for 6-pounder field carriages	140
Belt plates	5, 930	Copper and tin for the fabrication of brass field cannon, pounds	73, 149
Sabre belts	2, 432	6-pounder cannon balls	421

EXPENDITURES, ETC.

Amount paid for arms, &c.	\$165,597 66
Amount paid for inspection, packing-boxes, storage, and distribution of the arms, &c., to the several States and Territories	7, 971 60

173, 569 26
ORDNANCE OFFICE, *Washington, November 24, 1832.*G. BOMFORD, *Colonel of Ordnance.*

E.

Apportionment of arms to the militia for the year 1831, under the act of 1808, for arming and equipping the whole body of the militia.

States and Territories.	Date of return.	Number of militia.	No. of arms apportioned in muskets.
Maine.....	1831	41, 136	472
New Hampshire.....	1831	28, 992	332
Massachusetts.....	1831	48, 319	554
Connecticut.....	1831	24, 518	281
Rhode Island.....	1831	9, 600	110
Vermont.....	1824	27, 653	317
New York.....	1830	188, 615	2, 163
New Jersey.....	1829	39, 171	449
Pennsylvania.....	1831	182, 285	2, 090
Delaware.....	1827	9, 229	106
Maryland.....	1831	46, 259	531
Virginia.....	1831	101, 488	1, 164
North Carolina.....	1831	66, 552	763
South Carolina.....	1830	49, 512	569
Georgia.....	1830	42, 832	491
Kentucky.....	1831	70, 590	810
Tennessee.....	1830	60, 982	699
Ohio.....	1831	126, 471	1, 450
Louisiana.....	1829	14, 808	170
Indiana.....	1829	40, 000	459
Mississippi.....	1830	13, 724	157
Illinois.....	1831	27, 386	314
Alabama.....	1829	30, 000	344
Missouri.....	1830	7, 838	90
Michigan.....	1831	5, 476	63
Arkansas.....	1825	2, 028	23
Florida.....	1831	827	9
District of Columbia.....	1829	1, 756	20
Total.....		1, 308, 047	15, 000

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 24, 1832.*

F.

Statement of the ordnance and ordnance stores distributed to the militia, under the act of April 1808, from October 1, 1831, to September 30, 1832.

8-pounder brass cannon.....	2	Pistols.....	5, 345
6-inch brass howitzers.....	2	Carbines.....	120
6-pounder iron cannon.....	12	Sabres.....	2, 428
24-pounder iron howitzer, with carriage and equipments complete.....	1	Swords.....	311
12-pounder field carriages, and equipments complete.....	4	Sets of infantry accoutrements.....	4, 792
6-pounder field carriages, with equipments complete.....	18	Sets of rifle accoutrements.....	975
Muskets, complete.....	12, 470	Sabre belts.....	1, 843
Rifles, complete.....	3, 185	Cavalry cartridge-boxes.....	1, 243
		Holsters, pairs.....	1, 118
		Sword belts.....	400

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 24, 1832.*

G.

Statement of the artillery, small arms, accoutrements, and other ordnance stores, issued to the troops, the Engineer department, and to the State of South Carolina, on the late war account, from October 1, 1831, to September 30, 1832.

24-pounder iron cannon	8	Carbines, complete	129
12-pounder iron cannon	3	Pistols. . . . do	2, 492
6-pounder iron cannon	4	Sergeants' and musicians' swords	28
10-inch seacoast mortar and bed	1	Cavalry sabres	1, 273
10-inch siege mortar and bed	1	Cartridge-boxes	6, 874
24-pounder iron howitzers	2	Cartridge-box belts	6, 874
24-pounder casemate, and barbette carriage, complete	8	Bayonet scabbards	5, 940
24-pounder howitzer carriages, with implements, &c., complete	2	Bayonet belts	6, 411
12-pounder field carriages, with implements, &c., complete	8	Gun slings	1, 635
6-pounder field carriages, with implements, &c., complete	14	Brushes and picks	5, 689
6-pounder caissons	2	Sets of rifle accoutrements	403
Travelling forge	1	Rifle flasks	500
Sling cart	1	Sword belts	22
Ammunition wagons	2	Sabre belts	1, 500
Powder wagon	1	Holsters, pairs	1, 200
Sponges for cannon	192	Cavalry cartridge-boxes	1, 600
Bricoles	132	Musket flints	87, 686
Prolongs	18	Rifle and pistol flints	22, 000
Gunner belts, complete	12	Cannon powder, pounds	15, 405
Tarpaulins for guns	18	Musket powder, pounds	7, 907
Linstocks	10	Rifle powder, pounds	3, 400
Portfire stocks	10	Cannon cartridges	2, 066
Gunners' haversacks	19	Musket cartridges	694, 082
Gins and falls	2	Cartridge bags, flannel	4, 027
Tompions	40	Flannel, yards	100
Sponges and rammers	22	Cannon cartridge, musket cartridge, and portfire paper, pounds	431
Ladles and worms	5	Portfires	2, 285
Handspikes	4	Priming tubes	9, 800
Sponge covers	24	Slowmatch, pounds	296
Gunners' quadrants	3	Refined nitre, pounds	150
Artillery harness, sets	48	Pulverized sulphur, pounds	80
32-pounder cannon balls	351	Percussion primers	1, 598
24-pounder cannon balls	824	Musket bullets, pounds	3, 100
24-pounder canister shot	390	Buck-shot, pounds	139
12-pounder cannon balls	300	Signal rockets	50
6-pounder cannon balls	354	Lead, pounds	290, 100
12-pounder strapped shot	353	Twine, pounds	23
6-pounder strapped shot	639	Lacquer for cannon, gallons	97
12-pounder grape and canister shot	196	Paints, assorted, pounds	439
6-pounder grape and canister shot	441	Linseed and neatsfoot oil, gallons	22
10-inch shells	150	Spirits of turpentine, gallons	3
24-pounder shells	150	Paint brushes, assorted	27
Fuses assorted	630	Shell hooks	4
Fuse saws	3	Copper funnels	6
Fuse setters	5	Sets of powder measures	2
Fuse rasps	4	Budge barrels	2
Fuse mallets	3	Shot gauges, sets	2
Copper adze and driver	1	Set of carpenter's tools, complete	1
Muskets complete	8, 444	Set of blacksmith's tools, complete	1
Rifles.do	1, 185	Iron swivels	2
		Balls for swivels	150
		Timber for skids for cannon, feet	438
		Junk wads	1, 216

G. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 24, 1832*

H.

Statement of the lead made at the United States lead mines annually, from 1821 to the 30th September, 1832.

	Fever River.	Missouri.	Total.
Pounds of lead made from 1821 to 30th September, 1823.....	335, 130	.....	335, 130
Do.....do....for the year ending 30th September, 1824...	175, 220	.....	175, 220
Do.....do.....do.....30th September, 1825...	664, 530	386, 590	1, 051, 120
Do.....do.....do.....30th September, 1826...	958, 842	1, 374, 962	2, 333, 804
Do.....do.....do.....30th September, 1827...	5, 182, 180	910, 380	6, 092, 560
Do.....do.....do.....30th September, 1828...	11, 105, 810	1, 205, 920	12, 311, 730
Do.....do.....do.....30th September, 1829...	13, 343, 150	1, 198, 160	14, 541, 310
Do.....do.....do.....30th September, 1830...	8, 323, 998	8, 060	8, 332, 058
Do.....do.....do.....30th September, 1831...	6, 381, 900	67, 180	6, 449, 080
Do.....do.....do.....30th September, 1832...	4, 281, 876	.....	4, 281, 876
Totals	50, 752, 636	5, 151, 252	55, 903, 888

GEORGE BOMFORD, *Colonel of Ordnance.*

ORDNANCE DEPARTMENT, *November 24, 1832.*

H—Continued.

Statement of the operations of the United States lead mines in the vicinity of Fever river, and in Missouri, from 30th September, 1831, to the 30th September, 1832.

	Fever River.	Missouri. ^a	Total.
Pounds of lead made.....	4, 281, 876	.....	4, 281, 876
Pounds of lead which have accrued as rent.....	238, 898	.....	238, 898
Rents remaining due 30th September, 1831.....	172, 204	.....	172, 204
Total rents due 30th September, 1832.....	411, 102	.....	411, 102
Pounds of lead received during the year.....	155, 451	.....	155, 451
Rents remaining due 30th September, 1832.....	255, 651	.....	255, 651

GEORGE BOMFORD, *Colonel of Ordnance.*

ORDNANCE DEPARTMENT, *November 24, 1832.*

^a Nothing has been done in Missouri since the passage of the act of March 5, 1829, authorizing the sale of the lead mines in that State, besides attempting to settle the accounts of the leases which had been previously granted; and these settlements appear to be now closed. G. B.

No. 8.

REPORT OF THE SURGEON GENERAL.

SURGEON GENERAL'S OFFICE, *October 20, 1832.*

SIR: In compliance with your instructions I herewith enclose duplicate estimates of the expenses of the medical department of the army and of the Surgeon General's office for the year 1833. The amount drawn and remitted to the acting apothecary from the commencement of the present year to the termination of the third quarter has been \$10,911, and the amount of accounts rendered and settled by him in the same period has been \$10,846 22. Of the expenditures made on account of the Medical department by the officers of the Quartermaster's department during the same period accounts have been rendered and settled to the amount of \$7,998 76. In consequence of the movements and sickness on the northwest frontier the expenses of the year will be somewhat greater than heretofore, and a small addition has been made to the estimate for medicines, hospital stores, and bedding.

All the officers of the department are on duty and under orders, except four, one of whom is on furlough, one in arrest by the civil authority, and two are unfit for duty in consequence of ill health.

The several reports and returns required by the regulations of the department have been duly received, and all public property under the charge of the surgeons has been satisfactorily accounted for. The number of deaths reported in hospital during the year ending June 30th has been 109, of which 18 were from consumption, 16 from intemperance and accidents, leaving 75 from all other causes.

Allow me again respectfully "to call the attention of the department to the several memorials presented, and the several reports made in relation to graduating the pay of surgeons of the army in proportion to their term of service, and especially as they are now the only subordinate officers of either army or navy whose pay has not been increased. In 1816 an additional ration was allowed to all lieutenants of the army, and subsequently an additional ration to both captains and lieutenants, with \$10 per

month to the former while on duty with their companies. In 1828 an addition of \$10 per month and one ration per day was made to lieutenants of the navy, and in the same year the pay of the surgeons and assistant surgeons of the navy was increased after the periods of five and ten years service. The senior surgeon after ten years, and 'while in actual service at sea,' receives \$85 per month more than the junior assistants, and \$37 per month more than the full pay and emoluments of the army surgeon when on actual duty with his regiment; while the latter can at no period and under no circumstances receive above \$11 per month more than the junior assistant, or than he did at his first appointment."

Very respectfully, your obedient servant,

JOSEPH LOVELL, *Surgeon General.*

Hon. LEWIS CASS, *Secretary of War.*

No. 9.

REPORT OF THE COMMISSARY GENERAL OF PURCHASES.

COMMISSARY GENERAL'S OFFICE, *Philadelphia, October 18, 1832.*

SIR: In obedience to your instructions dated on the 21st September, 1832, I have prepared and have now the honor to enclose five statements, as follows, viz:

No. 1. Statement of moneys drawn from the appropriation for the purchasing department during the first three quarters of the year 1832.

No. 2. Statement of moneys received and disbursed during the first three quarters of the year 1832 on account of the purchasing department.

No. 3. Statement of moneys disbursed during the first three quarters of the year 1832 on account of the appropriation for the purchase of woollens, per act of 1829.

No. 4. Statement of moneys received and disbursed during the first three quarters of 1832 on account of the contingencies of the army.

No. 5. Statement of moneys received and disbursed during the first three quarters of 1832 on account of the appropriation for carrying into effect certain Indian treaties, per act 2d March, 1831.

I have the honor to be your obedient servant,

CALENDER IRVINE.

Hon. LEWIS CASS, *Secretary of War.*

No. 1.

Statement of moneys drawn from the appropriation for the purchasing department (for 1832) during the first three quarters of 1832.

April 23, 1832. By Secretary of the Treasury's warrant, No. 614.....	\$40,000 00
June 11, 1832. By Secretary of the Treasury's warrant, No. 976.....	30,840 32
July 12, 1832. By Secretary of the Treasury's warrant, No. 1230.....	26,343 65
August 16, 1832. By Secretary of the Treasury's warrant, No. 1496.....	25,000 00
September 13, 1832. By Secretary of the Treasury's warrant, No. 1725.....	20,066 19
	142,250 16

COMMISSARY GENERAL'S OFFICE, *Philadelphia, October 18, 1832.*

C. IRVINE, *Commissary General of Purchases.*

Hon. LEWIS CASS, *Secretary of War.*

No. 2.

Statement of moneys received and disbursed during the first three quarters of the year 1832, on account of the purchasing department.

To amount of moneys drawn from the Treasury Department between January 1 and September 30, 1832, as per statement No. 1.....	\$142,250 16
By amount expended during the first quarter of 1832, passed to the credit of C. Irvine, commissary general of purchases, per account settled by the Second Auditor of the Treasury Department.....	\$11,971 19
By amount expended during the second quarter of 1832, and credited as above, as per account settled by the Second Auditor of the Treasury Department.....	54,828 20
By amount expended during the third quarter of 1832, as per account in preparation for transmission to the Second Auditor of the Treasury Department for examination and settlement.....	69,525 73
	136,325 12
Add this sum, \$10,000, expended during the second and third quarters of 1832, on account of the purchase of woollens in advance, per act of 1829, as per statement No. 3, borrowed in November, 1831, and repaid by disbursements on said account.....	10,000 00
Carried forward.....	146,325 12
	142,250 16

Brought forward.....	\$146, 325 12	\$142, 250 16
Deduct this sum, embraced in the above expenditures, being bills paid for goods furnished in 1831, the appropriation falling short of the amount of accounts rendered for settlement.....	4, 967 57	
Amount of disbursements on account of the appropriation for 1832		141, 357 55
Balance unexpended of moneys received on account of the appropriation for 1832 during the first three quarters of said year.....		892 61

COMMISSARY GENERAL'S OFFICE, *Philadelphia, October 18, 1832.*

C. IRVINE, *Commissary General of Purchases.*

HON. LEWIS CASS, *Secretary of War.*

No. 3.

Statement of moneys disbursed during the first three quarters of the year 1832 on account of the appropriation for the purchase of woollens, per act of 1829.

By amount of disbursements during the second quarter of the year 1832, passed to the credit of C. Irvine, commissary general of purchases, per account settled by the Second Auditor of the Treasury Department	\$2, 233 99
By amount of disbursements during the third quarter of the year 1832, as per account in preparation for transmission to the Second Auditor of the Treasury Department for examination and settlement.....	7, 766 01
	10, 000 00

COMMISSARY GENERAL'S OFFICE, *Philadelphia, October 18, 1832.*

C. IRVINE, *Commissary General of Purchases.*

HON. LEWIS CASS, *Secretary of War.*

No. 4.

Statement of moneys received and disbursed during the first three quarters of the year 1832 on account of the contingencies of the War Department.

September 17, 1832, received the Secretary of the Treasury's warrant, No. 1730, amount.....	\$551 19
September 27, 1832, paid collector of Passyunk township taxes assessed on the United States arsenal for 1832.....	551 19

COMMISSARY GENERAL'S OFFICE, *Philadelphia, October 18, 1832.*

C. IRVINE, *Commissary General of Purchases.*

HON. LEWIS CASS, *Secretary of War.*

No. 5.

Statement of moneys received and disbursed during the first three quarters of the year 1832 on account of the appropriation for carrying into effect certain Indian treaties, per act of March 2, 1831.

July 12, 1832, received the Secretary of the Treasury's warrant, No. 1210, for	\$4, 509 81
By amount of disbursements during the third quarter of 1832, passed to the credit of C. Irvine, commissary general of purchases, as per account settled by the Second Auditor of the Treasury Department	4, 509 81

COMMISSARY GENERAL'S OFFICE, *Philadelphia, October 18, 1832.*

C. IRVINE, *Commissary General of Purchases.*

HON. LEWIS CASS, *Secretary of War.*

22D CONGRESS.]

No. 533.

[2D SESSION.]

CONSOLIDATION AND ADAPTATION OF EXISTING LAWS TO THE PRESENT MILITARY ESTABLISHMENT OF THE UNITED STATES.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 10, 1832.

DEPARTMENT OF WAR, *December 8, 1832.*

SIR: In conformity with a resolution of the House of Representatives of May 7, 1832, I have the honor to transmit a report containing a "revision of the acts of Congress" so "amended and altered as to render them better adapted to the military establishment of the United States," and "digested into one act."

This report has been prepared under my superintendence by Captain Mordecai, of the ordnance corps. It is only necessary in reference to the execution of the duty to observe that the terms of the resolution restricted the action of this department to a consolidation of the various existing laws into one, and to their amendment and alteration so far as a better adaptation to the present military establishment required. Further than this I have not deemed it my duty to go, and the *projet* will, therefore, be considered, not as presenting any peculiar views of this department, but as an attempt to reconcile the various and frequently doubtful, if not contradictory, provisions of the several acts which now regulate the military establishment of the United States.

I have the honor to be, very respectfully, your obedient servant,

LEWIS CASS.

HON. ANDREW STEVENSON, *Speaker of the House of Representatives*

AN ACT concerning the military establishment of the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, and it is hereby enacted, as follows, to wit:

CHAPTER I.

Of the military peace establishment.

SECTION 1.—*Of the artillery.*

ARTICLE 1. There shall be four regiments of artillery.

ARTICLE 2. Each regiment shall consist of one colonel, one lieutenant colonel, one major, one adjutant, who shall be taken from the subalterns of the regiment, one sergeant major, one quartermaster's sergeant, and nine companies.

ARTICLE 3. Each company shall consist of one captain, two first lieutenants, two second lieutenants, four sergeants, four corporals, three artificers, two musicians, and forty-two privates.

ARTICLE 4. One company of each regiment shall be designated and equipped as light artillery.

SECTION 2.—*Of the infantry.*

ARTICLE 5. There shall be seven regiments of infantry.

ARTICLE 6. Each regiment shall consist of one colonel, one lieutenant colonel, one major, one adjutant, who shall be taken from the subalterns of the regiment, one sergeant major, one quartermaster's sergeant, two principal musicians, and ten companies.

ARTICLE 7. Each company shall consist of one captain, one first lieutenant, one second lieutenant, three sergeants, four corporals, two musicians, and forty-two privates.

SECTION 3.—*Of the mounted rangers.*

ARTICLE 8. There shall be a *corps* of mounted rangers which shall consist of one major and six companies.

ARTICLE 9. Each company shall consist of one captain, one first lieutenant, two second lieutenants, five sergeants, five corporals, and one hundred privates.

SECTION 4.—*Of the general officers and their aides-de-camp.*

ARTICLE 10. There shall be one major general and two brigadier generals.

ARTICLE 11. A major general shall have two aides-de-camp; a brigadier general, one aide-de-camp.

ARTICLE 12. The aides-de-camp shall be taken from the subalterns of the line of the army.

SECTION 5.—*Of the Adjutant General's department.*

ARTICLE 13. There shall be one adjutant general, with the rank of colonel.

ARTICLE 14. The aides-de-camp of general officers shall, in addition to their other duties, perform those of assistant adjutant general.

ARTICLE 15. *The officers of the Adjutant General's department shall perform such duties as may be required of them, according to military usage and regulations, relative to the distribution of orders to the troops, details of service, military correspondence, and other duties of like nature.*

SECTION 6.—*Of the Inspectors' department.*

ARTICLE 16. There shall be two inspectors general, with the rank of colonel.

ARTICLE 17. *The officers of the Inspectors' department shall perform such duties as may be required of them, according to military usage and regulations, relative to mustering and inspecting the troops, and other duties of like nature.*

SECTION 7.—*Of the Topographical department.*

ARTICLE 18. There shall be six topographical engineers, with the rank of major; and four assistant topographical engineers, with the rank of captain.

ARTICLE 19. *The officers of the Topographical department shall perform such duties as may be required of them, according to military usage and regulations, relative to reconnoitering, making surveys and plans, and other duties of like nature.*

SECTION 8.—*Of the Quartermaster's department.*

ARTICLE 20. There shall be one quartermaster general, with the rank of brigadier general; four quartermasters, with the rank of major; and twenty assistant quartermasters, who shall be taken from the officers of the line of the army.

ARTICLE 21. It shall be the duty of the officers of the Quartermaster's department to provide quarters for the troops, and, when directed by the Secretary of War, to procure and issue military stores and other supplies requisite for their use; also to provide means of transportation for the troops, and for the clothing, stores, artillery, and camp and garrison equipage intended for the military service.

ARTICLE 22. The quartermaster general shall, under the direction of the Secretary of War, prescribe a system of accountability for the clothing and camp and garrison equipage issued to the troops; and he shall be responsible for the regularity and correctness of all returns in the Quartermaster's department.

ARTICLE 23. Assistant quartermasters shall, in addition to their other duties, be subject, under the orders of the Secretary of War, to do duty in the Subsistence department.

ARTICLE 24. The senior officer of the Quartermaster's department, attached to any separate army, command, or district, shall be authorized, with the approbation and under the direction of the Secretary of War, to employ as many artificers, mechanics, and laborers as the public service may require.

SECTION 9.—*Of the Subsistence department.*

ARTICLE 25. There shall be one commissary general of subsistence, with the rank of colonel; one commissary, with the rank of major; one other commissary, who shall be taken from the officers of the line of the army; and as many assistant commissaries as the service may require, not exceeding fifty, who shall be taken from the subalterns of the line.

ARTICLE 26. It shall be the duty of the officers of the Subsistence department, under the direction of the Secretary of War, to procure and issue rations for the troops.

ARTICLE 27. Assistant commissaries of subsistence shall, in addition to their other duties, be subject, under the orders of the Secretary of War, to do duty in the Quartermaster's department.

SECTION 10.—*Of the Purchasing department.*

ARTICLE 28. There shall be one commissary general of purchases, and two military storekeepers, to be attached to the Purchasing department.

ARTICLE 29. The commissary general of purchases shall be appointed for the term of four years.

ARTICLE 30. It shall be his duty, under the direction of the Secretary of War, to procure clothing and camp and garrison equipage for the troops.

SECTION 11.—*Of the Pay department.*

ARTICLE 31. There shall be one paymaster general, and fifteen paymasters, one of whom shall be taken from the subalterns of the corps of engineers.

ARTICLE 32. All officers of the Pay department shall be appointed for the term of four years.

ARTICLE 33. It shall be the duty of the paymasters to pay the troops. The paymaster general shall perform the duties of his office agreeably to the directions of the Secretary of War.

ARTICLE 34. Each paymaster shall be allowed a capable non-commissioned officer as a clerk.

ARTICLE 35. The troops shall be paid once, at least, if it be practicable, in every term of two months.

ARTICLE 36. Each paymaster shall make, once in two months, to the paymaster general, a correct report, showing the disposition of the funds previously transmitted to the said paymaster, and containing an accurate estimate for the next payment of such of the troops as it may be his duty to pay.

ARTICLE 37. No assignment of pay made by a non-commissioned officer or private soldier shall be valid.

SECTION 12.—*Of the Medical department.*

ARTICLE 38. There shall be one surgeon general, and twelve surgeons, and fifty-five assistant surgeons.

ARTICLE 39. *The officers of the Medical department, besides performing professional services for the troops, shall, under the direction of the Secretary of War, procure and issue medicines and hospital stores and supplies for their use.*

SECTION 13.—*Of the Engineer department.*

ARTICLE 40. There shall be a corps of engineers, which shall consist of one colonel, one lieutenant colonel, two majors, six captains, six first lieutenants, and six second lieutenants.

ARTICLE 41. The selection of the commander of the corps of engineers shall not be confined to that corps.

ARTICLE 42. The officers of the corps of engineers shall superintend the construction of military works,

and shall be subject at all times to do duty in such places and on such service as the President of the United States shall direct.

ARTICLE 43. A military academy shall be established at West Point, in the State of New York. *It shall be conducted by the commander of the corps of engineers, under the direction of the President of the United States.*

ARTICLE 44. It shall consist of the corps of engineers and the following officers, to wit: a professor and an assistant professor of natural and experimental philosophy; a professor and an assistant professor of mathematics; a professor and an assistant professor of the art of engineering; a chaplain, who shall be also professor of geography, history, and ethics; a teacher of the French language; and a teacher of drawing.

ARTICLE 45. *One of the officers* of the corps of engineers shall be the superintendent of the Military Academy, and, in his absence from the academy, the officer highest in rank of the said corps, present then on duty, shall perform the duties of superintendent.

ARTICLE 46. The professors and assistant professors of philosophy, mathematics, and engineering may be taken from the corps of engineers; *and the President of the United States may attach to the Military Academy such other officers of the army as may be necessary to perform the duties of instructors.*

ARTICLE 47. The academical staff, as such, shall not be entitled to any command in the army separate from the academy.

ARTICLE 48. The Secretary of War shall cause to be procured, at the public expense, under such regulations as shall be directed by the President of the United States, the necessary tools, implements, and apparatus for the use of the Military Academy.

ARTICLE 49. The President of the United States may appoint cadets of *the army*, not exceeding two hundred and sixty in number.

ARTICLE 50. No person shall be appointed a cadet who, at the time of his appointment, shall be less than fourteen or more than twenty-one years of age; and each cadet, previous to his appointment, shall be well versed in reading, writing, and arithmetic; and shall, with the consent of his parent or guardian, sign articles by which he shall engage to serve five years, unless sooner discharged.

ARTICLE 51. The cadets shall be attached, as students, to the Military Academy; but they shall be subject at all times to do duty in such places and on such service as the President of the United States may direct. They shall be arranged into companies, to each of which there shall be added four musicians; and they shall be instructed in all the duties of privates, non-commissioned officers, and officers, and in all those incident to a regular camp, for which purpose they shall be encamped at least *two* months in each year.

ARTICLE 52. When a cadet, after having gone through all the classes at the Military Academy, shall have received a regular degree from the academic staff, he shall be considered a candidate for a commission in any *regiment or corps* of the army the duties of which he may be judged competent to perform; and in case there shall not at the time be a vacancy in such *regiment or corps*, he may be attached to it, at the discretion of the President of the United States, by brevet of the lowest grade, until a vacancy shall happen; provided, that there shall not be more than one supernumerary officer to any one company at the same time.

SECTION 14.—*Of the Ordnance department.*

ARTICLE 53. There shall be an ordnance *corps*, which shall consist of one colonel, one lieutenant colonel two majors, and ten captains.

ARTICLE 54. The President of the United States may cause to be selected from the regiments of artillery as many subalterns as he may deem necessary for duty in the ordnance department.

ARTICLE 55. *It shall be the duty of the officers of the ordnance department to provide, preserve, and issue to the troops ordnance and ordnance stores for the military service, including cannon and other pieces of ordnance, cannon balls, shot, shells, carriages, ammunition wagons, forges, artificers' wagons, small arms, side arms, and other equipments, gunpowder, all kinds of ammunition and ordnance stores, and materials, implements, and apparatus of ordnance requisite for garrison, field, or siege service.*

ARTICLE 56. The Secretary of War may appoint as many ordnance sergeants as the service may require, not exceeding one for each military post. They shall be selected from the sergeants of the army who shall have faithfully served not less than eight years, during at least four of which they shall have been non-commissioned officers.

ARTICLE 57. The ordnance sergeant at any military post shall, under the direction of the commanding officer of the post, and according to such regulations as shall be prescribed by the Secretary of War, receive and preserve the ordnance and ordnance stores of the post.

ARTICLE 58. The *chief* of the Ordnance department shall, under the direction of the Secretary of War, enlist as many master armorers, master carriage-makers, master blacksmiths, artificers, armorers, carriage-makers, blacksmiths, and laborers, as the public service in the ordnance department may require, not exceeding, in all, two hundred and fifty.

ARTICLE 59. He shall attach to any separate body of troops the necessary artificers and other workmen, with proper carriages and equipments, under such regulations and restrictions as to their government and number as the Secretary of War shall direct.

ARTICLE 60. He shall direct the inspection and proof of all ordnance and ordnance stores purchased for the military service, and the construction and preparation of such as may be manufactured or prepared in the ordnance department.

ARTICLE 61. He shall furnish estimates, and, under the direction of the Secretary of War, shall make the necessary contracts and purchases for procuring supplies of ordnance and ordnance stores.

ARTICLE 62. He shall make to the War Department half yearly, or oftener if so directed, a correct report, in such form as the Secretary of War shall prescribe, of the officers and other persons, and of the ordnance and ordnance stores, in the ordnance department.

ARTICLE 63. The chief of the Ordnance department, or the senior officer of that department in any separate army, command, or district, shall execute the orders of the Secretary of War, and, in time of war, the orders of any general or field officer commanding any army, garrison, or detachment, for the supply of ordnance and ordnance stores for garrison, field, or siege service.

ARTICLE 64. The President of the United States shall cause to be established and preserved the armories and arsenals which may be deemed necessary for the manufacture, repair, and preservation of

ordnance and ordnance stores for the military service; but no such armory or arsenal shall be erected in any State until a cession or purchase of the land necessary for its accommodation shall have been made, on behalf of the United States, with the consent of the legislature of the State.

ARTICLE 65. In each armory there shall be employed one superintendent, who shall be appointed by the President of the United States, and who shall receive one hundred dollars a month and four rations a day, or an equivalent in money; one master armorer, who shall be appointed in like manner, and shall receive fifty dollars a month and two rations a day, or an equivalent in money; and as many workmen as the Secretary of War shall deem necessary.

ARTICLE 66. The *chief* of the Ordnance department shall establish such depots of ordnance and ordnance stores as the Secretary of War may deem necessary.

ARTICLE 67. The armories and arsenals of the United States shall be placed under the direction of the Ordnance department.

ARTICLE 68. The *chief* of the Ordnance department shall, under the direction of the Secretary of War, prescribe a system of regulations for the government of persons employed in the armories and arsenals, and for the manufacture, repair, and preservation of ordnance and ordnance stores.

ARTICLE 69. The officer or other person in charge of any arsenal, depot, or magazine, shall make to the chief of the Ordnance department, quarterly, or oftener if so directed, a correct return, in such form as may be prescribed, of all ordnance and ordnance stores in his charge.

ARTICLE 70. An account of the expenses of the national armories, and of the arms made and repaired therein, shall be annually laid before Congress.

ARTICLE 71. Any person retained or employed in any arsenal or armory of the United States who shall wantonly or carelessly break, impair, or destroy any implements, tools, or utensils, or any stock or materials for making guns, the property of the United States; or who shall wilfully and obstinately refuse to perform the services lawfully assigned to him, pursuant to his contract, shall forfeit for every such offence a sum not exceeding twenty dollars, to be recovered in any court having jurisdiction of the offence.

ARTICLE 72. Any person who shall procure or entice any artificer or workman retained or employed in any arsenal or armory of the United States to depart from the same during the term of his engagement, or to avoid or break his contract with the United States; or who, after due notice of the engagement of any such artificer or workman, shall, during the continuance of such engagement, retain, hire, or in any wise employ, harbor, or conceal such artificer or workman, shall, upon conviction before any court having cognizance of the offence, be fined, at the discretion of the court, in any sum not exceeding fifty dollars, or be imprisoned for any term not exceeding three months.

SECTION 15.—*Of pay and emoluments.*

ARTICLE 73. There shall be allowed to the officers and other persons in the military peace establishment of the United States pay and emoluments as follows, to wit:

1. To a major general, two hundred dollars a month, fifteen rations a day, forage for seven horses, and four servants.

2. To a brigadier general and to the quartermaster general, each, one hundred and four dollars a month, twelve rations a day, forage for five horses, and three servants.

3. To an aide-de-camp to a major general, twenty-four dollars a month, in addition to his pay in the line, and forage for two horses, *if not otherwise entitled to forage.*

4. To an aide-de-camp to a brigadier general, twenty dollars a month, in addition to his pay in the line, and forage for two horses, *if not otherwise entitled to forage.*

5. To the adjutant general and to an inspector general, each, ninety dollars a month, six rations a day, forage for five horses, and two servants.

6. To the commissary general of subsistence, ninety dollars a month, six rations a day, forage for four horses, and two servants.

7. To a topographical engineer, to a quartermaster, and to the commissary of subsistence, having the rank of major, each, sixty dollars a month, four rations a day, forage for four horses, and two servants.

8. To an assistant quartermaster, and to the other commissary of subsistence, each, not less than ten nor more than twenty dollars a month, in addition to his pay in the line, to be regulated by the Secretary of War, and forage for two horses, *if not otherwise entitled to forage.*

9. To an assistant commissary of subsistence, not less than ten nor more than twenty dollars a month, in addition to his pay in the line, to be regulated by the Secretary of War.

10. To the commissary general of purchases, three thousand dollars a year.

11. To a military storekeeper in the purchasing department, a salary not exceeding the pay and emoluments of a captain of infantry, to be regulated by the Secretary of War according to the duty which the storekeeper may perform.

12. To the paymaster general and to the surgeon general, each, two thousand five hundred dollars a year.

13. To a surgeon, forty-five dollars a month, three rations a day, forage for two horses, and one servant.

14. To an assistant surgeon, forty dollars a month, two rations a day, forage for two horses, and one servant.

15. To a colonel, seventy-five dollars a month, six rations a day, forage for four horses, and two servants.

16. To a lieutenant colonel and to the professor of natural and experimental philosophy in the Military Academy, each, sixty dollars a month, five rations a day, forage for three horses, and two servants.

17. To a major, to a paymaster, to a chaplain, and to the professor of mathematics and the professor of the art of engineering in the Military Academy, each, fifty dollars a month, four rations a day, forage for three horses, and two servants.

18. To an adjutant, ten dollars a month, in addition to his pay in the line, and forage for two horses, *if not otherwise entitled to forage.*

19. To a captain, to an assistant topographical engineer, and to the assistant professor of philosophy, the assistant professor of mathematics, the assistant professor of the art of engineering, the teacher of the French language, and the teacher of drawing in the Military Academy, each, forty dollars a month, four rations a day, and one servant.

20. To a first lieutenant, thirty dollars a month, four rations a day, and one servant.

21. To a second lieutenant, twenty-five dollars a month, four rations a day, and one servant.
22. To each captain and subaltern of the corps of mounted rangers, forage for two horses, in addition to the other emoluments of his grade.
23. To a graduate of the Military Academy attached by brevet to any regiment or corps, the pay and emoluments of his brevet grade.
24. To a cadet, sixteen dollars a month and two rations a day.
25. To a sergeant major and to a quartermaster's sergeant, each, nine dollars a month and one ration a day.
26. To an ordnance sergeant, thirteen dollars a month and one ration a day.
27. To a sergeant of artillery or infantry and to a principal musician, each, eight dollars a month and one ration a day.
28. To a corporal of artillery or infantry, seven dollars a month and one ration a day.
29. To an artificer of artillery, ten dollars a month and one ration a day.
30. To a musician, six dollars a month and one ration a day.
31. To a private of artillery or infantry, five dollars a month and one ration a day.
32. To a non-commissioned officer and to a private of the corps of mounted rangers, each, one dollar a day, in full compensation for his services and the use of his arms and horse.
33. To a master armorer, a master carriage-maker, and a master blacksmith, of the ordnance department, each thirty dollars a month and one ration and a half a day.
34. To an armorer, a carriage-maker, and a blacksmith, of the ordnance department, each sixteen dollars a month and one ration and a half a day.
35. To an artificer of the ordnance department, thirteen dollars a month and one ration a day.
36. To a laborer of the ordnance department, nine dollars a month and one ration a day.

ARTICLE 74. There shall also be allowed:

1. To the commanding officer of each separate post, such additional number of rations daily as the President of the United States shall, from time to time, direct, having respect to the special circumstances of each post.
2. To each officer in the actual command of a company, ten dollars a month, in addition to his other pay, as a compensation for his duties and responsibilities with respect to the clothing, arms, and equipments of the company.
3. To an officer having a brevet commission, the pay and emoluments of his brevet grade when on duty, and having a command according to his brevet rank, and at no other time.
4. To any officer who shall be obliged to incur any extra expense in travelling *to and from*, and sitting on, a general court-martial, a reasonable compensation for such extra expense, actually incurred, not exceeding one dollar and twenty-five cents a day, to an officer not entitled to forage, and one dollar a day to an officer entitled to forage.
5. To the person acting as judge advocate at a general court-martial, one dollar and twenty-five cents a day, in addition to his other pay, for every day he shall be necessarily employed in the duties of the court.
6. To a non-commissioned officer employed as clerk to a paymaster, double pay whilst so employed, and the actual expense of transportation while travelling under orders in the discharge of his duty.
7. To every enlisted soldier employed at work on fortifications, in surveys, in cutting roads, or other constant labor, if not less than ten days, fifteen cents a day, in addition to his other pay, and an extra gill of whiskey or spirits for each day while so employed.
8. To each matron or nurse necessarily employed in a hospital, and to each of the women allowed to any body of troops, not exceeding the proportion of four to a company, one ration a day.

ARTICLE 75. A subaltern officer on any staff duty, (except that of aide-de-camp to a major general,) for which he receives an extra compensation, shall be allowed three rations a day whilst in the performance of such duty, instead of the number to which he may be otherwise entitled.

ARTICLE 76. Every officer who shall not have drawn his rations in kind shall be allowed twenty cents for each ration to which he may be entitled.

ARTICLE 77. Every officer who shall not have drawn his forage in kind shall be allowed eight dollars a month for each horse for which he may be entitled to forage: *Provided*, That neither forage nor money shall be drawn for any horse not actually kept in service.

ARTICLE 78. Every officer shall be entitled, for each private servant allowed to him and actually kept in service, to the pay, rations, and clothing of a private soldier, or money in lieu thereof, on a certificate in the pay account setting forth the name and description of the servant: *Provided*, That none but company officers shall be allowed to take soldiers of the army as servants or waiters.

ARTICLE 79. Every officer whose duty shall require him to be on horseback in time of action, and whose horse shall have been killed in battle, shall be allowed a sum not exceeding two hundred dollars as a compensation for the loss of each horse so killed; the value of such horse to be proved by the affidavit of the quartermaster of the body of troops to which the owner may belong, or of two other credible witnesses.

ARTICLE 80. Every officer or soldier who shall have been discharged from the service, except by way of punishment for any offence, shall be allowed his pay and rations, or an equivalent in money, for such time as shall be sufficient for him to travel from the place of his discharge to the place of his residence, computed at the rate of twenty miles a day.

ARTICLE 81. Each enlisted workman, artificer, and laborer of the ordnance department shall be allowed the same clothing and other allowances as a private of infantry, except clothing to master workmen.

SECTION 16.—*Of recruiting.*

ARTICLE 82. A recruit for the military service shall be an effective, able-bodied citizen of the United States, not less than five feet six inches high, and not less than eighteen nor more than thirty-five years of age, and he shall be engaged to serve for five years, unless sooner discharged.

ARTICLE 83. The above regulations relative to the height and age of a recruit shall not extend to musicians, or to those soldiers who may re-enlist into the service.

ARTICLE 84. There shall be paid to each duly enlisted recruit a bounty of twelve dollars, the payment of one-half of which shall be deferred until he shall have been mustered, and shall have joined a body of troops in which he is to serve.

ARTICLE 85. There shall be paid to each commissioned officer employed in the recruiting service the sum of two dollars for each recruit duly enlisted by him, and mustered.

ARTICLE 86. *The preceding regulations shall not extend to enlistments for service in the corps of mounted rangers, or in the ordnance department.*

ARTICLE 87. Enlisted men of the corps of mounted rangers shall be engaged to serve for one year, unless sooner discharged.

ARTICLE 88. Enlisted men of the ordnance department shall be engaged to serve for five years, unless sooner discharged.

ARTICLE 89. All enlistments in the military service of the United States shall be voluntary.

ARTICLE 90. No person under the age of twenty-one years shall be enlisted or held in the service of the United States without the previous consent of his parent or guardian, if he have any.

ARTICLE 91. Any officer who shall enlist any person contrary to law shall forfeit, for every such offence, a sum equal to the value of the bounty and clothing which the person so enlisted may have received from the United States; which sum shall be deducted from the pay and emoluments of such officer.

SECTION 17.—*Of pensions.*

ARTICLE 92. If any officer or other person on the military peace establishment shall be disabled, by wounds or otherwise, while in the line of his duty in public service, he shall be placed on the list of invalid pensioners of the United States, at such rate of pay and under such regulations as may be directed by the President of the United States for the time being.

ARTICLE 93. To all persons on the military pension roll of the United States, of the grades hereinafter mentioned, there shall be allowed, for the highest rate of disability, the following monthly pensions, to wit: to a first lieutenant, seventeen dollars; to a second lieutenant, fifteen dollars; to a cadet, ——— dollars; to a non-commissioned officer, musician, or private, or other enlisted soldier, eight dollars; and for disabilities of a degree less than the highest, a sum proportionably less: *Provided*, That nothing herein contained shall be construed to lessen the pension of any person entitled, by special provision, to a higher pension than is herein provided.

ARTICLE 94. The monthly pension to be allowed for such wounds or disabilities, to a commissioned officer of any other than the above-mentioned rates, shall not exceed, for the highest rate of disability, half the monthly pay of such officer at the time of his being wounded or disabled; and no officers shall receive more than the half-pay of a lieutenant colonel.

ARTICLE 95. If any commissioned officer on the military peace establishment shall, while in the service of the United State, die, by reason of any wound received in actual service, and shall leave a widow, or, if no widow, a child or children, under sixteen years of age, such widow, or, if no widow, such child or children, shall receive, for the term of five years, half the monthly pay to which the deceased was entitled at the time of his death. In case of the death or intermarriage of such widow, before the expiration of the said term of five years, the half-pay for the remainder of the term shall go to the child or children, if any, of such deceased officer; and shall cease in the case of the death of such child or children before the expiration of said term.

ARTICLE 96. The right of any person to receive a pension in virtue of any of the foregoing provisions shall be construed to commence at the time of completing the testimony required to substantiate the claim of such person.

SECTION 18.—*Miscellaneous provisions.*

ARTICLE 97. The President of the United States may, by and with the advice and consent of the Senate, confer brevet rank on those officers of the army who shall have distinguished themselves by gallant actions or meritorious conduct, or who shall have served ten years in any one grade.

ARTICLE 98. The President of the United States may appoint those officers of the staff who are to be taken from the line of the army; and the appointment of such officers in the staff shall not prejudice their rank and promotion in the line.

ARTICLE 99. In the ordinary arrangement of the troops a division shall consist of two brigades, and shall be commanded by a major general; a brigade shall consist of two regiments, and shall be commanded by a brigadier general; but this arrangement may be varied at the discretion of the general commanding an army; and this article shall not be construed to require the appointment of a greater number of general officers than are, or may be, authorized by law.

ARTICLE 100. The President of the United States shall be authorized to prescribe the uniform of the army, and the manner in which the troops shall be armed and equipped; and also the composition of the ration, and the quantity and kind of clothing, camp equipage, medicines, and hospital stores, and other supplies which shall be issued for their use.

ARTICLE 101. The non-commissioned officers and privates of the corps of mounted rangers shall arm and equip themselves, unless otherwise ordered by the President of the United States; and they shall provide their own horses.

ARTICLE 102. The Secretary of War shall prepare general regulations for the army, not inconsistent with the provisions of law, better defining and prescribing the duties and powers of the officers and other persons on the military establishment; which regulations, when approved by the President of the United States, shall be respected and obeyed until they shall have been altered or revoked by the same authority.

ARTICLE 103. The Secretary of War may in each year make, or cause to be made, purchases and contracts for the purpose of procuring the clothing, camp equipage, medicines, and hospital stores requisite for the use of the troops during the succeeding year.

ARTICLE 104. Supplies of subsistence stores for the troops, unless, in particular and urgent cases, the Secretary of War should otherwise direct, shall be purchased by contract to be made by the commissary general, on public notice, under such regulations as the Secretary of War may prescribe, and such supplies shall be delivered, on inspection, in the bulk at such places as shall be specified in the contract.

ARTICLE 105. No officer of any department of the military establishment shall be concerned, except on account of the United States, in the purchase or sale of any article intended for the military service in the department to which he may belong, nor shall he accept any emolument other than what is or may be allowed by law for transacting any business in such department.

ARTICLE 106. *All officers of the military establishment* shall, when required thereto by order of the President of the United States, perform the duties of their respective offices with regard to the militia or volunteer forces who may be at any time in the service of the United States, as well as with regard to the regular forces.

ARTICLE 107. It shall be the duty of the proper officers of the staff of the army, on the requisition of the commanding officer of any detachment of seamen or marines of the navy of the United States which may be acting, or proceeding to act, on shore in conjunction with the land troops, to provide the officers, seamen, and marines of such detachment with rations and camp equipage, and the means of transportation for themselves and their baggage, provisions, artillery, and military stores, according to the relative rank and station of each, and to the military regulations in such cases, and also to furnish the commanding naval officer of any such detachment and his necessary aids with horses, accoutrements, and forage during the time they may be employed in co-operating with the land troops: *Provided*, That the cost of the rations which may be furnished shall be reimbursed at the contract price out of the appropriations for the support of the navy.

ARTICLE 108. Every officer of the quartermaster's, subsistence, purchasing, and pay departments, previously to entering on the execution of his office, shall take an oath *faithfully to perform the duties thereof*, and shall give a good and sufficient bond to the United States, to be approved by the Secretary of War, in such sum as the President of the United States shall direct, with condition fully to account for all money and public property which he may receive for the military service.

ARTICLE 109. The Secretary of War may allow to the quartermaster general and to the commissary general of purchases such sums as shall have been actually and, in his opinion, necessarily expended in their respective departments for office rent, fuel, candles, and extra clerk hire.

ARTICLE 110. The Secretary of War may make reasonable allowances for the store rent, storage, and salaries of storekeepers necessary for the safe-keeping of military stores and supplies.

ARTICLE 111. Every captain or commander of a company, detachment, or recruiting station, or other officer, who shall have received clothing or camp equipage for the use of his command or to be issued to the troops, shall render to the quartermaster general quarterly returns of such supplies, according to the forms which may be prescribed, accompanied by the requisite vouchers for any issues that shall have been made, which returns and vouchers shall, after due examination by the quartermaster general, be transmitted for settlement to the proper officer of the Treasury Department.

ARTICLE 112. It shall be the duty of all officers charged with issuing to the troops clothing or other supplies carefully to preserve the same, and any loss or damage of any article of supplies which shall appear on final settlement shall be made good by stoppages from the monthly pay of the officer accountable for such article, unless it shall be satisfactorily shown to the Secretary of War, by one or more depositions setting forth the circumstances of the case, that such loss or damage was occasioned by unavoidable accident, or occurred in actual service, without any fault on the part of such officer.

ARTICLE 113. Every officer commanding a regiment, corps, garrison, or detachment, shall make to the chief of the Ordnance department, once in every two months, or oftener if so directed, a written report stating the damages done to arms or equipments in the use of the troops under his command, and specifying the officer or soldier by whose abuse or negligence any of such damages may have been occasioned, and the cost of repairing any damages occasioned by such abuse or negligence shall be deducted from the pay of such officer or soldier.

ARTICLE 114. Whenever more than the authorized quantity of clothing shall have been issued to a soldier the value of the extra articles shall be deducted from his pay, and he shall receive pay according to the estimated value for such articles of clothing as shall not have been issued to him in each year; and, in like manner, any soldier discharged from the service shall receive pay for any articles of clothing that may be due to him.

ARTICLE 115. Every non-commissioned officer or soldier of the regular forces, and every officer or soldier of any militia or volunteer forces in the service of the United States who may be captured by the enemy, shall be entitled to receive during his captivity, although his term of service may have expired, the same pay, subsistence, and other allowances to which he may have been entitled whilst in actual service: *Provided*, That no prisoner of war of the militia shall be entitled, after the date of his parole, to receive such pay and allowances other than the travelling expenses allowed by law.

ARTICLE 116. No non-commissioned officer or soldier in the service of the United States shall be subject to personal arrest for any debt under the sum of twenty dollars contracted before enlistment, nor for any debt contracted after enlistment.

ARTICLE 117. Whenever any non-commissioned officer or soldier shall have been arrested, whether by mesne process or in execution, contrary to the intent of the preceding article, it shall be the duty of any judge of a district court of the United States, or of any court or judge of a State, duly authorized by the laws of such State, to grant, on application by an officer, a writ of *habeas corpus*, returnable before himself; and upon due hearing and examination in a summary manner, to discharge the non-commissioned officer or soldier from such arrest, taking common bail, if required, in any case upon mesne process, and to commit him to the applicant or some other officer.

ARTICLE 118. *All persons in the military service of the United States*, and all artificers, workmen, and laborers, (*though not enlisted men*,) employed on the fortifications, in the armories, or arsenals of the United States, shall be exempted, during their term of service, from duty in the militia, and from service as jurors in any court.

ARTICLE 119. Any person who shall procure or entice any soldier in the service of the United States to desert, or who shall purchase from any soldier his arms, uniform clothing, or any part thereof; and any captain or commanding officer of any ship or vessel who shall knowingly enter a deserter on board of such ship or vessel as one of his crew, or otherwise carry him away, or refuse to deliver him up to the orders of his commanding officer, shall, upon legal conviction, be fined, at the discretion of any court having cognizance of the offence, in any sum not exceeding three hundred dollars, or be confined for any term not exceeding one year.

ARTICLE 120. It shall be lawful for the President of the United States to cause fortifications to be erected and preserved, under his direction, in such places as the public safety may, in his opinion, require them; and to cause them to be provided with such armament, and to be garrisoned by such troops in the service of the United States, as he may judge necessary.

ARTICLE 121. It shall also be lawful for him to receive, in behalf of the United States, a cession of the land occupied from any State, or intended to be occupied by the fortifications, *armories, or arsenals*, of

the United States; or the necessary buildings; and where such cession has not been or shall not be made, to purchase such lands on behalf of the United States: provided, that no such purchase shall be made where such lands may be the property of a State.

ARTICLE 122. The President of the United States shall, whenever he may deem it advantageous to the public service, cause to be sold, under such regulations as shall be prescribed by the Secretary of War, any ordnance, ordnance stores, or subsistence or medical supplies, which, upon proper inspection and survey by one inspector general, or such other officer or officers as the Secretary of War may appoint for that purpose, shall appear to be damaged, or otherwise unfit for service.

CHAPTER II.

Rules and articles of war for the government of the armies of the United States.

SECTION 1.—*Of divine worship.*

ARTICLE 1. It is earnestly recommended to all officers and soldiers diligently to attend divine service; and any officer who shall behave himself indecently or irreverently at any place of divine worship shall be brought before a general court-martial, there to be publicly and severely reprimanded by the president. Any non-commissioned officer or soldier convicted before a court-martial of having so offended shall, for his first offence, forfeit one-sixth of a dollar, to be deducted out of his next pay; and for the second, and every subsequent like offence, he shall forfeit a like sum, and be confined twenty-four hours. The money so forfeited shall be applied, by the commanding officer of the troop or company to which the offender may belong, to the use of the sick soldiers of such troop or company.

ARTICLE 2. Any commissioned officer who shall use any profane oath or execration shall forfeit and pay for each and every such offence one dollar, to be applied as in the preceding article; and any non-commissioned officer or soldier so offending shall incur the penalties expressed in the preceding article.

ARTICLE 3. Any commissioned chaplain who shall be convicted, before a general court-martial, of having absented himself from his duty, (except in case of sickness or leave of absence,) shall be fined not exceeding one month's pay, besides the loss of his pay during such absence from duty; or shall be discharged from the service, as the said court-martial shall judge proper.

SECTION 2.—*Of crimes and punishments.*

ARTICLE 4. Any officer or soldier who shall begin, excite, cause, or join in any mutiny or sedition in any troop, company, garrison, detachment, party, or guard, in the service of the United States, shall, on conviction thereof, suffer death, or such other punishment as shall be awarded by a general court-martial.

ARTICLE 5. Any officer or soldier who, being present at any military sedition, shall not use his utmost endeavor to suppress the same, or who, coming to the knowledge of any mutiny, or intended mutiny, shall not, without delay, give information thereof to his commanding officer, shall, on conviction thereof, suffer death, or such other punishment as shall be awarded by a general court-martial.

ARTICLE 6. Any officer or soldier who shall desert from the service of the United States shall, on conviction thereof, suffer death, or such other punishment as shall be awarded by a general court-martial.

ARTICLE 7. Any officer or soldier who shall advise or persuade any other officer or soldier to desert from the service of the United States, or any non-commissioned officer or soldier who, without a regular discharge from the regiment, troop, or company in which he last served, shall enlist in any other regiment, troop, or company, shall be reputed a deserter, and shall suffer accordingly.

ARTICLE 8. Any officer or soldier who shall hold correspondence with, or give intelligence to, the enemy, directly or indirectly, or who shall relieve the enemy with victuals or ammunition, or shall knowingly harbor or protect an enemy, shall, on conviction thereof, suffer death, or such other punishment as shall be awarded by a general court-martial.

ARTICLE 9. Any officer or soldier who shall misbehave himself before the enemy, run away, or shamefully abandon or deliver up any fort, post, garrison, or guard, committed to his charge, or which it was his duty to defend, or speak words inducing others to do the like, or who shall compel the commander of any fort, post, garrison, or guard, to deliver it up to the enemy, or to abandon it, shall, on conviction thereof, suffer death, or such other punishment as shall be awarded by a general court-martial.

ARTICLE 10. Any officer or soldier who shall quit his post or colors to plunder and pillage, or who shall cast away his arms or ammunition, shall, on conviction thereof, suffer death, or such other punishment as shall be awarded by a general court-martial.

ARTICLE 11. Any officer or soldier who shall strike a superior officer, or draw or lift up any weapon, or offer any violence against him, being in the execution of his office, or who shall disobey any lawful command of a superior officer, shall, on conviction thereof, suffer death, or such other punishment as shall be awarded by a general court-martial.

ARTICLE 12. Any officer or soldier who, being employed in foreign parts, shall force a safe-guard, or who shall do violence to any person bringing provisions or other necessaries to the camp, garrison, or quarter of the troops of the United States employed in foreign parts, shall, on conviction thereof, suffer death, or such other punishment as shall be awarded by a general court-martial.

ARTICLE 13. Any officer or soldier who shall treacherously make known the watchword to any person not entitled, according to the rules and discipline of war, to receive it, or who shall, without good and sufficient cause, give a parole or watchword different from that which he received, shall, on conviction thereof, suffer death, or such other punishment as shall be awarded by a general court-martial.

ARTICLE 14. Any officer or soldier who, by discharging fire-arms, drawing swords, beating drums, or by any other means whatsoever, shall occasion false alarms in camp, garrison, or quarters, shall suffer death, or such other punishment as shall be awarded by a general court-martial.

ARTICLE 15. Any sentinel who shall be found sleeping on his post, or shall leave it before he shall have been regularly relieved, shall, on conviction thereof, suffer death, or such other punishment as shall be awarded by a general court-martial.

ARTICLE 16. Any officer who shall, knowingly receive and entertain a deserter, and shall not, on discovering him to be a deserter, immediately confine him and give notice thereof to the commanding officer

of the regiment, troop, or company in which he last served, shall, on conviction thereof before a general court-martial, be cashiered.

ARTICLE 17. Any officer who, being in arrest, shall leave his confinement before he shall have been set at liberty by proper authority, shall, on conviction thereof before a general court-martial, be cashiered.

ARTICLE 18. Any commissioned officer convicted before a general court-martial of conduct unbecoming the character of an officer and a gentleman, shall be cashiered.

ARTICLE 19. Any officer who, being in command of any garrison, fort, or barracks of the United States, shall exact an exorbitant price for any house, or shall let to a settler, or connive at the like exaction in others, or shall, by his own authority, and for his private advantage, lay any duty upon, or be interested in the sale of any victuals, liquors, or other necessaries of life, brought into the garrison, fort, or barracks for the use of the soldiers, shall, on conviction thereof before a general court-martial, be cashiered.

ARTICLE 20. Any officer who shall wilfully neglect or refuse, upon application duly made, to deliver over to the civil magistrates, or to assist in the apprehension of any officer or soldier under his command accused of a crime punishable by the known laws of the land, shall, on conviction thereof before a general court-martial, be cashiered.

ARTICLE 21. Any officer who shall knowingly make a false muster of man or horse, or who shall intentionally sign, or direct, or allow the signing of muster-rolls wherein such false muster shall be contained, or who shall knowingly muster, as a soldier, a person not a soldier, shall, upon proof thereof by two witnesses, before a general court-martial, be cashiered, and shall be thereby utterly disabled to have or hold any office or employment in the service of the United States.

ARTICLE 22. Any officer who shall take money or other thing by way of gratification, or mustering any portion of the troops, or on signing muster-rolls, shall, on conviction thereof before a general court-martial, be cashiered, and shall be thereby utterly disabled to have or hold any office or employment in the service of the United States.

ARTICLE 23. Any officer who shall knowingly sign a false certificate relating to the absence of any officer or soldier from muster or duty, or relating to his or their pay, shall, on conviction thereof before a general court-martial, be cashiered.

ARTICLE 24. Any officer who shall knowingly make a false return to the Department of War, or to any of his superior officers authorized to call for such return, of the state of the regiment, troop, company, or garrison, under his command, or of the arms, ammunition, clothing, or other stores, for which he may be accountable, shall, on conviction thereof before a general court-martial, be cashiered.

ARTICLE 25. Any officer who shall be convicted before a general court-martial of having sold without proper authority, or of having embezzled, misapplied, or wilfully or negligently suffered to be spoiled or damaged any provisions, forage, arms, clothing, ammunition, or other military stores belonging to the United States, shall, at his own expense, make good the loss or damage, and shall moreover forfeit all his pay, and be cashiered.

ARTICLE 26. Any commissioned officer who shall embezzle or misapply any money with which he may have been intrusted for any military purpose, shall, on conviction thereof before a general court-martial, be cashiered, and compelled to refund the money; any non-commissioned officer so offending shall, on conviction thereof, be reduced to the ranks, and put under stoppages until the money be refunded, and shall suffer such other punishment, according to the nature and degree of his offence, as a court-martial shall award.

ARTICLE 27. Any officer who shall be found drunk on his guard, party, or other duty, shall, on conviction thereof before a general court-martial, be cashiered; any non-commissioned officer or soldier so offending shall, on conviction thereof, suffer such punishment as shall be awarded by a court-martial.

ARTICLE 28. Any officer or soldier who shall send a challenge to any other officer or soldier to fight a duel, or shall accept such a challenge, if sent, shall, if a commissioned officer, on conviction thereof before a general court-martial, be cashiered; if a non-commissioned officer or soldier, he shall suffer such punishment as shall be awarded by a court-martial.

ARTICLE 29. Any officer or soldier who shall upbraid another for refusing a challenge, or who, being in command of a guard, shall, knowingly or willingly, suffer any person to go forth to fight a duel, or who shall second, promote, or carry a challenge, shall be punished as a challenger.

ARTICLE 30. Any officer who shall use contemptuous or disrespectful words against the President, the Vice-President, or the Congress of the United States, or against the chief magistrate or legislature of any State in which he may be quartered, shall, on conviction thereof, be cashiered, or otherwise punished as a general court-martial shall direct; and any non-commissioned officer or soldier convicted of having so offended shall suffer such punishment as shall be awarded by a court-martial.

ARTICLE 31. Any officer or soldier who shall behave himself with contempt or disrespect towards his commanding officer shall, on conviction thereof, suffer such punishment, according to the nature and degree of his offence, as shall be awarded by a court-martial.

ARTICLE 32. Any officer who shall intentionally or negligently omit to send any return or report lawfully required by the Secretary of War, or by any officer authorized to call for such return or report, shall, on conviction thereof, suffer such punishment, according to the nature and degree of his offence, as shall be awarded by a general court-martial.

ARTICLE 33. If any commanding officer upon complaint made to him of an officer or soldier beating or otherwise ill treating any person, of disturbing fairs or markets, or of committing any kind of riot, to the disquieting of the citizens of the United States, shall, after proof of the justice of the complaint, refuse or neglect to see justice done to the offender, and reparation made to the injured party, to the extent of part of the offender's pay, he shall, on conviction thereof before a general court-martial, be cashiered, or suffer such other punishment as the court-martial may award.

ARTICLE 34. Any provost marshal, or any officer in command of a guard, who shall refuse to receive, or who shall, without proper authority, release any prisoner duly committed to his charge, or shall suffer him to escape, shall, on conviction thereof, be punished according to the nature and degree of his offence, at the discretion of a court-martial.

ARTICLE 35. Any provost marshal, or any officer in command of a guard, who shall not, within twenty-four hours after the commitment of any prisoner to his charge, or as soon as he shall have been relieved from his guard make report in writing, to the commanding officer of such prisoner's name and crime, and of the name of the officer who committed him, shall, on conviction thereof, suffer such punishment, according to the nature and degree of his offence, as shall be awarded by a court-martial.

ARTICLE 36. Any officer or soldier who, being concerned in an affray, shall refuse to obey any officer, of what condition soever (though of inferior rank) who shall order him into arrest or confinement, or shall

draw his sword upon such officer, shall, on conviction thereof, suffer such punishment, according to the nature and degree of his offence, as shall be awarded by a general court-martial.

ARTICLE 37. Any officer or soldier who, not being prevented by sickness, or some other evident necessity, from repairing, at the time fixed, to the place of parade, of exercise, or of other rendezvous appointed by his commanding officer, shall fail to appear at such rendezvous, or who shall, without leave from his commanding officer, go from such place of rendezvous before he shall have been regularly dismissed or relieved, or who shall, without urgent necessity, or without leave from his superior officer, quit his guard, platoon, or division, shall, on conviction thereof, suffer such punishment, according to the nature and degree of his offence, as shall be awarded by a court-martial.

ARTICLE 38. Any officer or soldier who shall lie out of his quarters, garrison, or camp, without leave from his superior officer, shall, on conviction thereof, suffer such punishment, according to the nature and degree of his offence, as shall be awarded by a court-martial.

ARTICLE 39. Any officer or soldier who shall commit any waste or damage in any *cultivated grounds*, or shall maliciously destroy any property whatsoever belonging to an inhabitant of the United States, unless by order of the *commander* of an army, shall, on conviction thereof, (besides such other penalty as he may be liable to by law,) suffer such punishment, according to the nature and degree of his offence, as shall be awarded by a court-martial.

ARTICLE 40. Any non-commissioned officer or soldier who shall be found more than one mile from the camp without leave in writing from his commanding officer, or who shall, without leave from his commanding officer, absent himself from his troop, company, or detachment, shall, on conviction thereof, suffer such punishment, according to the nature and degree of his offence, as shall be awarded by a court-martial.

ARTICLE 41. Any non-commissioned officer or soldier who shall not retire to his quarters or tent at the *appointed signal for retiring* shall, on conviction thereof, suffer such punishment, according to the nature and degree of his offence, as shall be awarded by a court-martial.

ARTICLE 42. Any non-commissioned officer or soldier who shall sell, or designedly or negligently waste the ammunition delivered to him to be employed in the service of the United States, or who shall sell or negligently lose or spoil his horse, arms, clothes, or accoutrements, shall, on conviction thereof before a court-martial, undergo such monthly stoppages (not exceeding the half of his pay) as such court-martial shall deem sufficient for repairing the loss or damage, and shall suffer confinement, or such other punishment, according to the nature and degree of his offence, as shall be awarded by the said court-martial.

ARTICLE 43. Any soldier who shall hire another to do his duty for him, and also the party so hired to do another's duty, shall, on conviction thereof, suffer such punishment, according to the nature and degree of his offence, as shall be awarded by a court-martial.

ARTICLE 44. Any commissioned officer who shall connive at a soldier's hiring another to do his duty for him shall, on conviction thereof, suffer such punishment, according to the nature and degree of his offence, as shall be awarded by a general court-martial; and any non-commissioned officer so offending shall, on conviction thereof before a court-martial, be reduced to the ranks.

ARTICLE 45. Any officer or soldier who shall be guilty of a crime not capital, or of any disorder or neglect prejudicial to good order and military discipline, though not specified in the rules and articles of war, shall, on conviction thereof, suffer such punishment, according to the nature and degree of his offence, as shall be awarded by a court-martial.

ARTICLE 46. No officer or soldier shall suffer the punishment of death for desertion in time of peace, or for any offence except those expressly declared in the rules and articles of war to be so punishable.

ARTICLE 47. No officer or soldier in the service of the United States shall suffer corporal punishment by stripes or lashes.

ARTICLE 48. Any non-commissioned officer or soldier who shall desert from the service of the United States shall, in addition to any other penalties prescribed by the rules and articles of war, be liable to serve for and during such a period as shall, with the time he may have served previously to his desertion, amount to the full term of his enlistment; and such non-commissioned officer or soldier shall and may be tried by a court-martial and punished, although the term of his enlistment may have elapsed previous to his apprehension or trial.

SECTION 3.—Of courts-martial and courts of inquiry.

ARTICLE 49. *The President of the United States*, any general officer commanding an army, or any general officer or colonel commanding a separate *geographical* department, may appoint general courts-martial whenever necessary.

ARTICLE 50. Whenever any general officer commanding an army, or a general officer or colonel commanding a separate department, shall be the accuser or prosecutor of any officer under his command, the general court-martial for the trial of such officer shall be appointed by the President of the United States.

ARTICLE 51. *The commander of the corps of engineers may appoint, from the officers under his command, general courts-martial for the trial of cadets, or enlisted soldiers attached to the Military Academy.*

ARTICLE 52. A general court-martial may consist of any number of commissioned officers, from five to thirteen inclusively; but it shall not consist of less than thirteen, when that number can be convened without manifest injury to the service.

ARTICLE 53. *The officer ordering a general court-martial may appoint some fit person to act as judge advocate, and in case he shall not have made such appointment, or in case the person so appointed shall not attend previous to the convening of the court, the president of the court may appoint a judge advocate.*

ARTICLE 54. Any officer *not under the rank of captain* commanding any regiment, corps, garrison, or detachment, may appoint, for the troops under his command, courts-martial, to consist of three commissioned officers.

ARTICLE 55. Whenever it may be found convenient and necessary for the public service, the officers of the corps of marines shall be associated with the officers of the land forces for the purpose of holding courts-martial and trying offenders belonging to either; and, in such cases, the order of the senior officer, whether of the land or marine forces, who may be present, and duly authorized, shall be received and obeyed.

ARTICLE 56. At a general court-martial, the judge advocate shall administer to each member of the court, before they proceed upon trial, the following oath:

"You (A B) do swear that you will well and truly try and determine, according to evidence, the matter now before you, between the United States of America and the prisoner to be tried; and that you will

duly administer justice according to the rules and articles of war for the government of the armies of the United States, without partiality, fear, or affection; and if any doubt shall arise, not explained by said articles, according to your conscience, the best of your understanding, and the custom of war in like cases; and you do further swear that you will not divulge the sentence of the court until it shall have been published by the proper authority; neither will you disclose or discover the vote or opinion of any particular member of the court-martial, unless required to give evidence thereof, as a witness, by a court of justice, in a due course of law—so help you God.” The same oath shall be administered *in like manner by the president of any other than a general court-martial* to the other members, and afterwards, by any sworn member, to the president; and after the said oath shall have been administered to the respective members of a general court-martial, the president of the court shall administer to the judge advocate the following oath:

“You (A B) do swear, that you will not disclose or discover the vote or opinion of any particular member of the court-martial, unless required to give evidence thereof, as a witness, by a court of justice, in due course of law; nor divulge the sentence of the court to any but the proper authority, until it shall have been duly disclosed by the same—so help you God.”

ARTICLE 57. At a court-martial, the judge advocate or some other person deputed by the officer appointing the court, shall prosecute in the name of the United States, but shall so far consider himself as counsel for the prisoner, after the said prisoner shall have made his plea, as to object to any leading question to a witness, or any question to the prisoner, the answer to which might tend to criminate the said prisoner.

ARTICLE 58. When a prisoner arraigned before a court-martial shall stand mute, or answer foreign to the purpose, the court shall proceed to trial and judgment, as if the prisoner had pleaded not guilty.

ARTICLE 59. When a prisoner shall challenge any member of a court-martial, he must state his cause of challenge, of which the court shall, after due deliberation, determine the relevancy or validity, and decide accordingly; and no challenge to more than one member at a time shall be received by the court.

ARTICLE 60. All persons who give evidence before a court-martial are to be examined, upon oath or affirmation, in the following form:

“You swear or affirm, (as the case may be,) that the evidence you shall give in the cause now in hearing shall be the truth, the whole truth, and nothing but the truth—so help you God.”

ARTICLE 61. On any trial before a court-martial, of a case not capital, the deposition of any witness, not in the military service, taken before a justice of the peace, may be read in evidence: provided, that the prosecutor and the person accused shall have been present at the taking of the same, or shall have been duly notified thereof.

ARTICLE 62. Proceedings or trials before a court-martial shall be carried on only between the hours of eight in the morning and three in the afternoon; except in cases which, in the opinion of the officer appointing the court-martial, may require immediate example.

ARTICLE 63. All the members of a court-martial are to behave with decency and calmness; and, in giving their votes, are to begin with the youngest in commission.

ARTICLE 64. No person whatsoever shall use any menacing words, signs, or gestures, in presence of a court-martial, or shall cause any disorder or riot, or disturb their proceedings, on the penalty of being punished at the discretion of the court.

ARTICLE 65. No commissioned officer shall be tried except by a general court-martial, no member of which shall, if it can be avoided, be of a rank inferior to that of the officer to be tried.

ARTICLE 66. No sentence of death shall be awarded but by the concurrence of two-thirds of the members of a general court-martial.

ARTICLE 67. No regimental garrison, or *detachment*, court-martial shall have power to try capital cases; neither shall they inflict a fine exceeding one month's pay, nor imprison, nor put to hard labor any non-commissioned officer or soldier for a longer time than one month.

ARTICLE 68. In a case where a court-martial may think proper to sentence a commissioned officer to be suspended from command, they shall have power also to suspend his pay and emoluments for the same time, according to the nature and degree of his offence.

ARTICLE 69. In a case where a commissioned officer shall be cashiered for cowardice or fraud, it shall be added in the sentence that the crime, and place of abode, and of punishment of the delinquent, shall be published in the newspapers in and about the camp, and in those of the State or Territory from which the offender shall have come, or in which he shall have usually resided; after which it shall be deemed scandalous for any officer to associate with him.

ARTICLE 70. No person shall be liable to be tried by a court-martial for any offence which shall appear to have been committed more than two years before the issuing the order for such trial, unless the person, by reason of having absented himself, or some other manifest impediment, shall not have been amenable to justice within that period; nor shall any person be tried a second time for the same offence.

ARTICLE 71. No sentence of a court-martial shall be carried into execution until after the whole proceedings shall have been laid before the officer ordering the same, or the officer commanding the troops for the time being; nor shall any sentence of a court-martial, in time of peace, which shall extend to the loss of life, or to the dismissal of a commissioned officer or cadet, which shall, in time either of peace or war, respect a general officer, be carried into execution, until after the whole proceedings shall have been transmitted to the Secretary of War, to be laid before the President of the United States for his confirmation or disapproval, and orders in the case. All other sentences may be confirmed and executed by the officer ordering the court, or the commanding officer for the time being, as the case may be.

ARTICLE 72. Any officer authorized to order a court-martial shall have power to pardon or mitigate any punishment awarded by such court, except a sentence extending to the loss of life, or to the dismissal of an officer; which sentence, in a case where he may be authorized (by the preceding article) to carry it into execution, he may suspend, until the pleasure of the President of the United States can be known; which suspension, together with a copy of the record of the proceedings of the court-martial, the said officer shall immediately transmit to the President for his determination.

ARTICLE 73. The party tried by any general court-martial shall, upon demand made by himself, or any person in his behalf, be entitled to a copy of the record of the proceedings and sentence of such court-martial; and to this end, such record, transmitted by the judge advocate to the officer ordering the court, or to the officer commanding for the time being, shall be forwarded by the latter, with as much expedition as practicable, to the Secretary of War, and shall be carefully preserved in his office.

ARTICLE 74. Any officer authorized to appoint a general court-martial may appoint a court of inquiry to

examine into the nature of any transaction, or into any accusation or imputation against any officer or soldier; but as courts of inquiry may be perverted to dishonorable purposes, and may be considered as engines of destruction to military merit in the hands of weak and envious commanders, no such court shall be convened unless *specially ordered* by the President of the United States, or demanded by the accused officer or soldier.

ARTICLE 75. A court of inquiry shall consist of one or more commissioned officers, not exceeding three, and a suitable person as a recorder, to reduce the proceedings and evidence to writing. This court shall have the same power as a court-martial to summon witnesses, and to examine them on oath. The party accused shall also be permitted to cross-examine and interrogate the witnesses, so as to investigate fully the circumstances in the question; but a court of inquiry shall not give an opinion on the merits of the case, unless specially required to do so.

ARTICLE 76. The recorder of a court of inquiry shall administer to the members the following oath: "You shall well and truly examine and inquire, according to your evidence, into the matter now before you, without partiality, favor, affection, prejudice, or hope of reward. So help you God."

After which the president shall administer to the recorder, the following oath:

"You, A. B., do swear that you will, according to your best abilities, accurately and impartially record the proceedings of the court, and the evidence to be given in the case in hearing. So help you God."

A witness shall take the same oath as a witness sworn before a court-martial.

ARTICLE 77. The record of the proceedings of a court of inquiry shall be authenticated by the signatures of the recorder and the president, and shall be delivered to the officer ordering the court, or to the officer commanding for the time being; and the said record may be admitted as evidence by a court-martial, in any case not extending to the loss of life, or to the dismissal of an officer: provided, that the circumstances be such that oral testimony cannot be obtained.

SECTION 4.—*Of rank and command.*

ARTICLE 78. Officers having brevets or commissions of a prior date to those of the regiment in which they serve, may take place in courts-martial and on detachments, when composed of different corps, according to the ranks given them in their brevets, or dates of their former commissions; but in the regiment troop, or company, to which such officers belong, they shall do duty and take rank, both in courts-martial, and on detachments which shall be composed only of their own corps, according to the commissions by which they are mustered in the said corps.

ARTICLE 79. All officers serving by commissions from the authority of any particular State, shall, on all detachments, courts-martial, or other duty, wherein they may be employed in conjunction with the regular forces of the United States, take rank next after all officers of the like grade in said regular forces, notwithstanding the commissions of such militia or State officers may be elder than the commissions of the officers of the regular forces of the United States.

ARTICLE 80. If upon marches, guards, or in quarters, different corps of the army shall happen to join or do duty together, the officer highest in rank of the line of the army, marine corps, or militia, by commission, there on duty or in quarters, shall command the whole, and give orders for what is needful for the service, unless otherwise specially ordered by the President of the United States, according to the nature of the case.

ARTICLE 81. The functions of the engineers being generally confined to the most elevated branch of military science, they are not to assume, nor are they subject to be ordered on, any duty beyond the line of their immediate profession, except by the special order of the President of the United States; but they are to receive every mark of respect to which their rank in the army may entitle them, respectively, and are liable to be transferred, at the discretion of the President, from one corps to another, regard being paid to rank.

SECTION 5.—*Miscellaneous obligations and privileges.*

ARTICLE 82. Every recruit who shall enlist himself in the service of the United States shall, at the time of his so enlisting, or within six days thereafter, have the rules and articles of war for the government of the armies of the United States read to him, and shall go with the officer who shall have enlisted him, or with the commanding officer of the troop or company into which he shall have been enlisted, before a justice of the peace, or the chief magistrate of any city or town corporate, not being an officer of the army, or, where recourse cannot be had to a civil magistrate, before the judge advocate at a *general court-martial*, and in the presence of such justice, magistrate, or judge advocate, shall take the following oath or affirmation:

"I, A. B., do solemnly swear, or affirm, (as the case may be,) that I will bear true allegiance to the United States of America, and that I will serve them honestly and faithfully against all their enemies and opposers whatsoever; and will observe and obey, *according to the rules and articles of war*, the orders of the President of the United States, and of the officers appointed over me." And such justice, magistrate, or judge advocate, is to give the officer a certificate signifying that the person enlisted did take the said oath or affirmation. The same oath or affirmation shall also be taken and subscribed by every commissioned officer before he shall enter on the duties of his office.

ARTICLE 83. All officers and soldiers are to behave themselves orderly in quarters and on their march, and every commanding officer shall keep good order, and to the utmost of his power redress any abuse or disorder committed by any officer or soldier under his command.

ARTICLE 84. When any officer or soldier shall be accused of a capital crime, or of having used violence, or committed any offence against the person or property of any citizen of the United States such as is punishable by the known laws of the land, the commanding officer and the officers of the regiment, corps, troops, or company to which the person accused may belong, shall, upon application duly made by or in behalf of the party injured, use their utmost endeavors to deliver over such accused person to the civil magistrate, and shall assist the officers of justice in apprehending and securing such accused person, in order to his being brought to trial.

ARTICLE 85. All officers of what condition soever have power to quell all quarrels, affrays, and disorders, though the persons concerned should belong to another regiment, corps, troop, or company, and either to order officers into arrest or non-commissioned officers or soldiers into confinement until their proper superior officers shall be acquainted therewith.

ARTICLE 86. No officer or soldier shall use any reproachful or provoking speeches to another, upon pain,

if an officer, of being put in arrest; if a non-commissioned officer or soldier, of being confined, and of making the party offended, in the presence of his commanding officer, *such apology or acknowledgment as such commanding officer shall consider satisfactory and sufficient.*

ARTICLE 87. It shall be the duty of every commanding officer who shall know of a challenge to fight a duel having been given or accepted by any officer or soldier under his command, or shall have reason to believe the same to be the case, immediately to arrest and bring to trial such offender.

ARTICLE 88. Any officer or soldier who may refuse to accept a challenge to fight a duel is hereby discharged from any disgrace or opinion of disadvantage which might arise from such refusal, as he will only have acted in obedience to the laws, and have done his duty as a good soldier, who subjects himself to discipline.

ARTICLE 89. Any officer charged with a crime shall be arrested by his commanding officer, and confined to his barracks, quarters, or tent, and deprived of his sword; any non-commissioned officer or soldier so charged shall be confined until tried by a court-martial or released by proper authority; and no officer or soldier shall continue in arrest or confinement *before trial* more than eight days, or until such time as a court-martial can be assembled.

ARTICLE 90. Any officer who may commit a prisoner to the charge of a provost marshal, or of an officer commanding a guard, shall at the same time deliver an account in writing, signed by himself, of the crime with which the said prisoner may be charged.

ARTICLE 91. No commissioned officer or *cadet* shall be discharged from the service, except by order of the President of the United States, or in pursuance of the sentence of a general court-martial.

ARTICLE 92. No non-commissioned officer or soldier, duly enlisted and sworn, shall be dismissed from the service without a discharge in writing, signed by a field officer of the regiment or corps to which he may belong, or by his commanding officer, where no such field officer shall be present; and no non-commissioned officer or soldier shall be discharged before his term of service shall have expired, except by order of the President of the United States, the Secretary of War, *the commanding officer of an army* or of a separate *geographical* department, or in pursuance of the sentence of a general court-martial.

ARTICLE 93. Any colonel or other officer commanding a regiment, corps, troop, or company, and actually quartered with it, may give furloughs to non-commissioned officers or soldiers in such numbers and for so long a time as he shall judge to be consistent with the good of the service; and any captain or other officer commanding a *separate* troop, company, garrison, or detachment, (his field officer being absent,) may give furloughs to non-commissioned officers or soldiers for a time not exceeding twenty days in six months; but not to more than two persons to be absent at the same time, unless some extraordinary occasion should require a departure from this rule.

ARTICLE 94. No non-commissioned officer or soldier shall be excused from duty, except in case of sickness, disability, or leave of absence.

ARTICLE 95. At every muster the commanding officer of each regiment, troop, company, or detachment there present, shall give to the officer mustering such troops a certificate, signed by himself, signifying the length of time during which any officer or soldier who may not appear at such muster may have been absent, and the reason of his absence, a note of which reason and time of absence shall be inserted in the muster-rolls opposite to the name of such officer or soldier. The certificates, together with the muster-rolls, shall, as soon as practicable after the muster, be transmitted by the officer mustering to the Department of War.

ARTICLE 96. The commanding officer of every regiment, corps, garrison, or detachment, shall, in the beginning of every month, transmit through the proper channels to the Department of War an exact return of the state of the troops under his command, specifying the name of every officer who may be then absent from his post, with the reason for, and the time of his absence.

ARTICLE 97. Every captain or other commanding officer of a troop or company shall be charged with the care of the arms, accoutrements, ammunition, clothing, and other military stores belonging to the troop or company under his command, and shall be *accountable* for the same, in case of their being lost, spoiled, or damaged, otherwise than in actual service, or by unavoidable accident.

ARTICLE 98. All public stores, whether of artillery, ammunition, clothing, forage, or provisions, taken from the enemy, shall be secured for the service of the United States, and every commanding officer shall be answerable for any neglect in this respect.

ARTICLE 99. Every commanding officer is required to see that the persons permitted to suttle supply the troops under his command with good and wholesome provisions, and other articles, at a reasonable price, as he shall be answerable for his neglect in this respect.

ARTICLE 100. No suttler shall be permitted to sell any kind of liquors or victuals, or to keep his house or shop open for the entertainment of soldiers after nine o'clock at night, or before the beating of the reveille, or on Sundays during divine service or sermon, on the penalty of being dismissed from all future suttling.

ARTICLE 101. If any officer shall think himself wronged by his colonel or *other commanding officer*, and shall not, upon due application, receive from him the redress to which he may consider himself entitled, he may, in order to obtain justice, complain to the general commanding the troops, or to the commanding officer of the department in which he may be stationed, who is hereby required to examine into the said complaint, and to take proper measures for redressing the wrong complained of, and to transmit, as soon as possible, to the Department of War a true statement of such complaint, with the proceedings had thereon.

ARTICLE 102. If any *non-commissioned officer* or soldier shall think himself wronged by *any officer* of the troop or company to which he may belong, he may complain thereof to the commanding officer of his regiment or corps, who is hereby required to summon a regimental court-martial for doing justice to the complainant, from the decision of which regimental court-martial either party may, if he think himself still aggrieved, appeal to a general court-martial; but if, upon a hearing before such general court-martial, the appeal shall appear vexatious and groundless, the person so appealing shall be punished at the discretion of the said court-martial.

ARTICLE 103. When any commissioned officer or soldier shall die in the service of the United States, the major of the regiment to which the deceased may have belonged, or the officer doing the major's duty in his absence, or, in any post or garrison, the second officer in command shall immediately secure all his effects then in camp or quarters, and shall make an inventory thereof, which he shall forthwith transmit to the office of the Department of War, in order that it may be received by the executors or administrators of the deceased.

ARTICLE 104. When any non-commissioned officer or soldier shall die in the service of the United States, the officer commanding the troop or company to which the deceased may have belonged shall, in the presence of two other commissioned officers, take an account of his personal effects, and transmit it to the office of the Department of War; and the said effects shall be accounted for, and paid, to the representatives of the deceased; and in case any officer, so authorized to take care of such effects, shall, before he shall have so accounted for them, leave the regiment or post, he shall, before being permitted to quit the same, deposit them in the hands of the commanding officer, in order that they may be secured for, and paid to, the said representatives.

SECTION 6.—*Of the application of the Articles of War.*

ARTICLE 105. All commissioned officers, cadets, non-commissioned officers, artificers, musicians, and privates on the military establishment, and all other persons enlisted in the military service of the United States, or persons duly authorized to *suttle for the troops*; all followers and retainers to the camp, and all persons whatsoever serving with the armies of the United States in the field, though not enlisted soldiers, shall be governed by these rules and articles of war.

ARTICLE 106. The officers and soldiers of any militia or volunteer forces in the service of the United States shall, at all times and in all places, when joined or acting in conjunction with the regular forces of the United States, be governed by these rules and articles of war; and shall be subject to be tried by court-martial in like manner with the officers and soldiers in the regular forces, save only that such courts-martial shall be composed entirely of officers of such militia or volunteer forces.

ARTICLE 107. Any person not a citizen of, or not owing allegiance to the United States, who shall, in time of war, be found lurking as a spy in or about the fortifications or encampments of the armies of the United States, or any of them, shall suffer death, according to the law and usage of nations, by sentence of a general court-martial.

ARTICLE 108. Every officer now in the army of the United States shall, within six months after the passage of this act, and every officer who shall hereafter be appointed shall, before he shall enter on the duties of his office, subscribe these rules and articles of war.

ARTICLE 109. The foregoing articles shall be read and published once in every six months to every garrison, regiment, troop, company, or detachment, mustered or to be mustered in the service of the United States.

CHAPTER III.

Of the repeal of former enactments relating to the Military Establishment.

ARTICLE I. *This act shall take effect on the —— day of ——; from and after which day all acts and parts of acts which have been passed relating to the military establishment, and coming within the purview of any of the provisions of this act, shall be held to be repealed: Provided, That nothing herein contained shall be construed to affect any existing contract with the United States, or any debt or demand due to or from the United States; or to extend to any offence committed against any law now in force intended by this act to be repealed, or to any appointment to office made under any such law.*

REMARKS.

The resolution of the House of Representatives, in compliance with which the foregoing act has been prepared, was not regarded by the Secretary of War as authorizing him to propose any important alterations in the provisions of law relative to the military establishment, except such as seemed necessary in order to make those provisions agree with each other where they are found to be inconsistent; at the same time omitting such as have, by custom, become obsolete, and introducing others requisite to produce conformity between the law and the practice under it. In other respects the authority given by the resolution "to revise and amend the acts of Congress relating to the army," has been exercised chiefly in classifying and arranging the matter of the existing laws, and in amending their language.

The arrangement adopted in drawing up the revised act is sufficiently explained by the following

ANALYSIS.

CHAPTER I. Of the military peace establishment.	Section 15. Of pay and emoluments.
Section 1. Of the artillery.	Section 16. Of recruiting.
Section 2. Of the infantry.	Section 17. Of pensions.
Section 3. Of the mounted rangers.	Section 18. Miscellaneous provisions.
Section 4. Of the general officers and their aides-de-camp.	CHAPTER II. Rules and Articles of War for the government of the armies of the United States.
Section 5. Of the Adjutant General's department.	Section 1. Of divine worship.
Section 6. Of the Inspector's department.	Section 2. Of crimes and punishments.
Section 7. Of the Topographical department.	Section 3. Of courts-martial and courts of inquiry.
Section 8. Of the Quartermaster's department.	Section 4. Of rank and command.
Section 9. Of the Subsistence department.	Section 5. Miscellaneous obligations and privileges.
Section 10. Of the Purchasing department.	Section 6. Application of the Articles of War.
Section 11. Of the Pay department.	CHAPTER III. Of the repeal of former enactments.
Section 12. Of the Medical department.	
Section 13. Of the Engineer department.	
Section 14. Of the Ordnance department.	

In order that the changes proposed in the provisions and language of the enactments may be clearly shown by a comparison of the revised act with the existing laws a marginal note is made opposite to each article referring to the corresponding clause of the existing law, and attention is further directed

to the more important alterations by underlining the words containing them. Remarks in relation to some of them are here subjoined.

1. In order to avoid an unnecessary multiplication of terms for denoting the integral parts of the organization the battalion of rangers is styled a *corps*; and the grade of *second lieutenant* substituted for that of *third lieutenant*, the latter grade being found in no other corps, although the act of 1832 for raising the battalion of rangers refers to the existing laws for the compensation of officers of that grade.

2. It has been thought proper to designate, in general terms, the duties of the administrative departments of the army, leaving them, however, to be specified in detail, as heretofore, by the general regulations for the army.

3. The practice of the service being to separate the topographical engineers and their assistants from the line of the army, it is proposed to give them ordinary rank instead of brevets, as now required by law; and in general, where an appointment on the staff confers *rank* on an officer, it is proposed to omit the provisions of law which are now regarded as authorizing such an officer to retain his appointment in the line. As, for instance, in the cases of two of the quartermasters, and one of the commissaries of subsistence, the proposed alteration will not affect any rights which such an officer may now have, as those rights are secured by the repealing clause of this act.

4. The term *Ordnance department* being used to designate the whole ordnance service, the body of officers appointed especially for that service is styled the *ordnance corps*.

5. The following are the principal changes proposed in the Rules and Articles of War:

1. To extend the provisions of the 18th and 19th articles, relative to returns, to *all returns* lawfully required of an officer, instead of limiting them of a special nature; this is done by the 24th and 32d of the revised articles.

2. To extend the power of appointing general courts-martial to the *President of the United States*, and to a *general officer* commanding a separate department; also, to the *commander of the corps of engineers* for the government of the Military Academy.

3. To extend the power of appointing *garrison or detachment courts-martial* to *any officer*, (not under the rank of captain,) whether he have command of troops belonging to several corps or to one.

4. To omit the 86th article of war as unnecessary and inconvenient if applied in practice. The commanding officer of a post not being competent to appoint a general court-martial, even if he have a sufficient number of officers under his command, a reference to the commander of the department, or some other competent authority, must be made in *all cases* requiring the cognizance of such a court, and such commander will direct the court to assemble whenever it may be most convenient to the public service.

5. To define the authority by which courts of inquiry may be appointed, limiting it to those officers authorized to appoint general courts-martial.

6. To extend the application of the Articles of War to *all sutlers*, whether in quarters or in the field; and to modify the 96th article, so as to make it applicable to the class of persons embraced in it only when they may be serving with an army in the field. At present, if strictly construed, it will apply to workmen and laborers on fortifications, and in armories or arsenals.

7. The four articles of war in section 4, "of rank and command," are copied literally from the present code; the manner of construing them having been established by the decision of the government, and the custom of service. In the following articles, however, which are submitted as a substitute for those in section 4, the force of expression is thought to be more definite, to wit:

Of Rank and Command.

ARTICLE 78. Officers of any regiment or corps doing duty together, unmixed with officers of the regiments or corps, shall take rank according to the commissions by which they may be mustered in their own regiment or corps.

ART. 79. Officers not of the same regiment or corps doing duty together on detachments or in *councils of war*, *military boards*, courts-martial, or *courts of inquiry*, may take rank according to their brevets, or the dates of their former commissions.

ART. 80. Officers of the regular forces doing duty with officers of the like grade belonging to any militia or volunteer forces in the service of the United States shall have precedence of and shall command such officers of the militia or volunteer forces, although the commissions of the latter officers may be of elder date.

ART. 81. On marches, guards, or in quarters, where *troops belonging to different regiments or corps* shall happen to join and do duty together, or *when any of the regular forces shall happen to join and do duty with any militia or volunteer forces in the service of the United States*, the eldest officer present there on duty, whether of the regular or other forces, with the exception specified in the preceding article, shall command the whole, and give the orders needful for the service; unless the President of the United States shall otherwise specially direct, according to the circumstances of the case.

8. In article 79 (of the above) the terms "*former commissions*" are understood to mean a commission of the same grade with that by which an officer is mustered in his own regiment or corps, but of prior date, such cases being created by the transfer of officers from one regiment or corps to another, as will be seen by a reference to the Army Register.

9. It will be remembered that, by adopting the 81st of the above articles, and omitting the 63d of the present articles, full scope will, under the circumstances specified, be given to the exercise of every officer's *right to command* according to his rank, (whether by brevet or otherwise,) unless the President should make a special assignment of command. This is the reverse of the construction now generally given to the 62d article of war, but appears to be the provision most consistent with military propriety.

There are some provisions of law in which the officers of the army are incidently concerned, which it has not been deemed necessary to introduce into this act—such as those relating to the militia, to intercourse with the Indian tribes, quarantine laws, &c. In case of the passage of this act, these provisions would form a proper appendix for that purpose. It is not necessary that they should be re-enacted.

22D CONGRESS.]

No. 534.

[2D SESSION.]

APPLICATION OF MAJOR GENERAL ALEXANDER MACOMB FOR BREVET PAY, WITH THE
OPINION OF THE ATTORNEY GENERAL, AND SEVERAL STATEMENTS ON BREVET
RANK, DUTIES AND PAY, AND ARMY REGISTERS FOR 1818 AND 1821.

COMMUNICATED TO THE SENATE DECEMBER 11, 1832.

To the honorable the Senate and House of Representatives of the United States:

The memorial of Alexander Macomb respectfully sheweth: That your memorialist had the honor, during the late war, to receive from the President of the United States a brevet commission of major general in the army; and that, since the date of the same, he hath, as an officer of that rank, been placed by the Executive in command of various stations and departments of great importance and responsibility, in all which he hath endeavored to discharge, to the utmost of his ability, the duties devolved upon him.

He hath received for these services, since the passage of the act of 1818, only the pay and emoluments of a brigadier; it being thought by the executive officers of the government that the laws of the United States regulating the pay and emoluments of brevet officers of the army precluded them from applying to him that rule of compensation which had been adopted towards other officers.

It has been considered that the law of 1818, though it does not expressly repeal the act of 1812 upon the subject, does so impliedly; and that therefore your memorialist, though placed in command of a separate department, and one at least as important and responsible as any other, and having under his command a much more considerable numerical force than any other officer, was, nevertheless, as that force was not regularly organized into what might be regarded, technically, as a division of the army, precluded from receiving pay according to his brevet rank.

Your memorialist, considering it at least doubtful whether it was the intention of Congress to repeal the provisions of the former law, cannot however believe that it was designed to make the reward of an honorable and meritorious service depend upon the formality of any peculiar organization of the station or forces placed under the command of such an officer; so as to allow the pay according to the rank, in some instances, and deny it in others where the service was equally important and responsible, and the force under his command numerically greater.

Such, however, has been the situation of your memorialist; and while other brevet officers have received their pay according to their brevet rank, (as will appear in several instances,) he, though placed in stations, as he conceives of equal command in importance and of greater expense, has been deemed, though with an admission of the fairness and justice of his claim, unentitled from the peculiar terms of the law to the same rule of allowance. Under such circumstances, therefore, he would feel justified in presenting his claim to the Congress of the United States, where alone it can be considered and decided according to the principles of justice.

There is, however, a circumstance in his present situation which obliges him to offer his claim to the consideration of the present Congress.

Your memorialist, in the year 1811, became of one the sureties of Samuel Champlain, lieutenant of artillery, in a bond to the United States, as a paymaster. This officer, in the year 1813, was promoted to the rank of major in the Quartermaster's department, and acted in that capacity during the war; and your memorialist, not only confiding both in the honor of the officer and in the care of the officers of government, that his accounts as paymaster would be regularly settled according to the provisions of the law, and that such a promotion precluded the possibility of prior default, but being also then continually engaged in the public service during a most eventful period, and in distant scenes, made no inquiries as to the accounts of the said officer, or his liability as his security.

Recently, however, he finds, on the promotion of this officer, no settlement of his previous accounts had been required or enforced according to law; and although (as he is informed by that officer, and as he verily believes,) the large balance appearing by his accounts to have been in his hands at the time of his promotion was immediately expended by him as quartermaster under his new appointment, yet that balance (the officer being unable to discharge it) is now claimed from your memorialist as his surety; and a suit hath been instituted against your memorialist, in the name of the United States, in which, as he understands, the sum of ten thousand dollars is claimed to be recovered of him as such surety.

Your memorialist, therefore, confidently trusting that he is asking no more than the same measure of justice from the country he has endeavored to serve than it has awarded to others, respectfully requests that the accounting officers of the government may be allowed to settle his accounts according to his brevet rank; and to apply what may be so allowed him to the credit of the demand of the government now prosecuting against him, and to pay him whatever may remain due after satisfying that demand.

ENGINEER DEPARTMENT, *January 1, 1827.*

SIR: I beg leave to ask you to consider the following claim which I make to the pay and emoluments of a major general under the brevet commission which I have the honor to hold.

I should have advanced this claim long since had I not believed it would have produced an injurious effect, with regard to the general interests of the army, on the minds of the members of the national legislature; but since I have learned that Brevet Major Generals Gaines and Scott have both been in the constant receipt of their brevet pay under the law without involving the injurious consequences alluded to, I feel the more confident in bringing to your consideration my claim to the same allowances as they have received under my brevet commission as major general.

The principles on which Generals Gaines and Scott are entitled to their brevet pay is that they have commands according to their rank as major generals, that is, each commands a separate department or district, or that a number of troops equal to a division are under their respective commands.

My case is one that comes under the law with equal force and propriety with theirs; but there has been no declared official interpretation of the law in favor of my claim, although the law will fairly admit such interpretation, except as to my command from April 16, 1818, to May 31, 1821, at Detroit, which

was a separate department or district and separate post, having all the requisites on which to found my claim in the same manner on which that of General Scott or General Gaines founded theirs.

The act of Congress passed July 6, 1812, section 4th, enacts that "the President is hereby authorized to confer brevet rank on such officers of the army as shall distinguish themselves by gallant actions or meritorious conduct, or who shall have served ten years in any one grade; provided that nothing herein contained shall be so construed as to entitle officers so brevetted to any additional pay or emoluments, except *when commanding separate posts, districts, or detachments, when they shall be entitled to and receive the same pay and emoluments to which officers of the same grade are now or hereafter may be allowed by law.*"

Under the provisions of the foregoing section the President honored me with a brevet of major general, dated September 11, 1814, for successfully conducting the defence of the northern frontiers of the States of New York and Vermont, and particularly for gallantry and good conduct in the battle of Plattsburg.

A subsequent act of Congress was passed on April 18, 1818, which does not repeal in any particular the above-recited 4th section of the act of July 6, 1812, but seems rather intended to be an explanation of that law, and to limit the authority of the President with regard to conferring brevet commissions, making it obligatory on him to submit such brevet commissions as he should think proper thereafter to confer to the Senate for its advice and consent in relation thereto.

The law is in these words: "An act regulating the pay and emoluments of brevet officers.

"SECTION 1. *Be it enacted, &c., &c.,* That the officers of the army who have brevet commissions shall be entitled to and receive the pay and emoluments of their brevet rank when on duty and having a command according to their brevet rank, and at no other time.

"SECTION 2. *And be it further enacted,* That no brevet commission shall hereafter be conferred but by and with the advice and consent of the Senate."

The letter of the last-recited law admits of great latitude of interpretation. There is nothing in the phraseology of that law which implies a repeal of the 4th section of the act of July 6, 1812. There is a restriction only so far as it regards the authority vested in the President to confer brevet commissions, by making it obligatory on him, as before stated, to obtain the advice and consent of the Senate thereto; whereas, under the act of 1812, the President could of his own accord confer brevet rank for long and distinguished services. The 4th section of the act of July 6, 1812, then, continues in full force, with the restriction on the power to confer brevet rank, while the act of April 16, 1818, *regulating the pay and emoluments of brevet officers*, confirms the provisions of the 4th section of the act of 1812, at the same time it extends the privileges of brevet officers by allowing them their pay and emoluments as such *when on duty and having a command according to their brevet rank*. Now, the law of 1812 restricts the allowance of brevet pay and emoluments to the commanders of separate posts, districts, or detachments, that is, to the brevet officers having the chief command of such separate posts, districts or detachments; and the law of 1818 allows pay and emoluments to all "officers of the army who have brevet commissions when on duty, and having a command according to their brevet rank; and this law has been explained by a regulation (see Army Regulations, article 71, paragraph 1124) to mean that "brevet officers shall receive the pay and emoluments of their brevet commissions when they exercise command *equal* to their brevet rank. For example, a brevet captain must command a company; a brevet major and a brevet lieutenant colonel a battalion; a brevet colonel a regiment; a brevet brigadier general a brigade; and a brevet major general a division." And it is also admitted that a numerical force equivalent to any one of those divisions and subdivisions may constitute a command, that is, five companies, though of different regiments, will be equal to a battalion, and ten companies equal to a regiment, and so on. There is, undoubtedly, a great propriety and justice in extending the provisions of the law of 1818 to the brevet officers acting in a *subaltern* capacity at the heads of divisions, brigades, regiments, battalions, and companies, according to their rank; that is, to brevet officers who are not commanders-in-chief of separate armies, posts, districts, or detachments. I should humbly conceive that it is the importance of the command more than the numerical force that should decide whether the command was *according* to the rank of an officer; and, for the sake of illustration, let us imagine that the post of New Orleans with three battalions was in the estimation of the Executive a command of sufficient importance to justify the assignment of a brigadier general or even a major general to that command, having reference to its position, to the probability of some difficulties likely to arise, and the necessity of *high rank* to insure to the national officer, under certain circumstances, the power to command the militia when called out to aid in the defence of the country; would not such a command be far more important, far more responsible, and requiring greater experience and talents, and the exercise of higher attributes than the mere command of a division or brigade of troops under the command of another? And ought not such a command to warrant an allowance of brevet pay under the law as a *command according to brevet rank*? Certainly it would; and so the law of 1812 provides for the brevet officers when commanding in chief separate posts, districts, or detachments, their brevet pay; that is, to such brevet officers as may be assigned to such separate commands, and the law of 1818 to all enumerated in the act of 1812, with the addition of such as command in subordinate stations according to their brevet rank.

The law of 1818 does not define that a brevet major general shall command a division to entitle him to the pay and emoluments of his rank; but, as before recited, it declares simply that *when on duty, and having a command according to his brevet rank*, then he shall be entitled to the pay and emoluments of his brevet rank; but the construction given by the Executive does define what the command shall be; so it is equally competent for the Executive to declare, if he thought proper, the command of the subjects intrusted to the chief engineer, equal to the command of either Major General Gaines or Scott, and, consequently, equal to the command of a major general, and to entitle Major General Macomb to his brevet pay as such. Mr. Calhoun would never decide the question with respect to Generals Gaines and Scott as it regarded their right to draw their brevet pay; nor would he in my case, although he often assured me that my command was equal, if not superior, to the command of either of these generals. It was the Comptrollers of the Treasury who decided that their claim was just under the construction given to the law by the regulations; and mine is also admitted by the Second Comptroller to be equally just, but wants the sanction of the Secretary of War. But I have no such recourse, as the regulations do not define any other commands than such as are in the line of the army. I must, therefore, ask the decision of the War Department in my favor, believing that my command is equal to that of a major general, and that I am, of course, entitled to my pay and emoluments as such; the expression of such opinion would authorize the accounting officers to settle with me accordingly. I will now enumerate the objects and extent of my command and exhibit the numerical force under each head:

1st. The command of the corps of engineers, numerical force.....	2, 356 men.
2d. The command of the corps of topographical engineers.....	180 "
3d. The command of the Military Academy and the corps of cadets.....	373 "
4th. The command of the corps of civil engineers.....	2, 037 "
Total number of men.....	<u>4, 946</u>

The first embraces the direction of the fortifications of the United States.

The second, the topographical surveys of the coast and of the interior.

The third, the inspection, control, and administration of the Military Academy.

The fourth, the internal improvements by roads and canals, the clearing of rivers of obstructions, and the constructions of harbors.

To these may be added the superintendence and examination of the expenditure of the appropriations applicable to these objects, as all the money is issued on requisitions made by the chief engineer, and all the accounts examined by him and approved before they go to the Auditors of the Treasury for settlement—a duty exceedingly arduous and of great responsibility, as the sums appropriated annually for objects under the direction of the Engineer department are from six hundred thousand dollars to upwards of a million, averaging for the last four years nine hundred and fifty thousand dollars.

The geographical extent of my command is coequal with the whole United States and their Territories.

Although I have stated above that there is no regulation which applies to the case under consideration, there are, nevertheless, decisions exactly in point, one of which I will state. Brevet Major De Russey, who is a captain in the corps of engineers, was appointed to the command and superintendency of the works on the Gulf of Mexico. His command consisted of a number of forts and officers of engineers, civil assistants, mechanics, and laborers; amounting in all to upwards of four hundred, which was deemed equal to a battalion of infantry at least; and it was, in consequence, decided that he was entitled to his brevet pay, and he received it accordingly. So in the case of Brevet Lieutenant Colonel Totten, of the corps of engineers, who is a major in that corps. Those are two cases in point,* and furnish precedents for confirming my claim, for the law does not point out what a command of an officer may be. It is a regulation of the War Department to cover commands in the line of the army which has been established; but as it regards the engineers it is left subject to the decision of the Executive. Now, the law creating the corps of engineers places the senior officer of that corps at West Point, which is its established headquarters; but in the arrangement of the army the President has thought proper to establish a separate command at Washington, called the Engineer department, and to assign me to that command in the quality of major general, and has thought proper, from time to time, to augment my command and duties to the amount stated in this paper; the extent and importance of which are too manifest to admit, for one moment, that they are inferior in numerical or geographical extent to those of either Generals Gaines or Scott, who both, for distinguished services, received the brevet commissions of major generals, and who, in consequence of holding them, enjoy the pay and emoluments attached to their rank. I, with a superior command and honored with the same distinction as to rank, and obtained under the same circumstances, do not enjoy the same privileges—a distinction which certainly was not contemplated by the law, and certainly not warranted by the principles of justice and equity.

Respectfully submitted.

ALEX. MACOMB, *Major General and Chief Engineer.*

HON. JAMES BARBOUR, *Secretary of War.*

A comparison of the commands of Major Generals Scott, Gaines, and Macomb.

	Officers and men.
Major General Scott commands the eastern department, which comprises all the territory east of a line drawn from the southernmost point of East Florida to the northwest extremity of Lake Superior, and contains by the last returns.....	2, 092
Major General Gaines all west of that line, and called the western department, and contains by last returns.....	2, 123
Major General Macomb's command extends over both eastern and western departments, and contains, according to statement herewith.....	4, 946
So that, computing a regiment of five hundred men,	
General Scott will have.....	4 regiments.
General Gaines will have.....	4 "
General Macomb's equal to.....	<u>10 "</u>

The within statement is respectfully submitted to the Second Comptroller of the Treasury for his decision.

1st. I claim my brevet pay and emoluments as a major general while commanding at Detroit, having under me all the posts in Michigan, Ohio, and Indiana, constituting the fifth military department, which was similar to the commands of Major Generals Gaines and Scott, who received their brevet pay and emoluments, viz: April 16, 1818, to May 31, 1821.

2d. From June 1, 1821, to May 23, 1828, while in charge of the Engineer department, having a command according to my brevet rank as major general, as will be seen by the within statement.

ALEX. MACOMB, *Major General.*

* Brevet Colonel Bomford, of the Ordnance Department, furnishes in his case another precedent.

No. 2.

*Report of Comptroller Richard Cutts on the claim of Major General Macomb.*TREASURY DEPARTMENT, *Second Comptroller's Office, July 14, 1828.*

SIR: I have carefully examined the papers you presented for my consideration. The act of the 6th of July, 1812, authorizes the President to confer brevet rank, on certain conditions, and officers so brevetted are entitled to the pay and emoluments when commanding separate posts, districts, or detachments. This act is still in force. By the act of 18th April, 1818, it is enacted that the officers of the army who have brevet commissions shall be entitled to, and receive the pay and emoluments of their brevet rank when on duty, and having a command according to their brevet rank, and at no other time. The rules and regulations for the army of May 8, 1818, designate the numerical command necessary to entitle a brevet officer to his pay and emolument. For example, "a brevet captain must command a company, a brevet major or lieutenant colonel a battalion, a brevet colonel a regiment, a brigadier general a brigade, a brevet major general a division." From the foregoing it will be seen that the rules and regulations point out precisely the numerical force that entitles a brevetted officer to his pay and emoluments, leaving no discretion with the accounting officers. By the 9th section of the act of the 24th April, 1816, the Secretary of War, by the consent and advice of the President, is authorized to alter the rules and regulations for the government of the army, if the public interest shall require it. Under this provision, I presume, General Macomb was authorized by the President (Mr. Monroe) to receive the brevet pay and emoluments of a brigadier general, as chief of the engineer corps; Colonels Thayer and Totten that of a brevet colonel; Major De Russey that of a major; Colonel Bomford, of the Ordnance department, that of a colonel; Col. Abert, of the engineer corps was allowed his brevet pay and emoluments by Mr. Secretary Barbour. All the foregoing named officers are exceptions to the rules and regulations, and have been allowed by the special order of the late President or Secretary of War, except Colonel Abert, whose pay, &c., was allowed by the late Secretary of War (Mr. Barbour.) The officers above-named have received their brevet pay and emolument, to the extent of their brevet rank, except General Macomb.

Upon a full view of the whole case, as here submitted, I do not see any reason why, on the principles of justice and equity, Major General Macomb's claims to his brevet pay, &c., as a major general, are not as good as those of either Generals Scott or Gaines, as the number of men employed under his direction, by the accompanying statement, is equal to theirs; but, inasmuch as the regulations point out what is the specific amount of the command of a major general in the line of the army, and as all allowances of brevet pay to officers having command out of the line, have been settled by special reference to the War Department, or to the Executive, I do not feel myself authorized to admit said claims, without the special sanction of the President or the Secretary of War. With these remarks, I return to Major General Macomb his papers, setting forth his claim to the brevet pay and emoluments of a major general.

I am, respectfully, sir, &c.,

RICHARD CUTTS.

Major General MACOMB.

No. 3.

*Letter of General Macomb to the Secretary of War on the subject of his claim to brevet pay.*WASHINGTON, *February 20, 1829*

SIR: Since I placed in your hands my claim for the brevet pay of major general, with a report of the Second Comptroller, acknowledging the justice of that claim, I have seen the report of the Military Committee of the House of Representatives on the subject of brevet rank; and I find, in reading it, that the report goes fully to substantiate my claim in a legal point of view, while the equity of it stands confessedly on its own showing, and the opinion of the Second Comptroller.

1st. Generals Gaines and Scott received the pay and emoluments of major generals by brevet, when commanding separate districts, under the law of 1812, 6th of July.

I commanded a separate district and post, and was senior brigadier general in the army; but, not knowing the operation of the law, did not claim the brevet pay until I learned that Generals Gaines and Scott received pay on their brevets.

2d. That so much of the act of 6th July, 1812, as relates to pay to brevet officers when commanding separate districts, posts, or detachments, it is admitted by the chairman of the Military Committee of the House of Representatives, and the chairman of the Military Committee of the Senate, as it will appear by reference to their respective reports. The concluding argument of the committee of the House, in its report on the memorial of General Scott, and to which I beg leave to refer, says: "Taking a general view of brevet rank, the committee neither regards it as merely honorary, or as equal to, and identified with, lineal rank. It is not merely honorary; for where the contingencies occur which are adverted to in the 61st Article (of War) a brevet officer has of right the commands which are there given him; he is also, of right, entitled to the pay and emoluments which are allowed to him by the acts of 1812 and 1818," recognizing the principles set forth in my letter, sustaining my claim, above alluded to; and both the bills reported by the military committees of the Senate and of the House of Representatives seem to recognize the principle fully. I will not trouble you with any further remarks on the subject, but will respectfully refer you to my letter in your possession presenting my claim, the report of the military committee herewith enclosed, and the two bills reported by the committees of the Senate and of the House of Representatives having reference to brevet rank, &c.

Respectfully submitted,

A. MACOMB, *Major General.*HON. PETER B. PORTER, *Secretary of War.*

A.—Statement showing the number of persons employed under direction of Engineer department—Continued.

Corps of engineers.	Officers of the corps of engineers.	Officers of the corps of topographical engineers.	Assistant officers of the line of the army.	Overseers and clerks.	Professors and teachers, officers, and others.	Cadets.	Civil engineers, commissioners, superintendents, &c.	Mechanics.	Laborers, boatmen, &c.	Soldiers.	Aggregate.
Office of the Engineer department.....	2										2
Board of engineers	1										1
At the Military Academy	4										4
Aid to General Brown	1										1
On furlough	1										1
	23			55				356	1,917		2,356
TOPOGRAPHICAL ENGINEERS.											
On surveys in relation to roads and canals in Maine, Vermont, and New Hampshire		1	7						25		33
On surveys with a view to the improvement of certain harbors in Massachusetts and Connecticut, &c.....		1	2						5		8
On surveys in relation to roads and canals in Ohio and Pennsylvania.....		1	7						21		29
On surveys in relation to roads and canals in Virginia		1	7								27
On surveys in North Carolina		1	3								14
Survey with a view to a canal in Florida.....		1	7								62
Examining a route for a road from Zanesville, O., to Florence, Ala.....		1	2								3
In topographical bureau at Washington.....		1	1								2
With board of internal improvement		1									1
On furlough.....		1									1
		10	36						134		180
CIVIL ENGINEERS, COMMISSIONERS OF ROADS, SUPERINTENDENTS AND AGENTS.											
Repairing Fort Constitution							1	10	6		17
Preservation of islands in Boston harbor							1	25	16		42
Repairing Plymouth beach, Mass							1	1	20		22
Repairing Fort Washington							1	4			5
Improving the harbor of Mobile							1				1
Improving the harbor of Ashtabula, Ohio.....							2		25		27
Removing obstructions at the mouth of Grand river							1	4	15		20
Removing obstructions in Huron river							2	8	18		28
Removing obstructions at the mouth of Cunningham creek.....							1		25		26
Building piers at the mouth of Oswego harbor							1	10	30		41
Building piers at Buffalo creek, N. Y.....							1	10	20		31
Building a pier at Steel's Ledge, Belfast, Me.....							1				1
Improving the harbor of Sackett's Harbor							1				1
Building a pier at Dunkirk harbor, N. Y.....							1		30		31
Improving Cleveland harbor, Ohio.....							1				1
Completing a pier at the entrance of La Plaisance bay							1				1
Survey in Indiana in relation to canals.....							5		16		21
Survey in Maryland and District of Columbia in relation to canals							6		12		18
Continuation of the Cumberland road							76	107	1,122		1,305
Surveying and locating the Cumberland road.....							1		6		7
Repairing the old Cumberland road.....							1				1
Survey with a view to the connexion of the Tennessee with the waters of the Alabama							2		8		10
Making a road from Detroit to Chicago.....							1		75		76
Making a road from Miami to Detroit							1		75		76
Making a road from Detroit to Fort Gratiot.....							3		10		13
Making a road from Detroit to Saganaw.....							3		10		13
Improving the navigation of the Ohio and Mississippi rivers							1		100		101
Removing obstructions in the river Ohio							1		100		101
							119	179	1,739		2,037
Professors, cadets, &c., at the Military Academy, West Point.....					28	250				95	378

A.—Statement showing the number of persons employed under direction of Engineer department—Continued.

RECAPITULATION.

Corps of engineers.	Officers of the corps of engineers.	Officers of the corps of topographical engineers.	Assistant officers of the line of the army.	Overseers and clerks.	Professors and teachers, officers, and others.	Cadets.	Civil engineers, commissioners, superintendents, &c.	Mechanics.	Laborers, boatmen, &c.	Soldiers.	Aggregate.
Corps of engineers.....	28			55				356	1,917		2,356
Topographical engineers.....		10	36						134		180
Civil engineers, commissioners, superintendents, &c.....							119	179	1,739		2,037
Military Academy.....					28	250				95	373
	28	10	36	55	28	250	119	535	3,790	95	4,946

Extracted from the reports on file in the Engineer department.

BENJAMIN FOWLER, Clerk.

B.

Adjutant General's certificate.

ADJUTANT GENERAL'S OFFICE, April 25, 1831.

It appears from the records of the Adjutant General's office, that the 5th military department of the late north division was commanded by Brevet Major General Macomb, from 1818 to the period of the reduction of the army in June, 1821. It also appears that the number of companies which composed General Macomb's command, during the period above specified, exceed the number of companies stationed within the military departments commanded by Brevet Major General Scott for the years above-mentioned.

R. JONES, *Adjutant General.*

C.

Report of General Macomb on brevet pay to officers of the army.

HEADQUARTERS OF THE ARMY, Washington.

Is a brevet officer entitled to pay and emolument? If so, under what laws, and under what circumstances?

There are but two laws which relate to the allowing of pay and emoluments to brevet officers—the act of the 6th of July, 1812, and the act of 16th of April, 1818. The act of the 6th of July, 1812, fourth section, is in these words: "That the President is hereby authorized to confer brevet rank on such officers of the army as shall distinguish themselves by gallant actions or meritorious conduct, or who shall have served ten years in any one grade; provided, that nothing herein contained shall be so construed as to entitle officers so brevetted to any additional pay or emolument, except when commanding *separate posts, districts, or detachments*, when they shall be entitled to and receive the pay and emolument to which officers of the same grade are now, and hereafter may be, allowed by law."

This is the first act of the Congress of the United States, under the present Constitution, which authorizes the conferring of brevet rank. Brevet rank, as authorized by this act, is a reward for long, faithful, and distinguished public services; it may be considered in the light of a contract, and points out the particular circumstances under which an officer so brevetted would be entitled to the pay and emoluments of his brevet rank. If, then, this law may be considered in the light of a contract, then is a right vested under that contract which cannot be taken away by any repeal of the law.—(Fletcher vs. Peck, 6 Cranch, 88.) So under the act above quoted, to wit: 4th section of the act of July 6, 1812, a brevet officer commanding a *separate post, district, or detachment*, is entitled to and shall receive the same pay and emoluments as are allowed by law to other officers of the same grade. The act of the 16th of April, 1818, is in these words: "That officers of the army, who have brevet commissions, shall be entitled to and receive the pay and emoluments of their brevet rank when on duty, and having a command according to their brevet rank, and at no other time." There is nothing in the law last quoted, as far as I can perceive, that either repeals, supersedes, or abrogates the act of the 6th of July, 1812. This latter act seems rather intended by its phraseology to extend the privileges of brevet officers by allowing pay and emoluments to all brevet officers *when on duty and having a command according to their brevet rank*. Now the law of 1812, on the contrary, restricts the allowance of brevet pay and emolument to brevet officers when they may be in command of *separate posts, districts, or detachments*, that is to say, to brevet officers exercising a chief command of *separate posts, separate districts, or separate detachments*, while the law of 1818, as explained by the army regulations, allows to brevet officers their pay and emolument while exercising a command *equal* to their brevet rank; as, for instance, a brevet captain commanding a company, a brevet major a battalion, a brevet colonel a regiment, a brevet brigadier general a brigade, or a brevet major general a division.—(See Regulation, article 71, par. 1124.)

And it has been further decided that a command composed of different regiments, companies of different regiments, or detachments of different corps, amounting to any of the above-mentioned divisions or subdivisions, may be counted equal to a command entitling to brevet pay and emoluments according to rank. The law admits of great latitude of construction, it must be allowed. I am, however, clearly of opinion that so much of the law of the 6th of July, 1812, 4th section, as points out when a brevet officer shall be entitled to his pay and emoluments as such, is still in force, and not repealed by the act of the 16th of April, 1818. In this opinion I am sustained by the report of the Military Committee of the House of Representatives as declared by Colonel Drayton, its chairman, in answer to the memorial of General Scott.—(See documents.) In this report it says: "Taking a general view of brevet rank, the committee neither regard it as merely honorary, or as equal to, or identified with lineal rank. It is not merely honorary, for when the contingencies arrive which are adverted to in the 61st article, a brevet officer has, of right, the commands which are then given him; he is also of right entitled to the pay and emoluments which are allowed to him by the acts of 1812 and 1818." Here it is clearly shown that it was the opinion of the Military Committee that the act of 1812, as far as it regards the allowing of pay to brevet officers, is not repealed by the act of 1818. The conclusion, then, is, that the act of 1812 is in force. It may be made a question whether it be competent for Congress to violate the contract implied in the 4th section of the act of the 6th July, 1812, by repealing the said 4th section as it regards those officers who have received brevets under that law so as to deprive them of the pay and emolument which that law allows to them when commanding *separate posts, districts, or detachments*. It has been decided in the courts of the United States that "a party to a contract cannot pronounce its own deed invalid, even though that party be a sovereign State."—(See *Fletcher vs. Peck*, 6 Cranch, 88.) Indeed, it would appear from the bills presented by the Military Committees of both houses of Congress, at its last session, for abolishing the rank of major general, and regulating brevet pay in the army, that those committees were of opinion that the 4th section of the act of the 6th July, 1812, was still in force; also, the act of the 16th of April, 1818; otherwise why should these committees attempt to modify them? From the foregoing reasoning, I come to the following conclusions:

1st. Officers commanding separate posts, districts, or detachments, who have brevet rank, are entitled to the pay and emoluments of that rank, under the provisions of the 4th section of the act of the 6th of July, 1812.

2d. That a brevet officer having a command under another, or a brevet officer who is in the chief command, may receive his brevet pay, provided the amount of the force under his immediate and direct command shall correspond with his brevet rank, or, in other words, be equal to or *according to* his brevet rank. For example, a brevet captain commanding a company, or a number of men equal to a company; and so with any other brevet officer.

3d. An officer of engineers, having peculiar duties to perform, and his command being also of a peculiar character—for instance, the direction of the public works, fortifications, Military Academy, &c.—such engineer officer ought to be allowed, by a fair construction of the law, the advantages that might be obtained by any brevet rank which he might possess; as, for instance, a lieutenant of engineers, possessing the brevet rank of captain, directing a work, and having under his command as many men as would amount to a company in the line of the army, would be entitled to the pay of a captain; and a brevet major or brevet lieutenant colonel of engineers, directing works at which were employed a number of men equal to a battalion, whether soldiers or laborers and artificers, would be entitled to the pay of their respective brevet ranks. It would be but an equitable construction of the law; otherwise a brevet officer of engineers would not be entitled to any benefit from his brevet commission, however honorably obtained, and would, therefore, not enjoy privileges in common with other officers of the army, which certainly could not have been the intention of Congress. It may, therefore, be inferred, with great propriety, that the indefinite expression, "*according to their brevet rank,*" was employed in the law to give such a latitude to its construction as not to exclude any corps or class of officers from its benefits.

Respectfully submitted to the Secretary of War.

ALEX. MACOMB, *Major General*.

WASHINGTON, July 31, 1829.

SIR: I beg leave to submit to your decision my claim to brevet pay as a major general. I hope it may be either laid before the President or the Attorney General, if you find any difficulty in deciding upon the claim as presented in the enclosed papers.

With perfect respect, I am, sir, your obedient servant,

ALEX. MACOMB, *Major General*.

HON. JOHN H. EATON, *Secretary of War*.

The President of the United States of America to all who shall see these presents, greeting:

Know ye, that I do hereby confer on Brigadier General Alexander Macomb, of the army of the United States, the rank of major general by brevet in said army, to rank as such from the 11th day of September, in the year of our Lord one thousand eight hundred and fourteen, for his gallantry and good conduct in defeating the enemy at Plattsburg.

And I do strictly charge and require all officers and soldiers under his command to obey and respect him accordingly; and he is to observe and follow such orders and directions, from time to time, as he shall receive from me, or the future President of the United States of America, and other officers set over him, according to law and the rules and discipline of war. This commission to continue in force during the pleasure of the President of the United States for the time being.

Given under my hand at the city of Washington, this first day of October, in the year of our Lord one thousand eight hundred and fourteen, and in the thirty-ninth year of the independence of the United States.

By the President.

JAMES MONROE, *Secretary of War*.

JAMES MADISON.

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the thanks of Congress be, and are hereby, presented to Major General Macomb, and through him to the officers and men of the regular army under his command, and to the militia and volunteers of New York and Vermont, for their gallantry and good conduct in defeating the enemy at Plattsburg on the 11th of September—repelling, with one thousand five hundred men, aided by a body of militia and volunteers from New York and Vermont, a British veteran army greatly superior in number; and that the President of the United States be requested to cause a gold medal to be struck, emblematical of this triumph, and presented to Major General Macomb.

LANGDON CHEVES, *Speaker of the House of Representatives.*
E. GERRY, *Vice President of U. S. and President of the Senate.*

Approved November 3, 1814.

JAMES MADISON.

Official Army Register for 1818.

GENERAL STAFF.

Names.	Rank.	Date of appointment.	Brevet and former commissions.	Remarks.
Jacob Brown.....	Major general.....	Jan. 24, 1814	-----	Division of the N.
Andrew Jackson.....	do.....	May 1, 1814	-----	Division of the S.
Alexander Macomb.....	Brigadier general.....	Jan. 24, 1814	Sept. 11, 1814, major gen. brevet..	Detroit, N. D.
Edmund P. Gaines.....	do.....	March 9, 1814	Aug. 15, 1814, major gen. brevet..	Augusta, S. D.
Winfield Scott.....	do.....	March 9, 1814	July 25, 1814, major gen. brevet..	New York, N. D.
Eleazer W. Ripley.....	do.....	April 15, 1814	July 25, 1814, major gen. brevet..	New Orleans, S. D.
Daniel Parker.....	Adjutant and insp. gen.	Nov. 22, 1814	Brigadier general brevet.....	Washington.
Robert Butler.....	Adjutant general.....	March 5, 1814	Colonel brevet.....	S. division.
Robert Butler.....	do.....	-----	do.....	N. division.
Arthur P. Hayne.....	Inspector general.....	April 12, 1814	-----	S. division.
John E. Wool.....	do.....	April 29, 1816	do.....	N. division.
Charles J. Nourse.....	Assistant adj. general..	Sept. 14, 1814	Major brevet.....	General Scott.
R. M. Kirby.....	do.....	April 29, 1816	do.....	General McComb.
Clinton Wright.....	do.....	April 29, 1816	do.....	General Gaines.
Ferrin Willis.....	do.....	April 3, 1817	do.....	General Ripley.
John M. Davis.....	Assistant insp. general..	Oct. 1, 1814	do.....	General Gaines.
Francis S. Belton.....	do.....	Oct. 18, 1814	do.....	General McComb.
William McDonald.....	do.....	April 29, 1816	do.....	General Ripley.
John Biddle.....	do.....	June 19, 1817	do.....	General Scott.
Thomas S. Jesup.....	Quartermaster general..	May 8, 1818	Brigadier general brevet.....	Washington.
William Linnard.....	Dep. quarterm. general.	May 12, 1813	Major brevet.....	N. division.
Milo Mason.....	do.....	Feb. 13, 1818	do.....	S. division.
W. L. Robeson.....	Ass. dep. quartermaster.	Aug. 30, 1816	Captain brevet.....	S. division.
Thomas Tupper.....	do.....	Nov 15, 1816	do.....	N. division.
Henry Stanton.....	do.....	Feb. 13, 1818	do.....	West Point.
A. W. Hamilton.....	do.....	Feb. 13, 1818	do.....	-----
George Bender.....	do.....	April 18, 1818	do.....	-----
William A. Barron.....	do.....	April 18, 1818	do.....	-----
Archibald Darragh.....	do.....	April 18, 1818	do.....	-----
Richard J. Easter.....	do.....	April 18, 1818	do.....	-----
Joel Spencer.....	do.....	April 18, 1818	do.....	-----
R. H. Winder.....	Judge advocate.....	July 9, 1814	-----	S. division.
Samuel A. Storror.....	do.....	July 9, 1816	-----	N. division.

MEDICAL DEPARTMENT.

Names.	Rank.	Date of appointment.	Remarks.
Joseph Lovell.....	Surgeon general.....	April 18, 1818	Washington.
Tobias Watkins.....	Assistant surgeon general	April 18, 1818	N. division.
James C. Bronaugh.....	do.....	April 18, 1818	S. division.
George W. Maupin.....	Post surgeon.....	Nov. 5, 1802	-----
Joseph Goodhue.....	do.....	Feb. 8, 1803	-----
James H. Sergeant.....	do.....	March 6, 1806	-----
William T. Davidson.....	do.....	June 13, 1808	-----
Cor. Cunningham.....	do.....	Oct. 15, 1810	-----
William Ballard.....	do.....	March 24, 1812	-----
William Turner.....	do.....	Sept. 29, 1812	-----
Hanson Catlett.....	do.....	Feb. 18, 1813	-----
John H. Sackett.....	do.....	March 22, 1813	-----
S. A. Walsh.....	do.....	August 9, 1813	-----
Foster Swift.....	do.....	Feb. 18, 1814	-----
John Trevett.....	do.....	April 8, 1814	-----
Arnold Elzy.....	do.....	April 15, 1814	-----
German Senter.....	do.....	July 9, 1814	-----
W. C. Lane.....	do.....	Sept. 15, 1814	-----
William N. Mercer.....	do.....	Nov. 22, 1814	-----
T. I. C. Monroe.....	do.....	April 29, 1816	-----
Samuel B. Smith.....	do.....	Nov. 12, 1816	-----
George A. Carroll.....	do.....	Feb. 17, 1817	-----
Samuel Ayer.....	do.....	Feb. 17, 1817	-----
William Baker.....	do.....	June 20, 1817	-----
Jabez W. Heustis.....	do.....	Nov. 12, 1817	-----
Mordecai Hale.....	do.....	Feb. 13, 1818	-----
James Mann.....	do.....	April 18, 1818	-----

MEDICAL DEPARTMENT—Continued

Names.	Rank.	Date of appointment.	Remarks.
David G. Kerr.....	Post surgeon.....	April 18, 1818	
Samuel Shaw.....	do.....	do.....	
Benjamin Waterhouse.....	do.....	do.....	
Sylvester Day.....	do.....	do.....	
W. H. Buckner.....	do.....	do.....	
Edward Purcell.....	do.....	do.....	
William Stewart.....	do.....	do.....	
William Marshall.....	do.....	do.....	
Joseph Eaton.....	do.....	do.....	
B. Delavan.....	do.....	do.....	
Robert Archer.....	do.....	do.....	
Thomas Russell.....	do.....	do.....	
George C. Clitherall.....	do.....	do.....	
W. J. Clark.....	do.....	do.....	
Samuel C. Muir.....	do.....	do.....	
Francis Le Baron.....	Apothecary general.....	June 11, 1813	
Christopher Packus.....	Assistant apothecary.....	August 12, 1814	S. division.
James Cutbush.....	do.....	August 12, 1814	N. division.
PURCHASING DEPARTMENT.			
Callender Irvine.....	Commissary general.....	August 8, 1812	Office, Philadelphia.
John M'Kinney.....	Deputy commissary.....	April 12, 1812	Southern division.
Darby Noon.....	do.....	July 15, 1815	Northern division.
Robert Irvine.....	Asst' commissary of issues.....		Detroit.
James E. Herron.....	do.....		Sackett's Harbor.
Maurice Prevost.....	do.....		New Orleans.
Joseph W. Pinder.....	do.....		Savannah.
Edwin Starke.....	do.....		Norfolk.
Eli B. Clemson.....	do.....		St. Louis.
Archibald Steel.....	Military storekeeper.....		Philadelphia.
Samuel Devans.....	do.....		Charlestown, Mass.
John Fellows.....	do.....		New York.
Jonathan Snowden.....	do.....		West Point.
Thomas Martin.....	do.....		Newport, Ky.
Robert Wilson.....	do.....		Charleston, S. C.
John Chaffee.....	do.....		Springfield, Mass.
James Gibson.....	do.....		Pittsburg.
George Hackett.....	do.....		Carlisle.
Jacint Laval.....	do.....		Washington.
J. Whistler.....	do.....		St. Louis.
D. Hopkins.....	do.....		Baltimore.
James Ward.....	do.....		
William McGuire.....	do.....		Harper's Ferry, Virginia.
A. Giles.....	do.....		New York.
Thomas Harrison.....	do.....		Watertown.
Heman A. Fay.....	do.....		Albany.
Hugh McCall.....	do.....		Savannah.
PAY DEPARTMENT.			
Robert Brent.....	Paymaster general.....	July 1, 1808	Office, Washington.
[For regimental and battalion paymasters, see the several regiments and the corps of artillery.]			
SUSISTENCE DEPARTMENT.			
Colonel George Gibson.....	Commissary general.....	April 18, 1818	Washington.

ENGINEER DEPARTMENT.

Names.	Rank.	Date of appointment.	Brevet and former commissions.	Remarks.
CORPS OF ENGINEERS.				
J. G. Swift.....	Colonel.....	July 31, 1812	Brig. gen. bvt., Feb. 19, 1814	Chief engineer, headquarters, Wash'n.
Walker K. Armistead.....	Lieutenant colonel.....	do.....		
William McRee.....	Major.....	do.....	Colonel bvt., Aug. 15, 1814	
Charles Gratiot.....	do.....	Feb. 9, 1815		
J. G. Totten.....	Captain.....	July 31, 1812	Lt. col. bvt., Sept. 11, 1814	
Samuel Babcock.....	do.....	Sept. 20, 1812		
Sylv. Thayer.....	do.....	Oct. 13, 1813	Major brevet, Feb. 20, 1815	
E. De Russey.....	do.....	Feb. 9, 1815	Brevet, September 11, 1814	
Frederick Lewis.....	do.....	Oct. 1, 1817		
James Gadsden.....	do.....	April 15, 1818		
T. W. Maurice.....	First lieutenant.....	Oct. 13, 1813		
Hipol. Dumas.....	do.....	Feb. 20, 1814		
D. B. Douglass.....	do.....	Sept. 17, 1814	Captain bvt., Sept. 17, 1814	
George Trescott.....	do.....	Feb. 9, 1815		
J. L. Smith.....	do.....	Oct. 1, 1817		
Hor. C. Story.....	do.....	April 15, 1818	Brevet, September 17, 1814	
John Wright.....	Second lieutenant.....	March 30, 1814		
George Blaney.....	do.....	Oct. 31, 1816		Aide to Gen. Swift.

ENGINEER DEPARTMENT—Continued.

Names.	Rank.	Date of appointment.	Brevet and former commissions.	Remarks.
Thomas I. Leslie	Second lieutenant.....	Oct. 31, 1816	Paymaster.
William S. Evileth	do.....	do.....	.....
R. W. Pooler	do.....	Oct. 1, 1817	Assistant engineer.
William H. Chase	do.....	April 15, 1818	.....
General Simon Bernard.....	.....	Nov. 16, 1816	.....
TOPOGRAPHICAL ENGINEERS.				
John Anderson.....	Major.....	April 12, 1813	
Isaac Roberdeau.....	do.....	April 29, 1813	.....
John J. Abert.....	do.....	Nov. 22, 1814	.....
James Kearney.....	do.....	April 29, 1816	.....
Stephen H. Long.....	do.....	do.....	.....
P. H. Perrault.....	do.....	Feb. 17, 1817	.....
ASSISTANT TOP. ENGINEERS.				
Hugh Young.....	Captain.....	Feb. 19, 1817	Acting aide to Gen. Bernard.
William Tell Poussin.....	do.....	March 6, 1817	.....
John Le Conte.....	do.....	April 18, 1818	.....

MILITARY ACADEMY, WEST POINT, NEW YORK.

Senior officer of engineers, superintendent Military Academy.
 Jared Mansfield, professor natural and experimental philosophy.
 Captain D. B. Douglass, assistant professor natural and experimental philosophy.
 Andrew Ellicott, professor mathematics.
 Lieutenant Charles Davies, acting assistant professor mathematics.
 Claude Crozet, professor art of engineering.
 Lieutenant C. M. Eakin, acting assistant professor art of engineering.
 Cave Jones, chaplain, and professor ethics.
 Claudius Berrard, teacher French language.
 C. E. Zoeller, teacher of drawing.
 Samuel A. Walsh, surgeon.
 Pere Thomas, sword master.

ORDNANCE DEPARTMENT.

Names.	Rank.	Date of appointment.	Brevet and former commissions.	Remarks.
ORDNANCE DEPARTMENT.				
Decius Wadsworth.....	Colonel.....	July 2, 1812	Office, Washington.
George Bomford.....	Lieutenant colonel.....	Feb. 9, 1815	Brevet, December 22, 1814	
A. R. Wooley.....	Major.....	do.....	.....
James Dalaby.....	do.....	do.....	.....
John Morton.....	Captain.....	Sept 11, 1812	.....
R. D. Richardson.....	do.....	August 5, 1813	.....
George Talcott, jr.....	do.....	do.....	.....
Edwin Tyler.....	do.....	do.....	.....
John H. Margart.....	do.....	do.....	.....
J. H. Rees.....	do.....	Feb. 16, 1814	.....
J. D. Hayden.....	do.....	Feb. 9, 1815	Brevet, March 13, 1813	
William Wade.....	do.....	do.....	.....
M. J. Magee.....	do.....	Feb. 10, 1815	.....
Rufus L. Baker.....	do.....	May 21, 1817	.....
William C. Lyman.....	First lieutenant.....	April 19, 1813	.....
Joseph S. Nelson.....	do.....	April 30, 1813	Capt. brevet, April 30, 1813.	
David T. Welsh.....	do.....	do.....	Capt. brevet, June 20, 1814.	
James Baker.....	do.....	August 6, 1813	.....
Nehemiah Baden.....	do.....	do.....	.....
Christopher Keiser.....	do.....	do.....	.....
J. Livingston.....	do.....	March 5, 1814	.....
William Anderson.....	do.....	October 1, 1814	.....
J. Hall.....	do.....	May 17, 1816	.....
John W. Thompson.....	do.....	May 21, 1817	.....
Thomas T. Stephenson.....	Second lieutenant.....	July 21, 1814	.....
J. C. De Hart.....	do.....	August 1, 1814	.....
John Wilson.....	do.....	Dec. 26, 1814	.....
R. C. Pomeroy.....	do.....	do.....	.....
Charles F. Morton.....	do.....	do.....	.....
J. W. Phillips.....	do.....	Dec. 2, 1815	.....
O. O. Bangs.....	do.....	do.....	.....
James Simonson.....	do.....	May 21, 1817	.....
John Hills.....	do.....	January 1, 1818	.....
John Symington.....	do.....	April 18, 1818	.....
W. E. Williams.....	Third lieutenant.....	Dec. 2, 1815	.....
W. B. Davidson.....	do.....	do.....	.....
Joshua Howard.....	do.....	do.....	.....
Charles Ward.....	do.....	May 17, 1816	.....
Martin Thomas.....	do.....	March 5, 1817	.....
L. A. Rigail.....	do.....	April 18, 1818	.....
John B. Hobkirk.....	do.....	do.....	.....

REGIMENT OF LIGHT ARTILLERY.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commission.	Brevets and former commissions.	
COLONEL.			H. Saunders -----	July 14, 1814	Aid to Maj. Gen. Brown.	
Moses Porter -----	Mar. 12, 1812	Brig. gen. bvt., Sept. 10, 1813.	S. M. Mackay -----	Oct. 10, 1814		
LIEUTENANT COLONEL.			G. E. Wells -----	Sept. 30, 1816	Quartermaster.	
J. R. Fenwick -----	Dec. 2, 1811	Col. bvt., March 18, 1813.	E. Lyon -----	Jan. 1, 1817		
MAJOR.			S. Washburn -----	Jan. 15, 1817		
Abram Eustis -----	Mar. 15, 1810	Lt. col. bvt., Sept. 10, 1813.	G. Drane -----	Nov. 15, 1817		
CAPTAINS.			SECOND LIEUTENANTS.			
A. McDowell -----	April 1, 1812	Major bvt., Sept. 11, 1814.	W. Smith -----	May 12, 1814		
Luth. Leonard -----	July 6, 1812		Lt. col. bvt., July 5 1814.	H. F. Evans -----		June 2, 1814
A. S. Brooks -----	do -----	Lt. col. bvt., July 25, 1814.	W. Wells -----	Oct. 10, 1814		
Nath. Towson -----	do -----		J. A. Webber -----	Sept. 30, 1816		
Samuel D. Harris -----	do -----		T. J. Gardner -----	Jan. 1, 1817		
J. L. Eastman -----	July 31, 1813		B. L. E. Bonneville -----	Jan. 15, 1817		
Henry K. Craig -----	Dec. 23, 1813		Samuel Cooper -----	Nov. 15, 1817		
John R. Bell -----	Oct. 10, 1814		R. M. White -----	Dec. 1, 1817		
W. F. Hobart -----	Jan. 1, 1817		And. McIntire -----	Feb. 13, 1818		
G. N. Morris -----	Jan. 15, 1817		S. Johnson -----	April 18, 1818		
FIRST LIEUTENANTS.			PAYMASTER.			
J. H. Wilkins -----	Dec. 3, 1813	Adjutant.	Charles B. Talmadge -----	Mar. 27, 1818		
John Gates, jr. -----	do -----			SURGEON.		
John A. Shaw -----	Feb. 21, 1814		Lew. Dunham -----	Dec. 12, 1808		
William Lyman -----	June 10, 1814		SURGEON'S MATE.			
			W. H. Livingston -----	July 26, 1814		

CORPS OF ARTILLERY.

LIEUTENANT COLONELS.			Nath. N. Hall -----	Sept. 30, 1814	Bvt., Aug. 15, 1814.	
G. E. Mitchell -----	Mar. 3, 1813	Colonel bvt., May 5, 1814.	M. P. Lomax -----	Nov. 17, 1814		
James Rouse -----	do -----	Bvt., July 10, 1812	Milo Mason -----	May 17, 1816	Bvt., Feb. 20, 1815.	
William Lindsay -----	Mar. 12, 1813			John Farley -----		June 19, 1817
William Macrea -----	April 19, 1814			W. M. Read -----		Sept. 28, 1817
MAJORS.			L. Brown -----	do -----		
James B. Many -----	May 5, 1813	Col. bvt., May 17, 1815.	Luther Scott -----	Nov. 24, 1817		
J. Hindman -----	June 26, 1813	Lt. col. bvt., May 1, 1815.	R. R. Ruffin -----	Mar. 20, 1818		
J. Bankhead -----	Aug. 15, 1813		J. Erving, jr. -----	April 25, 1818		
J. B. Walbach -----	April 25, 1818		FIRST LIEUTENANTS.			
CAPTAINS.			A. L. Sands -----	Feb. 10, 1813		Adjutant.
Moses Sweet -----	June 30, 1807	Major bvt., June 30, 1817.	T. J. Beall -----	Mar. 3, 1813		Capt. bvt., March 17, 1814.
William Wilson -----	May 3, 1808	Major bvt., Dec. 28, 1814.	Richard A. Zantzingler -----	Mar. 13, 1813		Q. M., captain bvt., Aug. 15, 1814.
E. Humphreys -----	Jan. 9, 1809	Major bvt., Nov. 13, 1813.	W. R. Duncan -----	do -----		Capt. brevet, Sept. 11, 1814; aid to M. G. Macomb.
James Reed -----	Mar. 12, 1812	Lt. col. bvt., Sept. 17, 1814.	Chester Root -----	do -----		
J. B. Crane -----	July 6, 1812	Maj. bvt., April 27, 1813.	Gus. Loomis -----	May 5, 1813	Capt. brevet, Sept. 11, 1814.	
Roger Jones -----	do -----		J. Mountfort -----	May 20, 1813		
S. B. Archer -----	do -----		F. Whiting -----	June 20, 1813	Adjutant.	
S. Donoho -----	do -----		G. Dearborn -----	Oct. 1, 1813		
Th. Biddle, jr. -----	do -----		Felix Ansart -----	do -----	Quartermaster.	
J. T. B. Romayne -----	do -----		Th. C. Legate -----	Oct. 29, 1813		
Th. Stockton -----	Sept. 10, 1812	Maj. bvt., April 15, 1814.	S. Armstrong -----	Mar. 9, 1814	Capt. bvt., Jan. 8, 1815.	
William Gates -----	Mar. 3, 1813	Maj. bvt., Aug. 15, 1814.	Robert McClelland -----	May 1, 1814		
A. C. W. Fanning -----	Mar. 13, 1813		S. Spotts -----	May 22, 1814	Aid to Gen. Ripley. Do.	
J. M. O'Connor -----	do -----		L. Whiting -----	June 14, 1814		
I. Roach, jr. -----	April 13, 1813		W. H. Nicoll -----	June 22, 1814	Bvt., June 25, 1814.	
J. F. Heileman -----	May 5, 1813		G. D. Snyder -----	Aug. 30, 1816		
H. Yeaton -----	May 20, 1813		Eneas McKay -----	Dec. 1, 1816	Bvt., Mar. 12, 1813.	
Th. Bennet -----	June 20, 1813		J. P. Prince -----	May 13, 1817		
S. Churchill -----	Aug. 15, 1813		Richard Bache -----	June 15, 1817	Bvt., April 17, 1813.	
B. K. Pierce -----	Oct. 1, 1813		P. J. Neville -----	June 19, 1817		
G. P. Peters -----	Feb. 21, 1814		M. S. Massey -----	Aug. 5, 1817	Quartermaster.	
M. M. Payne -----	Mar. 2, 1814		T. W. Denton -----	Sept. 28, 1817		
Ethan A. Allen -----	July 25, 1814		Charles Anthony -----	do -----	Aid to Gen. Porter.	
			W. McClintock -----	Sept. 29, 1817		
			L. H. Osgood -----	Sept. 30, 1817	Bvt., July 15, 1814.	
			P. Melendy -----	Oct. 24, 1817		
			Jos. Taylor -----	Nov. 24, 1817		
			Joseph Bosque -----	Mar. 1, 1818		
			Robert Beall -----	Mar. 20, 1818		
			John A. Dix -----	Mar. 23, 1818		

CORPS OF ARTILLERY—Continued.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commission.	Brevets and former commissions.	
FIRST LIEUTS.—Cont'd.			James Badolet.....	Oct. 1, 1816		
G. W. Boyd.....	April 20, 1818	Quartermaster.	G. W. Gardner.....	do.....	Quartermaster.	
I. L. Gardner.....	do.....		B. S. A. Lowe.....	Oct. 31, 1816		
T. I. Harrison.....	do.....		Patrick Galt.....	Nov. 1, 1816	Adjutant.	
G. W. Gardiner.....	do.....		U. S. Frazer.....	Dec. 1, 1816		
C. S. Merchant.....	do.....		H. Griswold.....	May 1, 1817	Adjutant.	
Nath. G. Dana.....	do.....		James Monroe.....	May 2, 1817		
John Monroe.....	do.....		Robert C. Brent.....	May 13, 1817		
J. S. Allanson.....	do.....		Robert I. Scott.....	June 15, 1817		
L. G. De Russy.....	do.....		F. N. Berrier.....	June 19, 1817		
Thomas Childs.....	do.....		A. F. Cochrane.....	Aug. 5, 1817		
Jacob Schmuck.....	do.....		R. M. Forsyth.....	Sept. 8, 1817		
			First Lt. bvt., July 25, 1814.	T. W. Lendrum.....	Sept. 28, 1817	Adjutant.
Charles Mellon.....	do.....			James Spencer.....	do.....	
John S. Pierce.....	do.....			I. A. Adams.....	Sept. 29, 1817	
Allen Lowd.....	do.....		W. M. Graham.....	Sept. 30, 1817		
G. S. Wilkins.....	do.....		J. D. Graham.....	Oct. 14, 1817		
J. Ripley.....	do.....	Quartermaster.	C. Despinville.....	Oct. 24, 1817		
Tim. Green.....	do.....		John C. Kirk.....	Oct. 31, 1817		
Isaac E. Craig.....	do.....		J. R. Vinton.....	do.....		
C. M. Thruston.....	do.....		R. B. Lee.....	Nov. 24, 1817		
H. W. Fitzhugh.....	do.....		F. L. Griffith.....	Dec. 9, 1817		
J. Davis.....	do.....		E. J. Lambert.....	Mar. 1, 1818		
E. Humphrey.....	do.....		W. G. McNeill.....	do.....		
D. S. Andrews.....	do.....		G. M. Eakin.....	Mar. 20, 1818		
N. G. Wilkinson.....	do.....		M. A. Patrick.....	Mar. 23, 1818		
Elisha Brimhall.....	do.....	First Lt. bvt., Sep. 1, 1814.	Ed. Polk.....	April 2, 1818		
H. H. Minton.....	do.....		D. C. Nicholls.....	April 20, 1818		
Hugh K. Mead.....	do.....		John Gassaway.....	do.....		
H. M. Simons.....	do.....		W. Wright.....	do.....		
J. S. Abeel.....	do.....	First Lt. bvt., Oct. 1, 1814.	Constantine Pierce.....	do.....		
W. T. Willard.....	do.....		Samuel Hodges.....	do.....		
R. H. Lee.....	do.....	First Lt. bvt., Sep. 17, 1814.	J. M. Hanson.....	April 21, 1818		
Jesse McIlvain.....	do.....		BATTALION PAYMASTERS.			
W. L. Booth.....	April 25, 1818		Sat. Clark.....	April 29, 1816		
SECOND LIEUTENANTS.			J. Woodruff.....	do.....		
T. J. Baird.....	Aug. 1, 1816		David Gwynn.....	do.....		
I. Parkhurst.....	Aug. 30, 1816		D. S. Townsend.....	do.....		
R. L. Armstrong.....	do.....		Leroy Opie.....	do.....		
			Cary Nicholas.....	Feb. 17, 1817		
			S. Knight.....	May 16, 1817		
			Richard Platt.....	Nov. 21, 1817		

FIRST REGIMENT OF INFANTRY.

COLONEL.			Richard K. Call.....	July 15, 1814	Capt. bvt., Nov. 7, 1814.	
Daniel Bissell.....	Aug. 15, 1812	Brig. gen. bvt., Mar. 9, 1814.	James Smith.....	June 10, 1816	Bvt., April 15, 1814.	
LIEUTENANT COLONEL.			Robert L. Coomb.....	Oct. 31, 1816		
J. McNeal, jr.....	Feb. 24, 1818	Col. bvt., July 25, 1814.	T. S. Rogers.....	do.....	Adjutant.	
MAJOR.			W. V. Cobbs.....	April 15, 1817		
R. Whartenby.....	April 30, 1817	Bvt., May 1, 1814.	Truman Cross.....	Jan. 2, 1818	Quartermaster.	
CAPTAINS.			James Scallan.....	Jan. 31, 1818		
Alex. Gray.....	July 6, 1812	Maj. bvt., Dec. 23, 1814.	James Collins.....	Mar. 1, 1818		
John Jones.....	July 29, 1813		SECOND LIEUTENANTS.			
Henry Chotard.....	Oct. 9, 1813			William H. Ker.....	Aug. 14, 1817	
William Laval.....	Feb. 15, 1814		Maj. bvt., Nov. 7, 1814.	G. Powell.....	Feb. 13, 1818	
Jos. J. Miles.....	Mar. 11, 1814			G. C. Spencer.....	do.....	
Anattole Peychaud.....	do.....			William Seaton.....	do.....	
Ferd. L. Amelung.....	do.....			William Harney.....	do.....	
W. Christian.....	May 31, 1814			Jebial Brooks.....	do.....	
W. C. Beard.....	May 1, 1817		Bvt., Aug. 20, 1814.	W. R. Jouett.....	Feb. 19, 1818	
W. Sumpter.....	May 31, 1817			John Stone.....	April 18, 1818	
FIRST LIEUTENANTS.			A. B. Garrard.....	do.....		
William Gibbs.....	Mar. 11, 1814	Capt. bvt., Dec. 23, 1814. Paymaster.	SURGEON.			
			B. F. Harney.....	Aug. 17, 1814		
			SURGEON'S MATE.			
			G. B. McKnight.....	Feb. 17, 1817		

SECOND REGIMENT OF INFANTRY.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commission.	Brevets and former commissions.
COLONEL.			James Young -----	June 30, 1814	
Hugh Brady -----	July 6, 1812		William G. Belknap ---	Aug. 19, 1814	
LIEUTENANT COLONEL.			S. B. Griswold -----	Sept. 1, 1814	
N. Pinkney -----	April 15, 1814		Walter Bicker, jr. ---	do. -----	
MAJOR.			James Palmer -----	Sept. 30, 1814	Bvt., Aug. 5, 1814.
Enos Cutler -----	Feb. 10, 1818	Bvt., May 1, 1814	John Wood -----	Jan. 1, 1817	
CAPTAINS.			R. M. Harrison -----	Nov. 1, 1817	Aid to Gen. Brown.
Robert Gray -----	July 6, 1812	Maj. bvt., Aug. 15, 1813.	SECOND LIEUTENANTS.		
John Sproul -----	July 6, 1812	Maj. bvt., July 25, 1814.	Elisha Clark -----	July 25, 1814	
S. W. Kearney -----	April 1, 1813		Seth Johnson -----	Aug. 20, 1814	
Henry Schell -----	Mar. 21, 1814		Joshua B. Brant -----	Oct. 1, 1814	First Lt. bvt., Sep. 17, 1814. Quarterm'r.
A. R. Thompson -----	May 1, 1814		John Clitz -----	Oct. 19, 1814	
G. D. Smith -----	June 30, 1814	Maj. bvt., July 25, 1814.	Henry Smith -----	June 17, 1816	
W. J. Worth -----	Aug. 19, 1814	Maj. bvt., July 25, 1814.	S. Griffith -----	Feb. 19, 1817	
Henry Whiting -----	Sept. 1, 1814		Rd. Douglass -----	July 14, 1817	
James Bailey -----	June 17, 1816	Bvt., Mar. 27, 1814	M. F. Van De Venter ---	July 22, 1817	
W. Browning -----	Nov. 1, 1817	Bvt., Oct. 31, 1814	Wm. M'Curdy Gray ---	Feb. 19, 1818	
FIRST LIEUTENANTS.			John L. Elbert -----	April 18, 1818	
W. Hoffman -----	Nov. 11, 1813		PAYMASTER.		
B. A. Boynton -----	Nov. 25, 1813		J. W. Albright -----	July 9, 1816	
Owen Ransom -----	April 19, 1814		SURGEON.		
			W. V. Wheaton -----	Sept. 4, 1816	
			SURGEONS' MATES.		
			S. H. Littlejohn -----	April 3, 1813	
			Josiah Everett -----	July 21, 1813	

THIRD REGIMENT OF INFANTRY.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commission.	Brevets and former commissions.
COLONEL.			J. Culbertson -----	Oct. 1, 1813	
J. L. Smith -----	Feb. 10, 1818		Daniel Curtis -----	April 15, 1814	
LIEUTENANT COLONEL.			Lawrence Taliaferro ---	June 30, 1814	
Thos. S. Jesup -----	April 30, 1817	Col. bvt., July 25, 1814.	Turby F. Thomas -----	do. -----	Quartermaster
MAJOR.			Collin M'Cloud -----	Aug. 4, 1814	
Z. Taylor -----	May 15, 1814	Maj. bvt., Sept. 5, 1812.	Asher Phillips -----	May 17, 1816	Paymaster.
CAPTAINS.			John B. Clark -----	May 7, 1817	
Daniel Baker -----	Mar. 12, 1812	Maj. bvt., Aug. 9, 1812.	Ed. E. Brooks -----	June 1, 1817	
John T. Chunn -----	July 6, 1812	Maj. bvt., Aug. 15, 1814.	And. Lewis -----	Feb. 10, 1818	
Chas. Larrabee -----	Sept. 12, 1812	Maj. bvt., Aug. 9, 1812.	SECOND LIEUTENANTS.		
Wm. Whistler -----	Dec. 31, 1812		James Dean -----	June 28, 1814	
Hez. Bradley -----	April 19, 1814		Hillary Brunot -----	July 22, 1814	
G. H. Grosvenor -----	Apr. 21, 1814		Gab. I. Floyd -----	Oct. 1, 1814	
George Gray -----	Sept. 17, 1814		Edmond Hopkins -----	July 1, 1816	
John Green -----	Sept. 25, 1814		Britton Evans -----	Aug. 30, 1816	
James Hackley, jr. ---	May 17, 1816		Geo. W. Stall -----	Sept. 4, 1817	
John Garland -----	May 7, 1817		B. E. Burd -----	Nov. 21, 1817	
FIRST LIEUTENANTS.			Peter Grayson -----	Feb. 13, 1818	
Chas. L. Cass -----	May 20, 1813		Abraham Musser -----	April 18, 1818	
			SURGEON.		
			W. S. Madison -----	Oct. 5, 1816	
			SURGEONS' MATES.		
			J. Ponte C. Macmahon ---	Nov. 21, 1817	
			Wm. S. Comstock -----	April 21, 1818	

FOURTH REGIMENT OF INFANTRY.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commission.	Brevets and former commissions.
COLONEL.			CAPTAINS.		
William King -----	Feb. 21, 1814		James Dinkins -----	Feb. 6, 1811	Maj. bvt., May 15, 1814.
LIEUTENANT COLONEL.			J. N. McIntosh -----	May 1, 1811	
Duncan L. Clinch -----	Aug. 4, 1813		A. Cummings -----	Nov. 1, 1811	
MAJOR.			John A. Burd -----	July 6, 1812	Maj. bvt., Oct. 31, 1814.
M. Brooke -----	May 1, 1814	Col. bvt., Sept. 17, 1814.	G. W. Melvin -----	Aug. 24, 1812	
			Jas. H. Hook -----	May 20, 1813	
			J. M'Gavock, jr -----	May 31, 1817	
			James H. Gale -----	July 31, 1817	

FOURTH REGIMENT OF INFANTRY—Continued.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commission.	Brevets and former commissions.
CAPTAINS—Continued.			John D. Orr -----	Feb. 13, 1818	
Jas. M. Glassell -----	Feb. 10, 1818		Wm. Lear -----	do	
Eras. L. Dade -----	Feb. 24, 1818		Wm. Camp, jr -----	do	
FIRST LIEUTENANTS.			W. C. A. Armistead -----	do	
Philip Wager -----	Dec. 1, 1816	Quartermaster.	Q. B. Heronimus -----	Feb. 19, 1818	
Jos. Shomo -----	Dec. 31, 1816		Wm. H. Barclay -----	April 18, 1818	
Henry Wilson -----	do	Adjutant.	Lee Slaughter -----	do	
G. B. M'Claskey -----	do		Wm. A. M. Parker -----	do	
R. M. Sands -----	Mar. 12, 1817		PAYMASTER.		
John C. Wells -----	May 31, 1817		T. R. Broom -----	Feb. 13, 1818	
F. W. Brady -----	July 31, 1817		SURGEON.		
Jno. R. Clark -----	Oct. 31, 1817		M. H. Elliott -----	Oct. 31, 1817	
H. R. Dulany -----	Feb. 10, 1818		SURGEONS' MATES.		
W. F. Taylor -----	Feb. 24, 1818		R. C. Lane -----	Mar. 11, 1814	
SECOND LIEUTENANTS.			R. M. Ball -----	Feb. 17, 1817	
Jos. P. Bunting -----	Feb. 13, 1818				

FIFTH REGIMENT OF INFANTRY.

COLONEL.			I. Plympton -----	July 31, 1813	
James Miller -----	Mar. 9, 1814	Brig. gen. bvt., July 25, 1814.	Otis Fisher -----	July 20, 1814	Quartermaster.
LIEUTENANT COLONEL.			Jos. Gleason -----	July 25, 1814	Capt. bvt., Aug. 15, 1814.
Henry Leavenworth -----	Feb. 10, 1818	Col. bvt., July 25, 1814.	J. W. Holding -----	July 31, 1814	Capt. bvt., July 25, 1814.
MAJOR.			B. F. Larned -----	Aug. 4, 1814	Capt. bvt., Aug. 15, 1814; paymaster.
P. Muhlenburg -----	Feb. 24, 1818	Bvt., May 1, 1814.	R. A. M'Cabe -----	Oct. 16, 1816	Bvt., May 1, 1814.
CAPTAINS.			Nathan Clark -----	Mar. 3, 1817	
Josiah H. Vose -----	July 6, 1812	Maj. bvt., Aug. 4, 1814.	Edm. Kirby -----	May 1, 1817	Adjutant.
S. Burbank -----	Mar. 13, 1813	Maj. bvt., July 25, 1814.	T. Hunt -----	July 1, 1817	
Geo. Bender -----	May 13, 1813		SECOND LIEUTENANTS.		
M. Marston -----	June 26, 1813	Maj. bvt., Aug. 15, 1814.	R. H. Hammon -----	Oct. 1, 1814	
W. L. Foster -----	Oct. 15, 1813		P. R. Green -----	do	
Peter Pelham -----	Feb. 28, 1814		Jno. M'Cartney -----	July 16, 1816	
J. Fowle, jr. -----	June 10, 1814		Wm. Downey -----	Sept. 3, 1816	
David Perry -----	Sept. 1, 1814		E. K. Barnum -----	June 11, 1817	
James Pratt -----	Sept. 30, 1814		S. S. Stacy -----	July 22, 1817	
H. Whiting -----	Mar. 3, 1817	Bvt., Mar. 17, 1814.	R. H. Ashley -----	July 30, 1817	
FIRST LIEUTENANTS.			W. G. Camp -----	Feb. 13, 1818	
Geo. Gooding -----	Feb. 15, 1812	Capt. bvt., June 15, 1814.	E. P. Tyler -----	do	
			Henry Wilkins -----	April 18, 1818	
			SURGEON.		
			Jos. Wallace -----	do	
			SURGEONS' MATES.		
			J. P. Russell -----	May 25, 1814	
			R. M. Byrne -----	Nov. 6, 1817	

SIXTH REGIMENT OF INFANTRY.

COLONEL.			Benja. Watson -----	Aug. 15, 1813	Maj. bvt., July 25, 1814.
Hen. Atkinson -----	April 15, 1814		G. M'Glassin -----	do	Maj. bvt., Sept. 11, 1814.
LIEUTENANT COLONEL.			Dan. Ketchum -----	Sept. 30, 1813	Maj. bvt., July 25, 1814.
J. Snelling -----	Feb. 21, 1814		Th. Hamilton -----	Feb. 21, 1814	
MAJOR.			Newman S. Clarke -----	Oct. 1, 1814	Bvt., July 25, 1814.
Gad Humphreys -----	Mar. 31, 1817	Bvt., Apr. 18, 1814.	Elij. Boardman -----	Mar. 31, 1817	Bvt., Aug. 1, 1813.
CAPTAINS.			FIRST LIEUTENANTS.		
Turner Crooker -----	July 6, 1812	Maj. bvt., July 4, 1814.	Wm. Hale -----	Aug. 15, 1813	
W. S. Foster -----	Mar. 13, 1813	Maj. bvt., Aug. 15, 1814.	Ephr. Shaylor -----	do	Adjutant.
Th. M. Read -----	Apr. 16, 1813		G. M'Chain -----	Sept. 30, 1813	
John Bliss -----	May 13, 1813		Fr. A. Sawyer -----	Dec. 12, 1813	
			J. P. Livingston -----	Dec. 19, 1813	Capt. bvt., July 25, 1814.
			Alphonso Wetmore -----	July 9, 1814	Paymaster.
			Th. Stamford -----	Sept. 1, 1814	

SIXTH REGIMENT OF INFANTRY—Continued.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commission.	Brevets and former commissions.
FIRST LIEUTS.—Cont'd.			Hen. Taylor -----	Feb. 17, 1817	
J. Clark, jr -----	Sept. 1, 1814		Z. C. Palmer -----	June 16, 1817	
Delafayette Wilcox ---	Oct. 2, 1814		C. F. L. Durand -----	Feb. 13, 1818	
John Ellison -----	Mar. 31, 1817		W. A. Mix -----	do -----	
SECOND LIEUTENANTS.			SURGEONS.		
S. Keeler, jr -----	June 7, 1814		T. G. Mower -----	June 30, 1814	
Hazen Bedel -----	June 15, 1814		SURGEONS' MATES.		
Jas. McIlvain -----	July 19, 1814		Wm. Sterne -----	Mar. 11, 1814	
Benj. Fitch -----	July 25, 1814		W. H. Nicoll -----	Feb. 19, 1817	
Jacob Brown -----	Sept. 1, 1814	Quartermaster.			
John Mansfield -----	Sept. 30, 1814				

SEVENTH REGIMENT OF INFANTRY.

COLONEL.			Benj. R. Christian ---	April 30, 1817	
David Brearley -----	April 30, 1817	Bvt., Mar. 12, 1813.	Charles Betts -----	May 31, 1817	
LIEUTENANT COLONEL.			Daniel E. Burch -----	June 7, 1817	
M. Arbuckle -----	Mar. 9, 1814		Robert Lyman -----	Feb. 13, 1818	
MAJOR.			Richard I. Easter -----	do -----	
John Nicks -----	June 1, 1816	Bvt., Oct. 9, 1813.	James McLean -----	Mar. 27, 1818	
CAPTAINS.			Angus W. McDonald ---	April 1, 1818	
D. E. Twiggs -----	July 6, 1812	Maj. bvt., Sept. 21, 1814.	SECOND LIEUTENANTS.		
Geo. Vashon -----	Nov. 29, 1813		H. Berryman -----	Feb. 13, 1818	
E. Montgomery -----	May 1, 1814	Maj. bvt., Jan. 8, 1815.	G. Murdock -----	do -----	
J. S. Allison -----	June 25, 1814		H. S. Mallory -----	do -----	
George Birch -----	Aug. 31, 1816		Thos. C. Wilhight ---	April 18, 1818	
J. R. Corbaly -----	Sept. 18, 1816	Bvt., June 28, 1814.	S. D. Jones -----	do -----	
W. Bee, jr -----	April 30, 1817		B. Vincent -----	do -----	
Jos. J. Clinch -----	May 31, 1817		Wm. N. Bronaugh ---	do -----	
T. Blackston -----	do -----		R. D. Davis -----	do -----	
F. S. Gray -----	June 1, 1817		Richard Wash -----	do -----	
FIRST LIEUTENANTS.			PAYMASTER.		
Micaj. Crupper -----	Oct. 15, 1816		J. B. Hogan -----	Sept. 25, 1817	
G. Leftwich -----	April 30, 1817	Adjutant.	SURGEON.		
Lewis Lawshe -----	do -----	Quartermaster.	Thos. Lawson -----	May 21, 1813	
			SURGEONS' MATES.		
			R. C. Walmsley -----	July 1, 1813	
			I. W. Snowden -----	Feb. 19, 1817	

EIGHTH REGIMENT OF INFANTRY.

COLONEL.			R. B. Hyde -----	July 1, 1816	
E. C. Nicholas -----	Sept. 4, 1814		Geo. Kennerly -----	Jan. 15, 1817	Bvt., May 17, 1814.
LIEUTENANT COLONEL.			R. Humphreys -----	Mar. 31, 1817	Adjutant.
W. A. Trimble -----	Nov. 30, 1814	Bvt., Sept. 17, 1814.	Nath. Young -----	June 26, 1817	
MAJOR.			Sam'l Riddle -----	Aug. 13, 1817	
W. Lawrence -----	April 19, 1814	Lt. col. bvt., Sept. 15, 1814.	John Maul -----	Aug. 20, 1817	Quartermaster.
CAPTAINS.			Farly Eddy -----	Sept. 12, 1817	
J. Dorman -----	Nov. 9, 1811	Maj. bvt., June 28, 1814.	R. B. Mason -----	Sept. 25, 1817	
White Youngs -----	July 6, 1812	Maj. bvt., September 11, 1814.	S. W. Hebb -----	Feb. 13, 1818	
W. Davenport -----	Sept. 28, 1812		SECOND LIEUTENANTS.		
Willis Foulk -----	June 20, 1813		Ethan A. Hitchcock ---	Feb. 13, 1818	
L. Austin -----	April 21, 1814	Maj. bvt., July 5, 1814.	J. M. Washington ---	do -----	
Lewis B. Willis -----	June 1, 1816	Bvt., Jan. 31, 1814.	Jer. Yancey -----	do -----	
David Riddle -----	Dec. 8, 1816	Maj. bvt., September 17, 1814.	W. Whartley -----	do -----	
Rt. Houston -----	Mar. 31, 1817		G. W. Allen -----	do -----	
Thomas Wright -----	Sept. 25, 1817		John Whitman -----	do -----	
Wm. Arnold -----	Nov. 5, 1817		John Page -----	do -----	
FIRST LIEUTENANTS.			Cor. Gates -----	do -----	
Luther Hand -----	June 1, 1816		J. Wheelock -----	do -----	
			John Philbrick -----	April 21, 1818	
			SURGEON.		
			E. H. Bell -----	April 18, 1818	
			SURGEONS' MATES.		
			Arth. Nelson -----	Oct. 31, 1817	
			Thad. Hubbard -----	Feb. 13, 1818	

RIFLE REGIMENT.

Names and rank.	Date of commission.	Brevet and former commissions.	Names and rank.	Date of commission.	Brevet and former commissions.
COLONEL.			James S. Gray-----	Mar. 31, 1817	
Th. A. Smith-----	July 6, 1812	Eg. gen. bvt., Jan. 24, 1814.	T. F. Smith-----	April 22, 1817	
LIEUTENANT COLONEL.			T. F. Hunt-----	July 1, 1817	
Talbot Chambers-----	March 8, 1817	Bvt., Sept. 17, 1814.	W. S. Blair-----	July 15, 1817	
MAJOR.			W. G. Shade-----	Feb. 15, 1818	
Willoughby Morgan-----	do-----	Bvt., June 26, 1813.	John Gantt-----	April 5, 1818	
CAPTAINS.			Gab. Field-----	April 15, 1818	
William Bradford-----	July 6, 1812	Maj. bvt., August 20, 1814.	SECOND LIEUTENANTS.		
Joseph Selden-----	do-----	Lt. col. bvt., May 1, 1815.	John Clark-----	June 20, 1817	
Th. Ramsey-----	Nov. 30, 1812		C. Pentland-----	Oct. 9, 1817	
W. Martin-----	Mar. 17, 1814		Francis Smith-----	Feb. 13, 1818	
John O'Fallan-----	do-----		Thomas W. Kavanaugh-----	do-----	
Benjamin Birdsall-----	do-----	Maj. bvt., August 15, 1814.	L. Palmer-----	April 18, 1818	
J. S. McIntosh-----	May 8, 1817		Thomas Martin-----	do-----	
J. H. Ballard-----	April 22, 1817		Daniel H. Campbell-----	do-----	
Lewellen Hickman-----	Feb. 15, 1818		Martin Scott-----	do-----	
Stoughton Gantt-----	April 15, 1818		G. C. Catlett-----	do-----	
FIRST LIEUTENANTS.			PAYMASTER.		
J. McGunnegle-----	April 28, 1814		John Hall-----	do-----	
William Armstrong-----	Oct. 1, 1816		SURGEON.		
Bennet Riley-----	Mar. 31, 1817		John Gale-----	do-----	
			SURGEONS' MATES.		
			Samuel P. Hugo-----	Mar. 12, 1812	
			W. H. Pierson-----	Aug. 4, 1814	

LINEAL RANK.

COLONELS.		William Wilson, artillery-----
Moses Porter, 1st artillery, brigadier general by brevet-----		Enoch Humphreys, artillery, major by brevet-----
Thomas A. Smith, rifle, brigadier general by brevet-----		James Dinkins, 4th infantry, major by brevet-----
Hugh Brady, 2d infantry-----		J. N. McIntosh, 4th infantry-----
Daniel Bissell, 1st infantry, brigadier general by brevet-----		Alexander Cummings, 4th infantry-----
William King, 4th infantry-----		James Dorman, 8th infantry, major by brevet-----
James Miller, 5th infantry, brigadier general by brevet-----		Daniel Baker, 3d infantry, major by brevet-----
Henry Atkinson, 6th infantry-----		James Reed, artillery-----
R. C. Nicholas, 8th infantry-----		Andrew McDowell, 1st artillery-----
David Brearley, 7th infantry, by brevet-----		Robert Gray, 2d infantry, major by brevet-----
Joseph L. Smith, 3d infantry-----		Luther Leonard, 1st artillery-----
LIEUTENANT COLONELS.		J. B. Crane, artillery, major by brevet-----
John B. Fenwick, 1st artillery, colonel by brevet-----		R. Jones, artillery, lieutenant-colonel by brevet-----
George E. Mitchell, artillery, colonel by brevet-----		Alexander S. Brooks, 1st artillery, major by brevet-----
James House, artillery-----		Nathan Towson, 1st artillery, lieutenant colonel by brevet-----
William Lindsay, artillery-----		S. B. Archer, artillery, major by brevet-----
Duncan L. Clinch, 4th infantry-----		Saunders Donoho, artillery-----
J. Snelling, 6th infantry-----		Thomas Biddle, jr., artillery, major by brevet-----
Matthew Arbuckle, 7th infantry-----		John Sproull, 2d infantry, major by brevet-----
Ninian Pinkney, 2d infantry-----		Josiah H. Vose, 6th infantry, major by brevet-----
William Macrea, artillery, by brevet-----		William Bradford, rifle, major by brevet-----
William A. Trimble, 8th infantry, by brevet-----		Samuel D. Harris, 1st artillery, lieutenant colonel by brevet-----
T. Chambers, rifle, by brevet-----		John A. Burd, 4th infantry, major by brevet-----
Thomas S. Jesup, 3d infantry, colonel by brevet-----		Joseph Selden, rifle, lieutenant colonel by brevet-----
Henry Leavenworth, 5th infantry, colonel by brevet-----		Turner Crooker, 6th infantry, major by brevet-----
J. McNeal, jr., 1st infantry, colonel by brevet-----		J. T. B. Romayne, artillery-----
MAJORS.		David E. Twigg, 7th infantry, major by brevet-----
Abraham Eustis, 1st artillery, lieutenant colonel by brevet-----		Alexander Gray, 1st infantry-----
James B. Many, artillery-----		White Youngs, 8th infantry, major by brevet-----
J. Hindman, artillery, colonel by brevet-----		John T. Chuon, 3d infantry, major by brevet-----
James Bankhead, artillery-----		George W. Melvin, 4th infantry-----
William Lawrence, 8th infantry, lieutenant colonel by brevet-----		Thomas Stockton, artillery, major by brevet-----
George M. Brooke, 4th infantry, colonel by brevet-----		C. Larrabee, 3d infantry, major by brevet-----
Z. Taylor, 3d infantry, by brevet-----		William Davenport, 8th infantry-----
John Nicks, 7th infantry, by brevet-----		Thomas Ramsey, rifle-----
Gad Humphreys, 6th infantry, by brevet-----		William Whistler, 3d infantry-----
W. Morgan, rifle, by brevet-----		William Gates, artillery-----
Richard Whartenby, 1st infantry, by brevet-----		A. C. W. Fanning, artillery, major by brevet-----
E. Cutler, 2d infantry, by brevet-----		John M. O'Conor, artillery-----
P. Muhlenburg, 5th infantry, by brevet-----		William S. Foster, 6th infantry, major by brevet-----
John B. Walbach, artillery, lieutenant colonel by brevet-----		S. Burbank, 5th infantry, major by brevet-----
CAPTAINS.		Stephen W. Kearney, 2d infantry-----
Moses Sweet, artillery, major by brevet-----		J. Roach, jr., artillery-----
		Thomas M. Reed, jr., 6th infantry-----
		J. F. Heileman, artillery-----
		George Bender, 5th infantry-----
		John Bliss, 6th infantry-----
		Hopeley Yeaton, artillery-----
		James H. Hook, 4th infantry-----
		Willis Foulk, 8th infantry-----

LINEAL RANK—Continued.

CAPTAINS—Continued.

Thomas Bennett, artillery.....	James Pratt, 5th infantry.....
M. Marston, 5th infantry, major by brevet.....	N. N. Hall, artillery.....
John Jones, 1st infantry.....	Newman S. Clarke, 6th infantry.....
J. L. Eastman, 1st artillery.....	John R. Bell, 1st artillery.....
S. Churchill, artillery.....	M. P. Lomax, artillery.....
Benjamin Watson, 6th infantry, major by brevet.....	Milo Mason, artillery.....
George McGlassin, 6th infantry, major by brevet.....	James Hackley, 3d infantry.....
Daniel Ketchum, 6th infantry, major by brevet.....	Lewis B. Willis, 8th infantry.....
E. K. Pierce, artillery.....	James Bailey, 2d infantry.....
H. Chotard, 1st infantry, major by brevet.....	George Birch, 7th infantry.....
W. L. Foster, 5th infantry.....	John R. Corbaly, 7th infantry.....
George Vashon, 7th infantry.....	David Riddle, 8th infantry, major by brevet.....
H. K. Craig, 1st artillery.....	William F. Hobart, 1st artillery.....
William Laval, 1st infantry, major by brevet.....	George N. Morris, 1st artillery.....
Thomas Hamilton, 6th infantry.....	Henry Whiting, 5th infantry.....
George P. Peters, artillery.....	James S. McIntosh, rifle.....
Peter Pelham, 5th infantry.....	Eljjah Boardman, 6th infantry.....
M. M. Payne, artillery.....	Robert Houston, 8th infantry.....
J. J. Miles, 1st infantry.....	James H. Ballard, rifle.....
Anatole Peychaud, 1st infantry.....	William Bee, jr., 7th infantry.....
Fred. L. Amelung, 1st infantry.....	William C. Beard, 1st infantry.....
W. Martin, rifle.....	John Garland, 3d infantry.....
John O. Fallon, rifle.....	William Sumpter, 1st infantry.....
Benjamin Birdsall, rifle, major by brevet.....	Joseph J. Clinch, 7th infantry.....
Henry Shell, 2d infantry.....	Thomas Blackstone, 7th infantry.....
H. Bradley, 3d infantry.....	John McGavock, 4th infantry.....
L. Austin, 8th infantry, major by brevet.....	F. S. Gray, 7th infantry.....
G. H. Grosvenor, 3d infantry.....	John Farley, artillery.....
Elijah Montgomery, 7th infantry, major by brevet.....	James H. Gale, 4th infantry.....
Alexander R. Thompson, 2d infantry.....	Thomas Wright, 8th infantry.....
William Christian, 1st infantry.....	William M. Read, artillery.....
J. Fowle, jr., 5th infantry.....	Lowndes Brown, artillery.....
J. S. Allison, 7th infantry.....	William Browning, 2d infantry.....
G. D. Smith, 2d infantry, major by brevet.....	William Arnold, 8th infantry.....
E. A. Allen, artillery.....	Luther Scott, artillery.....
W. J. Worth, 2d infantry, major by brevet.....	James M. Glassell, 4th infantry.....
Henry Whiting, 2d infantry.....	R. R. Ruffin, artillery.....
David Perry, 5th infantry.....	Lewellen Hickman, rifle.....
George Gray, 3d infantry.....	F. L. Dade, 4th infantry.....
John Green, 3d infantry.....	Stoughton Gantt, rifle.....
	J. Erving, artillery.....

DIVISIONS AND DEPARTMENTS OF THE ARMY.

The northern division comprises five military departments, viz :

- No. 1. New York, above the Highlands, and Vermont.
- No. 2. New Hampshire, Massachusetts, Rhode Island, and Connecticut.
- No. 3. New York, below the Highlands, and New Jersey, excepting that part which furnishes the first division of militia.
- No. 4. Pennsylvania, Delaware, Maryland, and that part of New Jersey which furnishes the first division of militia.
- No. 5. Ohio, and the Territories of Michigan and Indiana.

The southern division comprises four military departments, viz :

- No. 6. Virginia, North Carolina, and the District of Columbia.
- No. 7. South Carolina and Georgia.
- No. 8. Louisiana and the Mississippi Territory.
- No. 9. Tennessee, Kentucky, and the Territories of Missouri and Illinois.

Army Register for 1821.

GENERAL ORDERS.

ADJUTANT AND INSPECTOR GENERAL'S OFFICE, *May 17, 1821.*

In pursuance of the act of Congress entitled "An act to reduce and fix the military peace establishment of the United States," passed the 2d of March, 1821, the President has directed that the following list of officers, the following organization of regiments and commands, with the following distribution of the troops, shall constitute the peace establishment of the United States from and after the first of June next:

GENERAL STAFF.

Names.	Rank.	Date of appointment.	Brevet and former commissions.	Remarks.
Jacob Brown.....	Major general.....	Jan. 24, 1814	.....	Washington.
Edmund P. Gaines.....	Brigadier general.....	Mar. 9, 1814	Aug. 15, 1814, maj. general by brevet.	
Winfield Scott.....	do.....	do.....	July 25, 1814, maj. general by brevet.	
Thomas S. Jesup.....	Brig. general and quartermaster general.	May 8, 1818	.....	Washington.
Henry Atkinson.....	Brig. general and adjutant general.	June 1, 1821	May 31, 1820, brig. general by brevet.	Washington.

GENERAL STAFF—Continued.

Names.	Rank.	Date of appointment.	Brevet and former commissions.	Remarks.
John E. Wool	Inspector general	April 29, 1816	Colonel	
James Gadsden	do	Oct. 1, 1820	do	
William Linnard	Quartermaster	May 12, 1813	Major	
Henry Stanton	do	May 13, 1820	do	
[For assistant quartermasters, see officers of the line.]				
Peter Fayssoux	Storekeeper, Q. M. department.			St. Louis.
Samuel Perkins	do			Detroit.
John D. Orr	do			New Orleans.
H. A. Fay	Storekeeper, provisions retained.			Albany.

SUBSISTENCE DEPARTMENT.

Col. George Gibson	Com. gen. of subsistence.	April 18, 1818	April 29, 1816, colonel staff.	Washington.
[For assistant commissaries of subsistence, see the subalterns of the line.]				

PURCHASING DEPARTMENT.

Callender Irvine	Com. of purchases	Aug. 8, 1812		Philadelphia.
Archibald Steel	Storekeeper			Do.

PAY DEPARTMENT.

D. Parker	Paymaster general.	June 1, 1821	Brig. general, staff, Nov. 22, 1814.	Office, Washington.
Thomas Wright	Paymaster	June 22, 1815	Captain	Pensacola.
Asher Phillips	do	Aug. 26, 1815	do	Third infantry.
Alphonso Whetmore	do	Oct. 14, 1815	do	Sixth infantry.
Ben. F. Larned	do	Nov. 24, 1815	do	Seventh infantry.
Satterlee Clark	do	April 29, 1816	Major	Utica, New York.
Joseph Woodruff	do	do	do	Charleston, S. C.
David Gwynn	do	do	do	Detroit, Michigan Ter.
David S. Townsend	do	do	do	Boston, Massachusetts.
Jacob W. Albright	do	July 9, 1816	Captain	Philadelphia.
Charles B. Tallmadge	do	Mar. 27, 1818	do	New York.
Daniel Randall	do	July 21, 1818	do	Baton Rouge.
Charles H. Smith	do	Nov. 24, 1819	do	Norfolk, Virginia.
Thomas Biddle	do	Aug. 7, 1820	Major	St. Louis.
A. A. Massias	do	Dec. 12, 1820	do	St. Augustine.

MEDICAL DEPARTMENT.

Joseph Lovell	Surgeon general	April 18, 1818		Washington.
Thomas Lawson	Surgeon	May 21, 1813		Seventh infantry.
Thomas G. Mower	do	June 30, 1814		St. Peter's.
B. F. Harney	do	Aug. 17, 1814		Baton Rouge.
W. V. Wheaton	do	Sept. 4, 1816		Sackett's Harbor.
W. S. Madison	do	Oct. 5, 1816		Green Bay.
M. H. Elliott	do	Oct. 31, 1817		Pensacola.
John Gale	do	April 18, 1818		Council Bluffs.
Josiah Everett	do	Jan. 28, 1820		Fort Columbus.
George W. Maupin	Assistant surgeon	Nov. 5, 1802		Fort Nelson, Virginia.
Joseph Goodhue	do	Feb. 8, 1803		Fort Constitution.
James H. Sargeant	do	Mar. 6, 1806		Fort Sullivan.
Sylvester Day	do	Dec. 9, 1807		Pittsburg arsenal.
William Ballard	do	Mar. 24, 1817		Fort Niagara.
William Turner	do	Sept. 29, 1812		Fort Wolcott.
Hanson Catlett	do	Feb. 18, 1813		Fort Washington.
Foster Swift	do	Feb. 18, 1814		Fort Trumbull.
John Trevett	do	April 8, 1814		Arsenal, Augusta.
William N. Mercer	do	Nov. 22, 1814		New Orleans.
T. I. C. Monroe	do	April 29, 1816		Arsenal, Richmond.
Samuel B. Smith	do	Nov. 12, 1816		Fort Mifflin.
James Mann	do	April 18, 1818		Boston harbor.
J. Wallace	do	do		Annapolis.
William Stewart	do	do		Fort McHenry.
Joseph Eaton	do	do		Fort Preble.
B. Delavan	do	do		Detroit.
Robert Archer	do	do		Fort Norfolk.
George C. Clitherall	do	do		Fort Johnson, N. C.
Squire Lea	do	May 15, 1818		Fort St. Philip.

MEDICAL DEPARTMENT—Continued.

Names.	Rank.	Date of appointment.	Brevets and former commissions.	Remarks.
Joseph P. Russell.....	Assistant surgeon..	Aug. 10, 1818		Fort Jackson, Savan'h.
Richard Weightman.....	do.....	Aug. 21, 1818		St. Augustine.
W. H. Livingston.....	do.....	Feb. 3, 1819		Arsenal, Watervliet.
I. P. C. Macmahon.....	do.....	July 23, 1819		Charleston harbor.
William Beaumont.....	do.....	Dec. 4, 1819		Mackinac.
Egbert H. Bell.....	do.....	Jan. 28, 1820		St. Mark's.
William H. Nicoll.....	do.....	do.....		Council Bluffs.
Robert French.....	do.....	April 12, 1820		Belle Fontaine.
Charles N. McCoskry.....	do.....	do.....		Amelia island.
James Cutbush.....	do.....	May 16, 1820		West Point.
William S. Comstock.....	do.....	Oct. 12, 1820		New York.
Richard Randall.....	do.....	do.....		Charleston harbor.
George B. McKnight.....	do.....	Oct. 13, 1820		Fort Smith.
Lyman Foot.....	do.....	Dec. 12, 1820		Plattsburg.
Thomas P. Hall.....	do.....	do.....		Chicago.
S. H. Littlejohn.....	do.....	June 1, 1821		Sackett's Harbor.
C. A. Finley.....	do.....	do.....		With the 7th infantry.
Charles Mendenhall.....	do.....	do.....		Prairie du Chien.
R. M. Coleman.....	do.....	do.....		With the 7th infantry.
Benjamin King.....	do.....	do.....		Baton Rouge.
A. P. Merrill.....	do.....	do.....		Pensacola.
H. F. Hall.....	do.....	do.....		Green Bay.
Prestley H. Craig.....	do.....	do.....		Fort Armstrong.
Charles Sloan.....	do.....	do.....		Baton Rouge.
John Jackson.....	do.....	do.....		Pensacola.

ENGINEER DEPARTMENT.

CORPS OF ENGINEERS.				
Alexander Macomb.....	Chief engineer.....	June 1, 1821	Maj. gen. bvt., Sept. 11, 1814.	Headquarters, Washington.
Simon Bernard.....	Assistant engineer.....	Nov. 16, 1816	Brig. general brevet	
Charles Gratiot.....	Lieutenant colonel.....	Mar. 31, 1819		
J. G. Totten.....	Major.....	Nov. 12, 1818	Lieut. colonel bvt., Sept. 11, 1814.	
Samuel Babcock.....	do.....	Mar. 31, 1819		
Sylvester Thayer.....	Captain.....	Oct. 15, 1813	Major brevet, Feb. 20, 1815.	
R. E. De Russey.....	do.....	Feb. 9, 1815	Brevet, Sept. 11, 1814.	
Frederick Lewis.....	do.....	Oct. 1, 1817		
T. W. Maurice.....	do.....	Nov. 12, 1818		
Hipol. Dumas.....	do.....	Mar. 31, 1819		
John L. Smith.....	do.....	Aug. 29, 1820		
Hor. C. Story.....	First lieutenant.....	April 15, 1818	Brevet, Sept 17, 1814.	
George Blaney.....	do.....	Nov. 12, 1818		
Thomas I. Leslie.....	do.....	Mar. 31, 1819		Paymaster, Washington.
William H. Chase.....	do.....	do.....		
Richard Delafield.....	do.....	Aug. 29, 1820		
Andrew Talcott.....	do.....	Oct. 10, 1820		
William A. Eliason.....	Second lieutenant.....	July 1, 1819		
Frederick A. Underhill.....	do.....	do.....		
Cornelius A. Ogden.....	do.....	do.....		
Henry Brewerton.....	do.....	do.....		
Stephen Tuttle.....	do.....	Aug. 29, 1820	Bvt., July 1, 1820	
Andrew J. Donelson.....	do.....	Oct. 1, 1820	do.....	
TOPOGRAPHICAL ENGINEERS.				
John Anderson.....	Major.....	April 12, 1813		
Isaac Roberdeau.....	do.....	April 29, 1813		
John J. Abert.....	do.....	Nov. 22, 1814		
James Kearney.....	do.....	April 29, 1816		
Stephen H. Long.....	do.....	do.....		
P. H. Perrault.....	do.....	Feb. 17, 1817		
ASSISTANT TOPOGRAPHICAL ENGINEERS.				
Hugh Young.....	Captain.....	Feb. 19, 1817		
William Tell Poussin.....	do.....	Mar. 6, 1817		
John Le Conte.....	do.....	April 18, 1818		
Hartman Bache.....	do.....	July 24, 1818		

FIRST REGIMENT OF ARTILLERY.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commission.	Brevets and former commissions.
COLONEL.			J. A. Dix	Mar. 23, 1818	Aid to General Brown.
Moses Porter	Mar. 12, 1812	Brig. gen. bvt., Sept. 10, 1813.	G. W. Gardiner	Apr. 20, 1818	A. C. S.
LIEUTENANT COLONEL.			C. S. Merchant	do	A. C. S.
G. Bomford	Feb. 9, 1815	Bvt., Dec. 22, 1814. Ordnance.	N. G. Dana	do	A. C. S.
MAJOR.			J. S. Abeel	do	Bvt., Oct. 10, 1814.
J. B. Walbach	Apr. 25, 1818	Lt. col. bvt., May 1, 1815.	W. T. Willard	do	
CAPTAINS.			Hy. W. Griswold	Dec. 12, 1818	
A. McDowell	Apr. 1, 1812		R. C. Brent	Mar. 5, 1819	
J. B. Crane	July 6, 1812	Maj. bvt., Nov. 13, 1813.	W. Smith	June 5, 1819	
A. S. Brooks	do	Maj. bvt., Sept 11, 1814.	C. Despenville	Sept. 10, 1819	
J. L. Eastman	July 31, 1813		John C. Kirk	Sept. 30, 1819	
Jas. Dalliba	Aug. 5, 1813	Maj. bvt., Feb. 9, 1815. Ordnance.	J. Simonson	Oct. 10, 1819	
S. Churchill	Aug. 15, 1813		M. A. Patrick	Aug. 11, 1820	A. C. S.
W. J. Worth	Aug. 19, 1814	Maj. bvt., July 25, 1814.	S. S. Smith	Nov. 30, 1820	
Milo Mason	May 17, 1816		SECOND LIEUTENANTS.		
Hy. Whiting	Mar. 3, 1817	Bvt., Mar. 17, 1814. A. Q. M.	Samuel Cooper	Nov. 15, 1817	Bvt., Dec. 11, 1815.
F. Whiting	Sept. 10, 1819		Andrew McIntire	Feb. 13, 1818	A. C. S.
FIRST LIEUTENANTS.			H. Brown	July 24, 1818	
N. Baden	Aug. 6, 1813		Giles Porter	do	
H. Saunders	July 14, 1814	A. C. S.	Geo. Webb	do	
P. Melendy	Oct. 24, 1817		W. B. Davidson	Sept. 1, 1818	
R. M. Kirby	Mar. 23, 1818	Maj. staff, April 29, 1816.	J. Howard	do	
			C. Wharton	Oct. 28, 1818	
			D. Van Ness	Mar. 3, 1819	
			Benjamin Vining	July 1, 1819	
			Z. J. D. Kinsley	do	
			Justin Dimick	do	
			G. W. Whistler	do	
			W. H. Swift	do	
			A. Pickevin	Aug. 13, 1819	
			Benjamin Walker	Dec. 31, 1819	
			G. D. Ramsey	July 1, 1820	
			W. T. W. Tone	July 12, 1820	

SECOND REGIMENT OF ARTILLERY.

COLONEL.			R. Bache	June 15, 1817	Bvt., Apr. 17, 1813. A. C. S.
N. Towson	June 1, 1821		L. G. De Russey	April 20, 1818	
LIEUTENANT COLONEL.			C. Mellon	do	A. C. S.
James House	Mar. 3, 1813		J. S. Pierce	do	A. C. S.
MAJOR.			Allen Lowd	do	A. C. S.
J. Hindman	June 26, 1813	Col. bvt., May 17, 1815.	G. S. Wilkins	do	A. C. S.
CAPTAINS.			T. Green	do	A. C. S.
Wm. Gates	Mar. 3, 1813		H. W. Fitzhugh	do	A. C. S.
A. C. W. Fanning	Mar. 13, 1813	Maj. bvt., Aug. 15, 1814.	J. J. Davis	do	
I. Roach, jr	April 13, 1813		R. L. Armstrong	July 2, 1818	
J. F. Heileman	May 5, 1813	Ordnance.	P. H. Galt	Sept. 26, 1818	
Geo. Talcott	Aug. 5, 1813	Maj. staff, Sept. 14, 1814.	H. S. Mallory	May 31, 1819	
C. J. Nourse	June 17, 1816		W. Wells	Aug. 28, 1819	A. C. S.
F. S. Belton	July 31, 1817	Maj. staff, Oct. 18, 1814.	C. M. Eakin	May 13, 1820	A. C. S.
R. A. Zantzinger	Dec. 12, 1818	Bvt., Aug. 15, 1814.	SECOND LIEUTENANTS.		
J. Mountfort	Aug. 11, 1819	Bvt., Sept. 11, 1814.	W. E. Williams	June 30, 1818	
T. C. Legate	May 13, 1820		S. Ringgold	July 24, 1818	
FIRST LIEUTENANTS.			E. Harding	do	
D. T. Welch	April 30, 1813	Capt. bvt., June 20, 1814.	J. Strong	do	
Elijah Lyon	Jan. 1, 1817	A. C. S.	J. Green	Sept. 11, 1818	A. Q. M.
E. Kirby	May 1, 1817	Aid to Gen. Brown.	A. C. Fowler	Mar. 3, 1819	
J. W. Thompson	May 21, 1817		M. Thomas	Mar. 31, 1819	
			J. A. Dumest	July 1, 1819	
			H. Gilbert	do	
			L. Gates	Aug. 13, 1819	
			T. P. Ridgely	do	
			J. W. Webb	do	
			J. R. Bowes	Oct. 10, 1819	
			J. A. Chambers	July 1, 1820	
			W. C. De Hart	do	
			D. D. Tompkins	do	
			W. P. Buchanan	do	
			J. Barney	do	

THIRD REGIMENT OF ARTILLERY.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commission.	Brevets and former commissions.
COLONEL			I. L. Gardner.....	April 20, 1818	A. Q. M.
W. K. Armistead.....	Nov. 12, 1818		T. Childs.....	do.....	A. C. S.
LIEUTENANT COLONEL.			C. M. Thruston.....	do.....	
G. E. Mitchell.....	March 3, 1813	Col. brevet, March 5, 1814.	W. L. Booth.....	April 25, 1818	
MAJOR.			T. J. Baird.....	June 2, 1818	A. C. S.
J. Bankhead.....	Aug. 15, 1813		U. S. Frazer.....	Oct. 20, 1818	A. C. S.
CAPTAINS.			T. W. Lendrum.....	May 30, 1819	A. C. S.
W. Wilson.....	May 3, 1808	Major brevet, May 3, 1818.	J. Spencer.....	June 26, 1819	
Roger Jones.....	July 6, 1812	Lieut. col. brevet, Sept. 17, 1814, col. staff Aug. 10, 1818.	I. A. Adams.....	July 31, 1819	
S. B. Archer.....	July 6, 1812	April 27, 1813, ordnance.	J. W. Phillips.....	Aug. 4, 1819	
T. Stockton.....	Sept. 10, 1812	April 15, 1814.....	H. F. Evans.....	Aug. 8, 1819	
H. K. Craig.....	Dec. 23, 1813		J. A. Webber.....	Oct. 31, 1819	A. C. S.
William Laval.....	Feb. 15, 1814	Major bvt., November 7, 1814.	R. B. Lee.....	do.....	
M. P. Lomax.....	Nov. 17, 1814		F. L. Griffith.....	Nov. 28, 1819	
G. N. Morris.....	Jan. 15, 1817		John Hills.....	Dec. 31, 1819	
R. L. Baker.....	May 21, 1817		SECOND LIEUTENANTS.		
F. Ansart.....	Nov. 28, 1819		S. McKenzie.....	July 24, 1818	
FIRST LIEUTENANTS.			G. W. Corprew.....	do.....	
S. Potts.....	May 22, 1814	Capt. bvt., Jan. 8, 1815, A. C. S.	W. S. Newton.....	do.....	
Aeneas Mackay.....	Dec. 1, 1816	Bvt. March 12, 1813	J. Hopkins.....	March 3, 1819	
J. P. Taylor.....	Nov. 24, 1817	A. C. S., bvt. July 15, 1814.	I. F. Hamtramck.....	July 1, 1819	
			J. L'Engle.....	do.....	
			J. M. Edwards.....	do.....	
			A. Brockenbrough.....	do.....	
			L. A. Rigail.....	Aug. 4, 1819	
			John Smith.....	Aug. 13, 1819	
			A. Stewart.....	Dec. 4, 1819	A. C. S.
			H. Garner.....	Jan. 28, 1820	
			T. E. Sudler.....	July 1, 1820	
			William H. Bell.....	do.....	
			F. N. Barbarin.....	do.....	
			H. J. Feltus.....	do.....	
			R. Lowndes.....	do.....	
			W. H. Kerr.....	Oct. 27, 1820	

FOURTH REGIMENT OF ARTILLERY.

COLONEL.			J. D. Graham.....	Sept. 8, 1819	
J. R. Fenwick.....	June 1, 1821	Bvt., March 18, 1813	J. R. Vinton.....	do.....	
LIEUTENANT COLONEL.			W. G. McNeill.....	Dec. 4, 1819	
W. Macrea.....	April 19, 1814	Bvt., July 10, 1812	T. I. Gardner.....	Dec. 31, 1819	
MAJOR.			J. Symington.....	May 17, 1820	A. C. S.
A. Eustis.....	Mar. 15, 1810	Lieut. col. bvt., September 10, 1813.	I. M. Washington.....	May 23, 1820	
CAPTAINS.			W. Wright.....	Aug. 23, 1820	
E. Humphreys.....	Jan. 9, 1809	Major brevet, Dec. 23, 1814.	SECOND LIEUTENANTS.		
John A. Burd.....	July 6, 1812	Major brevet, Oct. 31, 1814.	J. M. Chambers.....	July 24, 1818	
B. K. Pierce.....	Oct. 1, 1813		Charles Ward.....	Oct. 1, 1818	
M. M. Payne.....	March 2, 1814		H. A. Thompson.....	July 1, 1819	
John R. Bell.....	Oct. 10, 1814		W. Turnbull.....	do.....	
J. D. Hayden.....	Feb. 9, 1815	Bvt. March 13, 1813. Ordnance.	E. C. Sickles.....	do.....	
William Wade.....	Feb. 9, 1815		J. S. Hepburn.....	do.....	
W. F. Hobart.....	Jan. 1, 1817		Jos. D. Rupp.....	do.....	
John Erving.....	April 25, 1818		J. R. Blaney.....	do.....	
A. L. Sands.....	Sept. 17, 1818		G. C. Hutter.....	Jan. 28, 1820	
FIRST LIEUTENANTS.			E. G. W. Butler.....	July 1, 1820	
L. Whiting.....	June 14, 1814		J. H. Winder.....	do.....	
S. Washburn.....	Jan. 15, 1817	A. C. S.	S. B. Dusenbury.....	do.....	
M. S. Massey.....	Aug. 5, 1817		W. S. Maitland.....	do.....	
W. L. McClintock.....	Sept. 29, 1817	A. C. S.	E. R. Alberti.....	July 12, 1820	
G. S. Drane.....	Nov. 15, 1817		J. T. Davidson.....	Oct. 27, 1820	
John Monroe.....	April 20, 1818		H. P. Welch.....	do.....	
J. Schmuck.....	do.....	Bvt., July 25, 1814	P. Morrison.....	do.....	
J. Ripley.....	do.....		G. Thomas.....	June 1, 1821	
H. K. Mead.....	do.....	A. C. S.	ORDNANCE STOREKEEPERS.		STATION
J. Parkhurst.....	July 1, 1818		William W. Paine.....		Richmond.
James Monroe.....	Dec. 31, 1818		J. Snowden.....		West Point.
			Jacint Laval.....		Harper's Ferry.
			A. Giles.....		New York.
			Thomas Harrison.....		Schuylkill.
			H. McCall.....		Charleston.
			D. Hopkins.....		Baltimore.
			J. Whistler.....		Belle Fontaine.

FIRST INFANTRY

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commissions.	Brevets and former commissions.
COLONEL.			FIRST LIEUTENANTS.		
T. Chambers	Nov. 10, 1818		Garston Powell	July 1, 1818	
LIEUTENANT COLONEL			George C. Spencer	Oct. 1, 1818	
Z. Taylor	April 20, 1819		E. A. Hitchcock	Oct. 31, 1818	
MAJOR.			William S. Harney	Jan. 7, 1819	
R. Wartenby	April 30, 1817	Brevet, May 1, 1814	W. R. Jouett	Mar. 31, 1819	
CAPTAINS.			Samuel L. Isett	Sept. 27, 1819	
John Jones	July 29, 1813	A. Q. M.	Thomas Barker	July 23, 1820	A. C. S.
W. C. Beard	May 1, 1817	Bvt., Aug. 20, 1813	Const. Pierce	Sept. 3, 1820	
James H. Gale	July 31, 1817		E. Davis	Oct. 3, 1820	
Richard K. Call	July 1, 1818	Bvt., Nov. 7, 1814	Alfred Mitchell	Dec. 1, 1820	
W. V. Cobbs	Mar. 31, 1819		SECOND LIEUTENANTS.		
G. Loomis	April 7, 1819		E. J. Lambert	Mar. 10, 1819	
T. F. Smith	April 25, 1819		W. Malcolm	July 1, 1819	
Trueman Cross	Sept. 27, 1819	A. Q. M., major staff	J. Mackenzie	do	
S. H. Webb	July 9, 1820	Oct. 17, 1820.	Jasper Strong	do	
William H. Kerr	Dec. 1, 1820		John Tucker	Dec. 4, 1819	A. C. S.
			Thomas J. Ayres	Jan. 28, 1820	
			Mart. Burke	do	
			Samuel McRee	July 1, 1820	
			William Day	Oct. 27, 1820	
			Thomas P. Gwynne	Dec. 12, 1820	

SECOND INFANTRY.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commissions.	Brevets and former commissions.
COLONEL.			FIRST LIEUTENANTS.		
Hugh Brady	July 6, 1812		B. A. Boynton	Nov. 25, 1813	
LIEUTENANT COLONEL.			Owen Ransom	April 19, 1814	A. C. S.
W. Lawrence	May 8, 1818	Bvt., Sept. 15, 1814	James Young	June 30, 1814	
MAJOR.			S. B. Griswold	Sept. 1, 1814	
Enos Cutler	Feb. 10, 1818	Bvt., May 1, 1814	Walter Bicker, jr.	do	
CAPTAINS.			R. M. Harrison	Nov. 1, 1817	A. Q. M.
Alexander R. Thompson ..	May 1, 1814		C. F. Morton	Mar. 31, 1819	
Newman S. Clark	Oct. 1, 1814	Bvt., July 25, 1814	Seth Johnson	May 1, 1819	
E. Boardman	Mar. 31, 1817	Bvt., Aug. 1, 1813	Joshua B. Brant	Dec. 1, 1819	A. q. m. bvt., Sept. 17, 1814.
J. H. Ballard	April 22, 1817		John Chitz	Dec. 31, 1819	
T. J. Beall	Sept. 26, 1818	Bvt., Mar. 17, 1814	SECOND LIEUTENANTS.		
W. Hoffman	May 1, 1819		Henry Smith	June 17, 1816	
J. H. Wilkins	Aug. 28, 1819		M. F. Van de Venter	July 22, 1817	
G. Dearborn	Sept. 30, 1819		Edwin V. Sumner	Mar. 3, 1819	
T. Staniford	Mar. 1, 1820		Edmund B. Griswold	Aug. 13, 1819	
Daniel Curtis	Oct. 17, 1820		Samuel L. Russel	do	
			David Brooks	Jan. 28, 1820	
			Carlos A. Waite	do	
			George F. Lindsay	July 1, 1820	
			J. B. Pendleton	July 12, 1820	
			J. S. Gallagher	Oct. 4, 1820	

THIRD INFANTRY.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commissions.	Brevets and former commissions.
COLONEL.			FIRST LIEUTENANTS.		
N. Pinkney	May 13, 1820		William G. Belknap	Aug. 19, 1814	
LIEUTENANT COLONEL.			John B. Clark	May 7, 1817	A. C. S.
John McNeal, jr.	Feb. 24, 1818	Col. bvt., July 25, 1814.	Ed. E. Brooks	June 1, 1817	
MAJOR.			Andrew Lewis	Feb. 10, 1818	
D. Baker	June 1, 1819	Bvt., Aug. 9, 1812	T. J. Harrison	April 20, 1818	
CAPTAINS.			R. C. Pomeroy	Sept. 1, 1818	
C. Larrabee	Sept. 12, 1812	Maj. bvt., Aug. 9.	James Dean	Oct. 31, 1818	
William Whistler	Dec. 31, 1812		A. Musser	June 1, 1819	
Stephen W. Kearney	April 1, 1813		Hor. Webster	April 5, 1820	
Hez. Bradley	April 19, 1814		Henry H. Loring	Oct. 17, 1820	
John Green	Sept. 25, 1814		SECOND LIEUTENANTS.		
J. Garland	May 7, 1817		Samuel W. Hunt	Feb. 3, 1819	
W. Browning	Nov. 1, 1817	Bvt., Oct. 31, 1814	H. N. Baker	Aug. 13, 1819	A. C. S.
R. Humphreys	Dec. 24, 1818		J. C. Hayward	Jan. 28, 1820	
R. B. Mason	July 31, 1819		A. Woodward	May 17, 1820	
J. S. Nelson	Aug. 13, 1819	Bvt., Apr. 30, 1813	J. M. Tufts	July 1, 1820	
			L. N. Morris	do	
			Stewart Cowan	July 12, 1820	
			William Tolson	do	
			James B. Allen	Oct. 27, 1820	
			Edwin A. Caldwell	do	

FOURTH INFANTRY.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commission.	Brevets and former commissions.
COLONEL.			FIRST LIEUTENANTS.		
R. Butler-----	June 1, 1821	Col. staff, Mar. 5, 1814.	H. R. Dulany-----	Feb. 10, 1818	
LIEUTENANT COLONEL.			William Lear-----	Feb. 24, 1818	
G. M. Brooke-----	Mar. 1, 1819	Col. bvt., Sept. 17, 1814.	Jer. Yancey-----	Dec. 1, 1818	
MAJOR.			G. W. Allen-----	Jan. 1, 1819	
J. B. Maney-----	May 5, 1813		J. Page-----	do-----	
CAPTAINS.			Lee Slaughter-----	April 30, 1819	
J. H. Vose-----	May 6, 1812	Maj. bvt., Aug. 4, 1814.	E. Webb-----	July 31, 1819	
Saunders Donoho-----	July 6, 1812		Wm. M. Graham-----	Aug. 11, 1819	
James H. Hook-----	May 20, 1813		Edward Alexander-----	Aug. 20, 1820	
J. S. McIntosh-----	Mar. 8, 1817		Thomas Johnston-----	Dec. 31, 1820	
James M. Glassell-----	Feb. 10, 1818	Maj staff, May 22, 1818.	SECOND LIEUTENANTS.		
Francis L. Dade-----	Feb. 24, 1818		Jos. B. Shaw-----	Nov. 12, 1818	
Philip Wager-----	May 8, 1818		W. H. Mann-----	Feb. 3, 1819	
Hen. Wilson-----	April 20, 1819		R. B. A. Tate-----	Mar. 3, 1819	
R. M. Sands-----	April 30, 1819		Arthur W. Thornton-----	Nov. 30, 1819	A. C. S.
F. W. Brady-----	Dec. 31, 1820		John J. Jackson-----	Dec. 1, 1819	
			George Mountz-----	Jan. 28, 1820	
			J. B. Triplett-----	Oct. 27, 1820	
			William Martin-----	do-----	
			T. Burk-----	do-----	
			Edward N. Dulany-----	do-----	

FIFTH INFANTRY.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commission.	Brevets and former commissions.
COLONEL.			FIRST LIEUTENANTS.		
Josiah Snelling-----	June 1, 1819		J. Plympton-----	July 31, 1813	
LIEUTENANT COLONEL.			D. Wilcox-----	Oct. 2, 1814	
Henry Leavenworth-----	Feb. 10, 1818	Col. bvt., July 25, 1814.	R. A. McCabe-----	Oct. 16, 1816	Bvt., May 1, 1814.
MAJOR.			Nathan Clark-----	Mar. 17, 1817	A. C. S.
J. E. Dinkins-----	May 8, 1818	Bvt., May 15, 1814	T. Hunt-----	July 1, 1817	A. C. S.
CAPTAINS.			J. McIlvain-----	April 30, 1819	
S. Burbank-----	Mar. 13, 1813	Maj. bvt., July 25, 1814.	M. Scott-----	Nov. 2, 1819	
George Bender-----	May 13, 1813	A. Q. M.	G. Lowe-----	Mar. 15, 1820	
John Bliss-----	do-----		P. R. Green-----	Mar. 27, 1820	
M. Marston-----	June 26, 1813	Maj. bvt., August 15, 1814.	E. K. Barnum-----	Dec. 31, 1820	
Benjamin Watson-----	Aug. 15, 1813	Maj. bvt., July 25, 1814.	SECOND LIEUTENANTS.		
J. Fowle, jr.-----	June 10, 1814		S. S. Stacy-----	July 22, 1817	A. C. S.
David Perry-----	Sept. 1, 1814		C. Burbridge-----	June 16, 1818	
Bennet Riley-----	Aug. 6, 1818		J. C. Russell-----	July 24, 1818	
Charles L. Cass-----	Dec. 31, 1818		C. C. Hobart-----	Oct. 8, 1818	
T. F. Hunt-----	May 20, 1820	A. Q. M.	Joseph M. Baxley-----	Aug. 13, 1819	
			D. Tyler-----	July 1, 1819	
			B. Gorham-----	July 1, 1820	
			W. E. Cruger-----	July 12, 1820	
			Phineas Andrews-----	Oct. 27, 1820	
			W. Alexander-----	Oct. 27, 1820	

SIXTH INFANTRY.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commission.	Brevets and former commissions.
COLONEL.			FIRST LIEUTENANTS.		
Duncan L. Clinch-----	April 20, 1819		J. Clark, jr.-----	Sept. 1, 1814	A. C. S.
LIEUTENANT COLONEL.			John Gantt-----	April 5, 1818	
Willoughby Morgan-----	Nov. 10, 1818		Gabriel Field-----	April 15, 1818	
MAJOR.			C. Pentland-----	July 31, 1818	
Alexander Cummings-----	April 20, 1819		Thos. W. Kavanaugh-----	Nov. 10, 1818	
CAPTAINS.			L. Palmer-----	Nov. 10, 1818	
W. S. Foster-----	Mar. 13, 1813	Maj. bvt., August 15, 1814.	Jacob Brown-----	Aug. 18, 1819	A. C. S.
Daniel Ketchum-----	Sept. 30, 1813	Maj. bvt., July 25, 1814.	Samuel Shannon-----	Feb. 23, 1820	
Thomas Hamilton-----	Feb. 21, 1814		Henry Taylor-----	Mar. 1, 1820	
W. Martin-----	Mar. 17, 1814		Zalmon C. Palmer-----	Mar. 1, 1820	
Mathew J. Magee-----	Feb. 10, 1815		SECOND LIEUTENANTS.		
William Haile-----	May 14, 1818		W. D. McCray-----	Feb. 3, 1819	
J. McGunngle-----	July 12, 1818	A. Q. M.	Joseph Buckley-----	Aug. 13, 1819	
William Armstrong-----	July 31, 1818		William N. Wickliffe-----	Sept. 20, 1819	
James S. Gray-----	Nov. 10, 1818		John Duncan-----	Dec. 4, 1819	
Ephraim Shaylor-----	April 30, 1819		John Bradley-----	Jan. 28, 1820	
			N. I. Cruger-----	July 1, 1820	
			Thomas Noel-----	do-----	
			W. W. Morris-----	do-----	
			Wharton Rector-----	July 12, 1820	
			Richard Wells-----	Oct. 27, 1820	

SEVENTH INFANTRY.

Names and rank.	Date of commission.	Brevets and former commissions.	Names and rank.	Date of commission.	Brevets and former commissions.
COLONEL.			FIRST LIEUTENANTS.		
Matthew Arbuckle.....	Mar. 16, 1820		N. G. Wilkinson.....	April 20, 1818	
LIEUTENANT COLONEL.			H. Berryman.....	Dec. 31, 1818	
William Lindsay.....	Mar. 12, 1813		G. Murdock.....	Jan. 31, 1819	
MAJOR.			J. Wheelock.....	Mar. 12, 1819	
A. R. Woolley.....	Feb. 9, 1815		John Philbrick.....	April 11, 1819	
CAPTAINS.			A. M. Houston.....	Aug. 31, 1819	
William Bradford.....	July 6, 1812	Maj. bvt., August 20, 1814.	Wm. N. Bronaugh.....	Dec. 31, 1819	
D. E. Twiggs.....	do.....	Maj. bvt., Sept. 21, 1814.	Richard Wash.....	June 30, 1820	
W. Davenport.....	Sept. 28, 1812		B. L. E. Bonneville.....	July 9, 1820	
R. D. Richardson.....	Aug. 5, 1813		J. B. Hobkirk.....	Oct. 31, 1820	
J. S. Allison.....	June 25, 1814		SECOND LIEUTENANTS.		
George Birch.....	Aug. 31, 1816		Pierce Butler.....	Aug. 13, 1819	
R. B. Hyde.....	Oct. 31, 1818		John Stewart.....	do.....	
Nathaniel Young.....	Jan. 1, 1819		James Dawson.....	do.....	
G. Leftwich.....	June 15, 1819		W. S. Colquhoun.....	Dec. 4, 1819	A. C. S.
Daniel E. Burch.....	June 30, 1820		W. W. Outlaw.....	do.....	
			John McCauley.....	Jan. 28, 1820	
			Norman Holmes.....	do.....	
			Edgar S. Hawkins.....	July 1, 1820	
			R. D. A. Wade.....	Oct. 27, 1820	
			Robert Ross.....	do.....	

CITY OF WASHINGTON, *May 14, 1821.*

The board of general officers beg leave to recommend that, in case Brevet Brigadier General Atkinson should elect to take a regiment of infantry, (say the 6th,) Colonel D. L. Clinch be, in that case, arranged to the 4th infantry, Colonel R. Butler as lieutenant colonel of the 1st infantry, Lieutenant Colonel Taylor as major of the 7th infantry, Major Woolley to the 4th artillery, as captain, in the place of Captain Sands, the latter transferred to the 1st infantry in the place of Captain Cobbs, to be left out.

JAC. BROWN.

THE FOUR REGIMENTS OF ARTILLERY—

Thirty-six companies of fifty-five non-commissioned officers, artificers, musicians, and privates..... 1,980
Enlisted men for ordnance duties..... 56

THE SEVEN REGIMENTS OF INFANTRY—

Seventy companies of fifty-one non-commissioned officers, musicians, and privates..... 3,570
And the non-commissioned staff..... 36

Making a total of..... 5,642

To be distributed as follows :

FIRST REGIMENT OF ARTILLERY.

Colonel PORTER, Boston.
Lieutenant Colonel BOMFORD, Ordnance.
Major WALBACH, Portsmouth.
Brevet Major DALLIBA, Ordnance.

Fort Sullivan, Maine.

Captain Mason, First Lieutenant Dana, First Lieutenant Brent, Second Lieutenant Walker, and Second Lieutenant Tone.

Fort Preble, Maine.

Captain Brooks, First Lieutenant Simonson, First Lieutenant Patrick, Second Lieutenant Ramsay, and Second Lieutenant Davidson.

Fort Constitution, New Hampshire.

Captain F. Whiting, First Lieutenant Merchant, First Lieutenant Griswold, Second Lieutenant Howard, and Second Lieutenant Van Ness.

Harbor of Boston, Massachusetts.

Captain Eastman, Captain H. Whiting, First Lieutenant Dix, First Lieutenant Willard, First Lieutenant Smith, Second Lieutenant McIntire, Second Lieutenant Kinsley, Second Lieutenant Dimick, and Second Lieutenant Swift.

Fort Wolcott, Rhode Island.

Captain Crane, First Lieutenant Baden, First Lieutenant Abeel, Second Lieutenant Wharton, and Second Lieutenant Pickevin.

Fort Trumbull, Connecticut.

Captain McDowell, First Lieutenant Saunders, First Lieutenant Kirby, Second Lieutenant Brown, and Second Lieutenant Vining.

Harbor of New York.

Captain Churchill, Captain Worth, First Lieutenant Melendy, First Lieutenant Gardiner, First Lieutenant Disperville, First Lieutenant Kirk, Second Lieutenant Cooper, Second Lieutenant Porter, Second Lieutenant Webb, and Second Lieutenant Whistler.

SECOND REGIMENT OF ARTILLERY.

Colonel TOWSON, Fort McHenry.
Lieutenant Colonel HOUSE, Detroit.
Major HINDEMAN, Fort Mifflin.
Captain TALCOTT, Ordnance.

Fort Mifflin, Pennsylvania.

Captain Roach, First Lieutenant Kirby, First Lieutenant Wilkins, Second Lieutenant Fowler, and Second Lieutenant Thomas.

*Distribution of troops—Continued.**Fort McHenry, Maryland.*

Captain Belton, First Lieutenant Fitzhugh, First Lieutenant Mallory, Second Lieutenant Ringgold, and Second Lieutenant Dumest.

West Point, New York.

Captain Fanning, First Lieutenant Bache, First Lieutenant Galt, Second Lieutenant Green, and Second Lieutenant Gilbert.

Arsenal, Watervid, New York.

Captain Gates, First Lieutenant Welsh, First Lieutenant Lowd, Second Lieutenant Strong, and Second Lieutenant De Hart.

Plattsburg, New York.

Captain Zantzing, First Lieutenant Thompson, First Lieutenant Eakin, Second Lieutenant Williams, and Second Lieutenant Bowes.

Fort Niagara, New York.

Captain Heileman, First Lieutenant De Russey, First Lieutenant Green, Second Lieutenant Harding, and Second Lieutenant Gates.

Pittsburg, Pennsylvania.

Captain Nourse, First Lieutenant Armstrong, First Lieutenant Wells, Second Lieutenant Ridgely, and Second Lieutenant Buchanan.

Detroit, Michigan Territory.

Captain Mountfort, First Lieutenant Mellon, First Lieutenant Davis, Second Lieutenant Webb, and Second Lieutenant Tomkins.

Mackinac, Michigan Territory.

Captain Legate, First Lieutenant Lyon, First Lieutenant Pierce, Second Lieutenant Chambers, and Second Lieutenant Barney.

THIRD REGIMENT OF ARTILLERY.

Colonel ARMISTEAD, Fort Washington.
Lieutenant Colonel MITCHELL, Fort Norfolk.
Major BANKHEAD, Charleston.
Captain ARCHER, Ordnance.

Annapolis, Maryland.

Captain Jones, First Lieutenant Lendrum, First Lieutenant Lee, Second Lieutenant Hopkins, and Second Lieutenant Stewart.

Fort Washington, Potomac.

Captain Ansart, First Lieutenant Childs, First Lieutenant Boothe, Second Lieutenant Hamtramck, and Second Lieutenant J. Smith.

Richmond, Virginia.

Captain Baker, First Lieutenant Baird, First Lieutenant Hill, Second Lieutenant Bell, and Second Lieutenant Barbarin.

Norfolk Harbor, Virginia.

Captain Stockton, Captain Lomax, First Lieutenant Mackay, First Lieutenant Fraser, First Lieutenant Spencer, First Lieutenant Adams, Second Lieutenant Corprew, Second Lieutenant Brockenbrough, Second Lieutenant Garner, and Second Lieutenant Kerr.

Fort Johnson, Smithville, North Carolina.

Captain Wilson, First Lieutenant Spotts, First Lieutenant Thruston, Second Lieutenant McKenzie, and Second Lieutenant Feltus.

Charleston Harbor, South Carolina.

Captain Laval, Captain Morris, First Lieutenant Taylor, First Lieutenant J. L. Gardner, First Lieutenant Evans, First Lieutenant Griffith, Second Lieutenant Newton, Second Lieutenant L'Engle, Second Lieutenant Edwards, and Second Lieutenant Lowndes.

Arsenal, Augusta, Georgia.

Captain Craig, First Lieutenant Philips, First Lieutenant Webber, Second Lieutenant Rigall, and Second Lieutenant Sudler.

FOURTH REGIMENT OF ARTILLERY.

Colonel FENWICK, Pensacola.
Lieutenant Colonel MACREA, New Orleans.
Major EUSTIS, St. Augustine.
Captain WADE, Ordnance.

Fort Jackson, Savannah, Georgia.

Captain Erving, First Lieutenant Symington, First Lieutenant Wright, Second Lieutenant Thomas, and Second Lieutenant Maitland.

Fernandina, Amelia Island.

Captain Payne, First Lieutenant J. Monroe, First Lieutenant Washington, Second Lieutenant Hepburn, and Second Lieutenant Morrison.

St. Augustine, East Florida.

Captain Bell, Captain Hobart, First Lieutenant Washburn, First Lieutenant Drane, First Lieutenant Ripley, First Lieutenant T. J. Gardner, Second Lieutenant Sickles, Second Lieutenant Rupp, Second Lieutenant Alberti, and Second Lieutenant Davidson.

St. Mark's, Florida.

Captain Burd, Captain Sands, First Lieutenant McClintock, First Lieutenant Parkhurst, First Lieutenant James Monroe, First Lieutenant Vinton, Second Lieutenant Blaney, Second Lieutenant Hutter, Second Lieutenant Winder, and Second Lieutenant Dusenbury.

Pensacola, Florida.

Captain Pierce, Captain Hayden, First Lieutenant L. Whiting, First Lieutenant Massay, First Lieutenant J. D. Graham, First Lieutenant McNeil, Second Lieutenant Joseph Chambers, Second Lieutenant Thompson, Second Lieutenant Turnbull, and Second Lieutenant Butler.

Fort St. Philip, Louisiana.

Captain E. Humphrey, First Lieutenant Schmuck, First Lieutenant Mead, Second Lieutenant Ward, and Second Lieutenant Welch.

First regiment of infantry, Baton Rouge.
Second regiment of infantry, Sackett's Harbor.
Third regiment of infantry, Green Bay and Chicago. At Green Bay, eight companies; and at Chicago, two companies.
Fourth regiment of infantry, Pensacola.
Fifth regiment of infantry, St. Peter's, Prairie du Chien, and Fort Armstrong. At St. Peter's, seven companies; at Prairie du Chien, two companies; and at Fort Armstrong, one company.
Sixth regiment of infantry, Council Bluffs.
Seventh regiment of infantry, Arkansas and Red rivers. Six companies on Red river, and four companies on the Arkansas.

And the President further directs, until otherwise ordered, that the immediate command of all the troops as above distributed, west of a line drawn from the southernmost point of East Florida to the northwest extremity of Lake Superior, be assigned to brevet Major General Gaines, and that the command of the troops east of such line be assigned to brevet Major General Scott—the whole of Tennessee and Kentucky being considered in the western department.

The headquarters of Major General Brown will be in the District of Columbia; the headquarters of the western department will be at Louisville, Kentucky; and the headquarters of the eastern department will be at Governor's island, New York, when the generals are not on visits of inspection and tours of duty.

All officers included in the above list and not on special duty will forthwith join their respective regiments and commands.

Officers who are designated as assistant quartermasters and assistant commissaries of subsistence will forthwith report, by letter, to those departments for specific instructions.

Special orders having been given to local commanders for consolidating and reducing the troops preparatory to this arrangement, all supernumerary non-commissioned officers, artificers, musicians, and privates, if any such remain in service, will be discharged at their respective posts as soon as practicable.

All officers whose names are not included in the above list must consider themselves disbanded on the first of June next, except quartermasters, commissaries, and storekeepers charged with the safe-keeping of public property, who will remain in service until specially relieved from their accountability.

It is deemed inexpedient to continue arrests or proceedings of courts-martial which may have been instituted on officers not retained in the army. All such officers will be released from arrest and discharged from further duty.

All deserters from the army of the United States, previous to the date of this order, may peaceably and safely return to their homes without being subject to punishment or trial on account of such desertion. No reward or expenses will be allowed for apprehending any soldier who deserted prior to this order.

All soldiers in confinement by sentence of courts-martial will be dismissed the service with disgrace. The regulations relative to transfers is so far suspended that officers may be taken from one regiment or corps and arranged to another, the more perfectly to complete the organization, without consulting the individuals interested, until the 1st of January next.

By order:

D. PARKER, *Adjutant and Inspector General.*

NOTE.—In arranging the lieutenants of artillery to the most convenient stations for immediate duty, attention has not been paid in all cases, by the board of officers, to equal promotion, which must be a subject of future orders.

No. 5.

OPINION OF THE ATTORNEY GENERAL IN THE CASE OF GENERAL MACOMB.

DEPARTMENT OF WAR, *August 5, 1831.*

SIR: In obedience to your order I have examined the argument offered by Mr. Balch in support of the claim of General Macomb to be allowed the pay and emoluments of a major general while he was chief engineer, and, as such, had the charge of the Engineer department from May 1, 1821, to April 30, 1828, and I respectfully submit for your consideration the following report:

By the act of Congress of April 16, 1818, officers who have brevet commissions are entitled to receive the pay and emoluments of their brevet rank "while on duty and having a command according to their brevet rank and at no other time." The expressions "and at no other time," contained in this law, repeal the act of 1812, so far as it gave a title to the pay and emoluments of the brevet rank under other circumstances than those mentioned in the act of 1818.

The whole question referred to me, therefore, turns upon the construction of the above-mentioned act of Congress of April 16, 1818. By this law the title of the pay and emoluments of the brevet rank depends entirely upon the character of the command assigned to the officer, that is, upon the character of the body placed under his command, and he is entitled to the pay of his brevet rank only when the character and organization of that body renders it the appropriate military command of an officer of that grade in the army, for it is then only that he can be said to have a command according to his rank.

It follows that, in order to entitle General Macomb to the pay and emoluments of a major general, the command assigned to him must have been such a one as by the rules and regulations of the army was the regular and appropriate command of a major general. The command which properly belongs to such an officer does not depend upon the number of men placed under his control, nor upon the importance of the duties and station assigned to him. An officer may have a body of artificers and laborers under his direction, engaged in erecting fortifications or in making roads, as numerous as the regular command of a major general; yet such a body of men is not the appropriate command of a major general; he could not be said to have a command according to that rank. The appropriate command of a major general is a division of the army, and the military character of the body, and their organization according to the regulations of the army, here essentially necessary in order to constitute them a division and make them a major general's command. General Macomb did not command a body of this description. The greater part of the persons under his control did not belong to the army, and had neither the military character nor the organization required to constitute a division. He had not, therefore, a command according to the rank of a major general, and consequently, under the act of Congress of 1818, is not entitled to the pay and emoluments of that rank. The construction supposed to have been given to this act of Congress in analogous cases is also relied upon. I have not thought it necessary to inquire on what principle the allowances were made to the several officers mentioned in the argument referred to me. In the case before me the pay and emoluments in question are claimed only upon the ground that the character of the command assigned to General Macomb was such as entitled him to the pay and emoluments of his brevet rank. Whether he is or is not so entitled must depend upon the act of Congress; and if that act, upon its true construction, does not entitle him to the pay and emoluments claimed, the executive branch of the government cannot enlarge its operations beyond the proper meaning of its words, nor allow the pay and emoluments when the legislature have not authorized it to be done.

There is another view of this subject which I beg leave to present to the President. The same question now under consideration was brought before Mr. Monroe while he was President and decided by him in his order of June 12, 1822, and the accounting officers have ever since acted upon this construction of the law. I should doubt very much whether the correctness of that decision can now be properly

inquired into by the Executive branch of the government. It is true that erroneous decisions, founded upon mistakes in matters of fact, or occasioned by mistakes in figures and calculations, may, without doubt, be corrected by their successors in office at any time afterwards when the mistake is discovered. But when the President, acting within the scope of his authority and with all the facts before him pronounces a decision founded upon the construction of a law of Congress, and that decision is acted upon and the account finally settled accordingly, I should incline to think that the account cannot properly be reopened for revision by his successor in office, and if the decision is an erroneous one and injustice has thereby been done to an individual, the remedy is with the legislature. In any other view of the case an appeal would be to each succeeding President from the judgment of his predecessor, and the accounts and transactions of the government would always remain unsettled and liable to be reviewed and reconsidered at any period, however remote. Such right of appeal on the part of the individual does not seem necessary for the purposes of justice and would be exceedingly inconvenient and injurious to the public.

The case of General Macomb, it must be admitted, is one of some hardship. His brevet rank was gallantly earned. It was equal to that of Generals Scott and Gaines, and the command he held was as important and as full of responsibility as the respective commands held by them, yet they received the pay and emoluments of major generals, while General Macomb received only the pay and emoluments of a brigadier. I am persuaded that, if the subject had been brought before Congress, they would have felt the justice of placing them all upon the same footing, and I should have taken pleasure in finding myself justified in reporting in favor of the claim he makes. But upon a careful examination of the whole case, I think his claim cannot be lawfully allowed, and report accordingly.

I am, sir, with the highest respect, your most obedient servant,

R. B. TANEY, *Acting Secretary of War.*

The PRESIDENT of the United States.

Approved August 6, 1831.

ANDREW JACKSON.

22D CONGRESS.]

No. 535.

[2D SESSION.]

ON THE EXPEDIENCY OF ENLISTING MINORS INTO THE ARMY, AND IMPROVING THE CONDITION OF THE RANK AND FILE OF THE ARMY, BY ESTABLISHING SCHOOLS, RETAINING THE WHISKEY RATION, AND EXEMPTING THOSE SERVING FOUR YEARS FROM MILITIA DUTY, &c.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 17, 1832.

HEADQUARTERS OF THE ARMY, *Washington, February, 1832.*

Sir: Agreeably to the request contained in your letter of the 24th of January, I have the honor of stating here below my opinion of the expediency and practicability of carrying into effect the resolution of the House of Representatives of the 3d of January, referred to the Committee on Military Affairs, on motion of Mr. Ward.

"1st. Of enlisting into the army minors, from the ages of sixteen to seventeen, by and with the consent of their parents or guardians, to serve for the period of four years.

"2d. Of establishing schools at such military posts garrisoned exclusively by the troops so enlisted, for the purpose of teaching such branches of education as will fit and prepare the soldiers for situations of usefulness in life, and of reducing their monthly pay in the ratio of two dollars for every five dollars now paid.

"3d. Of retaining the whiskey portion of the ration, to be paid either in money, military equipments, or in some suitable badge of honor.

"4th. Of exempting all such non-commissioned officers and privates, who shall have served for the period of four years, from militia duty, except in case of war, invasion, or other public emergency; and that the committee inquire how far such enlistments and provisions may tend to destroy or lessen the evil of frequent desertion."

With regard to the several propositions contained in the resolution, I have to remark that I am of the opinion that lads of the proposed age, who might be enlisted into the service with the consent of their parents, in time of peace, would generally, in all probability, be of a character not suited for the public service; that none but idle, profligate, and incorrigible lads, who could not be controlled by their parents or guardians, would be permitted to be enlisted; and should such be enlisted there would be no probability of improving them, as they would come with confirmed habits of idleness, and our discipline is too mild to expect a reformation of them through its means. I would prefer that the ages of the boys should be much younger, and would propose not less than twelve or more than thirteen years, and the term of enlistment to be twelve years, or until they should, respectively, have attained the age of twenty-five years. At such a tender age, the boys might be instructed in the art of reading and writing the English language correctly; and, as they advanced, they should be taught the principles of mathematics, as far as to enable them to apply them to all common calculations, and to practical geometry, for civil and military purposes. I would also propose that they should be instructed in all the various handicrafts, which might be useful to the service in their capacity as soldiers, and which might enable them, after leaving the service, to provide for themselves a decent support. In a word, I would cause them to be instructed after the manner of the cadets at West Point, only beginning at the very rudiments of instruction in everything to be taught. They should be neatly and well-dressed as soldiers, drilled every day in military exercises, and made to perform all the duties of soldiers and non-commissioned officers. For which

purpose I would propose that one of the forts, best situated, should be made the school; and, after the experiment is fully tested, if successful, that other schools should be established at other suitable places. For instance, let us begin the experiment at Fort Monroe, in the Chesapeake, where there are all the accommodations necessary for the purpose. Let there be enlisted five hundred boys, of the age above mentioned, and for the term specified; these boys to receive, for the first three years, three dollars a month, with suitable clothing and rations; then, for two years, the full pay of a soldier; after that, to be promoted to be corporals, and when eighteen years of age to be formed into companies; the most expert soldiers and the best in regard to conduct to be made sergeants. Then send all except two companies to relieve such companies as are in other garrisons, so as to relieve a whole garrison at a time, that there may be none of the old soldiers at any of the posts occupied by the schooled soldiers. Fill up the school at Fort Monroe until the whole of the artillery may be composed of the lads educated at that place, unless other schools should be established for the same purpose. In order to give encouragement to those who have attained the rank of corporal, they should, after serving three years as corporals, be promoted to the rank of sergeants, so that eventually the whole army would be composed of non-commissioned officers, who should perform the duties of privates and non-commissioned officers in rotation, except two in each company, who should be selected from the most deserving, to be sergeant major and quartermaster sergeant of the company, to whom, as a suitable encouragement, a higher pay should be allowed. I would, in like manner, provide for musicians to be instructed according to the same rule, who should have the advantages of education, promotion, and increased pay. If the plan here proposed should be adopted, three points might be mentioned as suitable places for the schools, to wit: Fort Adams, in the harbor of Newport, R. I., Fort Monroe, in the Chesapeake, and Jefferson barracks, in Missouri. As a further encouragement to the troops so educated, I would recommend that the President be authorized to appoint to each military post a post-adjutant and post-commissary, to be selected from the non-commissioned officers who may have served out their term. These post-officers to have the rank, pay, and emoluments of second lieutenants, or of the lowest grade of commissioned officers that then might exist; and, thereafter, that all commissaries of posts be appointed from the non-commissioned officers who had performed their duty faithfully; and that, besides, to each battalion there should be appointed a sub-adjutant, to be also a promotion for the non-commissioned officers, and that, after having attained these places, they shall respectively be considered as candidates for appointments of higher degree in the military establishment, should they continue to merit further advancement. No bounty should be offered for enlistments. The boys should be received after a careful inspection as to health, size, and probable fitness for the duties to be encountered. The punishments should be small deductions from their pay, and confinement to quarters, &c., to be established by a fixed rule. Good conduct to authorize a restitution of the pay deducted, in proportion to amendment. No flogging or other severe punishment should be allowed. The officers who have been educated at the Military Academy should be the instructors of the school, who should receive a small additional compensation in consideration of their services.

The advantages expected to result from the establishment of these schools, are—1st. To render the rank and file of the army more respectable. 2d. To insure good officers and non-commissioned officers for a large army, whenever it may be necessary to augment the military establishment. 3d. To disseminate practical military knowledge more generally throughout the republic; and, finally, to banish vice, and prevent desertion in the army. The soldier, should he think proper to retire from the service at the end of his first enlistment, will retire to his friends with a good education, with a knowledge of some useful trade, and will, in fact, be a valuable citizen wherever he may establish himself. Besides the advantages which would result to the regular forces, men thus educated for military purposes would, on retiring to their homes, be found to be a great acquisition to the militia of their respective States, and therefore ought not to be exempted from duty in the militia, as proposed.

The great difficulty in our country has been the obtaining of persons of the requisite character and intelligence to be non-commissioned officers. In time of war, that class of officers, well instructed, is indispensable to the efficiency of the service. They are so intimately connected with the soldiers that on them, in a great measure, depend the moral character, health, comfort, discipline, and general efficiency of the rank and file. There are so many small, yet essential, duties to be performed by non-commissioned officers, that unless they are well-instructed and practiced in them no system can be pursued; and on the faithful execution of what is entrusted to them the good of the service in a great measure rests. There will also be created, by this plan, a description of officers long wanted in our service, that is, persons of the requisite habits, intelligence, honesty, and carefulness—a kind of isolated staff officers; such, for instance, as post-commissary, post-adjutant, military storekeeper, keeper of magazines of powder and ammunition, keeper of arsenals in which arms are deposited for safe keeping, or for immediate distribution and use. These men, from their habits and their knowledge of such things, would be the most fit persons to occupy such places; and the places would be so many rewards for, and inducements to, good conduct. Some scheme of this nature has been wanted to give respectability to the rank and file of the regular army, to induce good men to enter it; and, finally, to secure to the public faithful and efficient officers for keeping, in a state of preservation, the military supplies, vast quantities of which are constantly accumulating. When it shall be generally known that such advantages are offered to the faithful soldier, there will be no difficulty in filling our ranks, and I have no doubt that applications for admission into the schools of the army will be as pressingly made as they are now for filling the list of cadets at West Point. The advantages, though not in every respect equal, will nevertheless be considered of sufficient importance to claim the attention of many worthy, good people.

To present the whole subject in a more condensed and specific form, I beg leave to offer, herewith, the draft of a bill, which will exhibit more clearly the scheme in view.

I have the honor to be, sir, your most obedient humble servant,

ALEX. MACOMB, *Major General, commanding the army.*

HON. WILLIAM DRAYTON, *Chairman of the Military Committee of the House of Representatives.*

A BILL to improve the condition of the rank and file of the army.

1. *Be it enacted, &c.,* That, whenever the President of the United States shall deem it expedient, it shall be lawful for him to cause to be enlisted into the army of the United States such number of boys as he may judge proper, whose age, when enlisted, shall not be less than twelve years, nor more than thirteen

years, to serve until they respectively shall have attained the age of twenty-five, unless sooner discharged; provided the said boys shall be enlisted with their own free will, and with the written consent of their respective parents or guardians, if any such they have; and, if they have none, with the approbation of the proper authorities of the town, place, or city, in which such boys may respectively reside.

2. *Be it further enacted, &c.*, That the said boys, when so enlisted, shall be assembled at such military post or posts as the President may direct, where shall be established schools for their instruction in reading and writing the English language, in arithmetic, mathematics, and other proper branches of study; also, in the military arts and exercises, and in such handicraft trades as may be judged useful and proper.

3. *Be it further enacted, &c.*, That the said boys shall be entitled to receive such clothing and subsistence as may be necessary for them, provided they shall not exceed the cost of the clothing and subsistence now allowed to soldiers in the army; and that their pay, respectively, shall be as follows: for the first three years after their enlistment, three dollars per month; the next two years, five dollars a month; they shall then, respectively, be promoted to the rank of corporals, provided their conduct be such as to justify it, and be entitled to the pay attached to that grade. They shall then be formed into companies, with a due proportion of sergeants. The sergeants to be appointed from the most meritorious, as a reward for superiority in good conduct. The said corporals, after serving three years, shall severally be further promoted to the rank of sergeants, provided, as before, their conduct shall justify such promotion, with the pay and emoluments attached to said grade; but they shall, nevertheless, perform the duties of private, corporal, and sergeant, in rotation, according to such rule as shall be established by the President of the United States.

4. *Be it further enacted, &c.*, That the said companies shall be organized in the same manner as the companies now authorized in the several regiments of artillery and infantry, and be officered in like manner, and are to replace such companies, in said regiments, as shall be broken up. To each company there shall be attached one sergeant major, to be charged with the details of the company, under the direction of the captain or commanding officer; one quartermaster sergeant, to be in like manner under the direction of the commanding officer of the company, charged with the clothing, provisions, and other property belonging to the company, whose pay and subsistence, respectively, shall be equal to that of the cadet, with the addition of suitable clothing, to be furnished by the public.

5. *Be it further enacted, &c.*, That such of the non-commissioned officers as shall be employed in other duties than those in the line, as, for instance, in any of the trades they may have been taught, as blacksmiths, carpenters, wheelwrights, harness-makers, whitesmiths, or other handicraft, except military works, in the laboratory, police, or other necessary duties connected with the camp or garrison, shall receive an extra allowance of twenty cents per day; but ardent spirits are, on no account, to be allowed or issued to them as rations, or gratuitously, for services.

6. *Be it further enacted, &c.*, That after the completion of a full term of enlistment by any non-commissioned officer, who has enlisted according to this act in a manner to entitle him to an honorable discharge, the President may authorize the appointment of such non-commissioned officer, so discharged, on the recommendation of the colonel or commanding officer of the regiment to which such non-commissioned officer belonged, or under whom he may have served at the time of his discharge, to any of the following offices, to wit: To be sub-adjutant to a battalion or post, with the pay, rank, and emolument of a cadet, with suitable clothing, provided there be not more than one to each battalion or post, said sub-adjutant to perform the duties heretofore performed by sergeant majors of regiments, to be in lieu of said sergeant majors; post-adjutant, post-commissary, each with the rank, pay, and emoluments of second lieutenant, provided there be not more than one of each appointment to each military post, or to be keeper of military stores, and keeper of magazines and arsenals, under the direction of the Ordnance department, with the pay, rank, and emoluments of the lowest grade of commissioned officers in the line of the army. Besides these said appointments, the said non-commissioned officers, who have faithfully served their term out, shall be otherwise eligible to promotion in the line of the army, according to their respective merits.

7. *Be it further enacted, &c.*, That the President be, and he is hereby, authorized to cause to be detailed from the commissioned officers of the army such number of them as may be necessary to instruct the said boys, who shall be entitled, respectively, to receive an additional compensation of ten dollars a month while actually so employed; and also may cause to be detailed from the army such mechanics, or may direct to be engaged such number of mechanics, of respectable character and of different trades, as may be requisite and capable of teaching the mechanic arts and works proper to be taught to the said boys, in conformity with the second section of this act; the said mechanics to receive the monthly pay of twenty-five dollars, and the rations and clothing of a soldier.

8. *Be it further enacted, &c.*, That it shall be lawful to cause a suitable number of said boys, who may show the natural disposition for the attainment of knowledge in music, to be instructed on the several instruments used in the army, besides the instruction directed to be given to the other boys; the said boys selected for musicians to have all the advantages, as to promotion and appointment, allowed to the others, as they respectively advance in years, and maintain a good standing as to talents and conduct; and to receive the same pay and other allowances, according to rank.

9. *Be it further enacted, &c.*, That if, after the completion of the term for which any of the non-commissioned officers herein mentioned may have enlisted, there shall be no vacant place in the military establishment to which they respectively could be promoted, that they, the said non-commissioned officers, may be re-enlisted for any term not less than one year, and be borne on the rolls of their respective regiments, with the same rank and station held by them, respectively, and for any further term thereafter, as long as they may be fit to perform the duties of a soldier; retaining all the claims to further promotion to which merit and character may entitle them.

10. *Be it further enacted, &c.*, That the whole expense attending the introduction of this system shall not increase the estimated expense of the whole army, as now authorized, including bounties and premiums, and contingencies of the recruiting service; and it shall be lawful for the President to cause to be discharged such of the rank and file of the present army as may make it necessary to keep the expenses of the military establishment within the limits here prescribed.

22D CONGRESS.]

No. 536.

[2D SESSION.]

ON THE CLAIM OF MAJOR GENERAL ALEXANDER MACOMB TO THE PAY AND
EMOLUMENTS OF HIS BREVET RANK.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 18, 1832.

Mr. WARD, from the Committee on Military Affairs, to whom was referred the petition of Major General Macomb, reported:

That it appears from the petition and documents referred to the committee, that in the year 1811 Major General Macomb became one of the sureties of Samuel Champlain, lieutenant of artillery, in a bond to the United States, as a paymaster of the army; that, in the year 1813, the said Champlain was promoted to the rank of major in the Quartermaster's department, and acted in that capacity from that time until the close of the war; that, on his promotion, no settlement of his previous accounts was required or enforced according to law; that said Champlain is now unable to pay a balance found due to the government, and a suit has been instituted against the memorialist, and is now pending against him, in the name of the United States, for the recovery of the sum of \$10,000.

The memorialist states that said Champlain was transferred to the Quartermaster's department during the most eventful period of the late war, and when he, the memorialist, was continually engaged in the public service in distant scenes; and consequently he, the memorialist, could not make inquiries as to the accounts of the paymaster, or his liability as his security. But he states that he reposed entire confidence in the care and vigilance of the officers of the government, and he believed that they would have required the accounts of the paymaster to be regularly settled according to the provisions of the law; and, further, that such promotion precluded the probability of prior default.

The memorialist conceives that, as the officers of the government ought to have required the paymaster to have settled his accounts previous to his being transferred to the Quartermaster's department, that no claim for any default of his, after the lapse of so many years, ought to be made upon him; and therefore he considers his case as one of peculiar hardship, and as meriting the favorable consideration of Congress.

And although he considers that he might, under the statement of the case, ask to be discharged from his liability as such security, yet he forbears doing so; but he prays that Congress will, in consideration of the premises, allow an equitable claim which he has against the government for the pay and emolument of a brevet major general, from April 16, 1818, to April 30, 1823, which he claims to be due him, to be applied as an offset against whatever may be recovered against him as such security.

The facts in relation to this claim of the memorialist are as follows:

On the 11th of September, 1814, the President of the United States, under the act of the 6th of July, 1812, honored him with a brevet of major general for his gallantry and good conduct in the battle of Plattsburg, and for his having successfully conducted the defence of the northern frontiers of the States of New York and Vermont—the President being authorized, under the act referred, to confer brevet rank on such officers as should distinguish themselves by gallant actions or meritorious conduct, or who should have served ten years in any one grade; which act provides that no officer so brevetted "shall be entitled to any additional pay or emoluments, except when commanding *separate posts*, districts, or detachments, when they shall be entitled to and receive the same pay and emoluments to which officers of the same grade are now or may be hereafter allowed by law."

That, from 1821 to 1828, the memorialist commanded the eastern and western department, as the head of the Engineer department, and the force under his command amounted to 4,946 officers and men; and he claims the difference between the pay of a brigadier general, which he received during that time, and the pay due him as a major general.

This claim was rejected by the accounting officers of the government on the ground that the provision in the act of 1812 which authorized the emoluments claimed by the memorialist was repealed by the first section of the act of April 16, 1818, which provides that officers who have brevet commissions shall be entitled to receive the pay and emoluments of their brevet rank "*while on duty and bearing a command according to their brevet rank, and at no other time;*" and the decision of the accounting officers, on a reference by the President of the United States to the Attorney General, was reluctantly confirmed by him. The Attorney General, in concluding his report to the President, observes: "The case of General Macomb, it must be admitted, is one of some hardship; his brevet rank was gallantly earned; it was equal to that of Generals Scott and Gaines; and the command he held was as important and as full of responsibility as the respective commands held by them; yet they received the pay and emoluments of major generals, while General Macomb received only the pay and emoluments of a brigadier. I am persuaded that if the subject had been brought before Congress, they would have felt the justice of placing them all upon the same footing."

The committee are of opinion that, inasmuch as the officers of the government did not require the said Champlain to settle up his accounts previous to his transfer to the Quartermaster's department, but suffered the case to remain unsettled for so many years, that the memorialist ought in equity to be discharged from all responsibility as such security to said bond; and they therefore report a bill for his relief.

22D CONGRESS.]

No. 537.

[2D SESSION.]

ON CONFERRING MILITARY RANK UPON PAYMASTERS OF THE ARMY.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 28, 1832.

Mr. R. M. JOHNSON, from the Committee on Military Affairs, to whom was referred the resolution directing them to inquire into the propriety of conferring rank upon the officers of the pay department of the army, reported:

That, from a review of the several acts for the organization of the army, it appears that almost all the officers of the various departments of the staff have been clothed with military rank as essential to the efficient performance of their respective duties; that, previous to the act of March 2, 1821, the officers of the pay department were, with few exceptions, taken from the line of the army, retaining their rank in the line; that, since the passage of the above act, it appears, by reference to the Army Register, that the paymaster general retains the brevet rank of lieutenant colonel, conferred for services in the field during the late war, and the paymaster of the corps of engineers retains his rank in that corps, while the remaining paymasters, though generally appointed from the line of the army, have not retained their rank.

The committee, from an examination of the duties of the paymasters, can find no reason for their exclusion from rank in the army; previous legislation and present practice show that there is no incompatibility in their exercise of it. They, like other officers of the army, are liable to be tried by courts-martial, but, under the existing organization, not holding rank in the army, they are not eligible to sit as members of a court-martial. Every consideration seems to be in favor of extending to this department the privileges of rank enjoyed by the other branches of the staff. It is composed of the same materials. Its members, with two or three exceptions, served in the line of the army during the late war, and several of them with distinction. Their present duties are of an equally military character with those of the other administrative departments of the general staff. In travelling to remote posts with public funds under the escort of soldiers, in making payments to the troops, and upon various occasions of ordinary occurrence, the authority derived from military rank would be of great use in the discharge of their duties.

From a careful examination of the subject, the committee are satisfied that the proposed measure would impart more efficiency and greater capacity for usefulness to the pay department and promote the general interests of the service, while it would not conflict with the rights nor interests of any other portion of the army. Influenced by these considerations they have prepared the bill which is hereunto annexed, which provides the rank of colonel for the paymaster general, placing him upon a footing with the adjutant general, the inspector generals, and the commissary general of subsistence; and confers the rank of major upon the paymasters, placing them upon a footing with the quartermasters and assistant commissary of subsistence of the army.

The bill contemplates no additional expense, as the compensation of the paymaster general is fixed by previous legislation, which it is not the intention of this bill to disturb, and the paymasters are already allowed by law the pay and emoluments of the grade which it is now proposed to give them.

Memorandum of the services of the officers of the pay department of the army.

Lieutenant Colonel N. Towson, paymaster general.—Appointed captain of artillery at the commencement of the late war, was engaged with the enemy and captured the brig Caledonia, under the guns of Fort Erie, in 1812; at the battle of Queenstown, the capture of Fort George, the battle of Stoney creek, the capture of Fort Erie, the battles of Chippewa and Lundy's lane, the assault on Fort Erie, during the siege of Fort Erie, and in a cannonade before Chippewa, in October, 1814. He was wounded in action, received two brevets for services in the field, and has the acknowledgment of the Secretary of War that he was entitled to two more; served in the line of the army until 1819, when he was appointed paymaster general.

1. *William Piatt, paymaster.*—Appointed a captain in 1809; promoted to major in 1814; served as quartermaster general, with the rank of colonel, at New Orleans; was distinguished for his gallant conduct, and was wounded at the battle of New Orleans.

2. *D. S. Townsend, paymaster.*—A captain in the army early in the late war; assistant adjutant general, with the rank of major, in 1814; lost a leg in battle, and was brevetted a major in the campaign on the Niagara. If he had remained in the line he would have been at this time a major, with the brevet rank of lieutenant colonel.

3. *A. A. Massias.*—Appointed a captain in the rifle regiment in 1809; served through the war; was wounded, and brevetted a major for his gallant conduct in action.

4. *T. Wright.*—A lieutenant in the twenty-second infantry at the commencement of the war; served with his regiment through the war, on the Canadian frontier; was wounded during the campaign on the Niagara, in 1814. If he had remained in the line to the present time he would have been a brevet major.

5. *A. Wetmore.*—A lieutenant in the twenty-third infantry at the commencement of the war; served with his regiment on the Canadian frontier, and lost an arm in action. If he had remained in the line of the army he would at this time have been a brevet major.

6. *B. F. Larned.*—A lieutenant in the twenty-first infantry early in the war; served with his regiment on the frontier; was brevetted a captain for his gallant conduct at the assault on Fort Erie, in 1814; and if he had remained in the line he would at this time have been a brevet major.

7. *E. Kirby.*—A lieutenant in the fourth infantry at the commencement of the war; served as adjutant of his regiment on the Canadian frontier, through the war; was in several engagements with the

enemy; was more than five years aide-de-camp to Major General Brown, and more than a year acting adjutant general of the army at Washington; was a captain of artillery when appointed paymaster, in 1824.

8. *A. Phillips*.—A lieutenant in the ninth infantry at the commencement of the war; he served with his regiment on the northwestern frontier, through the war; and if he had remained in the line would at this time have been a brevet major.

9. *L. G. De Russey*.—Educated as a cadet at West Point; served during the last campaign of the war as a lieutenant of artillery; was a captain of artillery when appointed paymaster, in 1826.

10. *R. A. Forsyth*.—A cadet during the war; he volunteered and served with distinction upon the expedition from Detroit into Upper Canada, under Major Holmes, in 1814; was appointed a lieutenant in the fifth infantry in 1815; resigned, and served in the Indian department until his appointment as paymaster. If he had remained in the line he would have been at this time a captain.

11. *C. B. Tullmadge*.—Was in the service of the United States, with the rank of major in the militia of the State of New York, during the late war; was appointed assistant district paymaster in the army in 1814, and has served in the pay department until the present time.

12. *T. P. Andrews*.—Served as volunteer on board Commodore Barney's flotilla, in an action with the enemy in the Patuxent, during the late war.

13. *D. Randall*.—Was appointed assistant district paymaster in June, 1814, and has served in the pay department ever since.

14. *C. H. Smith*.—Appointed paymaster in 1819.

22D CONGRESS.]

No. 538

[2D SESSION.]

ON CONVERTING THE CORPS OF MOUNTED RANGERS INTO A REGIMENT OF DRAGOONS.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 28, 1832.

Mr. R. M. JOHNSON, from the Committee on Military Affairs, to whom was referred so much of the Secretary of War's report as relates to converting the corps of mounted rangers into a regiment of dragoons, reported:

That upon an examination of the organization of the present battalion of mounted rangers it does appear to the committee to be very defective. The companies are too large for men serving on horseback, and differ too materially from the organization of the other troops composing the army, there being in each company of rangers one hundred and ten men, exclusive of officers, which, when drawn into line, will make a very considerable front, nearly equal to that of a squadron of cavalry. There is but one field officer (and he a major, unprovided with any staff) to command 660 men, while in a regiment of infantry, where the duties cannot be so arduous, and the regiment composed only of 514 men, it has been deemed necessary to provide three field officers and an adjutant and certain non-commissioned staff, with a due proportion of music, none of which are provided for the rangers.

The regiment of dragoons, which it is proposed by the Secretary of War to substitute for the battalion of rangers, will not cost so much for its maintenance as that of the rangers by \$153,932 a year, as it will appear by his estimate accompanying his report. It must be evident from the constitution of the corps of rangers, and from the short period of their service, their efficiency will be but little superior to that of the ordinary militia—every year there must be a loss of time in reorganizing and recruiting the corps and in the acquisition of the necessary experience and knowledge; besides, it cannot be expected that their equipments and horses will be equal to those furnished by the public.

Regular dragoons, it is believed, are fully competent to discharge all the duties that can be required of mounted rangers. In celerity of movement they will, of course, be equal, and as it is the duty of dragoons to serve on horse or foot, they may be trained to the use of the rifle and sword as occasion may require. Besides these important objects, it is desirable to preserve in our military system the elements of cavalry tactics, and to keep pace with the improvements made in them by other nations. The addition of a regiment of dragoons to our present military establishment would make it much more complete, and would introduce a force which would harmonize with and participate in the *esprit du corps* so essential to military efficiency and so easily and certainly created by military principles.

A corps of this kind has long been wanted, and it is now generally conceded that mounted troops are absolutely necessary for that part of the inland frontier in contact with the Indians. In addition to our fixed military posts garrisoned by infantry, the means of protecting the frontier, should such a corps of cavalry as here recommended be raised, would be ample and complete. The committee, impressed with the importance of there being attached to the military establishment a regiment of dragoons, report a bill for that purpose.

22D CONGRESS.]

No. 539.

[2D SESSION.]

STATEMENT OF FORTIFICATIONS IN MAINE, THEIR LOCATION, NUMBER OF MEN AND ARMAMENT.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 29, 1832.

DEPARTMENT OF WAR, *December 28, 1832.*

SIR: In compliance with the resolution of the House of Representatives of the 9th July last, directing the Secretary of War to report to that House "a statement of the number of fortifications and other military defences in the State of Maine, with their respective locations, number of men, and armaments of each, respectively;" also "his opinion upon the expediency of increasing the military defences of that State," and "such information as he may be able to procure relative to the number and kind of military fortifications erected and maintained in the British North American possessions, and the number of troops therein," I have the honor to transmit a report of Major General Macomb, which contains the information required and the views of the department upon the subject.

I have the honor to be, very respectfully, your obedient servant,

LEWIS CASS.

HON. ANDREW STEVENSON, *Speaker of the House of Representatives.*HEADQUARTERS OF THE ARMY, *Washington, December 26, 1832.*

SIR: In conformity with your instructions to furnish the information called for by the resolution of the House of Representatives of the 9th of July, 1832, I have the honor to state that there are in Maine but three military posts, viz:

One at Portland, garrisoned by a company of the 3d regiment of artillery; one at Eastport, garrisoned by a company of the 3d regiment of artillery; and one at Houlton, garrisoned by four companies of the 2d regiment of infantry.

The armament of these posts is as follows:

At Portland, 8 pieces; at Eastport, 13 pieces; at Houlton, 4 pieces.

In the year 1821 the board of engineers made a reconnaissance of the maritime frontier of the State of Maine, and projected plans of certain works. An extract of their report is herewith transmitted, and to which I beg leave respectfully to refer you as to the defences deemed proper for the protection of the seaboard. The interior defences could not, with propriety, be settled until the decision as to the boundary of the State shall be fully adjusted.

The number of troops maintained in the British provinces adjoining the State of Maine varies according to circumstances. There is one regiment stationed at Frederickton, which furnishes detachments to the different settlements as occasion may require. At St. John's there is a battery of no great extent. At Quebec there is generally stationed a detachment of artillery and two regiments of infantry. The place itself is well known to be a considerable fortress, and has been rendered stronger by a citadel, of a new construction, on Cape Diamond.

At present it is not deemed expedient to erect further works on the frontiers of Maine. A military road, leading from Matanawcook to Houlton, has been opened, and is nearly completed. The works contemplated for the defence of the seaboard come within the second class of fortifications, and some of the most important of them may be commenced in the course of the year 1834.

In addition to the above-mentioned military posts in Maine, an arsenal of considerable extent has been recently erected at Augusta.

I have the honor to be, respectfully, &c.,

ALEX. MACOMB, *Major General.*HON. LEWIS CASS, *Secretary of War.**The northeastern section of the coast.*

The northeastern section is characterized by its serrated coast and its numerous harbors, and though differing in these respects entirely from the other sections, is no less distinguished in its climate by the prevalence, at certain seasons, of dense and lasting fogs. The extent of this section, measuring where the breaks in the coast are abrupt, from point to point, is about 500 miles, while a straight line from Cape Cod to Quoddy Head is hardly half that distance. The eastern half of this coast is singularly indented by deep bays, the shore being universally rocky, and having numerous islands, surrounded by deep water, which not only add to the number of harbors, but afford an interior navigation perfectly understood by the hardy sailors of the country, and measurably secured, by its intricacies and the other dangers of this foggy and boisterous region, from interruption by an enemy. The western half, though it has two very prominent capes and a few deep bays, is much less broken in its outline than the eastern. It is covered by few islands in comparison, but contains, nevertheless, several excellent harbors.

Considering the sparseness of the population in the eastern part of the State of Maine; the little comparative value of any existing establishment there;* the proximity of a province of another power, within which is situated an important post of naval rendezvous, the board think it would be inexpedient to undertake, under present circumstances at least, the defence by permanent works of any position to the east of Mount Desert island; especially as the capture of any work there, whereof the strength would

* Report of 1821.

be proportionate to the importance of the place covered, might, owing to its destitution of succor, be easily achieved by an enemy, who would not fail to profit of its situation to harass both our commercial and naval operations.*

Mount Desert island.—Situated between Frenchman's and Penobscot bays, and centrally as respects the Kennebeck and St. Croix rivers, having a capacious and safe roadstead affording anchorage for first rate vessels, easily accessible from the sea, and being easily defended by batteries, offers a station superior to all others on this portion of the coast for the navy of an enemy. From this point his cruisers can act with great effect against the navigation of the eastern coast, especially that of Maine, and his enterprises of every kind can be conducted with little loss of time against any point he may select. These considerations, added to the advantages which would result from possessing ourselves of a naval station which would afford protection to this commerce, and which would enable us to assume the offensive should our political relations again make it necessary in the immediate vicinity of a formidable provincial establishment of another power, together with the necessity of providing places of succor on a part of the coast where vessels are so frequently perplexed in their navigation by the prevailing fogs, lead the board to the conclusion that the fortification of this roadstead in a strong manner is indispensable.

From the incomplete state of the surveys, however, they are not at present able to state the particular mode nor the expense of the defences.

Penobscot bay.—The next important part of this coast proceeding westward is Penobscot bay. Upon this bay, and upon the river of the same name flowing into it, are situated several flourishing towns and villages. Of the many bays which intersect this coast the Penobscot† is the one which presents the greatest number of safe and extensive anchorages; their number, indeed, is such as to render it inexpedient to attempt under present circumstances the defence of any of them. Unless all were fortified, which would involve an expense out of all proportion to the objects secured thereby, an enemy would find all the shelter he could desire in either of the neglected harbors, while the local interests which would be covered by the defence of either are not regarded as being yet of sufficient amount to excite the cupidity of an enemy, especially considering the protection afforded by an establishment at Mount Desert island against all minor enterprises.

It is necessary, however, to protect the valuable commerce of the bay and river, and to afford a secure retreat for such vessels as, endangered by an enemy, may be unable to place themselves under the protection of the works to the right or left of the bay. The lowest point at which this object can be accomplished without great expense is at the narrows of the river opposite Bucksport, and the board have accordingly presented a project for a fort at that position, accompanied by a memoir and estimate. The expense is estimated at \$101,000.

The Sheeps-cut.—About thirty-five miles west of the Penobscot is the Sheeps-cut,* a deep and capacious indentation of the coast, on which, fourteen miles from the ocean and near the head of deep water, stands the town of Wiscasset. This town is of considerable importance to the commerce of Maine, and should be fortified; the rather as the works (placed in their proper situation from four to seven miles below the town) will cover a very excellent harbor of refuge for ships-of-war as well as merchantmen. The works heretofore erected, namely, Fort Edgecomb and a battery opposite, are too weak, and are placed too near the town to fulfill their object. The surveys here not being completed, no projects have yet been made by the board.

The Kennebeck river.—This river,* which is one of the largest in the eastern States, enters the sea nearly midway between Cape Cod and the mouth of the St. Croix. It rises near the sources of the Chaudier, a tributary of the St. Lawrence, and may one day serve as a line of operations against Quebec. The situation and extent of this river, the value of its products, and the active commerce of the flourishing town of Bath, lying about twelve miles from the sea, as well as the excellence of the harbor within its mouth, will not permit us to neglect its defence. The surveys, however, as in the case of the Sheeps-cut and Mount Desert island, being in an unfinished state, no projects have as yet been made. The present fort, which is on the west bank near the mouth, is very small, and is commanded by a ridge within pistol shot.

Portland.—A little to the northwest of Cape Elizabeth, and at the mouth of Fire river, is the town of Portland.‡ The protection of the town, of the merchantmen, and of the ships-of-war which may be stationed there to guard the coast, or which may enter for safety—all of them important objects—may be secured, as an inspection of the map of the town and harbor will show, by occupying Fort Preble, Point House island, Hog Island ledge, and Fish Point. At the same time, if the two channels to the north and east of Hog Island ledge can be obstructed at small expense, which is hardly a matter of doubt, although some final surveys are wanting to decide this point, there will be no necessity for a battery on the ledge, and Fish Point need only be occupied by such works as may be thrown up in time of war.

The projects of the board contemplate the preservation of Fort Preble and Fort Scammel, and the erection of new works having proper relations of defence with these.

The expense of the new works is stated in their estimate at \$135,000, not including the defence of Hog Island channel, the mode of which is yet undetermined.

* Report of 1821.

† See report of 1821 and memoir on the defence of the narrows of the Penobscot—1325.

‡ See reports of 1820 and 1821, and memoirs on the defence of Portland—1825.

22D CONGRESS.]

No. 540.

[2D SESSION.]

ADDITIONAL ESTIMATE FOR FORTIFICATIONS FOR THE YEAR 1833.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JANUARY 2, 1833.

DEPARTMENT OF WAR, *December 28, 1832.*

SIR: I have the honor to submit to the consideration of the Committee of Ways and Means the enclosed estimate of General Gratiot, and respectfully request that appropriations may be made accordingly.

I have the honor to be, very respectfully, your obedient servant,

LEWIS CASS.

HON. G. C. VERPLANCE, *Chairman of the Committee of Ways and Means,
House of Representatives.*

ENGINEER DEPARTMENT, *Washington, December 28, 1832.*

SIR: In conformity with the intention expressed in my last annual report, I have the honor to submit, herewith, an additional estimate of funds required for the public service in this department, and request that it may be laid before Congress should it meet your approbation.

Respectfully, your most obedient servant,

C. GRATIOT.

HON. LEWIS CASS, *Secretary of War.*

Additional estimate of funds required for the public service in the Engineer department during the year 1833.

For a fort on Throg's Neck, East river, New York.....	\$25, 000 00
For rebuilding Fort Delaware, Delaware river.....	50, 000 00
For a fort on Foster's bank, Pensacola harbor, Florida.....	25, 000 00
For a fort on Grand Terre, Baratavia, Louisiana	25, 000 00
	125, 000 00

REMARKS.

Fort Hamilton, at the Narrows of New York harbor, having been completed, it is proposed to continue the system of defence for that harbor by making arrangements to commence the work projected for Throg's Neck.

On the subject of rebuilding Fort Delaware I refer to the report of the board of engineers, which accompanies my general report of operations during the year 1831.

Much advantage and economy to the public service would result from having the means of collecting materials for the fort projected for Foster's bank, Pensacola harbor, as it would enable the engineer to make arrangements for procuring supplies from the persons already occupied in furnishing them for the work at Santa Rosa point, who will otherwise be compelled to break up their establishments, as the present work will be completed in the ensuing year.

The construction of the fort on Grande Terre will complete (with the exception of repairs to Fort St. Philip) the projected system of defence of Louisiana, and may now be advantageously commenced.

22D CONGRESS.]

No. 541.

[2D SESSION.]

MEANING OF THE WORDS "ALL MILITARY OFFICERS," AS USED IN THE RESOLVE OF CONGRESS OF MAY 15, 1778.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JANUARY 23, 1833.

DEPARTMENT OF WAR, *January 22, 1833.*

SIR: In compliance with the resolution of the House of Representatives of the 10th instant, directing the Secretary of War to report to that House "what construction has prevailed with the accounting officers as to the words 'all military officers,' used in the resolve of the 15th of May, 1778, relative to half-pay, and the reasons for such construction; whether they have been deemed to apply to officers of the *line* only, or have been extended to those of engineers, invalid artificers, Lee's legion, and other distinct and independent corps; whether there was any specific promise of land, or half-pay, either to Lee's legion, the

corps of engineers, or artificers, commanded by Colonel J. Baldwin; what discrimination, if any, was made in the organization of the two last corps; and whether, in both, the promotion of officers was not confined to the corps, respectively; and whether these corps were not component parts of the eighty-eight battalions raised to serve for 'during the war,' under the resolve of the 16th of September, 1776, specifically referred to in the resolve of the 12th of November, 1779; and which of the officers of either corps have obtained land, or half-pay, or commutation of half-pay;" I have the honor to enclose reports of the Third Auditor and the officer in charge of the bounty land bureau, which contain the information required.

I have the honor to be, very respectfully, your obedient servant,

LEWIS CASS.

HON. ANDREW STEVENSON, *Speaker of the House of Representatives.*

TREASURY DEPARTMENT, *Third Auditor's Office, January 18, 1833.*

SIR: The resolution of the House of Representatives of the United States of the 10th instant, and which was referred to me by you on the 11th instant for a report thereon, directs the Secretary of War to report to the House—

1st. What construction has prevailed with the accounting officers as to the words "all military officers," used in the resolve of the 15th of May, 1778, relative to half-pay, and the reasons for such construction.

2d. Whether they have been deemed to apply to officers of the line only, or have been extended to those of the engineers, invalids, artificers, Lee's legion, and other distinct and independent corps.

3d. Whether there was any specific promise of land or half-pay, either to Lee's legion, the corps of engineers, or artificers commanded by Colonel J. Baldwin.

4th. What discrimination, if any, was made in the organization of the two last corps; and whether, in both, the promotion of officers was not confined to the corps, respectively; and,

5th. Whether these corps were not component parts of the eighty-eight battalions raised to serve for "during the war," under the resolve of the 16th of September, 1776, specifically referred to in the resolve of the 12th of November, 1779; and,

6th. Which of the officers of either corps have obtained land or half-pay, or commutation of half-pay.

In relation to the first branch of the resolution I have the honor to furnish a copy of a report made to Congress by the commissioner of army accounts on the 25th of August, 1786, and which embraces the report of a committee of Congress on "the memorials of several officers of the late corps of artificers, praying that, in settling their accounts, they may be allowed the commutation of half-pay, as founded on justice, or on the acts of Congress," and which report contains the best explanation that I have been able to find of the construction that was given by the accounting officers to the words "all military officers," used in the resolve of the 15th of May, 1778, relative to half-pay, as well as the reasons for that construction.

Understanding the second branch of the resolution to have in view the ascertainment whether or not the officers "of the engineers, invalids, artificers, Lee's legion, and other distinct and independent corps," have been allowed half-pay, or commutation in lieu thereof, I have to state that, in accordance with the resolve of the 22d March, 1783, commutation has been allowed to "corps not belonging to the lines of particular States, and who are entitled to half-pay for life," among which were the corps of engineers, of invalids, Lee's legion, and Armand's corps.

In relation to the third branch of the resolution I have to state that, in the resolution of Congress of the 21st of October, 1780, making provision for a new arrangement of the army, "two partisan corps" are provided for, one of which was to be commanded by Colonel Armand, and the other by Major Lee; and, by said resolution, all the officers who should serve to the end of the war were promised half-pay for life, and, of course, half-pay was promised to the officers of said partisan corps. By the resolution of the 14th of November, 1780, "the officers of the engineering department" were "put on an equal establishment with the officers of the line." No promise of half-pay appears to have been made to the officers of the corps of artificers commanded by Colonel Baldwin; on the contrary, they are excluded from the allowance.—(See resolve of 16th November, 1779.)

In relation to the fourth branch of the resolution I have to state that it appears by the resolution of the 11th of March, 1799, the engineers were formed into a corps, and styled the "corps of engineers," and were to "take rank and enjoy the same rights, honors, and privileges with the other troops on the continental establishment;" and that they were to "take rank in their own corps according to the dates of their respective commissions." By the resolve of the 12th of November, 1779, the "eleven companies of artificers raised by the quartermaster general" were to "be reformed, and incorporated and arranged in such manner as the commander-in-chief shall deem proper." By the same resolve the officers, on receiving their commissions, were to have "rank only in their own corps," and "to hold regimental courts-martial in cases that concern their own corps only, and are usually cognizable by regimental courts-martial of the line."

In regard to the fifth branch of the resolution I have to state that I infer from the report of the commissioner of army accounts of the 25th August, 1786, (herewith transmitted,) that the provision in the resolution of the 12th of November, 1779, "that the officers and men of the said corps (artificers) be considered as part of the quotas of the eighty battalions, as apportioned on the several States to which they respectively belong," was not considered, either by the commissioner of army accounts or by Congress, as forming "component parts of the eighty-eight battalions raised to serve for 'during the war,' under the resolve of the 16th of September, 1776," in such a sense as to entitle them (the officers of the corps of artificers) to the grant of half-pay or commutation.

In relation to the sixth and last branch of the resolution I have to state that I cannot find that any officer of the artificers commanded by Colonel Baldwin has obtained "half-pay or commutation of half-pay;" on the contrary, the report of the committee of Congress, embraced in the report of the commissioner of army accounts of the 25th of August, 1786, closes with a resolution that the officers of the "late corps of artificers" were not entitled to it. Officers of engineers have received commutation.

With great respect.

PETER HAGNER, *Auditor.*

HON. LEWIS CASS, *Secretary of War.*

REPORT.

OFFICE OF ARMY ACCOUNTS, *New York, August 25, 1786.*

The commissioner for settling the accounts of the late army of the United States, to whom was referred the petition of A. Baird, requesting the commutation, in lieu of half-pay for life, as a deranged surgeon in Baldwin's corps of artificers, begs leave to report:

That Doctor Baird founds his claim on the resolution of January 17, 1781, granting, generally, the half-pay to the hospital department; and that of May 3, 1782, granting the same, particularly, to a surgeon of artificers.

That Congress did, on the 19th of October last, refer to your commissioner a report made by a committee of Congress on the petition of sundry officers of the late corps of artificers for half-pay or commutation, which report your commissioner was directed to take order on, and is in the following words, viz:

"The committee, consisting of ———, to whom was referred the memorials of several officers of the late corps of artificers, praying that, in settling their accounts, they be allowed the commutation of half-pay, as founded on justice or on the acts of Congress, beg leave to report:

"That the claims of those officers do not appear to be founded on the usage of nations nor in equity. They believe that half-pay has been allowed to military officers partly from a regard to the hardships and personal dangers to which they were exposed, but chiefly from a consideration that, by long continuance in the military line, they may have lost those habits by which they formerly had been enabled to provide for themselves or families; which reasons do not apply so fully to the officers of artificers.

"Your committee are of opinion that their sole rule on this occasion must be the acts of Congress respecting the officers in the corps of artificers; and they do not find any resolution by which they are entitled to half-pay or commutation; on the contrary, they seem to be expressly cut off from any such claim.

"The original act of Congress of May 15, 1778, by which half-pay was promised for seven years, confined the same to *military officers*, which certainly did not include the artificers; and you committee are of opinion that in all subsequent acts which relate to half-pay the same denomination of officers must be intended, unless in cases where other officers are expressly mentioned. Surely the act of October 2, 1780, promising half-pay to officers who might be deranged, never could be construed as giving half-pay to any class of officers who had no claim to half-pay had they continued in service to the end of the war. If any doubt could have arisen whether the artificers were intended in the promise of half-pay, it must be fully removed by the act of the 16th November, 1779; it was then resolved that it be recommended to the several States to allow the corps of artificers established by Congress the 12th instant all the benefits provided for officers and soldiers in the line of their quotas of the continental battalions, except the half-pay. After this pointed and express exclusion of those officers from the allowance of half-pay, your committee are of opinion that nothing but a subsequent promise, equally pointed and express, can give them a title to the same. None such has been made; wherefore they submit the following resolve: That the officers of the late corps of artificers in the service of the United States are not entitled to half-pay or the commutation for half-pay."

Your commissioner, therefore, supposes that he is not warranted to grant the commutation to the memorialist unless he has the direction of Congress.

J. P.

CHARLES THOMSON, Esq., *Secretary of Congress.*DEPARTMENT OF WAR, *Bounty Land Office, January 21, 1833.*

So far as information appears to be required from this office by the resolution of the House of Representatives of the United States of the 10th instant, referred to this office on the 19th instant to report thereon, I have the honor to state, in reference to the inquiries "whether there was any specific promise of land either to Lee's legion, the corps of engineers, or artificers commanded by Colonel J. Baldwin," that the two first named, being *military corps* on the continental establishment, the officers attached thereto were embraced in the several resolves of Congress providing bounty lands for such of them as continued in service to the close of the war.

No returns exist in this office of the names of the officers of the corps of artificers commanded by Colonel J. Baldwin; nor does it appear that land warrants have issued to any of the officers of that corps, except to Samuel A. McCoskey, surgeon, and William McCoskey, surgeon's mate; and these issues appear to have been made in virtue of the resolution of Congress of the 3d May, 1782, as follows: "*Resolved*, That as the dispersed situation of the corps of artificers commanded by Captain Wyley will no longer require the services of Dr. A. McCoskey, and Dr. William McCoskey, his mate, they be considered as reduced and retiring from the service on the 10th instant, and the surgeon be entitled to all the emoluments heretofore allowed to reduced regimental surgeons;" from which it would appear that these officers had been retained in service until the 10th May, 1782, being a period of more than thirteen months after the corps of artificers commanded by Colonel J. Baldwin had been dissolved under the resolution of Congress of the 29th March, 1781, by which resolution it is explicitly declared that "all officers of the regiment of artificers not retained by virtue of these resolutions be no longer considered in the service of the United States." The officers retained by the resolution just referred to were, it is believed, incorporated with the reduced corps of *artillery artificers*, and continued in service, the names of some eighteen or twenty of whom are returned on the records of this office as being entitled to, and as having received, bounty lands from the United States.

The officers of the regiment of *artillery artificers*, being attached to the artillery *in the field*, were, it is believed, considered *military officers*; hence, those of them who served to the end of the war were embraced in the resolves of Congress providing bounty lands. The duties of the officers of the corps of *artificers* being (as it is believed) confined to the superintendance of workshops, laboratories, &c., and to the control and direction of the artisans attached thereto, and, not being required to act in the field, were not, it is presumed, considered *military officers*. Their names were, therefore, not returned on the list of officers on file in this department among those entitled to land bounties from the United States. Had

they been considered *military* officers, it is presumed that Congress, when, by their resolution of March, 1781, they declared the corps of artificers "dissolved, and no longer in the service of the United States," would at that time have designated them as reduced and supernumerary officers, and, as such, entitled to all the emoluments in land and half-pay. That Congress did not so consider the officers of that corps is manifested by the discrimination made in the cases of the two Doctors McCoskey before referred to. If the surgeon of that name (surgeon's mate not being entitled to half-pay) had been considered, at the time of the dissolution of that corps, (to which he then belonged,) as entitled to "all the emoluments heretofore allowed to regimental surgeons," further legislation in behalf of that officer would have been superfluous.

The records of the War Department, from the earliest period succeeding the war of the revolution, exhibit no grant of bounty land to an officer or private of the corps of artificers, except in the two cases referred to in the foregoing. This fact indicates the construction applied to the resolutions of Congress in reference to that corps by the individual who first presided over the department, who was himself an officer of the highest grade in the army.

I have the honor to be, very respectfully, your obedient servant,

WM. GORDON.

HON. SECRETARY OF WAR.

22D CONGRESS.]

No. 542.

[2D SESSION.]

ON THE NECESSITY AND COST OF REPAIRING FORT MARION, SAN AUGUSTINE, FLORIDA.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JANUARY 24, 1833.

Copy of a letter from a distinguished gentleman of San Augustine to the delegate from Florida.

TALLAHASSEE, January 8, 1833.

SIR: I am sorry it has not been in my power, owing to the pressure of official engagements, to write you before now upon the subject of the public improvements which are necessary and proper at St. Augustine.

No one can see the *castle or fort*, as it is called, completed by the Spanish government in 1745, without *admiration and regret*. It is allowed, as you know, by military men to have been constructed according to the best principles of fortification, and it long afforded protection to an otherwise almost defenceless position; now going rapidly to ruin, its walls at one or two points are falling into the sea. When it passed into the hands of the United States it was in good repair, and the money expended upon the *barracks* in the same city (formerly an old monastery) might, if appropriated to this important work, not only have preserved a fine and venerable monument of art, but made it a commodious residence for soldiery, and an impregnable fortress. At present it is used as a *jail* and a *magazine*; for the latter it is not well suited, because *neglect and time* have rendered the roof and walls in many places pervious to moisture, and besides, *it is near half a mile from the garrison*. Apart from other considerations, *this post would be most important in the event of SERVILE INSURRECTION*, a contingency which, in a slaveholding country, we are always obliged to hold in consideration. If *panic* such as occurred not long ago in Georgia and other southern States should unhappily be spread abroad, either with or without cause, *Fort Marion* in good repair would afford a safe asylum to women and children; indeed, it would impart a sense of strength and security to all East Florida. If the work be worthy of repair, as it seems to me it certainly is, every day's delay will but increase the labor and expense of repairing; what *is* to be done should speedily be accomplished, for the time has come when a general dilapidation can only be checked by a strong and prompt effort. It may be added that the preservation of this great work (which cost so much originally that, when the accounts were presented to the Spanish King, he asked if the walls were made of *silver*) is perhaps due to the *feelings* of the community, of which it was once the pride and boast. There is no native inhabitant who speaks of its present ruinous condition without contrasting it with the favor and attention bestowed formerly upon it by the Spanish government, and expressing a lively regret *at the change*. If this castle were again devoted to military purposes, and the present barracks (which I do not venture to hope for, and scarcely persuade myself to suggest) converted *into a public seminary*, the advantages accruing to St. Augustine would be very great. That city has now to depend for its prosperity upon the *salubrity of its climate*, which invites those who wish for and prize health to reside there, and *fits it in a peculiar manner for a seat of learning*.

In former times there was a *sea-wall* running along the water's edge from the castle to the southern extremity of the city, protecting the inhabitants and their property from the encroachments of the waters, which, driven by the tides and winds, often threatened both. A part of this wall has been removed by the United States, for the purpose of making a wharf opposite to the barracks; and this breach, and others occasioned by the constant action of the sea, expose the city to gradual, but certain and great injury. Since I have been in St. Augustine the sea has made its way to the doors of several houses, literally *imprisoning* the inhabitants, and dashing the spray into the very windows. Unless arrested by a permanent wall, such as the Spaniards erected, there will at some time or other, and perhaps at no distant period, be a loss of life and property *particularly distressing to the government, because a considerable portion of the wall standing at the change of flags was removed by its agents*.

I am not able to speak with anything like accuracy of the amount necessary for these repairs; it would doubtless be considerable; but could the members of Congress be transported to the spot, ample

appropriations would not be for a moment withheld. I have imparted not my own opinions only, but those of the inhabitants of East Florida, of every intelligent stranger with whom I have conversed, and of several gentlemen of the army; all agree that the sea-wall should be thoroughly repaired, and so should Fort Marion, even though the present barracks continue to be appropriated, as now, to the use of the military. *Feeling and safety* alike demand these improvements.

FORT MARION, *St. Augustine, Florida, January 9, 1833.*

Sir: I have been requested by Judge R. R. Reed, and a number of gentlemen of the city of St. Augustine and its vicinity, to send you the enclosed estimate of the amount and cost of the materials required to repair Fort Marion and the tide-wall for the protection of the city of St. Augustine, which I hope will be of some service to you in obtaining an appropriation for so desirable an object.

I am, sir, very respectfully, your obedient servant,

G. S. DRANE, *Captain 2d Artillery.*

Hon. J. L. WHITE, *Delegate from Florida, Washington City, D. C.*

Estimate of the quantity, kind, and cost of the building materials delivered at St. Augustine, necessary for the repairs of Fort Marion and the tide-wall, for the protection of the city of St. Augustine, East Florida.

One thousand and two hundred squares of stone, at \$8 per square.....	\$9, 600 00
Six thousand bushels shell lime, at 12½ cents per bushel.....	750 00
Sixteen thousand bushels sand, at 3 cents per bushel.....	300 00
Ten thousand feet 1½-inch plank, at \$20 per thousand.....	2, 000 00
Ten thousand feet scantling, at \$18 per thousand.....	1, 800 00
Five thousand feet 1¼-inch plank, at \$20 per thousand.....	1, 000 00
Fifteen thousand brick, at \$16 per thousand.....	2, 430 00
Two large flatboats.....	450 00
Contingent expenses.....	800 00
	19, 130 00

NOTE.—Mechanics can be employed from \$1 50 to \$2 per day, and laborers at \$12 per month.

Extracts from the presentments of the grand jury returned at the November term, 1832, of the superior court for East Florida, copied and certified to the honorable the delegate from this Territory in the Congress of the United States, by order of the court.

Finally, the grand jury would press the particular attention of the delegate in Congress to a few facts, that he may be the better enabled to aid the inhabitants of this section of the country to provide for their present and immediate welfare.

They consider the jail wholly unfit for its purposes, it being damp, unsafe, and incommodious.

They repeat the call for an appropriation to cut the United States mail route as far as Palatea.

They would suggest that the government be informed of the necessity of reclosing the public trench in the northern part of the city, the several ponds adjacent, and, in particular, one a little distant from dragoon barrack lot, so that they may redound to the health and comfort of the inhabitants.

The roads from Jacksonville to St. Augustine, and thence to Tomoka, are in a bad condition, being almost impassable from fallen trees, and otherwise rendered dangerous from broken and decayed bridges.

A canal from Halifax river to Matanzas is every day more needed and looked for; and, in the opinion of the grand jury, the facilities for its accomplishment can be only equalled by its necessity. The canals from the North river to Pable creek, and from Six Mile creek to the St. Sebastian, as lately surveyed, are well worthy of consideration.

The want of a sea-wall to protect the city of St. Augustine is coming to be painfully felt; the inhabitants, with their little means, are wholly incapable of arresting the progress of the waters; so that, without some aid, they have cause to fear, at no distant period of time, a melancholy loss of property and life.

The grand jury recommend a bill to be submitted to the general government on the national importance of putting a few repairs on the fort at St. Augustine. It is impossible that any true Floridian can behold the present state of that model of fortification without regret, when even the stranger looks but to admire and sympathize in its decay. The watch-towers of Fort Marion are broken, every day brings the fissures of its terraces more asunder; its outworks are leaning and tottering to the sea, while the night-bird as she sits in the cranny of its ruins, alone seems happy in the desolation.

A true copy.

Attest:

GEORGE HIBBS, *Clerk.*
Per B. GIBBS, *Deputy Clerk.*

22D CONGRESS.]

No. 543.

[2D SESSION.]

ARMY REGISTER FOR 1833.

COMMUNICATED TO THE SENATE JANUARY 28, 1833.

DEPARTMENT OF WAR, *January 26, 1833.*

SIR: I have the honor to transmit fifty copies of the Army Register for 1833 for the use of the members of the Senate of the United States.

Very respectfully, I have the honor to be, your obedient servant,

LEWIS CASS.

Hon. HUGH L. WHITE, *President of the Senate of the United States.*

Register of the army of the United States for the year 1833.

GENERAL AND STAFF OFFICERS.

Names and rank.	Date of commission.	Brevet and staff appointment.	Remarks.
Alexander Macomb, maj. gen.	May 24, 1828		
Edmund P. Gaines, brig. general	March 9, 1814	Maj. gen. bvt., Aug. 15, 1814	
Winfield Scott.....do	do	Maj. gen. bvt., July 25, 1814	
ADJUTANT GENERAL'S DEPARTMENT.			
Roger Jones, colonel	March 7, 1825	Adjutant general	
INSPECTOR GENERAL'S DEPARTMENT.			
John E. Wool, colonel	April 29, 1816	Inspector general; brig. general bvt., April 29, 1826.	
George Croghan ..do	Dec. 21, 1825	Inspector general	
QUARTERMASTER GENERAL'S DEPARTMENT.			
Thomas S. Jesup, brig. general.	May 8, 1818	Quartermaster general; Major Gen. bvt., May 8, 1828.	
William Linnard, major.	May 12, 1813	Quartermaster; lieut. col. bvt., June 15, 1825.	
Henry Stanton ..do	May 13, 1820	Quartermaster	
Trueman Cross ..do	May 22, 1826	do	
Joshua B. Brant ..do	Dec. 28, 1832	do	
<i>(20 assistant quartermasters taken from the line)</i>			
SUBSISTENCE DEPARTMENT.			
George Gibson, colonel	April 18, 1818	Com'y general of subsistence; brig. gen. bvt., Apr. 29, 1826.	
James H. Hook, commissary	March 10, 1829	Quartermaster	
Joseph P Taylor.....do	do	Assistant quartermaster	
<i>(50 assistant commissaries taken from the subalterns of the line.)</i>			

PAY, PURCHASING, AND MEDICAL DEPARTMENTS.

No.	Names.	Rank.	Date of commission.	No.	Names.	Rank.	Date of commission.
PAY DEPARTMENT.				PURCHASING DEPARTM'T.			
1	Nathan Towson ^o ..	Paymaster general	May 8, 1822	1	Callender Irvine ..	Commissary gen. of purchases	Aug. 8, 1812
1	Thomas Wright ..	Paymaster	June 22, 1815			Storekeeper	
2	Asher Phillips ..	do	Aug. 26, 1815	1	Peter Fayssoux ..	do	
3	Alphonso Wetmore ..	do	Oct. 14, 1815	2			
4	Ben. F. Larned ..	do	Nov. 24, 1815	MEDICAL DEPARTMENT.			
5	David S. Townsend ..	do	April 29, 1816				
6	Charles B. Tallmadge ..	do	Mar. 27, 1818	1	Joseph Lovell ..	Surgeon general.	April 18, 1818
7	Daniel Randall ..	do	July 21, 1818	1	Thomas Lawson ..	Surgeon	May 21, 1813
8	Charles H. Smith ..	do	Nov. 24, 1819	2	Thomas G. Mover ..	do	June 30, 1814
9	A. A. Massias ..	do	Dec. 12, 1820	3	B. F. Harney ..	do	Aug. 17, 1814
10	T. P. Andrews ..	do	May 22, 1822	4	W. V. Wheaton ..	do	Sept. 4, 1816
11	Edmund Kirby ..	do	Aug. 5, 1824	5	J. P. C. Macmahon ..	do	Aug. 5, 1826
12	L. G. De Russey ..	do	Sept. 21, 1826	6	Wm. Beaumont ..	do	Nov. 26, 1827
13	William Piatt ..	do	May 20, 1830				
14	Robert A. Forsyth ..	do	Sept. 10, 1831				

^o Lieutenant colonel by brevet July 5, 1814.

MEDICAL DEPARTMENT—Continued.

No.	Names.	Rank.	Date of commission.	No.	Names.	Rank.	Date of commission.
	MEDICAL DEP'T.—Con'd.			22	Lawrence Sprague	Assistant surgeon	June 22, 1825
7	Lyman Foot	Surgeon	Mar. 5, 1831	23	Joel Martin	do	Aug. 15, 1825
8	Clement A. Finley	do	July 13, 1832	24	Thomas S. Bryant	do	Oct. 5, 1825
9	Prestley H. Craig	do	do	25	Philip Minis	do	April 12, 1826
10	Richard S. Satterlee	do	do	26	Robert E. Kerr	do	May 2, 1826
11	Zina Pitcher	do	do	27	Henry A. Stinnecke	do	May 8, 1826
12	Robert MacMillan	do	Sept. 3, 1832	28	Robert Archer	do	Aug. 5, 1826
1	James H. Sargent	Assistant surgeon	June 1, 1821	29	Lucius Abbot	do	Jan. 15, 1828
2	William Turner	do	do	30	William L. Wharton	do	Sept. 1, 1828
3	Foster Swift	do	do	31	James B. Sullivan	do	May 5, 1829
4	T. I. C. Monroe	do	do	32	Samuel W. Dalton	do	July 16, 1829
5	Samuel B. Smith	do	do	33	Ephraim M. Blaine	do	Nov. 17, 1829
6	Sylvester Day	do	do	34	Chas. S. Tripler	do	Oct. 30, 1830
7	Joseph Eaton	do	do	35	William A. Berry	do	April 25, 1831
8	Joseph P. Russell	do	do	36	Edward Worrell	do	Feb. 24, 1832
9	Richard Weightman	do	do	37	Philip Maxwell	do	July 13, 1832
10	Robert French	do	do	38	Henry L. Heiskell	do	do
11	Benjamin King	do	do	39	James W. Roper	do	do
12	John A. Brereton	do	July 1, 1821	40	James W. Hunt	do	do
13	Henry Stevenson	do	July 16, 1821	41	Richard Wayne	do	do
14	Edwin James	do	Jan. 27, 1823	42	Benjamin B. Hogan	do	do
15	Samuel G. I. DeCamp	do	Oct. 10, 1823	43	Charles S. Frailey	do	do
16	Edward Maccomb	do	Jan. 20, 1824	44	Charles McDougall	do	do
17	John W. Baylor	do	July 8, 1824	45	John R. Conway	do	do
18	Hamilton S. Hawkins	do	Nov. 22, 1824	46	Lucius O'Brien	do	do
19	John Thurston	do	Jan. 1, 1825	47	S. Etting Myers	do	do
20	Alfred W. Elwes	do	May 9, 1825	48	Thomas O. Dwyer	do	do
21	Robert C. Wood	do	May 28, 1825	49	Burton Randall	do	do

ENGINEER DEPARTMENT.

Charles Gratiot, commandant of the corps of engineers, brevet brigadier general, chief engineer.
John J. Abert, topographical engineer, brevet lieutenant colonel in charge of the topographical bureau.

CORPS OF ENGINEERS.

No.	Names and rank.	Date of commission.	Brevet and staff appointments.
	COLONEL.		
1	Charles Gratiot	May 24, 1828	Brig. gen. bvt., May 24, 1828, chief engineer.
	LIEUTENANT COLONEL.		
1	Joseph G. Totten	May 24, 1828	Col. brevet, September 11, 1824.
	MAJORS.		
1	Sylvanus Thayer	May 24, 1828	Lieut. col. bvt., March 3, 1823, Supt. Mil. Academy.
2	R. E. De Russey	December 22, 1830	Brevet September 11, 1824.
	CAPTAINS.		
1	John L. Smith	August 29, 1820	
2	George Blaney	July 1, 1824	
3	William H. Chase	January 1, 1825	
4	Richard Delafield	May 24, 1828	
5	Andrew Talcott	December 22, 1830	
6	William A. Eliason	March 5, 1832	
	FIRST LIEUTENANTS.		
1	Thomas J. Leslie	March 31, 1819	Paymaster, Nov. 27, 1815, Military Academy.
2	Cornelius A. Ogden	July 1, 1824	
3	Henry Brewerton	January 1, 1825	
4	Stephen Tuttle	May 24, 1828	
5	George Dutton	December 22, 1830	
6	Joseph Mansfield	March 5, 1832	
	SECOND LIEUTENANTS.		
1	Alexander H. Bowman	July 1, 1825	
2	Thompson S. Brown	do	
3	William H. C. Bartlett	July 1, 1826	
4	Robert E. Lee	July 1, 1829	
5	Alexander J. Swift	July 1, 1830	
6	Roswell Park	July 1, 1831	

TOPOGRAPHICAL ENGINEERS.

No.	Names and rank.	Date of commission.	Brevets.
MAJORS, BREVET.			
1	John Anderson	April 12, 1813.....	Lieutenant colonel brevet, April 12, 1823.
2	John J. Abert.....	November 22, 1814	Lieutenant colonel brevet, November 22, 1824.
3	James Kearney.....	April 29, 1816.....	Lieutenant colonel brevet, April 29, 1826.
4	Stephen H. Long.....	do.....	Lieutenant colonel brevet, April 29, 1826.
5	P. H. Perrault.....	February 17, 1817.....	Lieutenant colonel brevet, February 17, 1827.
6	Hartman Bache.....	August 1, 1832.....	Brevet, July 24, 1828.
<i>Assistant Topographical Engineers.</i>			
CAPTAINS, BREVET.			
1	Wm. G. McNeill	January 27, 1823	
2	James D. Graham.....	January 15, 1829	
3	Wm. Turnbull.....	August 20, 1831	
4	William H. Swift.....	August 1, 1832.....	

ORDNANCE DEPARTMENT.

COLONEL.			
1	George Bomford	May 30, 1832.....	Brevet, February 9, 1825.
LIEUTENANT COLONEL.			
1	George Talcott	do.....	
MAJORS.			
1	Henry K. Craig	do.....	Brevet, December 23, 1823.
2	William J. Worth.....	do.....	Lieutenant colonel brevet, July 25, 1824.
CAPTAINS.			
1	Rufus L. Baker	do.....	Major brevet, May 21, 1827.
2	Richard Bache.....	do.....	
3	John Symington.....	do.....	
4	William H. Bell.....	do.....	
5	Edward Harding.....	do.....	
6	Alfred Mordecai.....	do.....	
7	Benjamin Huger.....	do.....	
8	James A. J. Bradford.....	do.....	
9	John Hills.....	July 13, 1832.....	

FIRST REGIMENT OF ARTILLERY.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
COLONEL.				FIRST LIEUTENANTS.			
1	James House.....	May 8, 1822		1	Timothy Green.....	April 20, 1818	Capt. bvt., Ap'l 20, 1828. A.C.S.
LIEUTENANT COLONEL.				2	J. Simonson	Oct. 10, 1819	
1	J. B. Walbach	May 30, 1832	Col. bvt., May 1, 1825.	3	M. A. Patrick.....	Aug. 11, 1820	
MAJOR.				4	Giles Porter.....	Feb. 1, 1823	
1	Wm. Gates	do.....	Brevet, March 3, 1823.	5	J. Howard.....	Nov. 1, 1823	Ordnance.
CAPTAINS.				6	D. Van Ness.....	Nov. 4, 1823	A. C. S.
1	S. Churchill	Aug. 15, 1813	Maj. bvt., Aug. 15, 1823.	7	Justin Dimick.....	May 1, 1824	A. C. S.
2	Milo Mason.....	May 17, 1816	Maj. bvt., May 17, 1826.	8	Daniel Tyler	May 6, 1824	Ordnance.
3	Hy. Whiting.....	March 3, 1817	Maj. bvt., March 17, 1824. A.Q.M.	9	Lemuel Gates.....	Feb. 11, 1825	
4	F. Whiting	Sept. 10, 1819		10	D. D. Tompkins.....	Mar. 1, 1825	Ordnance.
5	H. Saunders.....	Nov. 4, 1823		11	George D. Ramsay	Mar. 1, 1826	Top. duty.
6	R. M. Kirby	Aug. 5, 1824	Maj. bvt., Sept. 17, 1824.	12	Jonathan Prescott	Mar. 31, 1827	
7	N. G. Dana.....	Sept. 15, 1825		13	Chas. Dimmock.....	Feb. 20, 1828	A. Q. M.
8	H. W. Griswold	April 26, 1832	Brevet, Dec. 12, 1828.	14	W. Wheelright.....	April 20, 1832	
9	W. Smith	May 30, 1832		15	James H. Cooke.....	April 26, 1832	
				16	L. B. Webster.....	May 30, 1832	Mil. Academy.
				17	George Nauman.....	do.....	Ordnance.
				18	John Farley	Aug. 1, 1832	
				SECOND LIEUTENANTS.			
				1	S. V. R. Ryan.....	July 1, 1825	
				2	Francis Taylor	do.....	
				3	A. D. Mackay.....	do.....	Top. duty.
				4	James R. C. Irwin.....	do.....	Top. duty.

FIRST REGIMENT OF ARTILLERY--Continued.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
SECOND LIEUTS.--Con'd				16	James H. Prentiss	July 1, 1830	
5	John McClellan	July 1, 1826	Adjutant.	17	J. B. Magruder	do	
6	John Williamson	do		18	Geo. W. Turner	July 1, 1831	
7	John H. Winder	April 2, 1827		BREVET SECOND LIEUTENANTS.			
8	Eben. S. Sibley	July 1, 1827	Engineer duty.	1	Jacob Ammen	July 1, 1831	
9	William Maynadier	do	Ordnance.	2	J. W. Bailey	July 1, 1832	
10	Rich'd C. Tilghman	July 1, 1828		3	Henry G. Sill	do	
11	Edmund French	do		4	Geo. Watson	do	Top. duty.
12	William Palmer	do	A. C. S.	5	Wm. H. Pettis	do	
13	Miner Knowlton	do	Mil. Academy.	6	L. Sitgreaves	do	
14	John F. Kennedy	do					
15	John W. Barry	July 1, 1830					

SECOND REGIMENT OF ARTILLERY.

COLONEL.				7	H. S. Mallory	May 31, 1819	
1	Wm. Lindsay	April 26, 1832	Bvt., March 12, 1823.	8	W. Wells	Aug. 28, 1819	A. C. S.
LIEUTENANT COLONEL.				9	S. McKenzie	Feb. 20, 1825	
1	Ichabod B. Crane	Nov. 3, 1832	Bvt., Nov. 13, 1823.	10	James Green	May 31, 1826	Adjutant.
MAJOR.				11	Abm. C. Fowler	Feb. 20, 1827	A. C. S.
1	Roger Jones	Feb. 17, 1827	Col. bvt., Sept. 17, 1824. Adj. General.	12	G. W. Whistler	Aug. 16, 1829	Top. duty.
CAPTAINS.				13	Win. C. DeHart	Oct. 10, 1831	Aide-de-camp to Bvt. Major General Scott.
1	J. F. Heileman	May 5, 1813	Maj. bvt., May 5, 1823.	14	J. A. Chambers	Jan. 28, 1832	
2	Frs. S. Belton	July 31, 1817		15	J. A. d'Lagnel	May 30, 1832	
3	R. A. Zantzing	Dec. 12, 1818	Maj. bvt., Aug. 15, 1824.	16	C. F. Smith	do	Mil. Academy.
4	J. Mountfort	Aug. 11, 1819	Maj. bvt., Sept. 11, 1824.	17	Const. Smith	do	
5	Thos. C. Legate	May 13, 1820		18	Fr. L. Dancy	Nov. 3, 1832	
6	N. Baden	April 1, 1824	Brevet, Aug. 6, 1823.	SECOND LIEUTENANTS.			
7	Jo P. Taylor	July 6, 1825	Commissary.	1	M. M. Clark	July 1, 1826	A. Q. M.
8	Gus. S. Drane	May 30, 1832	Bvt., Nov. 15, 1827.	2	John B. Grayson	do	
9	G. W. Gardiner	Nov. 3, 1832	Bvt April 20, 1828.	3	Hugh W. Mercer	July 1, 1828	
FIRST LIEUTENANTS.				4	Joseph L. Locke	do	Ordnance.
1	C. S. Merchant	April 20, 1818	Capt. bvt., April 20, 1828.	5	Thomas B. Adams	do	Ordnance.
2	Charles Mellon	do	Capt. bvt., April 20, 1828. Ord.	6	John Mackay	July 1, 1829	Top. duty.
3	Allen Lowd	do	Capt. bvt., April 20, 1828. A.C.S.	7	John C. Casey	do	Mil. Academy.
4	H. W. Fitzhugh	do	Capt. bvt., April 20, '28. A.Q.M.	8	Wm. E. Basinger	July 1, 1830	Mil. Academy.
5	James S. Abeel	do	Capt. bvt., April 20, 1828. Ord.	9	W. S. Chandler	do	
6	R. L. Armstrong	July 2, 1818	Capt. bvt., July 2, 1828.	10	Thos. B. Linnard	do	Ordnance.
				11	R. H. K. Whitley	do	
				12	James Allen	July 1, 1831	Mil. Academy.
				13	H. E. Prentiss	do	Mil. Academy.
				14	R. H. Peyton	do	Mil. Academy.
				15	A. A. Humphreys	do	
				16	George W. Ward	July 1, 1832	Top. duty.
				17	Robert P. Smith	do	
				18	P. St. G. Cooke	do	
				BREVET SECOND LIEUTENANTS.			
				1	Joseph C. Vance	July 1, 1832	Top. duty.
				2	John E. Brackett	do	
				3	W. B. Burnett	do	Mil. Academy.
				4	T. F. J. Wilkinson	do	

THIRD REGIMENT OF ARTILLERY.

COLONEL.				5	Thomas Childs	Oct. 1, 1826	
1	W. K. Armistead	Nov. 12, 1818	Brig. gen. bvt., Nov. 12, 1828.	6	C. M. Thruston	Feb. 17, 1827	
LIEUTENANT COLONEL.				7	Elijah Lyon	Feb. 20, 1827	Bvt., Jan. 1, 1827.
1	James Bankhead	April 26, 1832	Bvt., Aug. 15, 1823.	8	Upton S. Fraser	May 1, 1828	
MAJOR.				9	T. W. Lendrum	Dec. 31, 1828	
1	Alex. S. Brooks	April 26, 1832	Lieut. col. bvt., Sept. 11, 1824.	FIRST LIEUTENANTS.			
CAPTAINS.				1	J. R. Vinton	Sept. 30, 1819	A. C. S.
1	M. P. Loman	Nov. 17, 1814	Maj. bvt., Nov. 17, 1824.	2	R. B. Lee	Oct. 31, 1819	
2	Felix Ansart	Nov. 28, 1819		3	Samuel Ringgold	May 8, 1822	
3	Aeneas Mackay	Dec. 31, 1822		4	G. W. Corprew	Aug. 6, 1822	
4	W. L. McClintock	Aug. 11, 1823		5	W. S. Newton	Dec. 31, 1822	
				6	W. B. Davidson	Jan. 1, 1825	Adj. Gen. office.
				7	D. H. Vinton	April 7, 1825	Ordnance.
				8	Z. I. D. Kinsley	Aug. 30, 1825	M. Academy.
				9	John L'Engle	Dec. 11, 1825	A. Q. M.
				10	A. Brockenbrough	Oct. 1, 1826	
				11	H. Garner	Feb. 26, 1827	Adjutant.

THIRD REGIMENT OF ARTILLERY—Continued.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank	Date of commission.	Brevets and staff appointments.
FIRST LIEUTS.—Con'd.				9	George Fetterman ..	July 1, 1827	
12	F. N. Barbarin	Feb. 28, 1827	A. C. S.	10	Albert E Church	July 1, 1828	
13	Martin Burk	May 1, 1828		11	Robert E Temple	do	
14	R. D. A. Wade	Sept. 10, 1828	Ordnance.	12	George E. Chase	do	
15	Cam. Graham	Sept. 11, 1828		13	Joseph A Smith	July 1, 1829	M. Academy.
16	W. S. Maitland	Dec. 31, 1828		14	Charles W. Hackley	do	M. Academy.
17	Geo S. Greene	May 31, 1829		15	William R. McKee	do	
18	R. P. Parrott	Aug. 27, 1831	A. C. S.	16	Frs. Vinton	July 1, 1830	
SECOND LIEUTENANTS.				17	Benj. Poole	do	Top. duty.
1	J. W. Harris	July 1, 1825		18	Edwin Rose	do	
2	Robert Anderson	do	Ordnance.	BREVET 2D LIEUTS.			
3	William Bryant	July 1, 1826		1	Samuel H. Miller	July 1, 1831	
4	Edw. B. White	do	Top. duty.	2	Geo. H. Talcott	do	
5	Dan. S. Herring	do	Ordnance.	3	Eras. D. Keyes	July 1, 1832	
6	Theop. B. Brown	do		4	William Wall	do	
7	John Child	July 1, 1827	Ordnance.	5	James H. Simpson	do	
8	N. B. Buford	do		6	H. K. Yoakum	do	

FOURTH REGIMENT OF ARTILLERY.

COLONEL.				10	Horace Bliss	Dec. 31, 1827	Ordnance.
1	J. R. Fenwick	May 8, 1822	Brig. gen. bvt., Mar. 16, 1823.	11	Aug. Canfield	Mar. 1, 1830	Top. duty.
LIEUTENANT COLONEL.				12	John Pickell	May 28, 1831	
1	Abraham Eustis	do	Col. bvt., Sept. 10, 1823.	13	A. Beckley	July 31, 1831	Ordnance.
MAJOR.				14	F. Searle	Aug. 20, 1831	
1	A. C. W. Fanning	Nov. 3, 1832	Lt. col. bvt., Aug. 15, 1824.	15	F. L. Jones	Jan. 31, 1832	Ordnance.
CAPTAINS.				16	G. W. Long	Feb. 2, 1832	Engineer duty.
1	B. K. Pierce	Oct. 1, 1813	Maj. bvt., Oct. 1, 1823.	17	W. P. Bainbridge	May 30, 1832	
2	M. M. Payne	March 2, 1814	Maj. bvt., Mar. 2, 1824.	18	H. A. Wilson	Sept. 30, 1832	
3	John Erving	April 25, 1818	Maj. bvt., April 25, 1828.	SECOND LIEUTENANTS.			
4	L. Whiting	May 21, 1822		1	R. C. Smead	July 1, 1825	A. C. S.
5	J. L. Gardner	Nov. 1, 1823		2	W. F. Hopkins	do	M. Academy.
6	John Munroe	March 2, 1825		3	W. A. Thornton	do	
7	Jac. Schmuck	April 11, 1825		4	Thomas J. Cram	July 1, 1826	M. Academy.
8	J. W. Ripley	Aug. 1, 1825		5	M. C. Ewing	do	Top. duty.
9	Patrick H. Galt	May 15, 1829	Bvt., Sept 26, '28.	6	D. H. Tufts	do	
FIRST LIEUTENANTS.				7	Charles O. Collins	July 1, 1828	
1	I. M. Washington	May 23, 1820		8	John F. Lane	do	
2	Harvey Brown	Aug. 23, 1821	A. C. S.	9	James Barnes	July 1, 1829	
3	Samuel Cooper	July 6, 1821	Aid to Maj. Gen Macomb.	10	J. E. Johnston	do	
4	Charles Ward	July 20, 1822		11	Charles Pettigru	do	Ordnance.
5	H. A. Thompson	Dec. 31, 1822	Adjutant.	12	Franklin E. Hunt	do	
6	W. W. Morris	Aug. 11, 1823		13	Thos J. Lee	July 1, 1830	Top. duty.
7	S. B. Dusenbury	March 1, 1825		14	Simon H. Drum	do	
8	Edw. C. Ross	Nov. 27, 1826	M. Academy.	15	W. N. Pendleton	do	
9	John B. Scott	July 31, 1827	A. C. S.	16	Wm. A. Norton	July 1, 1831	M. Academy.
				17	S. C. Kidgeley	do	M. Academy.
				18	Wm. H. Emory	do	
				BREVET SECOND LIEUTENANTS.			
1	Benj. S. Ewell	July 1, 1832		1	Benj. S. Ewell	July 1, 1832	
2	John N. Macomb	do		2	John N. Macomb	do	Top. duty.
3	Edward Deas	do		3	Edward Deas	do	
4	Alfred Brush	do		4	Alfred Brush	do	Engineer duty.
5	Tench Tilghman	do		5	Tench Tilghman	do	

FIRST REGIMENT OF INFANTRY.

COLONEL.				3	R. B. Mason	July 31, 1819	
1	Z. Taylor	April 4, 1832		4	E. A. Hitchcock	Dec. 31, 1824	M. Academy.
LIEUTENANT COLONEL.				5	Wm. S. Harney	May 14, 1825	
1	Wm. Davenport	April 4, 1832		6	W. R. Jouett	May 1, 1829	
MAJOR.				7	Thos. Barker	May 31, 1829	
1	John Bliss	July 15, 1831	Brevet, May 13, 1823.	8	S. Shannon	July 28, 1831	A. Q. M.
CAPTAINS.				9	Sam. McRee	Dec. 31, 1831	
1	G. Loomis	April 7, 1819		10	Wm. Day	Oct. 26, 1832	
2	T. F. Smith	April 25, 1819		FIRST LIEUTENANTS.			
				1	Thos. P. Gwynne	Dec. 31, 1824	
				2	Jefferson Vail	May 14, 1825	
				3	W. M. Boyce	June 30, 1825	Top. duty.
				4	J. J. Abercrombie	Sept. 26, 1828	Adjutant.
				5	A. S. Miller	May 31, 1829	
				6	J. W. Kingsbury	Aug. 1, 1830	A. C. S.

FIRST REGIMENT OF INFANTRY—Continued.

No.	Names and rank.	Date of commission.	Brevets and staff appointments	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
FIRST LIEUTS.—Con'd				7	Sid. Burbank	July 1, 1829	Top. duty.
7	W. L. Harris	Dec. 31, 1830	A. C. S.	8	Seth Eastman	do	
8	E. Backus	July 28, 1831		9	E. R. Williams	do	
9	O. Cross	Dec. 31, 1831		10	Lloyd J. Beall	July 1, 1830	
10	Geo. W. Garey	Oct. 26, 1832		BREVET SECOND LIEUTENANTS.			
SECOND LIEUTENANTS.				1	George Wilson	do	A. Q. M.
1	T. B. W. Stockton	July 1, 1827	A. Q. M.	2	E. A. Ogden	July 1, 1831	
2	Joseph H. Lamotte	do	A. C. S.	3	E. F. Covington	do	
3	Jonas K. Greenough	do		4	Ingham Wood	do	
4	Eros G. Mitchell	July 1, 1828		5	Tho. M. Hill	July 1, 1832	
5	Jefferson Davis	do		6	Wm. H. Storer	do	
6	J. R. B. Gardinier	do		7	John Beach	do	

SECOND REGIMENT OF INFANTRY.

COLONEL.				6	Carlos A. Waite	May 1, 1828	A. Q. M.			
1	Hugh Brady	July 6, 1812	Brig. gen. bvt., July 6, 1822.	7	J. S. Gallagher	Feb. 2, 1830	A. C. S.			
LIEUTENANT COLONEL.				8	T. Morris	May 26, 1830	A. C. S.			
1	Alexander Cummings	Aug. 20, 1828	Bvt., Dec. 31, 1822.	9	J. J. B. Kingsbury	Sept. 13, 1831		Aid to Maj. Gen. Macomb. Top. duty.		
MAJOR.				10	J. R. Smith	Mar. 22, 1832				
1	William Whistler	April 28, 1826		Maj. bvt., May 1, 1824.	SECOND LIEUTENANTS.					
CAPTAINS.					1	H. Day	July 1, 1823			
1	A. R. Thompson	May 1, 1814			Maj. bvt., July 25, 1824.	2	W. Bloodgood		July 1, 1824	
2	N. S. Clark	Oct. 1, 1814				3	S. P. Heintzelman		July 1, 1826	
3	W. V. Cobbs	Mar. 31, 1819				4	Amos B. Eaton		do	
4	W. Hoffman	May 1, 1819				5	Silas Casey		do	
5	G. Dearborn	Sept. 30, 1819				6	Abner R. Hetzel		July 1, 1827	
6	T. Staniford	Mar. 1, 1820				7	Isaac P. Simonton		do	
7	B. A. Boynton	Jan. 8, 1823	8			Abraham Van Buren	do			
8	Owen Ransom	Jan. 25, 1823	9			James F. Izard	July 1, 1828			
9	Seth Johnson	Sept. 13, 1831	10	James W. Penrose		do				
10	Joshua B. Brant	Mar. 22, 1832	Bvt., September 17, 1824, Q. M.	BREVET SECOND LIEUTENANTS.						
FIRST LIEUTENANTS.				1	Edwin R. Long	July 1, 1829				
1	John Clitz	Dec. 31, 1819		Adjutant.	2	James M. Hill	July 1, 1830			
2	E. K. Barnum	Dec. 31, 1820			3	J. H. Leavenworth	do			
3	John Bradley	Oct. 2, 1822			4	J. H. K. Burgwin	do			
4	E. V. Sumner	Jan. 25, 1823			5	Geo. W. Patten	do			
5	Samuel L. Russell	Dec. 31, 1827			6	J. M. Clendenin	do			
COLONEL.					7	E. G. Eastman	July 1, 1831			
1	H. Leavenworth	Dec. 16, 1825			B. G. bvt., July 25, 1824.	8	J. G. Harvey	do		
LIEUTENANT COLONEL.						9	Jacob Brown	July 1, 1832		
1	Josiah H. Vose	April 23, 1830	Brevet, Apr. 1, 1823.			10	James V. Bomford	do		
MAJOR.						FIRST LIEUTENANTS.				
1	Step. W. Kearney	May 1, 1829		Major bvt., Sept. 25, 1824.		1	Benj. Walker	Oct. 13, 1823		
CAPTAINS						2	L. N. Morris	Dec. 31, 1825		
1	John Green	Sept. 25, 1814				Maj. bvt., May 7, 1827, War Office.	3	Otis Wheeler	April 28, 1826	
2	J. Garland	May 7, 1817					Brevet, April 30, 1813.	4	Hy. Bainbridge	June 6, 1827
3	J. S. Nelson	Aug. 13, 1819						5	George Wright	Sept. 23, 1827
4	S. H. Webb	July 9, 1820						6	J. W. Cotton	Oct. 4, 1827
5	W. G. Belknap	Feb. 1, 1822			7			E. B. Alexander	Dec. 29, 1827	
6	John B. Clark	Mar. 18, 1826			8			E. B. Birdsall	Feb. 17, 1829	
7	Andrew Lewis	June 6, 1827	9		Nat. S. Harris			Sept 11, 1829		
8	T. J. Harrison	Sept. 23, 1827	10		Joseph Bonnell			July 15, 1831		
9	James Dean	Oct. 4, 1827	SECOND LIEUTENANTS.							
10	Hy. H. Loring	July 15, 1831	Brevet, Apr. 30, 1813.	1	W. R. Montgomery			July 1, 1825		
COLONEL.				2	John Archer	July 1, 1826				
1	H. Leavenworth	Dec. 16, 1825		Major bvt., Sept. 25, 1824.	3	Edw. B. Babbitt	do			
LIEUTENANT COLONEL.					4	Richard W. Colcock	do			
1	Josiah H. Vose	April 23, 1830			Maj. bvt., May 7, 1827, War Office.	5	Charles L. C. Minor	do		
MAJOR.						6	Nath. C. Macrae	do		
1	Step. W. Kearney	May 1, 1829				Brevet, April 30, 1813.	7	Alex. G. Baldwin	do	
CAPTAINS							8	Jefferson Van Horne	July 1, 1827	
1	John Green	Sept. 25, 1814					Brevet, Apr. 30, 1813.	9	William S. Stillwell	do
2	J. Garland	May 7, 1817						10	Thomas Cutts	July 1, 1828
3	J. S. Nelson	Aug. 13, 1819	FIRST LIEUTENANTS.							
4	S. H. Webb	July 9, 1820	Major bvt., Sept. 25, 1824.					1	Benj. Walker	Oct. 13, 1823
5	W. G. Belknap	Feb. 1, 1822		2				L. N. Morris	Dec. 31, 1825	
6	John B. Clark	Mar. 18, 1826		3				Otis Wheeler	April 28, 1826	
7	Andrew Lewis	June 6, 1827		4	Hy. Bainbridge			June 6, 1827		
8	T. J. Harrison	Sept. 23, 1827		5	George Wright			Sept. 23, 1827		
9	James Dean	Oct. 4, 1827		6	J. W. Cotton	Oct. 4, 1827				
10	Hy. H. Loring	July 15, 1831		7	E. B. Alexander	Dec. 29, 1827				
COLONEL.				8	E. B. Birdsall	Feb. 17, 1829				
1	H. Leavenworth	Dec. 16, 1825		Brevet, Apr. 1, 1823.	9	Nat. S. Harris	Sept 11, 1829			
LIEUTENANT COLONEL.					10	Joseph Bonnell	July 15, 1831			
1	Josiah H. Vose	April 23, 1830	Major bvt., Sept. 25, 1824.		SECOND LIEUTENANTS.					
MAJOR.					1	W. R. Montgomery	July 1, 1825			
1	Step. W. Kearney	May 1, 1829			Maj. bvt., May 7, 1827, War Office.	2	John Archer	July 1, 1826		
CAPTAINS						3	Edw. B. Babbitt	do		
1	John Green	Sept. 25, 1814				Brevet, April 30, 1813.	4	Richard W. Colcock	do	
2	J. Garland	May 7, 1817					5	Charles L. C. Minor	do	
3	J. S. Nelson	Aug. 13, 1819					6	Nath. C. Macrae	do	
4	S. H. Webb	July 9, 1820					7	Alex. G. Baldwin	do	
5	W. G. Belknap	Feb. 1, 1822		8			Jefferson Van Horne	July 1, 1827		
6	John B. Clark	Mar. 18, 1826		9			William S. Stillwell	do		
7	Andrew Lewis	June 6, 1827	10	Thomas Cutts			July 1, 1828			
8	T. J. Harrison	Sept. 23, 1827	FIRST LIEUTENANTS.							
9	James Dean	Oct. 4, 1827	Brevet, Apr. 30, 1813.	1	Benj. Walker		Oct. 13, 1823			
10	Hy. H. Loring	July 15, 1831		2	L. N. Morris		Dec. 31, 1825			
COLONEL.				3	Otis Wheeler	April 28, 1826				
1	H. Leavenworth	Dec. 16, 1825		Major bvt., Sept. 25, 1824.	4	Hy. Bainbridge	June 6, 1827			
LIEUTENANT COLONEL.					5	George Wright	Sept. 23, 1827			
1	Josiah H. Vose	April 23, 1830			Maj. bvt., May 7, 1827, War Office.	6	J. W. Cotton	Oct. 4, 1827		
MAJOR.						7	E. B. Alexander	Dec. 29, 1827		
1	Step. W. Kearney	May 1, 1829				Brevet, April 30, 1813.	8	E. B. Birdsall	Feb. 17, 1829	
CAPTAINS							9	Nat. S. Harris	Sept 11, 1829	
1	John Green	Sept. 25, 1814					10	Joseph Bonnell	July 15, 1831	
2	J. Garland	May 7, 1817	SECOND LIEUTENANTS.							
3	J. S. Nelson	Aug. 13, 1819	Major bvt., Sept. 25, 1824.				1	W. R. Montgomery	July 1, 1825	
4	S. H. Webb	July 9, 1820					2	John Archer	July 1, 1826	
5	W. G. Belknap	Feb. 1, 1822		3			Edw. B. Babbitt	do		
6	John B. Clark	Mar. 18, 1826		4			Richard W. Colcock	do		
7	Andrew Lewis	June 6, 1827		5	Charles L. C. Minor		do			
8	T. J. Harrison	Sept. 23, 1827		6	Nath. C. Macrae		do			
9	James Dean	Oct. 4, 1827		7	Alex. G. Baldwin	do				
10	Hy. H. Loring	July 15, 1831		8	Jefferson Van Horne	July 1, 1827				
COLONEL.				9	William S. Stillwell	do				
1	H. Leavenworth	Dec. 16, 1825		Brevet, Apr. 30, 1813.	10	Thomas Cutts	July 1, 1828			
LIEUTENANT COLONEL.					FIRST LIEUTENANTS.					
1	Josiah H. Vose	April 23, 1830	Major bvt., Sept. 25, 1824.		1	Benj. Walker	Oct. 13, 1823			
MAJOR.					2	L. N. Morris	Dec. 31, 1825			
1	Step. W. Kearney	May 1, 1829			Maj. bvt., May 7, 1827, War Office.	3	Otis Wheeler	April 28, 1826		
CAPTAINS						4	Hy. Bainbridge	June 6, 1827		
1	John Green	Sept. 25, 1814				Brevet, April 30, 1813.	5	George Wright	Sept. 23, 1827	
2	J. Garland	May 7, 1817					6	J. W. Cotton	Oct. 4, 1827	
3	J. S. Nelson	Aug. 13, 1819					7	E. B. Alexander	Dec. 29, 1827	
4	S. H. Webb	July 9, 1820					8	E. B. Birdsall	Feb. 17, 1829	
5	W. G. Belknap	Feb. 1, 1822		9			Nat. S. Harris	Sept 11, 1829		
6	John B. Clark	Mar. 18, 1826		10			Joseph Bonnell	July 15, 1831		
7	Andrew Lewis	June 6, 1827	SECOND LIEUTENANTS.							
8	T. J. Harrison	Sept. 23, 1827	Brevet, Apr. 30, 1813.	1			W. R. Montgomery	July 1, 1825		
9	James Dean	Oct. 4, 1827		2	John Archer		July 1, 1826			
10	Hy. H. Loring	July 15, 1831		3	Edw. B. Babbitt		do			
COLONEL.				4	Richard W. Colcock	do				
1	H. Leavenworth	Dec. 16, 1825		Major bvt., Sept. 25, 1824.	5	Charles L. C. Minor	do			
LIEUTENANT COLONEL.					6	Nath. C. Macrae	do			
1	Josiah H. Vose	April 23, 1830			Maj. bvt., May 7, 1827, War Office.	7	Alex. G. Baldwin	do		
MAJOR.						8	Jefferson Van Horne	July 1, 1827		
1	Step. W. Kearney	May 1, 1829				Brevet, April 30, 1813.	9	William S. Stillwell	do	
CAPTAINS							10	Thomas Cutts	July 1, 1828	
1	John Green	Sept. 25, 1814	FIRST LIEUTENANTS.							
2	J. Garland	May 7, 1817	Major bvt., Sept. 25, 1824.				1	Benj. Walker	Oct. 13, 1823	
3	J. S. Nelson	Aug. 13, 1819					2	L. N. Morris	Dec. 31, 1825	
4	S. H. Webb	July 9, 1820					3	Otis Wheeler	April 28, 1826	
5	W. G. Belknap	Feb. 1, 1822		4			Hy. Bainbridge	June 6, 1827		
6	John B. Clark	Mar. 18, 1826		5			George Wright	Sept. 23, 1827		
7	Andrew Lewis	June 6, 1827		6	J. W. Cotton		Oct. 4, 1827			
8	T. J. Harrison	Sept. 23, 1827		7	E. B. Alexander		Dec. 29, 1827			
9	James Dean	Oct. 4, 1827		8	E. B. Birdsall	Feb. 17, 1829				
10	Hy. H. Loring	July 15, 1831		9	Nat. S. Harris	Sept 11, 1829				
COLONEL.				10	Joseph Bonnell	July 15, 1831				
1	H. Leavenworth	Dec. 16, 1825	Brevet, Apr. 30, 1813.	SECOND LIEUTENANTS.						
LIEUTENANT COLONEL.				1	W. R. Montgomery	July 1, 1825				
1	Josiah H. Vose	April 23, 1830		Major bvt., Sept. 25, 1824.	2	John Archer	July 1, 1826			
MAJOR.					3	Edw. B. Babbitt	do			
1	Step. W. Kearney	May 1, 1829			Maj. bvt., May 7, 1827, War Office.	4	Richard W. Colcock	do		
CAPTAINS						5	Charles L. C. Minor	do		
1	John Green	Sept. 25, 1814				Brevet, April 30, 1813.	6	Nath. C. Macrae	do	
2	J. Garland	May 7, 1817					7	Alex. G. Baldwin	do	
3	J. S. Nelson	Aug. 13, 1819					8	Jefferson Van Horne	July 1, 1827	
4	S. H. Webb	July 9, 1820					9	William S. Stillwell	do	
5	W. G. Belknap	Feb. 1, 1822	10				Thomas Cutts	July 1, 1828		
6	John B. Clark	Mar. 18, 1826	FIRST LIEUTENANTS.							
7	Andrew Lewis	June 6, 1827	Brevet, Apr. 30, 1813.	1			Benj. Walker	Oct. 13, 1823		
8	T. J. Harrison	Sept. 23, 1827		2			L. N. Morris	Dec. 31, 1825		
9	James Dean	Oct. 4, 1827		3	Otis Wheeler		April 28, 1826			
10	Hy. H. Loring	July 15, 1831		4	Hy. Bainbridge		June 6, 1827			
COLONEL.				5	George Wright	Sept. 23, 1827				
1	H. Leavenworth	Dec. 16, 1825		Major bvt., Sept. 25, 1824.	6	J. W. Cotton	Oct. 4, 1827			
LIEUTENANT COLONEL.					7	E. B. Alexander	Dec. 29, 1827			
1	Josiah H. Vose	April 23, 1830			Maj. bvt., May 7, 1827, War Office.	8	E. B. Birdsall	Feb. 17, 1829		
MAJOR.						9	Nat. S. Harris	Sept 11, 1829		
1	Step. W. Kearney	May 1, 1829				Brevet, April 30, 1813.	10	Joseph Bonnell	July 15, 1831	
CAPTAINS							SECOND LIEUTENANTS.			
1	John Green	Sept. 25, 1814	Major bvt., Sept. 25, 1824.				1	W. R. Montgomery	July 1, 1825	
2	J. Garland	May 7, 1817					2	John Archer	July 1, 1826	
3	J. S. Nelson	Aug. 13, 1819					3	Edw. B. Babbitt	do	
4	S. H. Webb	July 9, 1820					4	Richard W. Colcock	do	
5	W. G. Belknap	Feb. 1, 1822		5			Charles L. C. Minor	do		
6	John B. Clark	Mar. 18, 1826		6			Nath. C. Macrae	do		
7	Andrew Lewis									

THIRD REGIMENT OF INFANTRY--Continued.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
	BREVET SECOND LIEUTENANTS.			4	James H. Taylor	July 1, 1830	
				5	Wm. Eustis	do	
				6	Step. B. Legate	do	
1	Samuel K. Cobb	July 1, 1828		7	Robert H. Archer	July 1, 1832	
2	Lan. P. Lupton	July 1, 1829		8	Wm. O. Kello	do	
3	A. G. Blanchard	do		9	Henry Swartwout	do	

FOURTH REGIMENT OF INFANTRY.

	COLONEL.			3	P. Morrison	Aug. 26, 1826	A. C. S.
1	D. L. Clinch	April 20, 1819		4	Eustace Trenor	Nov. 29, 1826	
	LIEUTENANT COLONEL.			5	Geo. A. McCall	Jan. 25, 1829	Aid to Bvt. Maj. Gen. Gaines.
1	D. E. Twiggs	July 15, 1831		6	L. Thomas	Mar. 17, 1829	
	MAJOR.			7	R. D. C. Collins	Nov. 3, 1829	A. Q. M.
1	William S. Foster	July 7, 1826	Lieut. col. bvt., Aug. 15, 1824.	8	Elias Phillips	Mar. 30, 1831	A. C. S.
	CAPTAINS.			9	Gov. Morris	April 30, 1831	A. Q. M.
1	J. S. McIntosh	Mar. 8, 1817	Maj. bvt., Mar. 8, 1827.	10	F. D. Newcomb	July 6, 1832	
2	J. M. Glassell	Feb. 10, 1818	Maj. bvt., Feb. 10, 1828.		SECOND LIEUTENANTS.		
3	Francis L. Dade	Feb. 24, 1818	Maj. bvt., Feb. 24, 1828.	1	Timothy Paige	July 1, 1824	
4	Philip Wager	May 8, 1818	Maj. bvt., May 8, 1828.	2	Samuel R. Alston	July 1, 1825	
5	Henry Wilson	April 20, 1819		3	Washington Hood	July 1, 1827	Top. duty.
6	R. M. Sands	April 30, 1819		4	Wm. H. Harford	July 1, 1829	
7	Wm. Lear	May 1, 1824		5	Thomas Swords	do	Engineer duty.
8	G. W. Allen	Jan. 25, 1829	Bvt., Jan. 1, 1829.	6	Chileab S. Howe	do	Engineer duty.
9	J. Page	April 30, 1831	Bvt., Jan. 1, 1829.	7	Ro. W. Burnet	do	
10	Wm. M. Graham	July 6, 1832		8	Rd. B. Screven	do	
	FIRST LIEUTENANTS.			9	Joseph Ritner	July 1, 1830	M. Academy.
1	A. W. Thornton	April 25, 1823	A. S. C.	10	Rob. C. Buchanan	do	
2	Wm. Martin	Mar. 25, 1826	Adjutant.		BREVET SECOND LIEUTENANTS.		
				1	D. A. Manning	do	
				2	Chas. H. Larned	July 1, 1831	
				3	Thos. I. McKean	do	
				5	Bradford R. Alden	do	
				4	Fred. Wilkinson	do	
				6	G. B. Crittenden	July 1, 1832	

FIFTH REGIMENT OF INFANTRY.

	COLONEL.			6	Anthony Drane	Aug. 20, 1828	A. Q. M.
1	Geo. M. Brooke	July 15, 1831	Brig. gen. bvt., Sept. 17, 1824.	7	Alex. Johnston	Aug. 22, 1828	
	LIEUTENANT COLONEL.			8	L. T. Jamison	April 23, 1830	A. C. S.
1	Enos Cutler	April 28, 1826		9	James Engle	Oct. 14, 1830	A. C. S.
	MAJOR.			10	John M. Berrien	Dec. 31, 1830	Top. duty.
1	Geo. Bender	April 23, 1830	Bvt., May 13, 1823.		SECOND LIEUTENANTS.		
	CAPTAINS.			1	Moses E. Merrill	July 1, 1826	A. C. S.
1	J. Fowle	June 10, 1814	Maj. bvt., June 10, 1824.	2	Eph. K. Smith	do	
2	T. F. Hunt	May 20, 1820	A. Q. M.	3	Alexander S. Hooe	July 1, 1827	Top. duty.
3	J. Plympton	June 1, 1821		4	David Perkins	do	A. C. S.
4	D. Wilcox	April 1, 1822		5	Alexander J. Center	do	
5	R. A. McCabe	May 1, 1824		6	Edgar M. Lacy	do	
6	Nathan Clarke	June 29, 1824		7	Isaac Lynde	do	
7	Thos. Hunt	Sept. 27, 1824	Office of C. G. S.	8	Robert E. Clary	July 1, 1828	
8	M. Scott	Aug. 16, 1828		9	James L. Thompson	do	
9	G. Lowe	Aug. 20, 1828		10	Caleb Sibley	July 1, 1829	
10	J. B. F. Russell	April 23, 1830			BREVET SECOND LIEUTENANTS.		
	FIRST LIEUTENANTS.			1	James Allen	do	
1	Jos. M. Baxley	May 1, 1824		2	J. T. Collinsworth	July 1, 1830	
2	W. E. Cruger	June 29, 1824	Adjutant.	3	C. C. Daveiss	do	
3	W. Alexander	Oct. 31, 1825		4	Geo. W. McClure	do	
4	St. Clair Denny	Nov. 30, 1827	A. Q. M.	5	W. Chapman	July 1, 1831	Military Acad.
5	David Hunter	June 30, 1828		6	Moses Scott	do	
				7	H. P. Vanclave	do	
				8	Thos. Stockton	do	
				9	R. B. Marcy	July 1, 1832	

SIXTH REGIMENT OF INFANTRY.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
	COLONEL.						
1	Henry Atkinson-----	April 15, 1814	Brig gen. bvt., May 13, 1820.	5	Geo. Andrews-----	Feb. 11, 1827	A. Q. M.
	LIEUTENANT COLONEL.			6	Asa Richardson-----	May 1, 1827	
1	Daniel Baker-----	May 1, 1829	Brevet, Aug. 9, 1822.	7	John Nichols-----	Oct. 31, 1827	
	MAJOR.			8	G. H. Crosman-----	Aug. 30, 1828	
1	-----	-----	-----	9	J. Van Swearingen-----	May 12, 1829	
	CAPTAINS.			10	Joseph S. Worth-----	April 22, 1830	
1	Bennet Riley-----	Aug. 6, 1818	Maj. bvt., Aug. 6, 1828. A. Q. M.		SECOND LIEUTENANTS		
2	I. Clark, jr-----	Aug. 27, 1822		1	H. St. J. Linden-----	July 1, 1825	
3	Jacob Brown-----	April 7, 1825		2	Gustavus Dorr-----	do-----	
4	Z. C. Palmer-----	Feb. 15, 1826		3	Albt. S. Johnston-----	July 1, 1826	
5	W. N. Wickliffe-----	do-----		4	Jos. D. Searight-----	do-----	
6	Henry Smith-----	July 7, 1826		5	F. J. Brooke-----	do-----	
7	Thos. Noel-----	May 1, 1827		6	P. St. George Cooke-----	July 1, 1827	Adjutant.
8	Jas. Rogers-----	Aug. 30, 1828		7	Nathaniel J. Eaton-----	do-----	A. C. S.
9	Geo. C. Hutter-----	May 12, 1829		8	Robert Sevier-----	July 1, 1828	A. C. S.
10	C. Wharton-----	April 22, 1830		9	Gustave S. Rosseau-----	do-----	Top duty.
	FIRST LIEUTENANTS.			10	Thomas F. Drayton-----	do-----	
1	R. Holmes-----	Feb. 15, 1826	A. C. S.		BREVET SECOND LIEU- TENANTS.		
2	G. W. Waters-----	do-----		1	William Hoffman-----	July 1, 1829	
3	Levi M. Nute-----	July 7, 1826		2	Alber'e Cady-----	do-----	
4	M. W. Batman-----	Dec. 20, 1826		3	Jona. Freeman-----	do-----	
				4	M. L. Clark-----	July 1, 1830	
				5	T. L. Alexander-----	do-----	
				6	J. S. Van Derveer-----	do-----	
				7	J. S. Williams-----	July 1, 1831	
				8	John Conrod-----	do-----	
				9	Geo H Griffin-----	July 1, 1832	

SEVENTH REGIMENT OF INFANTRY.

	COLONEL.							
1	M. Arbuckle-----	Mar. 16, 1820		4	Francis Lee-----	Sept. 24, 1824	A. Q. M.	
	LIEUTENANT COLONEL.			5	J. R. Stephenson-----	Oct. 4, 1825	M. Academy.	
1	J. B. Many-----	June 1, 1821		6	Thomas Johnson-----	Dec. 16, 1825		
	MAJOR.			7	Jos. A. Phillips-----	June 30, 1828		
1	Sullivan Burbank---	Aug. 20, 1828	Lieut. col. bvt., July 25, 1824.	8	J. E. Newell-----	Nov. 10, 1829		
	CAPTAINS.			9	Jasper Macomb-----	do-----		
1	George Birch-----	Aug. 31, 1816	Maj. bvt., Aug. 31, 1826.	10	N. Tillinghast-----	June 30, 1830		
2	R. B. Hyde-----	Oct. 31, 1818	Maj. bvt., Oct. 31, 1828.		SECOND LIEUTENANTS.			
3	Nath. Young-----	Jan. 1, 1819	Maj. bvt., Jan. 1, 1829. Q. M.	1	W. G. Williams-----	July 1, 1824		Top duty.
4	Trueman Cross-----	Sept. 27, 1819		2	D. S. Miles-----	do-----		Adjutant.
5	Daniel E. Burch-----	June 30, 1820		3	W. Seawell-----	July 1, 1825		M. Academy.
6	H. Berryman-----	Oct. 6, 1822		4	L. F. Carter-----	do-----		
7	N. G. Wilkinson-----	July 31, 1824		5	Gabriel J. Rains-----	July 1, 1827		
8	B. L. E. Bonneville---	Oct. 4, 1825		6	Stephen W. Moore-----	do-----		
9	John Stuart-----	June 30, 1828		7	William W. Mather-----	July 1, 1828		
10	E. S. Hawkins-----	Nov. 10, 1829		8	John P. Davis-----	July 1, 1829		
	FIRST LIEUTENANTS.			9	The. H. Holmes-----	do-----		
1	Charles Thomas-----	Mar. 1, 1824	A. Q. M.	10	James West-----	July 1, 1830		
2	James L. Dawson-----	July 1, 1824			BREVET SECOND LIEU- TENANTS.			
3	Al. H. Morton-----	July 31, 1824		1	Samuel Kinney-----	do-----	Top duty.	
				2	Richard H. Ross-----	do-----		
				3	Albert M. Lea-----	July 1, 1831		
				4	Lus. B. Northrop-----	do-----		
				5	Geo. W. Cass-----	July 1, 1832		
				6	Lewis Howell-----	do-----		
				7	Daniel P. Whiting-----	do-----		
				8	Roger S. Dix-----	do-----		
				9	Richard C. Gatlin-----	do-----		
					Engineer duty.			

BATTALION OF MOUNTED RANGERS.

	MAJOR.					
1	Henry Dodge-----	June 21, 1832		6	Matthew Duncan---	Oct. 4, 1832
	CAPTAINS.				FIRST LIEUTENANTS.	
1	Lemuel Ford-----	June 16, 1832		1	Samuel Smith-----	June 29, 1832
2	Benjamin V. Beekes---	June 1, 1832		2	John Gibson-----	July 1, 1832
3	Jesse B. Browne-----	do-----		3	Jas. W. Hamilton-----	July 16, 1832
4	Jesse Bean-----	do-----		4	Joshua W. Fry-----	July 25, 1832
5	Nathan Boone-----	do-----		5	Joseph Pentecost---	July 30, 1832
				6	B. W. Moore-----	Nov. 6, 1832

BATTALION OF MOUNTED RANGERS—Continued.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank	Date of commission	Brevets and staff appointments.
SECOND LIEUTENANTS.				3	George Caldwell.....	July 30, 1832	
1	George Leach.....	July 6, 1832		4	W. R. Butler.....	Aug. 4, 1832	
2	Enoch Steen.....	July 16, 1832		5	H. E. Roberts.....	Nov. 6, 1832	
3	James Clyman.....	July 23, 1832		BREVET THIRD LIEUTENANTS.			
4	John Nees.....	July 28, 1832		1	Gaines P. Kingsbury.....	July 1, 1832	
5	Robert King.....	July 30, 1832		2	Humphrey Marshall.....	do.....	
6	Wm. Bradford.....	Nov. 6, 1832		3	Jas. M. Bowman.....	do.....	
THIRD LIEUTENANTS.				4	Asbury Ury.....	do.....	
1	Meed. W. Shields....	July 1, 1832		5	Albert G. Edwards.....	do.....	
2	J. G. McDonald.....	July 25, 1832					

NOTE.—This mark ^o affixed to any officer's name denotes a voluntary transfer, which is the cause of his anomalous regimental position.

LINEAL RANK OF ARTILLERY OFFICERS.

No.	Names and rank.	Date of commission.	Regiment.	Remarks.
COLONELS.				
1	W. K. Armistead.....	Nov. 12, 1818	3d artillery	
2	John B. Fenwick.....	May 8, 1822	4th artillery	
3	James House.....	do.....	1st artillery	
4	William Lindsay.....	April 26, 1832	2d artillery	
LIEUTENANT COLONELS.				
1	Abraham Eustis.....	May 8, 1822	4th artillery	
2	James Bankhead.....	April 26, 1832	3d artillery	
3	John B. Walbach.....	May 30, 1832	1st artillery	
4	Ichabod B. Crane.....	Nov. 3, 1832	2d artillery	
MAJORS.				
1	Roger Jones.....	Feb. 17, 1827	2d artillery	Adjutant General.
2	Alex. S. Brooks.....	April 26, 1832	3d artillery	
3	William Gates.....	May 30, 1832	1st artillery	
4	A. C. W. Fanning.....	Nov. 3, 1832	4th artillery	
CAPTAINS.				
1	J. F. Helleman.....	May 5, 1813	2d artillery	
2	Sylvester Churchill.....	Aug. 15, 1813	1st artillery	
3	B. K. Pierce.....	Oct. 1, 1813	4th artillery	
4	M. M. Payne.....	Mar. 2, 1814	4th artillery	
5	M. P. Lomax.....	Nov. 17, 1814	3d artillery	
6	Milo Mason.....	May 17, 1816	1st artillery	
7	Henry Whiting.....	Mar. 3, 1817	1st artillery	Assistant quartermaster.
8	Francis S. Belton.....	July 31, 1817	2d artillery	
9	J. Erving.....	April 25, 1818	4th artillery	
10	R. A. Zantzinger.....	Dec. 12, 1818	2d artillery	
11	John Mountfort.....	Aug. 11, 1819	2d artillery	
12	F. Whiting.....	Sept. 10, 1819	1st artillery	
13	Felix Ansart.....	Nov. 28, 1819	3d artillery	
14	Thomas C. Legate.....	May 13, 1820	2d artillery	
15	L. Whiting.....	May 21, 1822	4th artillery	
16	Eneas Mackay.....	Dec. 31, 1822	3d artillery	Assistant quartermaster.
17	W. L. McClintock.....	Aug. 11, 1823	3d artillery	
18	J. L. Gardner.....	Nov. 1, 1823	4th artillery	
19	H. Saunders.....	Nov. 4, 1823	1st artillery	
20	N. Baden.....	April 1, 1824	2d artillery	
21	R. M. Kirby.....	Aug. 5, 1824	1st artillery	
22	John Munroe.....	Mar. 2, 1825	4th artillery	
23	Jac. Schmuck.....	April 11, 1825	4th artillery	
24	Jos. P. Taylor.....	July 6, 1825	2d artillery	Commissary.
25	Jas. W. Ripley.....	Aug. 1, 1825	4th artillery	
26	Nathaniel G. Dana.....	Sept. 15, 1825	1st artillery	
27	Thomas Childs.....	Oct. 1, 1826	3d artillery	
28	Charles M. Thruston.....	Feb. 17, 1827	3d artillery	
29	Elijah Lyon.....	Feb. 20, 1827	3d artillery	
30	U. S. Fraser.....	May 1, 1828	3d artillery	
31	Thomas W. Lendrum.....	Dec. 31, 1828	3d artillery	
32	Patrick H. Galt.....	May 15, 1829	4th artillery	
33	Henry W. Griswold.....	April 26, 1832	1st artillery	
34	Gustavus S. Drane.....	May 30, 1832	2d artillery	
35	Walter Smith.....	do.....	1st artillery	
36	Geo. W. Gardiner.....	Nov. 3, 1832	2d artillery	

LINEAL RANK OF INFANTRY OFFICERS

No.	Names and rank.	Date of commission.	Regiment.	Remarks.
COLONELS.				
1	Hugh Brady	July 6, 1812	2d infantry	
2	Henry Atkinson	April 15, 1814	6th infantry	
3	Duncan L. Clinch	April 20, 1819	4th infantry	
4	Matthew Arbuckle	Mar. 16, 1820	7th infantry	
5	Henry Leavenworth	Dec 16, 1825	3d infantry	
6	George M. Brooke	July 15, 1831	5th infantry	
7	Zachariah Taylor	April 4, 1832	1st infantry	
LIEUTENANT COLONELS.				
1	James B. Many	June 1, 1821	7th infantry	
2	Enos Cutler	April 28, 1826	5th infantry	
3	Alexander Cummings	Aug. 20, 1828	2d infantry	
4	Daniel Baker	May 1, 1829	6th infantry	
5	Josiah H. Vose	April 23, 1830	3d infantry	
6	David E. Twiggs	July 15, 1831	4th infantry	
7	William Davenport	April 4, 1832	1st infantry	
MAJORS.				
1	William Whistler	April 28, 1826	2d infantry	
2	William S. Foster	July 7, 1826	4th infantry	
3	Sullivan Burbank	Aug. 20, 1828	7th infantry	
4	Stephen W. Kearney	May 1, 1829	3d infantry	
5	George Bender	April 23, 1830	5th infantry	
6	John Bliss	July 15, 1831	1st infantry	
7	.....	.....	6th infantry	
CAPTAINS.				
1	Alex. R. Thompson	May 1, 1814	2d infantry	
2	John Fowle	June 10, 1814	5th infantry	
3	John Green	Sept. 25, 1814	3d infantry	
4	Newman S. Clark	Oct. 1, 1814	2d infantry	
5	George Birch	Aug. 31, 1816	7th infantry	
6	J. S. McIntosh	Mar. 8, 1817	4th infantry	
7	John Garland	May 7, 1817	3d infantry	
8	James M. Glassell	Feb. 10, 1818	4th infantry	
9	F. L. Dade	Feb. 24, 1818	4th infantry	
10	Philip Wager	May 8, 1818	4th infantry	
11	Bennet Riley	Aug. 6, 1818	6th infantry	
12	R. B. Hyde	Oct. 31, 1818	7th infantry	
13	Nathaniel Young	Jan. 1, 1819	7th infantry	
14	W. V. Cobbs	Mar. 31, 1819	2d infantry	
15	Gustavus Loomis	April 7, 1819	1st infantry	
16	Henry Wilson	April 20, 1819	4th infantry	
17	Thomas F. Smith	April 25, 1819	1st infantry	
18	Richard M. Sands	April 30, 1819	4th infantry	
19	William Hoffman	May 1, 1819	2d infantry	
20	R. B. Mason	July 31, 1819	1st infantry	
21	Joseph S. Nelson	Aug. 13, 1819	3d infantry	
22	Trueman Cross	Sept. 27, 1819	7th infantry	Quartermaster.
23	Greenleaf Dearborn	Sept. 30, 1819	2d infantry	
24	Thomas Staniford	Mar. 1, 1820	2d infantry	
25	Thomas F. Hunt	May 20, 1820	5th infantry	A. Q. M.
26	Daniel E. Burch	June 30, 1820	7th infantry	
27	Stephen H. Webb	July 9, 1820	3d infantry	
28	J. Plympton	June 1, 1821	5th infantry	
29	W. G. Belknap	Feb. 1, 1822	3d infantry	
30	Delafayette Wilcox	April 1, 1822	5th infantry	
31	I. Clark	Aug. 27, 1822	6th infantry	A. Q. M.
32	H. Berryman	Oct. 6, 1822	7th infantry	
33	B. A. Boynton	Jan. 8, 1823	2d infantry	
34	Owen Ransom	Jan. 25, 1823	2d infantry	
35	Robert A. McCabe	May 1, 1824	5th infantry	
36	William Lear	do	4th infantry	
37	Nathan Clark	June 29, 1824	5th infantry	
38	N. G. Wilkinson	July 31, 1824	7th infantry	
39	Thomas Hunt	Sept. 27, 1824	5th infantry	
40	Ethan A. Hitchcock	Dec. 31, 1824	1st infantry	Office Com Gen. of Sub. M. Academy.
41	Jacob Brown	April 7, 1825	6th infantry	
42	W. S. Harney	May 14, 1825	1st infantry	
43	B. L. E. Bonneville	Oct. 4, 1825	7th infantry	
44	Zalmon C. Palmer	Feb. 15, 1826	6th infantry	
45	William N. Wickliffe	do	6th infantry	
46	John B. Clark	Mar. 18, 1826	3d infantry	
47	Henry Smith	May 7, 1826	6th infantry	
48	Thomas Noel	May 1, 1827	6th infantry	
49	Andrew Lewis	June 6, 1827	3d infantry	
50	Thomas J. Harrison	Sept. 23, 1827	3d infantry	
51	James Dean	Oct. 4, 1827	3d infantry	
52	John Stuart	June 30, 1828	7th infantry	
53	Martin Scott	Aug. 16, 1828	5th infantry	
54	Gideon Lowe	Aug. 20, 1828	5th infantry	

LINEAL RANK OF INFANTRY OFFICERS—Continued.

No.	Names and rank.	Date of commission	Regiment.	Remarks.
CAPTAINS—Continued.				
55	Jason Rogers.....	Aug. 30, 1828	6th infantry	
56	George W. Allen.....	Jan. 25, 1829	4th infantry	
57	William R. Jonett.....	May 1, 1829	1st infantry	
58	George C. Hutter.....	May 12, 1829	6th infantry	
59	Thomas Barker.....	May 31, 1829	1st infantry	
60	Edgar S. Hawkins.....	Nov. 10, 1829	7th infantry	
61	Clifton Wharton.....	April 22, 1830	6th infantry	
62	J. B. F. Russell.....	April 23, 1830	5th infantry	
63	John Page.....	April 30, 1831	4th infantry	
64	Henry H. Loring.....	July 15, 1831	3d infantry	
65	Samuel Shannon.....	July 28, 1831	1st infantry	
66	Seth Johnson.....	Sept. 13, 1831	2d infantry	
67	Samuel McRae.....	Dec. 31, 1831	1st infantry	
68	Joshua B. Brant.....	Mar. 22, 1832	2d infantry	Q. M.
69	William M. Graham.....	July 6, 1832	4th infantry	
70	William Day.....	Oct. 26, 1832	1st infantry	

RELATIVE RANK

Of the field officers and captains of the artillery and infantry.

No.	Names, rank, and date of commission.	Regiment and corps.	Brevets.	Remarks.
COLONELS.				
1	Hugh Brady, July 6, 1812.....	2d infantry	Brig. gen. bvt., July 6, 1822	
2	Henry Atkinson, April 15, 1814.....	6th infantry	Brig. gen. bvt., May 13, 1820	
3	W. K. Armistead, November 12, 1818.....	3d artillery	Brig. gen. bvt., November 12, 1828	
4	Duncan L. Clinch, April 20, 1819.....	4th infantry		
5	Matthew Arbuckle, March 16, 1820.....	7th infantry		
6	John R. Fenwick, May 8, 1822.....	4th artillery	Brig. gen. bvt., March 18, 1823	
7	James House, May 8, 1822.....	1st artillery		
8	Henry Leavenworth, December 16, 1825.....	3d infantry	Brig. gen. bvt., July 25, 1824	
9	George M. Brooke, July 15, 1831.....	5th infantry	Brig. gen. bvt., September 17, 1824	
10	Zach. Taylor, April 4, 1832.....	1st infantry		
11	William Lindsay, April 26, 1832.....	2d artillery	Brevet, March 12, 1823	
LIEUTENANT COLONELS.				
1	James B. Many, June 1, 1821.....	7th infantry		
2	Abraham Eustis, May 8, 1822.....	4th artillery	Col. bvt., September 10, 1823	
3	Enos Cutler, April 28, 1826.....	5th infantry		
4	Alexander Cummings, August 20, 1828.....	2d infantry		
5	Daniel Baker, May 1, 1829.....	6th infantry	Brevet, August 9, 1822	
6	Josiah H. Vose, April 23, 1830.....	3d infantry		
7	David E. Twiggs, July 15, 1831.....	4th infantry		
8	William Davenport, April 4, 1832.....	1st infantry		
9	James Bankhead, April 26, 1832.....	3d artillery	Brevet, August 15, 1823	
10	John B. Walbach, May 30, 1832.....	1st artillery	Col. bvt., May 1, 1825	
11	Ichabod B. Crane, November 3, 1832.....	2d artillery	Brevet, Nov. 13, 1823	
MAJORS.				
1	William Whistler, April 28, 1826.....	2d infantry	Brevet, December 31, 1822	
2	W. S. Foster, July 7, 1826.....	4th infantry	Lieut. col. bvt., Aug. 15, 1824	
3	Roger Jones, February 17, 1827.....	2d artillery	Col. bvt., September 17, 1824	
4	Sullivan Burbank, August 20, 1828.....	7th infantry	Lieut. col. bvt., July 25, 1824	
5	Stephen W. Kearney, May 1, 1829.....	4th infantry	Brevet, April 1, 1823	
6	George Bender, April 23, 1830.....	5th infantry	Brevet, May 13, 1823	
7	John Bliss, July 15, 1831.....	1st infantry	Brevet, May 13, 1823	
8	Alexander S. Brooks, April 26, 1832.....	3d artillery	Lieut. col. bvt., Sept. 11, 1824	
9	William Gates, May 30, 1832.....	1st artillery	Brevet, March 3, 1823	
10	A. C. W. Fanning, November 3, 1832.....	4th artillery	Lieut. col. bvt., August 15, 1824	
11	.....	6th infantry		
CAPTAINS.				
1	J. F. Heileman, May 5, 1813.....	2d artillery	Maj. bvt., May 5, 1823	
2	Sylvester Churchill, August 15, 1813.....	1st artillery	Maj. bvt., August 15, 1823	
3	Benjamin K. Pierce, October 1, 1813.....	4th artillery	Maj. bvt., October 1, 1823	
4	M. M. Payne, March 2, 1814.....	4th artillery	Maj. bvt., March 2, 1824	
5	Alex. R. Thompson, May 1, 1814.....	2d infantry	Maj. bvt., May 1, 1824	
6	J. Fowle, June 10, 1814.....	5th infantry	Maj. bvt., June 10, 1824	
7	John Green, September 25, 1814.....	3d infantry	Maj. bvt., September 25, 1824	
8	Newman S. Clarke, October 1, 1814.....	2d infantry	Maj. bvt., July 25, 1824	
9	M. P. Lomax, November 17, 1814.....	3d artillery	Maj. bvt., November 17, 1824	
10	Milo Mason, May 17, 1816.....	1st artillery	Maj. bvt., May 17, 1826	
11	George Birch, August 31, 1816.....	7th infantry	Maj. bvt., August 31, 1826	
12	Henry Whiting, March 3, 1817.....	1st artillery	Maj. bvt., March 17, 1824	
13	J. S. McIntosh, March 8, 1817.....	4th infantry	Maj. bvt., March 8, 1827	
14	John Garland, May 7, 1817.....	3d infantry	Maj. bvt., May 7, 1827	

RELATIVE RANK—Continued.

No.	Names, rank, and date of commission.	Regiment and corps.	Brevets.	Remarks.
CAPTAINS—Continued.				
15	Francis S. Belton, July 31, 1817	2d artillery		
16	James M. Giassell, February 10, 1818	4th infantry	Maj. bvt., February 10, 1828	
17	Francis L. Dade, February 24, 1818	4th infantry	Maj. bvt., February 24, 1828	
18	J. Erving, April 25, 1818	4th artillery	Maj. bvt., April 25, 1828	
19	Philip Wager, May 8, 1818	4th infantry	Maj. bvt., May 8, 1828	
20	Bennet Riley, August 6, 1818	6th infantry	Maj. bvt., August 6, 1828	
21	R. B. Hyde, October 31, 1818	7th infantry	Maj. bvt., October 31, 1828	
22	R. A. Zantinger, December 12, 1818	2d artillery	Maj. bvt., August 15, 1824	
23	Nathaniel Young, January 1, 1819	7th infantry	Maj. bvt., January 1, 1829	
24	W. V. Cobbs, March 31, 1819	2d infantry		
25	Gustavus Loomis, April 7, 1819	1st infantry		
26	Henry Wilson, April 20, 1819	4th infantry		
27	Thomas F. Smith, April 25, 1819	1st infantry		
28	Richard M. Sands, April 30, 1819	4th infantry		
29	William Hoffman, May 1, 1819	2d infantry		
30	R. B. Mason, July 31, 1819	1st infantry		
31	John Mountfort, August 11, 1819	2d artillery	Maj. bvt., September 11, 1824	
32	J. S. Nelson, August 13, 1819	3d infantry	Brevet, April 30, 1813	
33	F. Whiting, September 10, 1819	1st artillery		
34	Trueman Cross, September 27, 1819	7th infantry		
35	Greenleaf Dearborn, September 30, 1819	2d infantry		
36	Felix Ansart, November 28, 1819	3d artillery		
37	Thomas Staniford, March 1, 1820	2d infantry		
38	Thomas C. Legate, May 13, 1820	2d artillery		
39	Thomas F. Hunt, May 20, 1820	5th infantry		
40	Daniel E. Burch, June 30, 1820	7th infantry		
41	Stephen H. Webb, July 9, 1820	3d infantry		
42	J. Plympton, June 1, 1821	5th infantry		
43	W. G. Belknap, February 1, 1822	3d infantry		
44	D. Wilcox, April 1, 1822	5th infantry		
45	Levi Whiting, May 21, 1822	4th artillery		
46	I. Clark, jr., August 27, 1822	6th infantry		
47	Henry Berryman, October 6, 1822	7th infantry		
48	Æneas Mackay, December 31, 1822	3d artillery		
49	Benjamin A. Boynton, January 8, 1823	2d infantry		
50	Owen Ransom, January 25, 1823	2d infantry		
51	W. L. McClintock, August 11, 1823	3d artillery		
52	J. L. Gardner, November 1, 1823	4th artillery		
53	Henry Saunders, November 4, 1823	1st artillery		
54	N. Baden, April 1, 1824	2d artillery	Brevet, August 6, 1823	
55	Robert A. McCabe, May 1, 1824	5th infantry		
56	W. Lear, May 1, 1824	4th infantry		
57	Nath. Clark, June 29, 1824	5th infantry		
58	N. G. Wilkinson, July 31, 1824	7th infantry		
59	R. M. Kirby, August 5, 1824	1st artillery	Maj. bvt., Sept. 17, 1824	
60	Thomas Hunt, September 27, 1824	5th infantry		
61	Ethan A. Hitchcock, December 31, 1824	1st infantry		
62	John Munroe, March 2, 1825	4th artillery		
63	Jacob Brown, April 7, 1825	6th infantry		
64	J. Schmuck, April 11, 1825	4th artillery		
65	W. S. Harney, May 14, 1825	1st infantry		
66	Joseph P. Taylor, July 6, 1825	2d artillery		
67	James W. Ripley, August 1, 1825	4th artillery		
68	Nath. G. Dana, September 15, 1825	1st artillery		
69	B. L. E. Bonneville, October 4, 1825	7th infantry		
70	Z. C. Palmer, February 14, 1826	6th infantry		
71	W. N. Wickliffe, February 15, 1826	6th infantry		
72	John B. Clark, March 18, 1826	3d infantry		
73	Henry Smith, July 7, 1826	6th infantry		
74	Thomas Childs, October 1, 1826	3d artillery		
75	Charles M. Thruston, February 17, 1827	3d artillery		
76	Elijah Lyon, February 20, 1827	3d artillery	Brevet, January 1, 1827	
77	Thomas Noel, May 1, 1827	6th infantry		
78	Andrew Lewis, June 6, 1827	3d infantry		
79	Thomas J. Harrison, September 23, 1827	3d infantry		
80	James Dean, October 4, 1827	3d infantry		
81	U. S. Fraser, May 1, 1828	3d artillery		
82	John Stuart, June 30, 1828	7th infantry		
83	Martin Scott, August 16, 1828	5th infantry		
84	Gideon Lowe, August 20, 1828	5th infantry		
85	Jason Rogers, August 30, 1828	6th infantry		
86	Thomas W. Lendrum, December 31, 1828	3d artillery		
87	George W. Allen, January 25, 1829	4th infantry	Brevet, January 1, 1829	
88	William R. Jouett, May 1, 1829	1st infantry		
89	George C. Hutter, May 12, 1829	6th infantry		
90	Patrick H. Galt, May 15, 1829	4th artillery	Brevet, September 26, 1828	
91	Thomas Barker, May 31, 1829	1st infantry		
92	Edgar S. Hawkins, November 10, 1829	7th infantry		
93	Clifton Wharton, April 22, 1830	6th infantry		
94	J. B. F. Russell, April 23, 1830	5th infantry		
95	John Page, April 30, 1831	4th infantry	Brevet, January 1, 1829	
96	Henry H. Loring, July 15, 1831	3d infantry		
97	Samuel Shannon, July 28, 1831	1st infantry		
98	Seth Johnson, September 13, 1831	2d infantry		
99	Sam. McRee, December 31, 1831	1st infantry		

RELATIVE RANK—Continued.

No.	Names, rank, and date of commission.	Regiment and corps.	Brevets.	Remarks.
CAPTAINS—Continued.				
100	Joshua B. Brant, March 22, 1832	2d infantry ..	Brevet, September 17, 1824.....	
101	Henry W. Griswold, April 26, 1832	1st artillery..	Brevet, December 12, 1828	
102	Gustavus S. Drane, May 30, 1832	2d artillery ..	Brevet, November 15, 1827	
103	Walter Smith, May 30, 1832	1st artillery..	.....
104	W. M. Graham, July 6, 1832	4th infantry ..	.....
105	Wm. Day, October 26, 1832	1st infantry ..	.....
106	George W. Gardiner, November 3, 1832	2d artillery ..	Brevet, April 20, 1828.....	

LIST OF GRADUATES

Of the Military Academy attached to the army as supernumerary brevet second lieutenants.

No.	Names.	Regiment.	No.	Names.	Regiment.
1828.					
1	Samuel K. Cobb	3d infantry ..	40	Bradford R. Alden.....	4th infantry ..
			41	Thomas Stockton.....	5th infantry ..
			42	James S. Williams.....	6th infantry ..
			43	Ingham Wood.....	1st infantry ..
1829.					
2	William Hoffman.....	6th infantry ..	44	Frederick Wilkinson.....	4th infantry ..
3	Lancaster P. Lupton	3d infantry ..	45	John G. Harvey	2d infantry ..
4	Alb. Cady.....	6th infantry ..	46	John Conrad	6th infantry ..
5	Albert G. Blanchard	3d infantry ..	1832.		
6	James Allen.....	5th infantry ..	47	Benjamin S. Ewell	4th artillery ..
7	Jonathan Freeman.....	6th infantry ..	48	George W. Cass.....	7th infantry ..
8	Edwin R. Long.....	2d infantry ..	49	Jacob W. Bailey.....	1st artillery ..
1830.					
9	James M. Hill.....	2d infantry ..	50	Henry G. Sill.....	1st artillery ..
10	Samuel Kinney.....	7th infantry ..	51	Joseph C. Vance	2d artillery ..
11	Jesse H. Leavenworth.....	2d infantry ..	52	George Watson.....	1st artillery ..
12	Mer. L. Clark.....	6th infantry ..	53	Erasmus D. Keyes.....	3d artillery ..
13	Jno. T. Collinsworth.....	5th infantry ..	54	Lewis Howell	7th infantry ..
14	John H. K. Burgwin.....	2d infantry ..	55	William Wall	3d artillery ..
15	Thomas L. Alexander.....	6th infantry ..	56	John N. Macomb	4th artillery ..
16	James H. Taylor.....	3d infantry ..	57	Edward Deas.....	4th artillery ..
17	Camillus C. Daviess.....	5th infantry ..	58	John E. Brackett.....	2d artillery ..
18	John S. Van Derveer.....	6th infantry ..	59	Ward B. Burnett.....	2d artillery ..
19	George Wilson.....	1st infantry ..	60	James H. Simpson	3d artillery ..
20	George W. Patten.....	2d infantry ..	61	Alfred Brush.....	4th artillery ..
21	William Eustis.....	3d infantry ..	62	Henderson K. Yoakum	3d artillery ..
22	David A. Manning.....	4th infantry ..	63	Tench Tilghman.....	4th artillery ..
23	George W. McClure.....	5th infantry ..	64	Wm. H. Pettes.....	1st artillery ..
24	Richard H. Ross.....	7th infantry ..	65	T. F. J. Wilkinson	2d artillery ..
25	John M. Clendenin.....	2d infantry ..	66	Lorenzo Sitgreaves.....	1st artillery ..
26	Stephen B. Legate.....	3d infantry ..	67	George B. Crittenden.....	4th infantry ..
1831.					
27	Albert M. Lea.....	7th infantry ..	68	Jacob Brown	2d infantry ..
28	Samuel H. Miller.....	3d artillery ..	69	Daniel P. Whiting	7th infantry ..
29	George H. Talcott.....	3d artillery ..	70	Randolph B. Marcy	5th infantry ..
30	Jacob Ammen.....	1st artillery ..	71	Thomas M. Hill	1st infantry ..
31	William Chapman	5th infantry ..	72	Roger S. Dix	7th infantry ..
32	Charles H. Larned.....	4th infantry ..	73	Robert H. Archer	3d infantry ..
33	Elb. G. Eastman.....	2d infantry ..	74	James V. Bomford	2d infantry ..
34	Moses Scott.....	5th infantry ..	75	Richard C. Gatlin.....	7th infantry ..
35	Thomas J. McKean.....	4th infantry ..	76	Wm. H. Storer.....	1st infantry ..
36	Edmund A. Ogden.....	1st infantry ..	77	George H. Griffin	6th infantry ..
37	Lucius B. Northrop.....	7th infantry ..	78	John Beach.....	1st infantry ..
38	E. F. Covington.....	1st infantry ..	79	William O. Kello.....	3d infantry ..
39	Horatio P. Vancleve.....	5th infantry ..	80	Henry Swartwout.....	3d infantry ..
			81	Gaines P. Kingsbury.....	M't'd rangers.
			82	Humphrey Marshall	M't'd rangers.
			83	James M. Bowman.....	M't'd rangers.
			84	Asbury Ury.....	M't'd rangers.
			85	Albert G. Edwards.....	M't'd rangers.

MILITARY ACADEMY, WEST POINT, NEW YORK.

INSPECTOR.

Brevet Brigadier General Charles Gratiot, chief engineer, (*ex officio*), inspector of the Military Academy.

ACADEMIC STAFF.

SUPERINTENDENT AND COMMANDANT.

Brevet Lieutenant Colonel S. Thayer, corps of engineers.

PROFESSOR OF MATHEMATICS.

Charles Davies, A. M.

ASSISTANT PROFESSORS.

First Lieutenant Edward C. Ross, fourth artillery.
 Second Lieutenant Charles W. Hackley, third artillery.
 Second Lieutenant Miner Knowlton, first artillery.
 Second Lieutenant James Allen, second artillery.
 Second Lieutenant Richard H. Peyton, second artillery.
 Second Lieutenant Samuel C. Ridgeley, fourth artillery.
 Brevet Second Lieutenant Benjamin S. Ewell, fourth artillery.

CHAPLAIN AND PROFESSOR OF ETHICS.

Rev. Thomas Warner.

MILITARY ACADEMY—Continued.

ASSISTANT PROFESSORS.

First Lieutenant Nicholas Tillinghast, seventh infantry.
Second Lieutenant J. Allen Smith, third artillery.

PROFESSOR OF NATURAL PHILOSOPHY.

Edward H. Courtenay.

ASSISTANT PROFESSORS.

Second Lieutenant T. Jefferson Cram, fourth artillery.
Second Lieutenant William A. Norton, fourth artillery.

PROFESSOR OF ENGINEERING.

Dennis H. Mahan.

ASSISTANT PROFESSORS.

Second Lieutenant Henry E. Prentiss, second artillery.
Brevet Second Lieutenant Ward B. Burnett, second artillery.

TEACHERS OF THE FRENCH LANGUAGE.

Claudius Berard.
Julian Molinard.

TEACHER OF DRAWING.

INSTRUCTOR OF TACTICS, AND COMMANDANT OF THE CORPS OF CADETS.

Captain Ethan A. Hitchcock, first infantry.

ASSISTANT INSTRUCTORS.

First Lieutenant N. Sayre Harris, third infantry.
Second Lieutenant William E. Basinger, second artillery.
Second Lieutenant Joseph Ritner, fourth infantry.
Brevet Second Lieutenant William Chapman, fifth infantry.

INSTRUCTOR OF ARTILLERY.

First Lieutenant Zebina J. D. Kinsley, third artillery.

ACTING PROFESSOR OF CHEMISTRY AND MINERALOGY.

Second Lieutenant W. Fenn Hopkins, fourth artillery, A. M.

ASSISTANT PROFESSORS.

Second Lieutenant William W. Mather, seventh infantry.
Second Lieutenant John C. Casey, second artillery.

SWORD MASTER.

Nicholas A. Jumel.

ADJUTANT.

First Lieutenant Charles F. Smith, second artillery.

QUARTERMASTER.

First Lieutenant Lucien B. Webster, first artillery.

PAYMASTER AND TREASURER.

First Lieutenant Thomas J. Leslie, corps of engineers.

SURGEON.

Dr. Walter V. Wheaton.

ASSISTANT SURGEON.

Robert E. Kerr, M. D.

Officers of the army attached to the Military Academy at West Point.

Engineers	2
Artillery	18
Infantry	7
Medical staff	2
Total	29

Resignations, &c., since the publication of the last Register.

RESIGNATIONS.

TOPOGRAPHICAL ENGINEER.

Brevet Major William Tell Poussin, July 31, 1832.

QUARTERMASTER.

Major George Bender, December 15, 1832.

ASSISTANT SURGEONS.

Thomas Lining, December 10, 1832.
Green W. Caldwell, October 19, 1832.

FIRST LIEUTENANTS.

William H. Swift, 1st artillery, August 1, 1832.
James Monroe, 4th artillery, September 30, 1832.
William Cook, 4th artillery, January 31, 1832.
Walter Gwynn, 4th artillery, February 2, 1832.

SECOND LIEUTENANTS

Dennis H. Mahan, corps of engineers, January 1, 1832.
Isaac Trimble, 1st artillery, May 31, 1832.
John N. Dillahunty, 1st artillery, April 14, 1832.
Joshua Barney, 2d artillery, July 31, 1832.
John M. W. Picton, 2d artillery, March 1, 1832.
Ormsby McK. Mitchell, 2d artillery, September 30, 1832.
Bennett H. Henderson, 3d artillery, June 30, 1832.
Frederick Norcom, 4th artillery, August 31, 1832.
Joseph B. Smith, 4th artillery, May 31, 1832.

BREVET SECOND LIEUTENANTS.

George R. J. Bowdoin, 1st infantry, August 31, 1832.
Benjamin W. Brice, 3d infantry, February 13, 1832.
William C. Heyward, 3d infantry, February 6, 1832.
William H. Warfield, 3d infantry, October 12, 1832.
James P. Hardin, 4th infantry, December 15, 1832.
Henry Van Rensselaer, 5th infantry, January 27, 1832.
Charles Whittlesey, 5th infantry, September 30, 1832.
Samuel R. Curtis, 7th infantry, June 30, 1832.
Albert T. Bledsoe, 7th infantry, August 31, 1832.
Richard G. Fain, 1st artillery, December 31, 1832.
C. H. Larned, 4th infantry, December 31, 1832.

DEATHS.

COLONEL.

Willoughby Morgan, 1st infantry, April 4, 1832.

LIEUTENANT COLONEL.

Brevet Colonel Wm. MacRea, 2d artillery, November 3, 1832.

CAPTAINS.

Brevet Major Theo. Maurice, corps of engineers, March 5, 1832.
Brevet Major Thomas J. Beall, 1st infantry, October 26, 1832.
Brevet Major Elijah Boardman, 2d infantry, March 22, 1832.

FIRST LIEUTENANTS.

George Webb, 1st artillery, April 20, 1832.
Frederick L. Griffith, 2d artillery, January 28, 1832.

SECOND LIEUTENANTS.

Napoleon B. Bennett, 3d artillery, November 2, 1832.
Gustavus Brown, 3d artillery, July 12, 1832.
Levin Gale, 1st infantry, September 1, 1832.
Joseph Clay, 4th infantry, July 8, 1832.
Nelson N. Clark, 4th infantry, July 11, 1832.
Samuel Torrence, 4th infantry, September 1, 1832.
Amos Foster, 5th infantry, February 7, 1832.
Benjamin W. Kinsman, 7th infantry, May 14, 1832.

BREVET SECOND LIEUTENANTS.

Franklin McDuffee, 4th artillery, July 15, 1832.
Thomas J. Royster, 6th infantry, September 5, 1832.

PAYMASTER.

Charles B. Tallmadge, December 31, 1832.

SURGEONS.

Josiah Everett, July 14, 1832.
Richard M. Coleman, September 2, 1832.

ASSISTANT SURGEONS.

James Mann, November 7, 1832.
John Jackson, January 31, 1832.
Mordecai Hale, December 9, 1832.

TEACHER OF DRAWING.

Thomas Gimbrede, December 25, 1832.

DECLINED.

CAPTAINS.

Brevet Major William Wade, ordnance.
Captain Richard B. Mason, ordnance.

ASSISTANT SURGEON.

Andrew M. Clark.

DISMISSED.

SECOND LIEUTENANT.

William E. Aisquith, 2d artillery, May 24, 1832.

The following list of cadets is attached to the Army Register conformably to a regulation for the government of the Military Academy requiring the names of the most distinguished cadets, not exceeding five in each class, to be reported for this purpose at each annual examination.

REPORTED AT THE EXAMINATION IN JUNE, 1832.

Names.	Studies in which each cadet particularly excels.
FIRST CLASS.	
George W. Ward -----	Mathematics, natural philosophy, chemistry and mineralogy, civil and military engineering, rhetoric and moral philosophy, French language, drawing, tactics, and artillery.
Robert P. Smith -----	Mathematics, natural philosophy, chemistry and mineralogy, civil and military engineering, rhetoric and moral philosophy, French language, drawing, tactics, and artillery.
Benj. S. Ewell -----	Mathematics, natural philosophy, chemistry and mineralogy, civil and military engineering, rhetoric and moral philosophy, French language, tactics, and artillery.
George W. Cass -----	Mathematics, natural philosophy, chemistry and mineralogy, civil and military engineering, rhetoric and moral philosophy, tactics, and artillery.
Jacob W. Bailey -----	Mathematics, natural philosophy, chemistry and mineralogy, civil and military engineering, rhetoric and moral philosophy, and French language.
SECOND CLASS.	
Jonathan G. Barnard ----	} Natural philosophy, chemistry, and drawing.
Frederick A. Smith ----	
Wm. H. Sidell -----	} Natural philosophy and chemistry.
George W. Cullum -----	} Natural philosophy, chemistry, and drawing.
Rufus King -----	
THIRD CLASS.	
William Smith -----	} Mathematics, French, and drawing.
Harrison Loughborough -	} Mathematics and French.
John Sanders -----	
John F. Lea -----	} Mathematics, French, and drawing.
James Duncan -----	
FOURTH CLASS.	
George M. Legate -----	} Mathematics and French.
Thomas T. Gantt -----	
Charles H. Bigelow -----	
Charles J. Whiting -----	
Montgomery Blair -----	

Officers of the line of the army employed in the staff and on other detached service, 1833.

Regiments,	General staff.				Recruiting service.				Ordnance service.				Topographical service.				Engineer service.				Military Academy.				Special service.				Recapitulation.									
	Majors.	Captains.	First lieutenants.	Second lieutenants.	Total.	Majors.	Captains.	First lieutenants.	Second lieutenants.	Total.	Captains.	First lieutenants.	Second lieutenants.	Total.	First lieutenants.	Second lieutenants.	Brevet 2d lieutenants.	Total.	First lieutenants.	Second lieutenants.	Brevet 2d lieutenants.	Total.	Captains.	First lieutenants.	Second lieutenants.	Total.	Captains.	First lieutenants.	Second lieutenants.	Total.	Majors.	Captains.	First lieutenants.	Second lieutenants.	Brevet 2d lieutenants.	Aggregate.		
First artillery	1	1	2	2	6							4	1	5	1	2	1	4	1	1	1	3	1	2	2	5	1	2	1	4	1	2	1	4	1	2	1	16
Second artillery	1	1	2	4	8						1	2	2	5	1	2	1	4	1	4	1	6									1	2	2	6	8	2	19	
Third artillery	1	1	2	2	6							2	3	5	3	3	3	9	1	1	2	6			1	1	2	1	1	2	1	5	8		14			
Fourth artillery			1	1	2							3	1	4	1	2	1	4	1	1	2	6			1	1	2	1	1			7	10	1	18			
Aggregate of artillery	1	3	5	9	18						1	11	7	19	3	9	3	15	1	2	3	17			1	3	4	1	4	25	33	4		67				
First infantry	1	1	2	2	6	1	1	2	4	4					1	1	2	4				1	1			1	1	4	1	2					8			
Second infantry	1	1	3	3	8	1	1	2	5	5						2	2	4				1	1			1	1	2	2	2	6	1			11			
Third infantry			1	1	2			2	2	2													1		2	3	1	3		3					7			
Fourth infantry			2	2	4			2	2	2					1	1	2	4				1			1	2	3	4		4					9			
Fifth infantry	1	2	3	3	9			1	1	2					1	1	2	4				1	1			1	1	2	4	1	1				8			
Sixth infantry	1	1	2	2	6			2	1	3					1	1	2	4				1	1	2		2	2	2	2	2	2	2	1			9		
Seventh infantry	1	2	3	3	9			2	3	5					1	2	3	6				1	1		3	1	4	2	4	2	8	4	2		16			
Aggregate of infantry	5	8	16	16	45	1	6	6	13	26					2	7	11	20				6	6	3	4	13	1	18	21	23	5			68				
Grand aggregate	1	8	13	25	47	1	6	6	13	26	1	11	7	19	5	16	5	26	1	5	1	7	6	15	3	25	6	4	7	17	2	22	46	50	9	135		

Organization of the army of the United States.

	Major general.	Brigadier general.	Adjutant general.	Inspector general.	Quartermaster general.	Quartermasters.	Commissary general of subsistence.	Commissaries.	Surgeon general.	Surgeons.	Assistant surgeons.	Paymaster general.	Paymasters.	Commissary general of purchases.	Military storekeepers.	Colonels.	Lieutenant colonels.	Majors.	Captains.	First lieutenants.	Second lieutenants.	Third lieutenants.	Sergeant majors.	Quartermaster sergeants.	Sergeants.	Corporals.	Principal musicians.	Musicians.	Artificers.	Enlisted men for ordnance.	Privates.	Total commissioned.	Total non-commissioned officers, musicians, artificers, and privates.	Aggregate.
General staff.....	1	2	1	2	1	4	1	2																							14	68	14	
Medical staff.....									1	12	55																					68	68	68
Pay department.....												1	14																			15	15	15
Purchasing department.....														1	2																	3	3	3
Corps of engineers.....																1	1	2	6	6	6											22	22	22
Topographical engineers.....																		6	4												10	10	10	
Ordnance department.....																1	1	2	10					44					250		14	294	308	
Four regiments of artillery.....																4	4	4	36	72	72		4	4	144	144		72	108		1,512	192	1,988	2,180
Seven regiments of infantry.....																7	7	7	70	70	70		7	7	210	280	14	140		2,940	231	3,598	3,829	
Battalion of mounted rangers.....																		1	6	6	6	6		30	30					600	25	660	685	
Grand aggregate.....	1	2	1	2	1	4	1	2	1	12	55	1	14	1	2	13	13	22	132	154	154	6	11	11	428	454	14	212	108	250	5,052	594	6,540	7,134

Component parts of regiments, battalion, and companies.

	Colonel.	Lieut. colonel.	Major.	Adjutant.	Captains.	1st lieutenants.	2d lieutenants.	3d lieutenants.	Sergeant major.	Quartermaster sergeant.	Sergeants.	Corporals.	Principal musicians.	Musicians.	Artificers.	Privates.	Total commiss'd.	Total non-com'd officers, musicians, and privates.	Aggregate.
A regiment of artillery.....	1	1	1	1	9	18	18		1	1	36	36		18	27	378	48	497	545
A company of artillery.....					1	2	2				4	4		2	3	42	5	55	60
A regiment of infantry.....	1	1	1	1	10	10	10		1	1	30	40	2	20		420	33	514	547
A company of infantry.....					1	1	1				3	4		2		42	3	51	54
Battalion of mounted rangers.....			1		6	6	6	6			30	30				600	25	660	685
A company of mounted rangers.....					1	1	1	1			5	5				100	4	110	114

The adjutants being taken from subalterns of the line are not included in the aggregate.

A list of the military posts and arsenals.

No.	Posts.	State or Territory.	Post office.	Permanent commanders.	Regiment.
EASTERN DEPARTMENT.					
1	Fort Winnebago	Michigan Territory.	Fort Winnebago	Lieut. Col. Cutler	5th infantry.
2	Fort Brady	do	Sault St. Marie	Brevet Major Fowle	5th infantry.
3	Fort Mackinac	do	Michilimackinac	Brevet Major Thompson	2d infantry.
4	Fort Howard	do	Green Bay	Bvt. Brig. Gen. Brooke	5th infantry.
5	Fort Dearborn	Illinois.	Chicago	Major Whistler	2d infantry.
6	Fort Gratiot	Michigan Territory.	Fort Gratiot	Brevet Major Payne	4th artillery.
7	Fort Niagara	New York	Youngstown	Lieut. Col. Cummings	2d infantry.
8	Hancock Barracks	Maine	Houlton	Brevet Major Clark	2d infantry.
9	Fort Sullivan	do	Eastport	Captain Childs	3d artillery.
10	Fort Preble	do	Portland	Captain McClintock	3d artillery.
11	Fort Constitution	New Hampshire	Portsmouth	Captain Ansart	3d artillery.
12	Fort Independence	Massachusetts	Boston	Bvt. Lieut. Col. Brooks	3d artillery.
13	Fort Wolcott	Rhode Island	Newport	Brevet Major Lomax	3d artillery.
14	Fort Trumbull	Connecticut	New London	Captain Thruston	3d artillery.
15	West Point	New York	West Point	Brevet Lieut. Col. Thayer	-----
16	Fort Columbus	do	New York	-----	-----
17	Fort Hamilton	do	do	Brevet Major Pierce	4th artillery.
18	Fort McHenry	Maryland.	Baltimore.	Bvt. Col. Walbach	1st artillery.
19	Fort Severn	do	Annapolis	Brevet Major Erving	4th artillery.
20	Fort Washington	do	Fort Washington	Brevet Major Mason	1st artillery.
21	Fort Monroe	Virginia	Old Point Comfort	Brevet Colonel Eustis	4th artillery.
22	Bellona Arsenal	do	Argyle	Captain F. Whiting	1st artillery.
23	Fort Johnston	North Carolina	Smithville	Brevet Major Churchill	1st artillery.
24	Beaufort	do	Beaufort	Captain Griswold	1st artillery.
25	Fort Moultrie	Char'ston harbor, S. C.	Charleston	Lieut. Col. Bankhead	3d artillery.
26	Castle Pinkney				
27	Augusta Arsenal	Georgia	Augusta	-----	-----
28	Oglethorpe Barracks	do	Savannah	Captain Belton	2d artillery.
29	Fort Marion	Florida	St. Augustine	Captain Drane	2d artillery.
WESTERN DEPARTMENT.					
1	Fort Snelling	Upper Mississippi	Fort Snelling	Major Bliss	1st infantry.
2	Fort Crawford	do	Prairie du Chien	Col. Z. Taylor	1st infantry.
3	Fort Armstrong	Illinois.	Rock Island	Lieut. Col. Davenport	1st infantry.
4	Fort Leavenworth	Right bank of the Missouri, near the Little Platte.	Fort Leavenworth	Bvt. Major Riley	6th infantry.
5	Jefferson Barracks	Missouri.	Jefferson Barracks	Bvt. Brig. Gen. Atkinson	6th infantry.
6	Fort Gibson	Arkansas	Fort Gibson	Colonel Arbuckle	7th infantry.
7	Fort Jesup	Louisiana.	Fort Jesup	Bvt. B. G. Leavenworth	3d infantry.
8	Fort Towson	Arkansas	Little River Lick	Lieutenant Colonel Vose	3d infantry.
9	Baton Rouge	Louisiana	Baton Rouge	Bvt. Lieut. Col. Foster	4th infantry.
10	New Orleans	do	New Orleans	Lieut. Col. Twiggs	-----
11	Fort Wood	do	do	Bvt. Maj. Zantzing	2d artillery.
12	Fort Pike	do	Petite Coquille	Bvt. Maj. Mountfort	2d artillery.
13	Fort Jackson	do	Fort Jackson	Captain Baden	2d artillery.
14	Fort King	Florida	Seminole Agency	Captain Graham	4th infantry.
15	Key West	do	Key West	Bvt. Major Glassell	4th infantry.
	Arsenal, Kennebec	Maine	Augusta.	Bvt. Captain Mellon	2d artillery.
	Arsenal, Watertown	Massachusetts.	Watertown	Major Crair	Ordnance.
	Arsenal, Champlain	Vermont	Vergennes	Lieut. D. H. Vinton	3d artillery.
	Arsenal, Watervliet	New York	Watervliet	Lieut. Col. Talcott	Ordnance.
	Arsenal, Rome	do	Rome	Bvt. Captain Abeel	2d artillery.
	Arsenal, Allegheny	Pennsylvania.	Pittsburg	Bvt. Major Baker	Ordnance.
	Arsenal, Frankfort	do	Frankfort	Bvt. Lieut. Col. Worth	Ordnance.
	Arsenal, Pikesville	Maryland	Pikesville	Lieut. R. D. A. Wade	3d artillery.
	Arsenal, Washington	District of Columbia	Washington	Captain Mordecai	Ordnance.
	Arsenal, St. Louis	Missouri.	St. Louis	Captain Symington	Ordnance.
	Arsenal, Mount Vernon	Alabama	Mount Vernon	Captain Harding	Ordnance.
	Arsenal, Baton Rouge	Louisiana.	Baton Rouge	Captain Bradford	Ordnance.

The western department comprises all west of a line drawn from the southernmost point of East Florida to the northwest extremity of Lake Superior, taking in the whole of Tennessee and Kentucky; and the eastern department all east of such line, including Fort Winnebago.

The headquarters of the general-in-chief are in the District of Columbia; the headquarters of the western department are at Memphis, Tennessee; the headquarters of the eastern department are in the city of New York. These officers whose stations are changed by transfers and promotions will report for duty accordingly.

By order:

R. JONES, *Adjutant General.*

22D CONGRESS.]

No. 544.

[2D SESSION.]

ANNUAL RETURNS OF THE MILITIA OF THE UNITED STATES FOR 1832.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 6, 1833.

DEPARTMENT OF WAR, *February 5, 1833.*

SIR: I have the honor to transmit reports from the office of the Adjutant General of the militia force of the United States, and of their arms, &c., required to be laid before Congress by the act of March 2, 1803, "to provide for the national defence by establishing a uniform militia."

Very respectfully, I am, sir, your obedient servant,

LEWIS GASS.

HON. ANDREW STEVENSON, *Speaker of the House of Representatives.*

Abstract of the general annual returns of the militia of the United States, by States and Territories, according to the act of March, 1803, for the year 1832. 。

States and Territories.	Returns.		Infantry, &c.							Cavalry.							Artillery.							
	For what year received.	Date.	Number of divisions.	Number of brigades.	Number of regiments.	Number of battalions.	Number of companies.	Commissioned officers, including general division, brigade, staff, &c.	Non-commissioned officers, musicians, and privates.	Total.	Number of divisions.	Number of brigades.	Number of regiments.	Number of battalions.	Number of companies.	Commissioned officers.	Non-commissioned officers, musicians, and privates.	Total.	Number of divisions.	Number of brigades.	Number of regiments.	Number of battalions.	Number of companies.	
Maine	1832	Dec. 25.....	8	16	55	.....	516	1,994	33,383	35,377	.....	.....	2	13	31	152	1,440	1,592	.....	.....	2	10	29
New Hampshire.....	1832	June 19.....	3	6	40	80	367	1,361	22,283	23,644	.....	.....	.....	.....	36	138	1,270	1,408	.....	.....	.....	.....	39
Massachusetts.....	1832	Dec. 22.....	7	16	.....	.....	518	2,050	41,052	43,102	.....	.....	2	.....	18	91	736	827	.....	.....	3	3	46
Vermont	1823	Mar. 20, 1824	4	10	35	.....	.....	1,330	21,790	23,120	.....	.....	.....	.....	123	1,302	1,425	.....	.....	.....	.....	.....	22
Rhode Island.....	1832	Dec. 31.....	.....	2	4	.....	21	101	992	1,093	.....	.....	.....	.....	1	4	54	58	.....	.....	.....	.....	4
Connecticut.....	1832	Dec. 18.....	3	6	25	.....	252	986	19,903	20,889	.....	.....	.....	.....	19	105	917	1,022	.....	1	6	.....	43
New York	1832	Dec. 31.....	30	59	249	13	2,165	8,784	146,701	155,485	3	7	26	2	113	554	4,591	5,145	4	11	41	4	267	
New Jersey	1829	Dec. 2.....	4	13	49	105	437	1,681	31,983	33,664	.....	.....	4	8	33	137	1,617	1,754	.....	.....	.....	.....	32
Pennsylvania.....	1830	Feb. 16, 1831	16	32	146	80	537	.....	.....	164,421	.....	.....	.....	.....	.....	.....	2,873	.....	.....	.....	.....	.....	.....
Delaware	1827	.....	1	3	10	.....	.....	371	7,861	8,232	.....	.....	.....	.....	32	234	266	.....	.....	.....	.....	.....	.....
Maryland	1832	Dec. 31.....	4	14	50	106	480	1,905	39,597	41,502	.....	.....	14	28	60	328	2,266	2,594	.....	1	2	3	33
Virginia	1833	Nov. 15.....	5	22	143	.....	1,107	3,351	86,511	89,862	.....	.....	5	.....	102	381	6,996	7,377	.....	.....	5	.....	74
North Carolina	1832	Dec. 20.....	8	18	94	188	756	2,820	61,134	63,954	.....	.....	5	10	20	89	710	799	.....	.....	.....	.....	5
South Carolina	1830	Jan. 19, 1831	5	10	51	102	489	1,886	43,719	45,605	.....	.....	.....	.....	.....	181	1,310	1,491	.....	.....	.....	.....	.....
Georgia	1830	May 24, 1831	9	18	74	.....	777	2,676	39,655	42,329	.....	.....	.....	.....	9	31	417	448	.....	.....	.....	.....	1
Alabama	1829	Dec. 20.....	3	5	22	44	206	720	13,990	14,710	.....	.....	.....	.....	.....	12	170	182	.....	.....	.....	.....	.....
Louisiana	1829	Jan. 9, 1820	3	7	23	49	163	659	12,375	13,034	.....	.....	.....	.....	14	7	149	156	.....	.....	.....	1	2
Mississippi	1830	Dec. 6.....	2	6	26	613	12,989	13,602
Tennessee	1830	Dec. 31.....	6	3,570	56,637	60,207	775
Kentucky	1832	Dec. 10.....	14	29	120	240	1,067	3,388	58,944	62,332	25	84	1,394	1,478	6
Ohio	1832	Jan. 7, 1833	17	54	149	9	1,241	4,693	104,751	109,444	.....	.....	3	16	71	361	3,697	4,058	.....	.....	.....	4	32
Indiana	1833	Jan. 4, 1833	9	22	79	153	734	2,573	46,159	48,732	106	1,681	1,787
Illinois	1830	Jan. 1, 1831	2	5	28	70	204	856	4	12
Missouri	1831	Dec. 31.....	4	12	36	35	208	3,408	3,616
Michigan Territory	1831	Nov. 28.....	8	18	64	259	4,821	5,080	3	12	134	146	1	3	1
Arkansas Territory	1825	Dec. 16.....	9	145	1,740	1,885
Florida Territory	1831	Nov. 8.....	43	784	827	131	143
District of Columbia	1832	Nov. 20.....	1	3	6	22	90	1,098	1,888

Abstract of the general annual returns of the militia of the United States, &c —Continued.

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States and Territories.	Returns.		Artillery.			Riflemen.							Aggregate.	Remarks.	
	For what year received.	Date.	Commission'd officers.	Non-commission'd officers, musicians, and privates.	Total.	Number of divisions.	Number of brigades.	Number of regiments.	Number of battalions.	Number of companies.	Commission'd officers.	Non-commission'd officers, musicians, and privates.			Total.
Maine.....	1832	Dec. 25.....	114	1,653	1,767	.....	.....	.....	.....	25	71	1,199	1,270	40,006	"One company of cavalry and six companies of infantry not included; no returns have been made."
New Hampshire.....	1832	June 19.....	111	1,485	1,596	.....	.....	.....	.....	30	82	1,091	1,173	27,952	Three companies of cavalry and one company of artillery, amounting to 731, included in the aggregate.
Massachusetts.....	1832	Dec. 22.....	173	2,604	2,867	.....	.....	.....	.....	37	.....	.....	.....	46,796	
Vermont.....	1833	Mar. 20, 1834	83	953	1,036	.....	.....	.....	.....	.....	.....	.....	.....	25,581	
Rhode Island.....	1832	Dec. 31.....	19	207	226	.....	.....	.....	.....	.....	.....	.....	.....	1,377	The adjutant general says "there are in the State 15 regiments, 91 companies of infantry, and 17 companies of light infantry; the whole number of militia enrolled is probably about 9,600."
Connecticut.....	1832	Dec. 18.....	210	2,688	2,898	.....	.....	.....	.....	22	62	1,163	1,225	26,034	
New York.....	1832	Dec. 31.....	1,003	13,178	14,181	2	4	26	1	134	617	8,512	9,129	183,940	The adjutant general reports the strength of the militia to be 188,506.
New Jersey.....	1829	Dec. 2.....	89	1,836	1,925	.....	.....	.....	.....	24	81	1,747	1,828	39,171	
Pennsylvania.....	1830	Feb. 16, 1831	.....	.....	3,661	.....	.....	.....	.....	.....	.....	.....	11,330	182,285	
Delaware.....	1827	.....	12	176	188	.....	.....	.....	.....	.....	32	511	543	9,229	
Maryland.....	1832	Dec. 31.....	104	1,536	1,640	.....	.....	2	4	75	50	673	723	46,459	
Virginia.....	1832	Nov. 15.....	224	5,508	5,732	.....	.....	.....	.....	.....	.....	.....	.....	102,971	
North Carolina.....	1832	Dec. 20.....	14	40	54	.....	.....	.....	.....	28	39	908	947	65,754	
South Carolina.....	1830	Jan. 19, 1831	72	970	1,042	.....	.....	.....	.....	.....	104	1,270	1,374	49,512	
Georgia.....	1830	May 24, 1831	3	52	55	.....	.....	.....	.....	.....	.....	.....	.....	42,832	
Alabama.....	1829	Dec. 20.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,892	The adjutant general reports the aggregate greatly below the real strength of the militia of the State.
Louisiana.....	1829	Jan. 9, 1820	55	719	774	.....	.....	.....	.....	.....	60	784	844	14,808	
Mississippi.....	1830	Dec. 6.....	.....	.....	.....	.....	.....	.....	.....	.....	6	116	122	13,724	
Tennessee.....	1830	Dec. 31.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60,982	The governor reports no returns from several regiments, and says: "If a complete return could be had our militia would be at least 85,000."
Kentucky.....	1832	Dec. 10.....	20	352	372	.....	.....	.....	.....	22	58	1,612	1,670	65,852	
Ohio.....	1832	Jan. 7, 1833	110	1,836	1,946	.....	.....	26	7	263	967	15,746	16,713	132,161	
Indiana.....	1832	Jan. 4, 1833	60	620	680	.....	.....	.....	.....	.....	122	2,592	2,714	53,913	
Illinois.....	1830	Jan. 1, 1831	.....	.....	.....	.....	.....	.....	.....	11	33	.....	.....	27,386	
Missouri.....	1831	Dec. 31.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,616	The adjutant general reports "only four brigades heard from, and those returns very incomplete."
Michigan Territory.....	1831	Nov. 28.....	3	38	41	.....	.....	.....	.....	.....	11	198	209	5,476	
Arkansas Territory.....	1825	Dec. 16.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,028	The governor reports the 1st regiment of infantry imperfect; the 2d only two companies returned; the 5th and 9th no returns received.
Florida Territory.....	1831	Nov. 8.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	827	The adjutant general reports the militia to be about 4,000 effective men.
District of Columbia.....	1832	Nov. 20.....	2	23	25	.....	.....	.....	.....	.....	4	32	36	1,249	The first and second brigades not heard from.
														1,286,813	

Abstract of the annual return of arms, accoutrements, and ammunition of the militia of the United States.

States and Territories.	ORDNANCE AND ORDNANCE STORES.																																		
	Brass.								Iron.										Sponges and rammers.	Ladles and worms.	Bricoles and drag ropes.	Trail handspikes.	Lead aprons.	Ammunition boxes.	Tumbrels and powder carts.	Sets of harness.	Rounds of shot and shells.	Pounds of cannon powder.	Gun-carriages.						
	12-pounders.	9-pounders.	6-pounders.	4-pounders.	3-pounders.	2-pounders.	Howitzers.	Epourvets.	Cannon.	42-pounders.	32-pounders.	24-pounders.	18-pounders.	12-pounders.	9-pounders.	6-pounders.	4-pounders.	3-pounders.												Howitzers.	Swivels.	Cannon.			
Maine.....	2		14		44		3	3		1	4	25	5	2	5	12	8	5	1			108	101	398	154	80	147	52	141	8,244					
New Hampshire.....				38							4	8			2	14	3					50	63	83	68	28	101	7	51						
Massachusetts.....	2		46	12	32									2								126	93	545	141	78	126	45	218						
Vermont.....																					20														
Rhode Island.....				6												2						4							2	7					
Connecticut.....			16		7									5	7	88		2				128	100	466	116	68	111	2	112	6,240lb.					
New York.....		3	81		5											35						128	107	328		73	170		90	197	2,120				
New Jersey.....				4												23	6	1		3		33		39	22				24						
Pennsylvania.....			5						8							10					10														
Delaware.....																	1																		
Maryland.....				2	1							2		1	37	4			1			77	41	203	84	34	34	3	23			9,304			
Virginia.....			5	2												23	4					23	12	18	6	11	17	1	9				14		
North Carolina.....																																			
South Carolina.....			2	18		1	2									1	7					13	8	21	10	8	13		4			15			
Alabama.....																																			
Louisiana.....			2	4																		6	6	12	6	6	6	2	8	100	100				
Tennessee.....																																			
Kentucky.....			2												1	1	1					4	4	8	10	4	4	5	5			175			
Ohio.....																16						15	11	41	25	8	12								
Indiana.....																	8					8		18	10	4	6			3					
Missouri.....																																			
Michigan Territory.....																																			
Distriet of Columbia.....													2	2																					

NOTE.—No returns of arms, &c., from the States of Georgia, Mississippi, Illinois, nor from the Territories of Arkansas and Florida. This return of arms, &c., is taken from the returns corresponding in date with those which furnished the strength of the militia.

Abstract of the annual return of arms, accoutrements, and ammunition, &c.—Continued.

States and Territories.	Muskets.	Bayonets.	Carriage-boxes and belts.	Bayonets, scabbards, and belts.	Brushes and picks.	Spare flints.	Ball cartridges.	Rifles.	Powder-horns.	Pouches.	Loose balls.	Pounds of rifle powder.	Horsemen's pistols.	Swords.	Swords, scabbards, and belts.	Knapsacks.	Haversacks.	Drums.	Fifes.	Bugles and trumpets.	Remarks.
Maine.....	26,076	25,833	5,416	17,978	17,720	85,271	20,578	1,528	1,036	1,094	111,600	21	1,547	2,332	2,081	17,305	71	610	441	56	
New Hampshire.....	22,022	21,854	15,604	14,609	14,419	30,692	4,000	1,300	538	439	2,769	.....	1,803	2,197	2,163	14,934	41	527	430	24	
Massachusetts.....	15,277	15,358	16,067	15,340	16,645	33,990	215,113	2,383	1,762	1,857	33,244	641½	755	2,080	2,125	16,620	133	451	291	76	
Vermont.....	15,986	15,081	17,696	11,910	15,436	23,110	.....	265	116	275	.....	.....	2,778	2,624	1,994	.....	13,508	422	469	7	
Rhode Island.....	823	818	872	821	807	2,136	.....	.....	.....	.....	.....	.....	51	190	100	258	.....	36	23	.....
Connecticut.....	20,548	20,491	16,508	16,408	12,889	96,820	240,820	1,798	486	497	16,716 lbs.	240	3,680	5,310	5,320	9,790	74	570	540	47	
New York.....	32,987	32,987	35,862	31,764	18,592	52,931	3,642	29,871	25,201	22,994	73,497	2,809½	7,965	7,688	4,509	2,184	101	3,530	2,462	382	
New Jersey.....	12,968	2,932	1,060	2,932	.....	.....	.....	764	117	94	.....	.....	1,308	2,339	2,339	.....	.....	327	349	51	
Pennsylvania.....	18,144	.....	.....	.....	.....	.....	.....	9,253	.....	.....	.....	.....	1,134	1,342	.....	.....	.....	1,131	732	116	Exclusive of those in arsenals.
Delaware.....	840	818	384	.....	.....	.....	.....	79	.....	.....	.....	.....	164	374	.....	.....	.....	.....	.....	.....
Maryland.....	17,368	12,733	12,516	3,905	577	9,520	66,814	2,158	1,116	1,922	11,658	160	480	1,264	1,115	2,219	2	120	.....	114	
Virginia.....	37,416	37,109	6,650	40	.....	715	2 boxes.	1,817	235	229	.....	.....	1,885	2,064	1,719	.....	.....	208	208	26	
North Carolina.....	12,130	9,226	3,200	3,240	1,504	.....	.....	15,950	.....	.....	.....	.....	2,307	1,875	1,000	.....	.....	950	917	64	
South Carolina.....	*1,961	1,828	1,957	1,599	1,321	11,070	2,510	11,050	7,211	7,211	22,220	877	331	1,948	1,960	5,378	79	168	147	30	
Alabama.....	2,087	.....	.....	.....	.....	1,006	.....	367	725	395	2,165	229	121	375	124	.....	.....	49	51	4	
Louisiana.....	1,000	1,000	550	550	550	2,000	2,000	206	6	.....	.....	.....	.....	100	100	500	.....	11	11	29	
Tennessee.....	1,617	763	.....	763	.....	.....	.....	*14,741	.....	†10,828	.....	.....	.....	1,441	.....	.....	.....	412	373	.....
Kentucky.....	5,609	5,409	4,719	4,120	576	33,142	5,451	5,287	7,122	5,781	55,493	3,037	674	1,667	1,416	542	75	231	174	17	
Ohio.....	14,591	5,544	2,044	1,665	848	2,150	452	18,550	7,703	5,221	9,408	450½	3,073	4,298	4,101	112	193	984	714	85	
Indiana.....	577	232	189	15	.....	10,000	.....	8,200	6,500	.....	48,000	1,200	350	780	780	.....	.....	288	400	20	
Missouri.....	.....	.....	.....	.....	10	337	.....	114	131	.....	1,299	76½	.....	4	4	.....	.....	2	2	.....
Michigan Territory.....	98	39	13	3	89	132	60	†732	447	534	936	38	76	112	16	.....	.....	29	24	2	
District of Columbia.....	144	144	144	144	.....	.....	.....	66	.....	.....	.....	.....	.....	18	.....	.....	76	.....	.....	.....

* Shot guns included.

† Fuses included.

‡ Powder-horns included.

NOTE.—No returns of arms, &c., from the States of Georgia, Mississippi, Illinois, nor from the Territories of Arkansas and Florida. This return of arms, &c., is taken from the returns corresponding in date with those which furnished the strength of the militia.
 R. JONES, Adjutant General United States Army.
 ADJUTANT GENERAL'S OFFICE, Washington, February 4, 1833.

[22D CONGRESS.]

No. 545.

[2D SESSION.]

ON THE EXPEDIENCY OF COMPLETING THE MILITARY ROAD FROM HOULTON TO MARS HILL, IN MAINE.

COMMUNICATED TO THE SENATE FEBRUARY 7, 1833.

The Committee on Military Affairs, to whom was referred the memorial of sundry inhabitants of Houlton, in Maine, praying that an appropriation be made for completing the military road from that place to Mars Hill, in said State, reported:

That the said memorial having been submitted to the consideration of the honorable the Secretary of War, and having received the expression of his opinion that the extension of the said road under present circumstances is unnecessary, the committee are of opinion that the prayer of the memorialists ought not to be granted, and recommend accordingly.

[22D CONGRESS.]

No. 546.

[2D SESSION.]

ORDERS GIVEN TO THE MILITARY AND NAVAL COMMANDERS OF THE UNITED STATES AT CHARLESTON, SOUTH CAROLINA, IN 1832-'33.

COMMUNICATED TO THE SENATE FEBRUARY 12, 1833.

To the Senate:

In compliance with the resolution of the Senate requesting the President of the United States to lay before it "copies of the orders which have been given to the commanding officers of the military forces assembled in and near to the city of Charleston, South Carolina; and also copies of the orders which have been given to the commander of the naval forces assembled in the harbor of Charleston, particularly such orders, if any such have been given, to resist the constituted authorities of the State of South Carolina within the limits of said State," I transmit herewith papers numbered from one to seventeen inclusive, embracing the orders which have been given to the commanding officers of the land and naval forces assembled in and near the city of Charleston, and within the limits of the State of South Carolina, and which relate to the military operations in that quarter. No order has at any time been given in any manner inconsistent therewith. There is a part, however, of the letter of the Secretary of War, dated December 3, 1832, omitted, which, being conditional in its character, and not relating to the operation of the troops, it is deemed improper, in the present state of the service, to communicate.

No order has been at any time given "to resist the constituted authorities of the State of South Carolina within the chartered limits of said State."

ANDREW JACKSON.

WASHINGTON, *February 12, 1833.*

No. 1.

[Confidential.]

NAVY DEPARTMENT, *December 12, 1832.*

SIR: The Experiment and Natchez will both sail soon as practicable, and touch at the port of Charleston, South Carolina.

You can take passage in either to your station, and will, when necessary, after perusing the instructions given to their commanders, issue any orders to either, within the tenor of those instructions, which your skill and experience may deem necessary.

I wish you, before they sail, to give every caution and advice to them as to their passage at this inclement season, and to see that they have on board suitable charts, chronometers, &c., for the voyage.

You are requested to furnish me with a particular report from time to time of all your proceedings while commander of the station at Charleston, South Carolina.

I am, respectfully, sir, your obedient servant,

LEVI WOODBURY.

Com. JESSE D. ELLIOTT, (*Commanding Naval Station, Charleston, S. C.,*) at *Norfolk, Virginia.*

No. 2.

[Confidential.]

NAVY DEPARTMENT, *December 12, 1832.*

SIR: You are directed, whenever ready again for sea, to proceed to the port of Charleston, South Carolina, and carry out, as passenger there, Commodore Jesse D. Elliott, the commander of that station.

You will remain there till further orders from the department, taking special care to give to all our citizens and navigation in that neighborhood all needful aid and protection in their accustomed and lawful pursuits.

In the present inflamed condition of the public mind in a portion of the community there, you will use scrupulous caution to give no just occasion for offence, and will enjoin on your officers and crew the utmost moderation and forbearance in their department, consistent with their duty to the laws and Constitution.

Your acts will be confined entirely to the defensive—giving relief to those in distress and to those under attacks from illegal force; and will exercise the greatest vigilance to co-operate with the commander of the forts in that neighborhood in defending the public works and public property from aggression, injury, or capture, by any violent and illegal assaults from any quarter whatever.

You will consult and obey the commander at that station in any exigency, and should another vessel of war of the United States touch at the same port while you remain there, you can extend your cruise to the port of Savannah, and it is hoped a cordial union will exist in all your proceedings.

I am, respectfully, sir, your obedient servant,

LEVI WOODBURY.

Lieut. WILLIAM MERVINE, *Commanding U. S. Schooner Experiment, Norfolk, Virginia.*

No. 3.

[Confidential]

NAVY DEPARTMENT, *December 19, 1832.*

SIR: You are directed, as soon as the Natchez shall be ready for sea, to proceed to the port of Charleston, South Carolina, and carry with you as passenger from Norfolk, should he be there and request it, Commodore Jesse D. Elliott, the commander of the Charleston station. After reaching Charleston you will remain there until further orders from this department, taking especial care to give to all our citizens and navigation in that neighborhood all needful aid and protection in their accustomed and lawful pursuits.

In the present excited state of feeling of a portion of the community there, you will use scrupulous caution to give no just occasion for offence, and will enjoin on your officers and men the utmost moderation and forbearance in their department, consistent with the fulfilment of their duty to the Constitution and laws.

Your acts are to be confined entirely to the defensive—giving relief to those in distress and to those under attacks from illegal force, and vigilantly co-operating with the commanders of the forts in that neighborhood in defending the public works and public property from aggression, injury, or capture, by any violent and illegal assaults from any quarter whatever.

You will consult and obey the commander of that station in any exigency, and it is hoped a cordial union will exist in all your proceedings.

I am, respectfully, sir, your obedient servant,

LEVI WOODBURY.

Mast. Com. JOHN P. ZANTZINGER, *Commanding U. S. Ship Natchez, Norfolk, Virginia.*

No. 4.

[Confidential]

NAVY DEPARTMENT, *December 24, 1832.*

SIR: Among the duties intrusted to you while on the Atlantic coast the present winter is that of seeking, by every judicious means, the safety of our coasting navigation and vessels coming home from abroad at this inclement season.

After arriving at Charleston, and making it your station till other orders, you will occasionally, after storms and inclement weather, cruise at some distance up and down the coast, and, if finding any vessels in distress, yield them all practicable aid.

I am, respectfully, sir, your obedient servant,

LEVI WOODBURY.

Lieutenant WILL. MERVINE, *Commanding U. S. Schooner Experiment, Norfolk, Virginia.*

No. 5.

[Confidential.]

NAVY DEPARTMENT, *December 24, 1832.*

SIR: Among the duties intrusted to you while on the Atlantic coast the present winter is that of seeking, by every judicious means, the safety of our coasting navigation and vessels coming home from abroad at this inclement season.

After arriving at Charleston, and making it your station till other orders, you will occasionally, after storms and inclement weather, cruise at some distance up and down the coast, and, if finding any vessels in distress, yield them all practicable aid.

I am, respectfully, sir, your obedient servant,

LEVI WOODBURY.

Mast. Com. JOHN P. ZANTZINGER, *Commanding U. S. Ship Natchez, Norfolk, Virginia.*

No. 6.

HEADQUARTERS OF THE ARMY, *Washington, October 29, 1832.*

SIR: From the information which has been received by the Executive, it is deemed necessary that the officers in the harbor of Charleston should be advised of the possibility of attempts being made to surprise, seize, and occupy the forts committed to them. You are therefore especially charged to use your utmost vigilance in counteracting any such attempts. You will call personally on the commanders of Castle Pinckney and Fort Moultrie, and instruct them to be vigilant to prevent surprise, in the night or by day, on the part of any set of people whatever who may approach the forts with a view to seize and occupy them. You will warn the said officers that such an attempt is apprehended, and that they will be held responsible for the defence, to the last extremity, of the forts and garrisons under their respective commands against any assault, and also against every intrigue and surprise.

The attempt to surprise the forts and garrisons, it is expected, will be made by the militia, and it must be guarded against by constant vigilance and repelled at every hazard.

These instructions you will be careful not to show to any persons other than the commanding officers of Castle Pinckney and Fort Moultrie. They are to be considered by you and them as strictly confidential, and will govern you and them as commanders in the harbor.

I am, sir, respectfully, yours,

A. MACOMB, *Major General Commanding.*

Brevet Major J. F. HEILEMAN, *Commanding the troops of the United States in Charleston, and in the harbor of Charleston, South Carolina.*

No. 7.

[Confidential.]

ADJUTANT GENERAL'S OFFICE, *Washington, November 6, 1832.*

SIR: The general-in-chief directs that you order Captain Ripley, with his company (B) of the fourth regiment of artillery, to proceed forthwith to Fort Moultrie, in the harbor of Charleston, South Carolina, with further orders to report his arrival at that post to the commanding officer of the troops on the Charleston station.

I am, sir, very respectfully, your obedient servant,

R. JONES, *Adjutant General.*

Brevet Colonel EUSTIS, *Fourth Artillery, Commanding Fort Monroe, Virginia.*

No. 8.

ADJUTANT GENERAL'S OFFICE, *Washington, November 7, 1832.*

SIR: The general-in-chief directs that you order company C, of the first regiment of artillery, to proceed forthwith to Fort Moultrie, in the harbor of Charleston, with orders to report to the commanding officers of that post and station.

I am, sir, very respectfully, your obedient servant,

R. JONES, *Adjutant General.*

Brevet Colonel EUSTIS, *Commanding Fort Monroe, Virginia.*

No. 9.

HEADQUARTERS, *Washington, November 12, 1832.*

SIR: I have this day received your letter of the 5th instant. By this time it is expected that the barbette carriages for Castle Pinckney have arrived. I was surprised to find that they had not been shipped many months ago, as they were ordered at the same time with the other equipments.

In reply to your inquiry, how you are to act in case the authorities of South Carolina should demand possession of the citadel and the arms belonging to the State, I have to state that you will, on such demand, evacuate the citadel, and deliver to the proper authority the arms, taking, of course, receipts for the property, as is usual. And should the cholera press on you, you are authorized to retire with your company to Sullivan's island or Castle Pinckney, as you may deem best. But in the latter case you will write a letter to the intendant of the city, informing him of your intention; and as it has been intimated to you that the citadel and the arms belonging to the State will be demanded of you, that you are desirous of turning them and all other property in your charge over to the proper authorities, that you will do so on the demand of such authorities, and retire from the city. You will, however, take care to secure all the property belonging to the United States that may be of use or valuable, and cause it to be transferred to Castle Pinckney or Fort Moultrie, or both, according to your judgment will be most proper. Be careful to do everything in writing, in the way of communication with the authorities with whom you may act; be courteous and decided, avoiding all committal on your part as to hostility, but defend yourself, if attacked, in conformity with the instructions you have received.

I have the honor to be, sir, your obedient servant,

ALEX. MACOMB, *Major General, Commanding.*

Brevet Major HEILEMAN, *Commanding in Charleston, &c., &c.*

No. 10.

[Confidential.]

WASHINGTON, *November 18, 1832.*

SIR: The state of affairs in South Carolina has occasioned much solicitude to the President. He indulges the hope that the intelligence and patriotism of the citizens will prevent any infraction of the Constitution and laws of the general government. But, while he anxiously looks for this result, he deems it possible, from the information he has received, that, in the first effervescence of feeling, some rash attempt may be made by individuals to take possession of the forts of the United States in the harbor of Charleston. The possibility of such a measure furnishes a sufficient reason for guarding against it, and the President is therefore anxious that the situation and means of defence of these fortifications should be inspected by an officer of experience, who could also estimate and provide for any dangers to which they may be exposed. He has full confidence in your judgment and discretion, and it is his wish that you repair immediately to Charleston, and examine everything connected with the fortifications. You are at liberty to take such measures, either by strengthening these defences or by re-inforcing these garrisons with troops drawn from any other posts, as you may think prudence and a just precaution require.

Your duty will be one of great importance and of great delicacy. You will consult fully and freely with the collector of the port of Charleston and with the district attorney of South Carolina; and you will take no step, except what relates to the immediate defence and security of the posts, without their concurrence. The execution of the laws will be enforced through the civil authority, and by the mode pointed out by the acts of Congress. Should, unfortunately, a crisis arise, when the ordinary power in the hands of the civil officers shall not be sufficient for this purpose, the President will determine the course to be taken and the measures to be adopted. Till, therefore, you are otherwise instructed, you will act in obedience to the legal requisitions of the proper civil officers of the United States.

I will thank you to communicate to me freely and confidentially upon every topic upon which you may deem it important for the government to receive information.

Very respectfully, your obedient servant,

LEWIS CASS.

Major General Scott, *Commanding Eastern Department, Washington.*

No. 11.

[Confidential.]

DEPARTMENT OF WAR, *December 3, 1832.*

SIR: Your letter of the 27th ultimo has been received and laid before the President. He is pleased at the discretion and judgment manifested by you.

The course of the government will be regulated by the principles stated in the personal interview I had with you. I cannot but hope that the good sense and patriotism of the citizens of South Carolina will still prevent the occurrence of those consequences which must result from the attempt to enforce the ordinance recently passed by the convention of that State. In any event the President will perform his duty, and only his duty, under the Constitution and laws of the United States.

Your position will, for the present, be a proper one at Savannah. But of this you will judge, advising the department of your movements, and communicating all the information in your possession which can be useful to the government in the present extraordinary conjuncture of affairs.

You will please to take care that the defences of the forts in the harbor of Charleston be finished as rapidly as possible, and that every necessary step is taken for their security.

Such instructions as your position may require, and as the course of events may call for, will be communicated to you from time to time.

Very respectfully, your obedient servant,

LEWIS CASS.

Major General Scott, *United States Army, Savannah, Georgia.*

No. 12.

ORDER No. 109.] HEADQUARTERS OF THE ARMY, *Adjutant General's Office, Washington, Dec. 4, 1832.*

Companies B and E of the 3d regiment of artillery, and companies C and G of the 4th regiment of artillery, now at Fort Monroe, will forthwith proceed by sea to Fort Moultrie, in the harbor of Charleston, South Carolina, and report for duty. Should these companies not be full, they will be completed from the companies remaining at Fort Monroe.

Lieutenant Colonel Bankhead, of the 3d regiment of artillery, will repair to Charleston, South Carolina, and take the command of the troops in that harbor.

Major Bender, quartermaster, will repair without delay to Charleston, South Carolina, for duty at that station.

By order of Major General Macomb.

S. COOPER, *Assistant Adjutant General.*

No. 13.

ADJUTANT GENERAL'S OFFICE, *Washington, December 7, 1832.*

SIR: The general-in-chief directs that you order company G, of the 1st regiment of artillery, to proceed with the four companies destined for Fort Moultrie, South Carolina; and that you cause to be sent with the troops four twenty-four-pounder howitzers, four twelve-pounder field pieces, and eight six-pounders, with their equipments complete, together with fifty rounds of ammunition per gun.

I have the honor to be, sir, your obedient servant,

S. COOPER, *Assistant Adjutant General.*

COMMANDING OFFICER, *Fort Monroe, Virginia.*

No. 14.

HEADQUARTERS OF THE ARMY, *Washington, January 24, 1833.*

SIR: From the conversations I have had with the President and Secretary of War, it is expected that you will be in Charleston harbor by the end of the month. You will, therefore, avail yourself of the earliest opportunity to proceed to that position, and resume the direction of the military department.

I have the honor to be, sir, yours, very respectfully,

A. MACOMB.

Major General WINFIELD SCOTT, *Commanding Eastern Department.*

No. 15.

HEADQUARTERS OF THE ARMY, *Washington, January 25, 1833.*

SIR: You will receive at Fort Moultrie or Castle Pinckney the collector and such officers of the customs as he may have occasion to employ and take with him; and you will allow him to remain at and establish the custom-house within the post, and afford him all facilities and also protection for that purpose, and in taking and receiving the entries of vessels and their cargoes, and in performing the other duties necessary by law to be performed at the custom-house; and further, you will receive, previously to the removal of the custom-house, and whenever the collector may desire it, such of his private property and effects, and also such foreign goods, wares, and merchandise, as he may find it necessary to send for that purpose for safe-keeping, and hold the same under his direction and subject to his orders only.

I am, sir, very respectfully, your obedient servant,

ALEX. MACOMB, *Major General, Commanding the Army.*

Lieutenant Colonel JAMES BANKHEAD,

Commanding the troops of the United States in the harbor of Charleston, S. C.

No. 16.

ADJUTANT GENERAL'S OFFICE, *Washington, January 26, 1833.*

SIR: As it is probable that the Rules and Articles of War have not been subscribed by many of the officers under your command, the general-in-chief directs you will, on the receipt of this, require all the officers in the harbor of Charleston to comply with the first article of the first section of the act for establishing rules and articles for the government of the armies of the United States, for which purpose I herewith send the Rules and Articles of War to receive the signatures of all the officers, including your own, which, when completed, you will transmit to the office of the Adjutant General. Should any object to sign the Articles of War, as required by law, you will report their names accordingly.

I am, sir, respectfully,

R. JONES, *Adjutant General.*

Colonel JAMES BANKHEAD, *Commanding Charleston harbor.*

No. 17.

[Confidential.]

DEPARTMENT OF WAR, *January 26, 1833.*

SIR: I have received your letter of the 23d instant, and am directed by the President to communicate to you his wish that you repair to Charleston with the least possible delay and assume the command of the troops in that quarter, under the views and instructions heretofore communicated to you. This intimation would have been given before, but I supposed it was your intention to return, and therefore felt unwilling, by any expression of my expectation, to hasten it at the expense perhaps of inconvenience to yourself.

An express has been established between here and Charleston, and will be continued as long as the state of things there may permit and require it. Should, however, any circumstance delay or prevent it, you are at full liberty, whenever you think the public interest requires it, to make other arrangements

for the conveyance of your despatches. You can employ pilot boats, as you suggest, when these are necessary.

I did not know till yesterday that _____ was ordered to Savannah. Your course respecting that officer was equally firm and discreet, and met my entire approbation. I have directed he should be immediately relieved and withdrawn from that quarter.

All your despatches have been communicated to the President, and your general views and proceedings have been approved by him. The three orders to which you especially refer I shall briefly advert to.

It is the most earnest wish of the President that the present unhappy difficulties in South Carolina should be terminated without any forcible collision; and it is his determination that if such collision does occur it shall not be justly imputable to the United States. He is therefore desirous that in all your proceedings, while you execute your duty firmly, you act with as much discretion and moderation as possible; and this course he has never doubted but you will adopt.

Self-defence is a right belonging as much to military bodies as to individuals; and officers commanding separate posts are responsible at all times for their defence, and are bound to use due precaution to avoid danger. If a body of armed men approach Sullivan's island with apparently hostile views it will be proper to pursue the course indicated by you to Colonel Bankhead; that is, to warn their commanding officer to retire, and to inform him of the course which you will be compelled to adopt in the event of his continued approach. Should this warning be useless, and the armed body attempt to land, you will be justified in resisting such attempt. But before this unfortunate alternative is resorted to I rely upon your patriotism and discretion to endeavor, by all reasonable and peaceable means, to induce any such armed body to abandon their enterprise. The subject is committed to you in the full conviction that while you discharge your duty as an officer you will be mindful of the great delicacy of the subject, and of the anxiety of the President to avoid, if possible, a resort to force. But whatever the just rights of self-defence require must be done, should a case occur involving such a question.

Your order to Colonel Twiggs was right in the event of his being compelled to abandon his post. But before the receipt of your letter, while we were here in much anxiety about the arsenal at Augusta, and had not learned the prudent measures taken by you for its defence, Colonel Twiggs was directed to defend himself if attacked to the last extremity. In such a case an officer must reject all other considerations and maintain his position as long as he has the means of resistance. It would certainly be better to destroy the arms and ammunition in the arsenal than they should fall into the hands of any assailants. But that is a result I do not suffer myself to anticipate while so valuable an officer as Colonel Twiggs is in command and is supported by an adequate garrison.

The course you have directed respecting those officers, if any there may be, who hesitate in their allegiance to their country in the hour of trial and peril meets the entire approbation of the President. I flatter myself that none such will be found; but if there are they should be immediately known, when their cases will become the subject of special consideration. When I received your letter respecting _____ and _____ I directed General Macomb to order Colonel Bankhead to call upon all the officers under him who had not already done it to take the oath of allegiance, and to sign the Rules and Articles of War.

Since writing the above paragraph I learn, on inquiry, that the directions I gave respecting the oath of allegiance were omitted to be carried into effect. I have renewed the order. I will thank you to report any facts which may come to your knowledge tending to show that upon the great question of duty any officer has embraced views which would probably unfit him for the performance of any trust which might be reposed in him; and you are at liberty to order from South Carolina or its borders any such officer.

It has been represented that the martello tower on James island, and the fort at the mouth of Stone inlet, might be important positions for you to occupy. Please to examine these points and take such measures on the subject as you may deem necessary.

Very respectfully, your obedient servant,

LEWIS CASS.

Major General Scott, *United States Army, New York.*

22d CONGRESS.]

No. 547.

[2D SESSION.]

ON CLAIM BY AN OFFICER OF THE ARMY FOR COMPENSATION FOR A HOUSE ERECTED
AT FORT JESUP, LOUISIANA, AND USED AS QUARTERS.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 19, 1833.

Mr. R. M. JOHNSON, from the Committee on Military Affairs, to whom was referred the petition of Lieutenant A. H. Morton, reported:

That they have called upon the War Department for the facts of the case, and having received a communication on the subject of the claim, the committee do not believe that it is either just or expedient to make provision for such claims. The committee refer to documents marked A and B and make them a part of this report.

Resolved, That the prayer of the petitioner is unreasonable and ought not to be granted.

A.

DEPARTMENT OF WAR, *February 14, 1833.*

SIR: I have the honor to transmit a report from the quartermaster general, made in pursuance to your letter received on the 6th instant.

From the facts of this case, as they appear by the report of the quartermaster general, and particularly that a part of the materials was public property, and that a part if not the whole of the labor was performed by the troops, it appears to me inexpedient to grant the relief asked for. No authority is shown for the erection of this house upon the public ground, nor for the employment of the public property and labor in its construction, and I think the precedent would be a bad one were provision made for the payment required. If buildings are wanted for the public service there is a prescribed mode in which they can be procured; but certainly encouragement should not be given to their voluntary construction, and the mingling together, as in this case, of public and private property.

Very respectfully, I have the honor to be, your obedient servant,

LEW. CASS.

Hon. R. M. JOHNSON, *Chairman Committee on Military Affairs, Ho. of Reps.*

B.

QUARTERMASTER GENERAL'S OFFICE, *Washington City, February 9, 1833.*

SIR: In reply to the letter of the honorable Chairman of the Committee on Military Affairs of the House of Representatives, referred to this office on the 6th instant, with a petition of Lieutenant A. H. Morton, asking payment or rent for a house said to have been erected by him at the post of Fort Jesup, Louisiana, I have the honor to state:

1st. That the building referred to is found to be convenient and useful, and is perhaps necessary to the troops composing the present increased garrison

2d. The house is on the public property and is said to be contiguous to other public buildings.

3d. The house was valued, in 1831, at \$250, (see paper marked *a*;) but as it is known that a part of the materials used belonged to the public, and that a part, if not the whole, of the labor was performed by the troops, it is impossible to say what would be the value of the nails and other articles furnished by Lieutenant Morton.

4th. The Secretary of War has unquestionably the right to cause the house to be purchased or payment to be made for the amount expended in erecting it. Application was made in January, 1832, by the quartermaster at the post for authority to pay for that as well as certain buildings erected by others. Paper marked (*b*) contains the decision in the case of Lieutenant Morton. It may be proper here to remark that it is the duty of the Quartermaster's department to furnish quarters for the troops, but no permanent barracks can be erected but by order of the Secretary of War. If the building was temporary, and from the appraisement it would seem to be so, it was the duty of the quartermaster to erect it, provided the public service required it; but neither the commanding officer nor any other individual had a right to authorize the erection of private buildings upon the public property. I return the papers in the case, and I am, sir, respectfully, your obedient servant,

TH. S. JESUP, *Quartermaster General.*

Hon. LEWIS CASS, *Secretary of War, Washington City.*

(a.)—*Extrait.*

We, the undersigned, Lewis Latham and Henry Stoker, citizens of the parish of Natchitoches, Louisiana, being chosen referees to value certain property, the former by Lieutenant Francis Lee, assistant quartermaster, on the part of the United States, the latter by the owners of the property to be valued; said property being certain improvements of houses built on public lands, within the immediate vicinity of Cantonment Jesup, Louisiana, and, in fact, forming a part of said garrison, value the same as follows: A dwelling-house, with out-houses, the property of Lieutenant A. H. Morton, 7th regiment of infantry, and now occupied by Brevet Major Green, 3d infantry, and his family as quarters, \$250.

LEWIS LATHAM.
HENRY STOKER

CANTONMENT JESUP, *December 14, 1831.*

(b.)—*Extract.*QUARTERMASTER GENERAL'S OFFICE, *March 8, 1832.*

SIR: Payment for houses erected by officers cannot be made unless they show that they had the authority of the War Department to erect them.

I am, sir, &c.,

THO. S. JESUP, *Quartermaster General.*

Lieutenant FRANCIS LEE, *Assistant Quartermaster, Fort Jesup, Louisiana.*

22D CONGRESS.]

No. 548.

[2D SESSION.]

ON CLAIM OF MAJOR GENERAL ALEXANDER MACOMB TO THE PAY AND EMOLUMENTS
CORRESPONDING WITH HIS BREVET RANK.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 25, 1833.

Mr. WHITTLESEY, from the Committee on Claims, to whom was committed a bill reported by the Committee on Military Affairs, for the relief of Alexander Macomb, with the report made by said committee, and the accompanying papers, reported:

The petitioner seeks to be released and discharged from his liability on a bond given to the United States by Samuel Champlin, on the 28th day of May, 1811, in the sum of ten thousand dollars, with J. Roddy, R. C. Jennings, and the said Alexander Macomb, as his sureties, with the condition that the said Samuel Champlin should well and truly execute and faithfully discharge his duties as paymaster, and regularly account, when thereto required, for all moneys received by him from time to time, with such person or persons as should be duly authorized and qualified for that purpose, and if the condition was performed the said bond was to be void and of no effect, otherwise to remain in full force and virtue. The condition of the bond has been broken, and a judgment has been recovered against the administrator of J. Roddy, and a suit is now pending before the court in this district against General Macomb.

The petitioner thinks he is entitled to relief from the following considerations:

1st. That Samuel Champlin was appointed deputy quartermaster general in the month of March, 1813, and acted in that capacity during the war, and until 1815, whereby he was led to conclude that his principal was not a defaulter as paymaster.

2d. That the petitioner being then continually engaged in the public service, during a most eventful period, and in distant scenes, made no inquiry as to the accounts of said officer, or his liability as his security.

3d. That he believes the large balance in the hands of Samuel Champlin, as paymaster, at the time he was promoted to the office of deputy quartermaster general, was expended under his new appointment, and is now claimed of him.

The petitioner sets up a claim against the United States for his pay and emoluments, by virtue of his brevet rank, which he is willing should be set off against any demand they have against him.

These claims should be examined separately, for if the liability of General Macomb has been cancelled by any act of the United States, and he has a just and equitable demand against the United States, he is entitled to it, and no fictitious claim should be interposed to prevent him from obtaining what is due to him.

It will be necessary to investigate the facts, and see how far they comport with the statement made by the petitioner, on which he relies for his discharge, and when the facts are ascertained apply to them the principles of law applicable in such cases, and then abide by the result, whether it shall be in favor of or against the claimant.

The committee addressed a letter to the Secretary of the Treasury on the 21st of January, requesting him, among other things, to inform the committee—

1st. The date of the appointment of Mr. Champlin as deputy quartermaster general.

2d. To furnish the committee with a copy of the different advancements of money made to Samuel Champlin as district paymaster.

3d. To be informed whether two accounts were opened with him on the books of the treasury, one as paymaster, from the date of his appointment until the resignation of that office, or until he was transferred to the quartermaster's department, and the other as quartermaster after said transfer.

4th. The reason why Mr. Champlin's account as paymaster was not settled before 1819.

So much of the communication as embraced the foregoing inquiries was referred to the Third Auditor for his report, which was made on the 24th of January last, and sent by the Secretary of the Treasury to the committee, and to which reference is made as a part of this report.

1st. In answer to the first inquiry it appears that Mr. Champlin was appointed by General Pinckney deputy quartermaster general on the 9th of July, 1812, and that his regular appointment in that office took place on the 18th of March, 1813, and that he continued to disburse in that department from the time of his first appointment to the time of his regular appointment, and subsequently to the end of his service. He resigned his office of paymaster on the 31st of May, 1813, being about two months and an half from the date of his regular appointment as quartermaster general.

2d. It appears from the answer to the second inquiry, accompanied by a copy of the account of money advanced to Mr. Champlin, that he received for the pay department \$387,259 98, and that he disbursed \$331,332 78, leaving due from him \$55,927 20.

3d. Two accounts were kept at the treasury, in one of which was debited the money advanced on his estimates or drafts, as paymaster; and in the other the money advanced on his estimates or drafts, as deputy quartermaster general, and the credits were carried to the appropriate accounts.

4th. In answer to the fourth inquiry, which, from the statement in the petition, presupposed the accounts of Mr. Champlin as paymaster were not settled before 1819, it is stated that "Major Champlin received his advances of money from the paymaster general, to whom it was his duty regularly to render his accounts and vouchers. It is now ascertained from the office of the paymaster general that this was not done, although repeatedly called on, until near the end of the second quarter of the year 1814. The vouchers he then rendered were turned over by the paymaster general to the accountant of the War Department, and a settlement thereof made on the 22d of November, 1814, resulting in a balance due to the United States of \$70,727 50, of which Major Champlin was advised, and a statement explanatory of the settlement sent him, that he might explain, or produce vouchers to remove objections to any item not allowed to his credit." Major Champlin was a defaulter as deputy quartermaster general, and was requested to settle this account. The act of May, 1816, established additional accounting officers to settle the war accounts, and Mr. Hagner says, "the case of Major Champlin, with many hundreds of others, was turned over by the paymaster general for settlement, and was, as early as the immense number of

accounts would possibly permit, attended to. From the large amount found standing to the debit of Major Champlin, it was believed that he must have further and large accounts to render; and to afford him an opportunity of doing so he was written to from time to time, from this office, urging the transmission of them. On the 11th of May, 1818, he was informed that, unless his accounts and vouchers were rendered before the 1st of July following, his account would be stated and reported for suit; and again on the 30th of May, 1818, to the same effect, under instructions from the Comptroller of the Treasury." On the 25th of June, 1818, abstracts and vouchers for payments as district paymaster, made in 1813, were received, and he was then called on to send all his vouchers, with an account current, which he had not before that time rendered. He promised, by letter of June 29, 1818, to exhibit all of his accounts in a few days. A further credit was allowed, by which the account was reduced to \$66,394 13, on the 15th of July, 1819, and his account as paymaster was reported for suit on the 26th of July, 1819, and as deputy quartermaster general on the 11th of August following. A correspondence was opened between Mr. Hagner and Mr. Stedman, of Charleston, as early as 1822, and was continued until 1825, relative to a trunk of papers that belonged to Major Champlin, when it was received at the Third Auditor's office. These papers were examined, and another settlement was made, which reduced the balance to \$55,927 20, and a transcript was sent to the agent of the treasury, on the 18th of July, 1826.

A suit was directed by the agent of the treasury to be commenced against the said Champlin and his sureties in the Charleston district, where the bond was executed on the 28th of July, 1819. The marshal returned in regard to R. C. Jennings and General Macomb that they had left the State. Mr. Roddy's executors pleaded that no assets had come to their hands, and the plea was sustained. Afterwards another suit was commenced, on ascertaining that they had received assets; and, after several continuances, judgment was recovered against said executors in May, 1829, and they have offered to pay their proportion of the judgment.

A judgment was recovered against Samuel Champlin, the principal in the bond, at the September term, 1826, on which an execution was issued, and was returned at the November term following "*nulla bona*."

As to the first reason urged by the petitioner why he should be discharged, because Major Champlin was promoted to be deputy quartermaster general, it would be necessary for the petitioner to state, and prove, if it was within his power, before he could derive any benefit from the promotion, the time when he was informed of it; for the ground for setting this up is, that he was induced from the promotion to conclude Major Champlin was not a defaulter as deputy paymaster general, and therefore made no inquiry about it. If this point can in any manner affect the liability of the petitioner, the time when he was first informed of the promotion is of importance; but the committee do not think, if it was stated and proven, it would entitle him to relief.

As to the second reason—that the petitioner was engaged in the public service, and in distant scenes—the committee remark that he was an officer in the service at the time he became surety, and must have known that he was liable to be ordered to any place where his services might be required; and although this consideration was entitled to all due weight with him before he signed the bond, it does not, in the estimation of the committee, affect his liability either legally or equitably.

The petitioner is mistaken in supposing that the money placed in the hands of Major Champlin, as paymaster, was in part expended in the Quartermaster's department. The accounts being kept separate and distinct, the expenditure was carried to the appropriate account, and a balance was found to be due to the United States from Major Champlin, as deputy quartermaster general, in the sum of \$74,956 89. The law is, if the obligee of the bond makes a new contract, or extends the time of payment by agreement, or varies the terms of the contract, the sureties are discharged; but any indulgence, by forbearing to bring a suit and enforce the collection, does not discharge the sureties.

If the government had been grossly negligent in settling the account, and a series of years had elapsed, and the circumstances of the principal had been such that the debt could have been collected, if diligence had been used in a reasonable time, and the principal had become insolvent after the expiration of such reasonable time, it would present a strong equitable case for the interposition of Congress. But, in this instance, the principal was called on to settle his accounts as early as the second quarter of 1814; and from that time until the suit was ordered, in 1819, he was repeatedly urged to forward his vouchers. It must be borne in mind, when deciding the question of negligence, that war was declared in little over a year from the time the bond was executed, and that the business necessarily accumulated upon the department, and could not be despatched with as much readiness as in a time of peace. One condition of the bond is "that the said Samuel Champlin shall regularly account," and this condition was broken before he received any appointment in the Quartermaster's department, and the petitioner was liable on the bond for this breach of the condition. The fault in not settling this account does not rest upon the accounting officers, who were urging a settlement, but upon Major Champlin, who neglected to render his accounts. The object in taking the bond was to indemnify the United States if the principal was not faithful; and his fidelity was guaranteed by the sureties. The Third Auditor used every exertion in his power to aid the sureties, not only in urging a settlement, but in obtaining the papers of the principal, from which to ascertain the credits to which he was entitled.

The deposition of William Cox has been taken for the purpose of proving that Major Champlin had the means at his disposal to pay the amount of his defalcation, if he had been required to do so. After stating his acquaintance with Major Champlin, and the confirmation of his appointment as deputy quartermaster general, in 1813, he says, "at which period, he, Major S. Champlin, enjoyed the good opinion of all his brother officers, as well as citizens, and stood very high in the estimation of General Pinckney; and, at which time, had he been called upon to settle his accounts as paymaster, it is my decided opinion he possessed all the ability and means."

Mr. Cox does not speak of any other period than that of 1813, when Major Champlin's appointment of deputy quartermaster general was confirmed; which we have seen before was in March. The committee cannot think the government is chargeable with any neglect for not having enforced the payment of what was due from him at that time, and they believe it would have been a subject of complaint if a suit had then been commenced, or if Major Champlin had been removed from office.

Mr. Cox seems to have formed his opinion rather from the general estimation in which Major Champlin was held than from any knowledge of his property. The extent of his property at this, or at any subsequent period, is susceptible of proof; and it would be more satisfactory, and more safe, to have the facts proven than to take the opinion of gentlemen, however respectable. A memorandum is found

among the papers, in which the cases of Joseph Crocket and George Johnston are referred to, where relief has been granted to sureties.

The committee applied for the report in the case of Joseph Crocket, for the purpose of ascertaining the grounds on which relief was granted, and were informed in the clerk's office that no report was made. The papers were then called for, and were hastily examined. Joseph Crocket was collector of the internal revenue, and his account remained unsettled for a series of years. It is proven that long after he was a defaulter he was possessed of a large property, amounting to more than sixty thousand dollars; the different farms, and other property are enumerated, and their value established; all of which he had disposed of, and was insolvent. Under these circumstances, the Judiciary Committee thought it furnished a case for relieving the sureties on equitable principles.

George Johnston became the surety of Benjamin F. Bourne, a purser in the navy, on the 30th of April, 1817. Mr. Bourne was ordered to the Mediterranean, in November, 1817, from whence he returned under arrest, in 1820; he was released from arrest in July, 1820, and was ordered to the frigate Constellation, when he was indebted to the United States in the sum of \$24,639. He returned from the Pacific in July, 1822, died in New York in November, 1823, without having been called on to settle his account; his account was not stated until March, 1824, and suit was not commenced against Mr. Johnston until some time in the year 1827, when his co-sureties had left the country and gone to England.

By the rules and regulations of the Navy Department, made in conformity to existing laws, no purser was to be ordered to a ship whose accounts were not settled, and who was a defaulter. Mr. Bourne was a defaulter at the time Mr. Johnston became his security, and the amount of his defalcation accumulated during each subsequent cruise. A judgment was recovered against Mr. Johnston, and he applied to Congress for relief. A bill passed the Senate, but its rejection was recommended by this committee, in a report made on the 12th of April, 1830.—(Vol. 3, 1st session, 21st Congress.)

A case was subsequently brought before the Supreme Court, and the sureties were discharged on the ground of duress, under circumstances in every particular similar to those that existed in the execution of Mr. Bourne's bond by Mr. Johnston. After this decision by the Supreme Court, Mr. Johnston applied again for relief, which was granted, on the ground that the bond was void at its inception; and being void, it was not equitable to hold him responsible, notwithstanding a judgment had been recovered against him.

The committee refer to their report above-mentioned, and to 9 Wheaton Reports, 735, and to 11 Wheaton, 184, for their opinion on the question of laches by the government. In the authority first referred to, as to the laws which require settlements to be made at short and stated periods, the court say: "but these provisions of the law are enacted by the government for its own security and protection, and to regulate the conduct of its own officers; they are merely directory to such officers, and constitute no part of the contract with the security. The general principle is that laches are not imputable to the government; and this maxim is founded not in the notion of extraordinary prerogatives, but upon a great public policy." The committee have bestowed much reflection on this case, which seemed to be demanded by the circumstance that a bill had been reported by a standing committee; and they have compared the facts and the circumstances with those that existed in other cases decided by the committee, and they have examined the law as pronounced by the court, where laches have been imputed by sureties against the United States, and they are constrained to say they do not think the petitioner, for anything heretofore noticed, is entitled to relief.

The subject of brevet pay appears to have been submitted to Mr. Eaton while he was Secretary of War, and he decided against its allowance on the 27th of May, 1831; and it was referred by the President to the Attorney General, acting Secretary of War, and his opinion was given at length, on the 6th of August, 1831, and approved by the President, and referred to and made a part of this report, so far as it relates to a construction of the law.

The same question was decided by Mr. Monroe, in 1822, and an order was issued, which has governed the accounting officers in settling this class of claims.

By the act of March 2, 1821, the military peace establishment was permanently reduced and fixed. One major general and two brigadier generals were retained in the service. General Macomb was not retained as one of the brigadier generals, but accepted the appointment of chief of the Engineer department. The early decision of Mr. Monroe must have satisfied General Macomb that he was not entitled to brevet pay, so long as that decision remained unrevoked; and it was optional, whether to remain at the head of the Engineer department or retire from it.

Having referred to the decisions of those whose province it was to decide this question the committee will not enlarge upon it; and concurring in those decisions, they think the petitioner is not entitled to an allowance for brevet pay. The following resolution is submitted:

Resolved, That the petitioner is not entitled to relief.

DEPARTMENT OF WAR, August 5, 1831.

SIR: In obedience to your order I have examined the argument offered by Mr. Balch in support of the claim of General Macomb, to be allowed the pay and emoluments of a major general while he was chief engineer, and as such had the charge of the Engineer department, from May 1, 1821, to April 30, 1828, and I respectfully submit for your consideration the following report:

By the act of Congress of April 16, 1818, officers who have brevet commissions are entitled to receive the pay and emoluments of their brevet rank "while on duty, and having a command according to their brevet rank, and at no other time." The expressions, *and at no other time*, contained in this law, repeal the act of 1812, so far as it gave a title to the pay and emoluments of the brevet rank under other circumstances than those mentioned in the act of 1818.

The whole question referred to me therefore turns upon the construction of the above-mentioned act of Congress of April 16, 1818. By this law the title to the pay and emoluments of the brevet rank depends entirely upon the character of the command assigned to the officer; that is, upon the character of the body placed under his command, and he is entitled to the pay of his brevet rank only when the character and organization of that body renders it the appropriate military command of an officer of that grade in the army; for it is then only that he can be said to have a command according to his rank.

It follows, that in order to entitle General Macomb to the pay and emoluments of a major general, the command assigned to him must have been such a one as, by the rules and regulations of the army, was the regular and appropriate command of a major general. The command which properly belongs to such an officer does not depend upon the number of men placed under his control, nor upon the importance of the duties and station assigned to him. An officer may have a body of artificers and laborers under his direction, engaged in erecting fortifications or in making roads, as numerous as the regular command of a major general, yet such a body of men is not the appropriate command of a major general, he could not be said to have a command according to that rank. The appropriate command of a major general is a division of the army, and the military character of the body, and their organization according to the regulations of the army, are essentially necessary in order to constitute them a division, and make them a major general's command. General Macomb did not command a body of this description. The greater part of the persons under his control did not belong to the army, and had neither the military character nor the organization required to constitute a division. He had not therefore a command according to the rank of a major general, and consequently, under the act of Congress of 1818, is not entitled to the pay and emoluments of that rank. The construction supposed to have been given to this act of Congress, in analogous cases, is also relied upon. I have not thought it necessary to inquire on what principles the allowances were made to the several officers mentioned in the argument referred to me. In the case before me, the pay and emoluments in question are claimed only upon the ground that the character of the command assigned to General Macomb was such as entitled him to the pay and emoluments of his brevet rank. Whether he is or is not so entitled must depend upon the act of Congress; and if that act, upon its true construction, does not entitle him to the pay and emoluments claimed, the Executive branch of the government cannot enlarge its operations beyond the proper meaning of its words, nor allow the pay and emoluments, when the legislature have not authorized it to be done.

There is another view of this subject, which I beg leave to present to the President. The same question now under consideration was brought before Mr. Monroe while he was President, and decided by him in his order of June 12, 1822, and the accounting officers have ever since acted upon this construction of the law. I should doubt very much whether the correctness of that decision can now be properly inquired into by the Executive branch of the government. It is true that erroneous decisions, founded upon mistakes in matters of fact, or occasioned by mistakes in figures and calculations, may, without doubt, be corrected by their successors in office at any time afterwards when the mistake is discovered; but when the President, acting within the scope of his authority, and with all the facts before him, pronounces a decision, founded upon the construction of a law of Congress, and that decision is acted upon, and the account finally settled accordingly, I should incline to think that the account cannot properly be re-opened for revision by his successors in office; and if the decision is an erroneous one, and injustice has thereby been done to an individual, the remedy is with the legislature. In any other view of the case an appeal would be to each succeeding President from the judgment of his predecessor, and the accounts and transactions of the government would always remain unsettled, and liable to be reviewed and reconsidered at any period, however remote. Such right of appeal, on the part of the individual, does not seem necessary for the purposes of justice, and would be exceedingly inconvenient and injurious to the public.

The case of General Macomb, it must be admitted, is one of some hardship; his brevet rank was gallantly earned; it was equal to that of Generals Scott and Gaines; and the command he held was as important and as full of responsibility as the respective commands held by them, yet they received the pay and emoluments of major generals, while General Macomb received only the pay and emoluments of a brigadier. I am persuaded that if the subject had been brought before Congress they would have felt the justice of placing them all upon the same footing, and I should have taken pleasure in finding myself justified in reporting in favor of the claim he makes; but upon a careful examination of the whole case, I think his claim cannot be lawfully allowed, and report accordingly.

I am, sir, with the highest respect, your most obedient servant,

R. B. TANEY, *Acting Secretary of War.*

The PRESIDENT of the United States.

Approved August 6, 1831.

ANDREW JACKSON.

22D CONGRESS.]

No. 549.

[2D SESSION.]

MEASURES TAKEN FOR THE PURCHASE OF A SITE AND ERECTION OF BARRACKS AT
NEW ORLEANS.

COMMUNICATED TO THE SENATE FEBRUARY 27, 1833.

DEPARTMENT OF WAR, *February 26, 1833.*

SIR: I have the honor to transmit a report from the quartermaster general, showing what measures have been taken for the purchase of a site, and the erection of barracks, &c., in the vicinity of New Orleans, in compliance with a resolution of the Senate of the 22d instant.

With great respect, I am, sir, your obedient servant,

LEW. CASS.

Hon. HUGH L. WHITE, *President of the Senate.*

QUARTERMASTER GENERAL'S OFFICE, *Washington City, February 26, 1833.*

SIR: In compliance with a resolution of the Senate of the 22d instant, referred to this office yesterday, which requires that the Secretary of War communicate to that body "what measures, if any, have been taken to carry into effect the law of the 14th July, 1832, for the purchase of a site and the erection of barracks, quarters, and storehouses in the vicinity of New Orleans," I have the honor to report that the season had so far advanced before the appropriation was made that no measures could be adopted for carrying the law into effect during the summer with any prospect of success; and the prevalence of the cholera and of the yellow fever at New Orleans prevented any attempt to carry it into effect during the autumn.

But Lieutenant Colonel Twiggs, one of the most efficient officers of the army, being under orders for New Orleans, was requested to confer with the governor of Louisiana and the mayor of the city as to the most eligible site, and to communicate the views of those officers with his own on the subject. Lieutenant Colonel Twiggs was stopped on his way and assigned to the command of the troops at Augusta, Georgia, which deprived the department of the advantage of his experience and agency in selecting a proper site, since which, the only measure adopted has been to order an officer of the Quartermaster's department to New Orleans, who will be required to take immediate measures to carry the law into effect.

I return the resolution; and I am, sir, respectfully, your obedient servant,

TH. S. JESUP, *Quartermaster General.*

Hon. LEWIS CASS, *Secretary of War, Washington City.*

22D CONGRESS.]

No. 550.

[2D SESSION.]

STATEMENT OF THE ARMS MADE, AND EXPENSES INCURRED, AT THE NATIONAL ARMORIES IN 1832.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 28, 1833.

DEPARTMENT OF WAR, *February 23, 1833.*

SIR: I have the honor to transmit a statement of the expenditures incurred, and of the arms manufactured at the national armories, in the year 1832, prepared in conformity with the provisions of the act of April 2, 1794.

With great respect, I am, sir, your obedient servant,

LEWIS CASS,

Hon. ANDREW STEVENSON, *Speaker of the House of Representatives.*

Statement of the expenditures made at the national armories, and of the arms, &c., manufactured therein, during the year 1832.

	Expenditures.					Arms, &c., manufactured.										
	For buildings, canals, and other permanent improvements.	For the manufacture of arms.	For the manufacture of Hall's rifles.	For miscellaneous expenses not embraced in the foregoing.	Total amount expended.	Muskets.	Hall's rifles, without bayonets.	Screw-drivers.	Wipers.	Ball screws.	Spring vises.	Flint emps.	Arm chests.	Carbines repaired and fitted with new bayonets.	Ammunition flasks.	Bullet moulds.
Springfield, Mass.	\$6,442 58	\$175,006 81	.....	\$1,200 19	\$182,649 58	13,600	.....	13,600	21,200	1,360	1,360	13,600	579	220	....	....
Harper's Ferry, Va.	18,408 68	153,318 88	\$50,892 17	674 26	223,293 99	12,000	4,360	4,360	4,360	.....	436	6,622	137	.....	20	436
	24,851 26	232,325 69	50,892 17	1,874 45	405,943 57	25,600	4,360	17,960	25,560	1,360	1,796	20,232	716	220	20	436

Statement in detail of the operations of the armory at Springfield, Massachusetts.

ARMORY, DR.

For value of component parts of arms on hand, 1st January, 1832.....	\$81,919 66
For value of unwrought materials on hand, 1st January, 1832.....	48,709 28
For this amount expended during the year, comprising all the payments made by the paymaster.....	\$182,649 58
From which deduct the amount of rent of houses received from workmen.....	952 45
	<hr/> 181,697 13

For value of 2,200 lbs. of powder received from the storekeeper, for proving musket barrels, at 20 cents.....	\$440 00
For value of 5,039 lbs. of lead received from storekeeper, for proving musket barrels, at 4 cents	201 56
	312, 967 63

ARMORY, Cr.

By amount expended for permanent improvements per foregoing statement.....		\$6, 442 58
Arms and equipments made, viz:		
13, 600 muskets, average cost of each.....	\$11 66 ²³⁶³ / ₁₃₆₀₀	158, 668 63
13, 600 screw-drivers.....	8	1, 088, 00
21, 200 wipers.....	12 $\frac{1}{2}$	2, 650 00
1, 360 ball screws.....	15	204 00
1, 360 spring vises.....	30	408 00
13, 600 lead flint caps.....	1	136 00
579 arm chests.....	2 20	1, 273 80
For amount expended in preserving arms and for miscellaneous purposes, not incidental to the manufacture of arms.....		1, 200 19
By amount of supplies furnished for inspecting contract arms.....		525 63
By amount of arms and appendages furnished the Ordnance office as samples.....		200 00
By amount expended in repairing and fitting 220 carbines, with bayonets.....		642 40
By value of 2 sets verifying instruments at \$125 each.....		250 00
By value of component parts of arms on hand, 31st December, 1832.....		90, 447 05
By value of unwrought materials.....		48, 831 35
		312, 967 63

Statement in detail of the operations of the armory at Harper's Ferry, Virginia.

ARMORY, Dr.

For value of component parts of arms on hand, 1st January, 1832.....		\$51, 388 36
For value of unwrought materials on hand, 1st January, 1832.....		54, 992 20
For this amount expended during the year, comprising all the payments made by the paymaster.....	\$223, 293 99	
From which deduct the amount received for rent of houses from the workmen.....	2, 490 87	
		220, 803 12
For value of supplies received from the Washington arsenal, viz:		
3, 000 lbs. of powder at 20 cents.....	600 00	
4, 028 lbs. of lead at 4 cents.....	161 12	
20, 000 musket flints at \$2 50 per M.....	50 00	
		811 12
		327, 994 80

ARMORY, Cr.

By amount expended in permanent improvements per foregoing statement.....		\$18, 408 68
Arms and equipments made, viz:		
12,000 muskets, average cost of each.....	\$11 62 ¹²⁰³ / ₁₂₀₀₀	139, 550 13
6, 632 flint caps at.....	1	66 32
137 arm chests at.....	1 95 ¹³⁷ / ₁₃₇	268 38
By amount expended in preserving arms and for miscellaneous purposes, not incidental to the manufacture of arms.....		674 26
By amount expended in the manufacture of Hall's rifles.....		50, 892 17
By value of supplies furnished the Allegheny arsenal.....		413 40
By value of component parts of arms on hand, 31st December, 1832.....		55, 386 39
By value of unwrought materials on hand, 31st December, 1832.....		62, 335 07
		327, 994 80

Statement in detail of the expenditures on Hall's rifle.

Dr.

For value of component parts of arms on hand, 1st January, 1832.....		\$90, 294 09
For value of unwrought materials on hand, 1st January, 1832.....		11, 249 04
For amount expended during the year, comprising the total amount of payments made by the paymaster on account of Hall's rifles, viz:		
For materials.....	\$16, 530 92	
For pay of workmen.....	34, 361 25	
		50, 892 17
For value of 10,000 lbs. lead received from the Washington arsenal at 4 cents per lb.....		400 00
		152, 835 30

Cr.

By amount expended in permanent improvements.....		\$15,938 16
By arms and equipments made, viz:		
4,360 rifles, without bayonets, at \$13 01 ²³ / ₁₀₀ each.....		56,756 86
4,360 screw-drivers.....	7 ¹ / ₄	316 10
4,360 wipers.....	19	828 40
436 bullet moulds.....	40	174 40
436 spring vices.....	24	104 64
20 ammunition flasks.....	1 25	25 00
By value of component parts of arms on hand, December 31, 1832.....		64,425 62
By value of unwrought materials on hand, December 31, 1832.....		14,266 12
		152,835 30

G. BOMFORD, *Colonel of Ordnance.*ORDNANCE OFFICE, *Washington, February 23, 1833.*

23D CONGRESS.]

No. 551.

[1ST SESSION.]

ANNUAL REPORT OF THE SECRETARY OF WAR SHOWING THE CONDITION OF THAT DEPARTMENT IN 1833.

COMMUNICATED TO CONGRESS, WITH THE MESSAGE OF THE PRESIDENT, DECEMBER 3, 1833.

DEPARTMENT OF WAR, *November 29, 1833.*

SIR: In submitting to you, agreeably to your instructions, a report of the operations and administration of this department for the past year, it affords me pleasure to bear my testimony to the zeal and ability of the respective officers at the head of the various bureaus, and of those employed to aid them in the performance of the important functions committed to this branch of the executive government.

A reference to the accompanying reports and documents will show the state of the army, as well with relation to its numbers, and their position and condition, as to the progress of the various works intrusted to them, and the collection and preservation of the necessary *materiel* for offensive and defensive operations, which is indispensable to the safety of the country. The principle which governed the reduction of the army from a war to a peace establishment has been found by subsequent experience to be salutary, and its practical operation has been to form a body of officers equal in all the requisites of military knowledge and efficiency to those of any other service which is known to us. The army is so organized that should an increase become necessary in consequence of those conflicts of interest and opinion to which all nations in their intercourse with one another have been exposed, and from which we have no right to expect perpetual exemption, any reasonable addition may be made to it without disturbing its arrangement; and the professional knowledge and experience embodied in it will be immediately felt in the new corps, and will identify them with those previously in service. The military experience of other countries, as well as of our own, has shown that the system of extension, by which new and old troops are incorporated together, is much better calculated to produce discipline and subordination, and thus to meet the exigencies of a service which does not allow large bodies of troops to be kept up in time of peace, than the organization of separate corps, composed of inexperienced officers and men, with all their military knowledge to acquire and all their military habits to form. And this is more particularly true of the staff departments of an army, upon which its movement, its subsistence, and the economy of its administration must principally depend. The system established in our service is equally creditable to the army and satisfactory to the government, and may be applied to any necessary extent without any diminution of that economy and efficiency which have heretofore marked its operation.

Much advantage is anticipated from the operation of the act passed at the last session of Congress for improving the condition of the army. Already its effects have been felt, as the subjoined documents will show, in the decrease of desertion and in the increase of the business of recruiting. The addition to the pay of the rank and file, the reduction of the term of service, and the improved condition of the non-commissioned officers, promise important meliorations in the character of the army. This prospect cannot but be interesting to the government and the country. Although the numerical strength of the army is comparatively small, it is yet sufficient to excite public solicitude; and this must be increased by the consideration that the character of our military establishment may hereafter essentially depend upon the measures now taken for its moral and intellectual advancement. Although it were idle, in the present state of the country, to apprehend any danger from the force which is employed, still the lessons of experience taught by the progress of events in other nations ought not to be neglected, nor the possibility overlooked that other circumstances may lead to the increase of our military strength, and to the diminution of that wise jealousy which is now one of our national characteristics. Moral habits in the soldiery constitute one of the best safeguards against the abuse of military power, and their inculcation has engaged the attention of this department during successive periods of its administration. Amongst other measures which have been adopted with this view, you have recently directed the discontinuance of all parades on Sunday, in order that that day may be exclusively devoted to the purposes of instruction and improvement. Certainly, in time of peace, no just reason can exist for converting a day of rest and devotion into a day of military parade.

The act for the better defence of the frontiers by raising a regiment of dragoons is in the process of execution. About six hundred men have been enlisted and most of the officers appointed, and five of the companies have been ordered to proceed to Fort Gibson, upon the Arkansas, where they will be stationed during the winter. The remainder of the regiment will be concentrated at Jefferson Barracks this season, and it is intended in the spring to order the whole to proceed through the extensive Indian regions between the western boundaries of Missouri and Arkansas and the Rocky mountains. It is deemed indispensable to the peace and security of the frontiers that a respectable force should be displayed in that quarter, and that the wandering and restless tribes who roam through it should be impressed with the power of the United States by the exhibition of a corps so well qualified to excite their respect. These Indians are beyond the reach of a mere infantry force. Without stationary residences, and possessing an abundant supply of horses, and with habits admirably adapted to their use, they can be held in check only by a similar force, and by its occasional display among them. Almost every year has witnessed some outrage committed by them upon our citizens, and, as many of the Indian tribes from the country this side of the Mississippi have removed and are removing to that region, we may anticipate their exposure to these predatory incursions, unless vigorous measures are adopted to repel them. We owe protection to the emigrants, and it has been solemnly promised to them; and this duty can only be fulfilled by repressing and punishing every attempt to disturb the general tranquillity. Policy and humanity equally dictate this course; and there is reason to hope that the display of this force will itself render unnecessary its hostile employment. The more barbarous tribes will perceive that their own safety is closely connected with the permanent establishment of pacific relations both with the United States and with the other Indians.

It is due to the regiment of dragoons to remark that its composition is believed to be good, and I anticipate it will do honor to the army and render effectual service to the country.

I feel it a duty once more to ask your favorable interposition in behalf of the medical corps. There is no portion of the army whose compensation is so utterly inadequate to their services. The pay of the highest grade but little exceeds that of a captain, and the pay of the lowest that of a first lieutenant; and these two grades constitute the whole range of service within the reach of medical officers. In the line of the army, and most of the staff departments, there are successive gradations of rank, each with increased emolument, to stimulate the exertions and to reward the services of the officers. The importance of professional skill and talent in the medical corps will not be doubted; and the dispersed condition of our army in time of peace, and its exposure to the effects of various climates, render the conservation of its health an object of much solicitude; and in time of war this solicitude will be increased by the perils of active service.

In order to place in a proper condition this branch of our military establishment, a system of examination has been recently instituted, by which the pretensions of medical gentlemen seeking appointments in the army will be subjected to rigid scrutiny. A board, composed of able and experienced surgeons, has been organized, and the various members of the department have been examined by them. The result has already been highly useful, and cannot fail to be so for the future. But, while the standard of professional acquirements is thus increased, justice demands that the rate of compensation should be examined, and that it should be rendered commensurate with the duties and responsibility of this most useful class of officers. It is not to be expected that the medical corps can retain the able men who now compose it, or see the others join it, unless their services are adequately rewarded.

The act organizing the subsistence department expires, by its own limitation, on the 2d day of March next. It was originally passed in 1818, and has been continued, by successive temporary acts, till the present time. The reason of this course of legislation is undoubtedly to be found in the fact that the introduction of the system was an experiment, and it was deemed prudent to test operations before a permanent character was given to it. This has been fully done, and the result is, in every point of view, satisfactory. All who were acquainted with the mode of supplying the army previously to and during the late war, and for a few years after its termination, must be sensible of the superiority of the present plan. In the quality of the provisions, in the certainty of the supply, and in the economy of administration, its operation is decidedly superior to the old system, where contractors furnished and issued all the subsistence required. The continued failures that took place, and frequently in the most critical state of affairs, the controversies arising out of perpetual attempts to issue unsound provisions, and the serious obstacles which these and the other operations of the system interposed to the public service, must be fresh in the recollection of every military man who participated in the events of those periods. The army is now well and promptly supplied, and the faithful officer at the head of the subsistence department has established a system of purchasing, of issuing, and of responsibility, which, while it insures this result, guards the public interest against loss and imposition, as far as a business necessarily so extended permits. During the fifteen years in which this department has been in operation, more than five millions and a half of dollars have been expended under its direction, and the whole loss which has been incurred by the defalcation of its officers does not amount to sixteen thousand dollars.

I consider that the time has arrived when the present arrangement should be rendered permanent, and I therefore present the subject with that view to your notice. And I also beg leave to suggest that the compensation of the clerks in the office should be increased. It is now lower than the average amount allowed in the other public offices, and less than is due to their labor and responsibility.

The report of the visitors appointed to examine the Military Academy shows that the institution is in a prosperous condition, and is fulfilling the duties committed to it, in the education of the young men destined for the military service of the country. The suggestions made by the visitors for the improvement of this national school, are the result of a careful examination, and, coming as they do from a body of able and impartial citizens, are entitled to much consideration. They appear to me just in themselves, and promising, in the event of their adoption, salutary consequences to the institution.

There is one subject which I feel particularly desirous of placing before you. The situation of teacher of drawing corresponds neither with the nature and importance of the duties required of that officer, nor with the professional merit of the distinguished artist who has relinquished the fair prospects held out to him in a foreign country to accept it. The art itself is highly important to military men, and its acquisition is essential to a respectable standing at the academy. It is very desirable that the instructor should unite in his person those high qualifications, natural and acquired, which have in all ages been the lot of those who have attained eminence in the art, and which have placed it among those pursuits that are at once the cause and the effect of advanced improvement in society. I respectfully recommend that this officer be placed in the same situation as the professors at the academy, and I cannot but believe

that such a measure would not only be just in itself, but would be a proper tribute of respect to the liberal arts, and a proper notice of one whose professional talents and success have been honorable to his country.

I have had the honor heretofore to submit to your consideration my views in relation to brevet commissions in the army, and I am induced, as an act of justice to those entitled to them, again to present the subject. If no new legislation is contemplated, nor any action of the Senate which shall change the principle or practice heretofore prevalent, no objections occur to me to delay any longer these promotions. The officers have earned them by length of service, agreeably to the established usage; and to make a discrimination without any previous declaration, so as to exclude from this advantage those who are at this time entitled to it, does not seem called for by the exigency of any circumstance connected with this subject. And, in fact, there are no very obvious reasons occurring to me why these professional honors, which, in common cases, make no demand upon the treasury, but serve to foster those professional feelings which give elevation to the military character, should not be granted, as they have heretofore been. Under ordinary circumstances they would produce no practical operation, either with relation to emolument or command. When they should do either, it would be precisely when their value would be enhanced by the very state of things producing this change in their operation; when the greater experience of the brevet officer would entitle him to an enlarged command, and to a corresponding rank over those, whether in the regular army or the militia, whose qualifications, so far as these depend upon service, are less than his.

The attention of the army has been frequently drawn to a project for the establishment of a fund for the support of invalid officers, and of the widows and children of such as may die in the service. The object is a commendable one; and as the only aid expected of the government is such legislative provision as may be necessary to give effect to the measure, in conformity with the general views of the officers of the army, it is certainly entitled to the favorable regard of the government. A moderate and stated deduction from the pay of each officer would create a fund which would afford essential relief to many who otherwise would be exposed to want and penury, and might soothe the declining years of meritorious officers, who may have necessarily expended in the maintenance of their families the whole allowance made to them by law, and who, without such an arrangement, would look forward with anxiety for the future. Whatever plan may be ultimately adopted, a legal organization is essential to its operation and success; and as the funds will be provided by the officers themselves, and for their own advantage, the administration will no doubt be committed to them, to be exercised by such persons and in such manner as they may direct. The considerations connected with this measure are so obviously just and in accordance with the dictates of prudence and humanity, that I trust they will be favorably considered. And I also feel it my duty to bring before you a kindred subject connected with the rank and file of the army, and having for its object a provision for the support of superannuated soldiers. In our service, as at present organized, a soldier can only be retained as long as his physical powers are sufficient to enable him to perform the duties required of him. When his constitution fails, unless it is the result "of disability incurred in the line of his duty," he is discharged without any provision for his support, and generally, from the *habits of his life*, without the disposition and too often the power to labor, and without the means of support. He is then thrown upon the charity of the community, after devoting the best of his life to the service of his country.

This result may be easily obviated without expense to the government, and an ample provision made for those discharged soldiers who are unable to procure the means of support. The principle which has been long and wisely applied to the navy may be safely applied to the army. An inconsiderable deduction from the pay of each soldier would go far towards the creation of a fund for this purpose. And if this deduction were to commence with those who might enlist after the passage of the law, there could be no objections on account of the previous engagements formed with the soldiers. And there are three auxiliary sources of revenue which may be applied towards the former object. These are:

Fines assessed by courts-martial;

The pay due to soldiers who may die without leaving any heirs to claim it;

A proportion of the post fund, which is principally derived from a tax upon sutlers.

It is believed that the means which may be realized agreeably to this suggestion would be found sufficient to provide for the maintenance of this class of persons whose condition is now so hopeless and so unsuited to the character of the government and the feelings of the community.

The experience of every year adds to the conviction, that the sooner the Indians remaining east of the Mississippi migrate to the region west of that river, the sooner will they be relieved from the embarrassments of their present position, and placed in a situation where they may physically and morally improve, and look forward to a prosperous and permanent destiny. All the reports which reach the department upon this subject concur in the representation that the emigrants already there are comfortable and contented—that the region assigned to them is fertile, salubrious, and as extensive as they and their descendants for many generations can require. They are making improvements, and erecting dwellings, and are evidently laying the foundations of a social system which, it is to be hoped, will afford them security and prosperity. As a striking proof of their improvement, and of the quantity of provisions raised among them, it may be stated that one of the contracts for furnishing provisions has been taken by a Choctaw, who is said to have a supply of his own amply sufficient to enable him to meet his engagement. It is fortunate for the Indians themselves, and for the great cause of humanity, that the efforts of the government to persuade them peaceably and voluntarily to remove are every year crowned with more and more success. Since the last annual report from this department, the conditional arrangement made by the Seminoles for their emigration has been rendered absolute by a personal inspection of the country proposed for their residence. They have examined, and are satisfied with it; and if the treaty should be ratified by the Senate, they will soon leave the Territory of Florida. An arrangement has also been made with the separate bands in that Territory, by which they have agreed to emigrate; and thus provision has been made for the removal of the whole Indian population from Florida.

The treaty with the Chickasaws has terminated all difficulties with that tribe. It is understood that the exploring party provided for in that instrument are about to commence their journey with a view to select a residence west of the Mississippi. If they succeed, they will remove within the period limited. If they do not, and choose to remain, they will become, with their own consent, citizens of Mississippi, and will occupy, as absolute owners, the several tracts of land assigned to them.

The obligations assumed by the United States in the treaty with the Choctaws for the removal of those Indians have been fulfilled. From the reports which have been made to the department it appears that about fifteen thousand individuals of this tribe have been removed. A party, estimated to contain

from fifteen hundred to three thousand persons, have changed their usual place of residence in Alabama, and have declined accompanying the other Indians in their emigration. It is believed that this party is composed principally of the worst portion of the tribe, and that they intend to hang upon the white settlements, in order to indulge the vicious habits they have acquired. As the government has scrupulously fulfilled its engagements with these people, which terminate with this year, and as every exertion has been made by the proper agents to induce them to remove, nothing remains but to leave them to the results of their own experience. It cannot be long before they will feel the necessity of rejoining the great body of the tribe.

Satisfied as you have been that the very existence of the Creeks in Alabama required their establishment in the country west of the Mississippi where so many of their tribe already reside, you have not hesitated to embrace every opportunity which offered of accomplishing this object. Instructions have been three times given to ascertain their views and to endeavor to persuade them to acquiesce in this course. The two first attempts proved unsuccessful. The result of the last is unknown. Independent of the general reasons arising out of our Indian relations which operated to induce these efforts, the peculiar state of things among these Indians, and a strong desire to remove the difficulties connected with them, had much influence in directing the negotiations.

The Sacs and Foxes have quietly removed to the region assigned to them, and the Winnebagoes have left the country upon Rock river, agreeably to the stipulations of the treaty with them, and retired across the Mississippi to their lands north of the Wisconsin.

Treaties have been formed with the Pottawatomies, Chippewas, and Ottawas, claiming the district on the west side of Lake Michigan, south of Green Bay and north of Chicago, for its cession to the United States, and with the Pottawatomies of the peninsula of Michigan for the relinquishment of their reservation south of Grand river.

With the exception, therefore, of the Miamies in the State of Indiana, of a band of the Wyandots at Upper Sandusky, in Ohio, and of scattered portions of the Ottawas and Chippewas in the peninsula of Michigan, north of Grand river and of Saginaw bay, probably not exceeding altogether five thousand individuals, the whole country north of the Ohio and east of the Mississippi, including the States of Ohio, Indiana, and Illinois, and the Territory of Michigan as far as the Fox and Wisconsin rivers, has been cleared of the embarrassments of Indian relations, and the Indians themselves have either already emigrated, or have stipulated to do so within limited periods and upon such terms as will insure them adequate subsistence and the means of establishing themselves comfortably in their new residence, unless, indeed, the aid and efforts of the government are rendered useless by their habitual indolence and improvidence. The Cherokees occupying portions of land in Georgia, Alabama, North Carolina, and Tennessee, and probably not exceeding eleven thousand persons, are the only Indians south of the Ohio and east of the Mississippi with whom an arrangement has not been made either for emigration or for a change of political relations. It is to be regretted that the same causes which have heretofore prevented an adjustment of the difficulties of that tribe and their removal west yet continue to defeat the efforts of the government. These causes are, no doubt, principally to be traced to the ascendancy of particular individuals, and to their desire to retain political influence and power. It is expected that about five hundred of these Indians will remove west this season, and the residue of the Cherokees then remaining east of the Mississippi will be, agreeably to previous computations, about ten thousand five hundred.

The commissioners west of the Mississippi are engaged in the execution of the duties connected with our Indian relations in that quarter. They have succeeded in arranging satisfactorily the disputed question of boundaries between the Creeks and Cherokees, which has for some time occasioned much embarrassment. They have also formed treaties with the Creeks, the Cherokees, the Senecas, the Shawnese, the Quapaws, and the Seminoles of Florida, by which all matters connected with these tribes have been satisfactorily adjusted. Their labors will be now directed to the other subjects indicated in their instructions, and which are important to a permanent arrangement of the various questions arising out of the new state of things which will be created in that region. Among these, one of the most interesting is a practical plan for regulating the intercourse of the various tribes, indigenous and emigrant, with one another and with the United States, and for the establishment of some general principles by which their own internal government can be safely administered by themselves, and a general superintending authority exercised by the United States so far as may be necessary to restrain hostilities among them and incursions into our borders. Until such a system is adopted, it is evident that the condition of these Indians cannot be secure, nor will the obligation imposed upon the government be fulfilled. The task requires an intimate knowledge of the local circumstances of the tribes of that region and of the country they inhabit, and a practical acquaintance with Indian habits, feelings, and mode of life. I trust the commissioners will be able to report a plan which will fulfil the expectation of those who have observed with solicitude the course of this matter, and which will eventually secure the prosperity of the Indians. As it is probable, however, that this cannot be effected within the time limited for the duties of the commissioners, I would respectfully suggest the propriety of their term of service being prolonged until the close of the next year.

There have been presented for allowance, under the pension act of June 7, 1832, thirty thousand six hundred claims. The whole of these have been examined and either admitted, rejected, or returned to the parties for supplementary action. Twenty-three thousand four hundred and thirty-eight certificates have been issued, eleven hundred and eleven claims have been rejected, three hundred returned cases are in the office awaiting or undergoing re-examination, thirteen hundred and fifty-one, which are incomplete in their proofs, are suspended till these are furnished, and four thousand four hundred and twenty-five are in the hands of the parties for additional evidence or authentication, or *in transitu* between them and the office.

It is creditable to the industry and efficiency of the Pension office that such a mass of business should have been performed within the period which has elapsed since the passage of the above law.

I have the honor to be, very respectfully, sir, your obedient servant,

LEWIS CASS.

The PRESIDENT of the United States.

List of documents accompanying the report of the Secretary of War.

- No. 1. Major general commanding the army. Report and documents, A to F.
 No. 2. Quartermaster general. Report.
 Nos. 3 and 4. Chief engineer. Report, with documents, and report from the visitors of the Military Academy.
 No. 5. Chief of the Topographical bureau. Report.
 No. 6. Paymaster general. Report and document A.
 No. 7. Commissary general of subsistence. Report and document B.
 No. 8. Chief of the Ordnance department. Report and documents, from A to I.
 No. 9. Surgeon general. Report.
 No. 10. Commissary general of purchases. Report and documents, No. 1 to 5.
 No. 10½. Clothing bureau. Report.
 No. 11.* Commissioner of Indian Affairs. Report and documents, A to D.
 No. 12. Commissioner of Pensions. Report and documents, A to G.
 No. 13. Bounty Land office. Report.
 No. 14. Second Auditor. Report and documents, A and B.
 No. 15. Third Auditor. Documents A and B.

No. 1.

REPORT OF THE MAJOR GENERAL OF THE ARMY.

HEADQUARTERS OF THE ARMY, *Washington, November 23, 1833.*

SIR: Since my last annual report on the state of the army nothing material has occurred in the movements of the troops worthy of particular notice. The discipline of the several corps continues to be maintained with regularity, and there is every reason to believe that they are in a condition for active service.

The battalion of mounted rangers has been discharged in conformity with your instructions, and the regiment of dragoons authorized by the act of the 2d of March, 1833, in lieu of that battalion, has been partially raised. Five companies of it are mounted, and have been ordered to Fort Gibson under Colonel Dodge, to be in readiness to accompany the commissioners in the ensuing season on their contemplated visit to the Indian country. The remaining five companies are being raised. The lateness of the selections and appointments of the captains and other officers from the mounted rangers has been the cause of the delay in filling the regiment; but there is every prospect that before the end of the year the regiment will be completed to its establishment.

The results expected to be produced by the operation of the act of the 2d of March of the last session of Congress "for the improvement of the condition of the non-commissioned officers and privates of the army, and for the prevention of desertion," so far as they can be ascertained, are decidedly favorable and satisfactory. The men who now offer to enlist are found to be of a more respectable class, and the number of enlistments does not diminish. In regard to desertions, there are strong indications of the salutary operations of the law, as the average number of men who have deserted for a given period since the passage of the bill is, by a comparison with the number of desertions for corresponding periods in the three years preceding, one-third less. A further proof of the beneficial influence of the law on the rank and file of the army is found in the fact that soldiers who have honorably completed their term of service now more readily re-enlist, which is considered a decided advantage to the public, both as it regards economy in the expenditure for the military service and in reference to the efficiency of the army.

In compliance with your instructions I herewith furnish the following statements and returns:

1. A statement showing the organization of the army, marked A.
2. A return of the actual state of the army, marked B.
3. A return exhibiting the strength of the eastern department, designating the posts and garrisons, marked C.
4. A return exhibiting the strength of the western department, designating the posts and garrisons, marked D.
5. A statement showing the number of recruits enlisted in the army from the 1st of January to the 30th of September, 1833, marked E.
6. An estimate of the funds required for the recruiting service for the year 1834, marked F.
7. An estimate of the contingent expenses of the headquarters of the army, including those of the office of the Adjutant General, for the year 1834, marked G.

I have the honor to be, sir, your most obedient servant,

ALEX. MACOMB, *Major General, Commanding the Army.*

HON. LEWIS CASS, *Secretary of War.*

* This and the following numbers taken in their appropriate classes.

A.

Organization of the army of the United States, 1833.

	Major general.	Brigadier general.	Adjutant general.	Inspector general.	Quartermaster general.	Quartermasters.	Commissary general of subsistence.	Commissaries.	Surgeon general.	Surgeons.	Assistant surgeons.	Paymaster general.	Paymasters.	Commissary general of purchases.	Military storekeepers.	Colonels.	Lieutenant colonels.	Majors.	Adjutants.	Captains.	First lieutenants.	Second lieutenants.	Sergeant majors.	Quartermaster sergeants.	Sergeants.	Corporals.	Principal musicians.	Chief bugler.	Buglers.	Musicians.	Farrier and blacksmith.	Artificers.	Enlisted men for ordnance.	Privates.	Total commissioned.	Total non-commissioned officers, musicians, artificers, and privates.	Aggregate.
General staff.....	1	2	1	2	1	4	1	2																											14	14	
Medical department.....									1	12	55																								68	68	
Pay department.....												1	14																						15	15	
Purchasing department.....														1	2																				3	3	
Corps of engineers.....																1	1	2			6	6	6												22	22	
Topographical engineers.....																		6			4														10	10	
Ordnance department.....																1	1	2			10											250		14	294	308	
Regiment of dragoons.....																1	1	1		10	11	10	1	1	40	40	1	2	20		10		600	34	715	749	
First regiment of artillery.....																1	1	1		9	18	18	1	1	36	36				18		27		378	48	497	545
Second regiment of artillery.....																1	1	1		9	18	18	1	1	36	36				18		27		378	48	497	545
Third regiment of artillery.....																1	1	1		9	18	18	1	1	36	36				18		27		378	48	497	545
Fourth regiment of artillery.....																1	1	1		9	18	18	1	1	36	36				18		27		378	48	497	545
Aggregate of artillery.....																4	4	4		36	72	72	4	4	144	144				72		108		1,512	192	1,988	2,180
First regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2							420	33	514	547
Second regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2							420	33	514	547
Third regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2							420	33	514	547
Fourth regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2							420	33	514	547
Fifth regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2							420	33	514	547
Sixth regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2							420	33	514	547
Seventh regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2							420	33	514	547
Aggregate of infantry.....																7	7	7		70	70	70	7	7	210	280	14			140				2,940	231	3,598	3,829
Grand aggregate.....	1	2	1	2	1	4	1	2	1	12	55	1	14	1	2	14	14	22		136	159	158	12	12	438	464	15	2	20	212	10	108	250	5,052	603	6,595	7,198

NOTE.—The law authorizes the appointment of fifty assistant commissaries of subsistence and twenty assistant quartermasters, to be taken from the line of the army. The former are confined to the rank of lieutenants.

HEADQUARTERS OF THE ARMY, Washington, November, 1833.

ADJUTANT GENERAL'S OFFICE, Washington, November, 1833.

ALEX. MACOMB, Major General, Commanding the Army.

R. JONES, Adjutant General.

B.—General return of the army of the United States—Continued.

	PRESENT.													ABSENT.							PRESENT AND ABSENT.					
	On extra or daily duty.						In arrest or confinement.						Commissioned officers.	Non-commissioned officers, musicians, artificers, and privates.	Detached service.			With leave, or on furlough.				Total.	Aggregate.			
	Field officers.	Captains.	Subalterns.	Non-commissioned officers.	Musicians.	Artificers.	Privates.	Field officers.	Captains.	Subalterns.	Non-commissioned officers.	Musicians.			Artificers.	Privates.	Field officers.	Captains.	Subalterns.	Non-commissioned officers, musicians, artificers, and privates.	Field officers.			Captains.	Subalterns.	Non-commissioned officers, musicians, artificers, and privates.	Subalterns without leave.	Non-commissioned officers, &c., in confinement, &c., (sick.)
General staff,.....																										14
Medical staff,.....																										68
Pay department.....																										15
Purchasing department.....																										3
Corps of engineers.....																										26
Topographical engineers.....																										10
Ordnance department.....																									153	167
Regiment of dragoons.....						4							8	35	354	1			2	1					356	393
1st regiment of artillery.....			1	3		4	12				1	1	26	25	408		1	20	4		2	4	1	9	423	474
2d regiment of artillery.....				7	1	1	22				2	1	32	22	350	2	3	21	22		6			8	380	432
3d regiment of artillery.....		1		3			10						19	22	362	1	17	7			1	1	3	1	372	425
4th regiment of artillery.....		2	1	5			48			1	1	1	11	22	400	1		22	1		1		6	4	411	457
Aggregate of artillery.....		3	2	18	1	5	92			1	4	3	88	101	1,520	3	5	80	34		4	11	10	1	1,585	1,788
1st regiment of infantry.....			1	17	2		92				1		36	21	378		4	8	14		2	3	1	5	398	436
2d regiment of infantry.....			3	9	1		45						34	27	436	1	2	9	2			1	2	9	449	489
3d regiment of infantry.....			4	10			39					1	14	26	370	1	3	8	25			2	3	1	399	439
4th regiment of infantry.....			1	7	1		28				2	2	61	19	413	2	3	10	10			7	1	1	425	466
5th regiment of infantry.....			3	6			44				1	1	27	25	426	2	3	10	10			1	7	3	453	490
6th regiment of infantry.....	1	1	5	4			29				2		46	24	394		4	7	14	1	1	3	3	4	415	455
7th regiment of infantry.....			2	4			40					5	19	18	421		3	13	15			2	5	4	440	480
Aggregate of infantry.....	1	1	19	57	4		317				6	9	237	160	2,838	6	21	60	103	1	6	23	17	21	2,979	3,255
Recruits and unattached soldiers.....																									673	673
Grand aggregate.....	1	4	21	75	5	5	431			1	10	12	333	296	4,712	10	26	140	139	2	10	34	27	1	5,746	6,412

NOTE.—The major and 1 captain of the 2d regiment of artillery, and 1 captain of the 7th regiment of infantry, being staff officers, are omitted in the "aggregate" of their respective regiments, because they are reported and included in the aggregate of the general staff.

HEADQUARTERS OF THE ARMY, Washington, November, 1833.

ADJUTANT GENERAL'S OFFICE, Washington, November, 1833.

ALEX. MACOMB, Major General, Commanding the Army.

R. JONES, Adjutant General.

C.—Position and distribution of the troops in the eastern department, under the command of Brevet Major General Winfield Scott.

Vol. V—28 C

No.	Posts.	Situation.	Commanding officers.	Regiments.	Number of companies.	Present.																	Commissioned officers.	Non-commissioned officers, musicians, artificers, and privates.		
						Colonel.	Lieutenant colonels.	Majors.	Adjutant.	Surgeons.	Assistant surgeons.	Captains.	First lieutenants.	Second lieutenants.	Bvt. second lieutenants.	Sergeant majors.	Quartermaster serg'ts.	Sergeants.	Corporals.	Principal musicians.	Chief buglers.	Buglers.			Musicians.	Furriers and blacksmiths.	Artificers.	Privates.
1	Fort Winnebago.....	Portage, Fox, and Wisconsin rivers.....	Lieut. Col. Cutler.....	5th infantry...	4	1				1	1	1	3	1		7	10			5			138	8	160	
2	Fort Brady.....	Sault St. Marie, Michigan Territory.....	Captain Cobbs.....	2d infantry...	2					1	2	1	1	2		7	8			4			82	7	99	
3	Fort Mackinac.....	Michilimackinac, Michigan Territory.....	Major Whistler.....	do.....	2			1		1	1	2				7	7			5			77	6	96	
4	Fort Howard.....	Green Bay, Michigan Territory.....	Bvt. Brig. Gen. Brooke.....	5th infantry...	4	1			1	1	2	3	2	1	1	13	13	2		7			123	12	160	
5	Fort Dearborn.....	Head of Lake Michigan, Illinois.....	Major Green.....	do.....	2			1		2	2	2				7	7			3			66	8	83	
6	Fort Gratiot.....	Outlet of Lake Huron, Michigan Territory..	Bvt. Major Payne.....	4th artillery...	2					1	1	2	1			6	7			3		4	68	5	88	
7	Fort Niagara.....	New York.....	Lieut. Col. Cummings.....	2d infantry...	2		1		1		1	2	2		1	7	7	1		4			91	8	111	
8	Hancock Barracks.....	Holton Plantation, Maine.....	Bvt. Major Clarke.....	do.....	4					3	3	2	2			12	13	1		6			120	10	152	
9	Fort Sullivan.....	Eastport, Maine.....	Captain Childs.....	3d artillery...	1					1	1	1	1	1		3	2			2		2	33	5	42	
10	Fort Preble.....	Portland, Maine.....	Captain McClintock.....	do.....	1					1	1	1				3	2			2		2	33	3	42	
11	Fort Constitution.....	Portsmouth, New Hampshire.....	Captain Ansart.....	do.....	1					1	1		2			4	4			2		2	31	4	43	
12	Fort Independence.....	Boston, Massachusetts.....	Bvt. Lieut. Col. Brooks.....	do.....	1			1		1	1	1				4	3			2		2	31	4	42	
13	Fort Wolcott.....	Newport, Rhode Island.....	Bvt. Maj. Lomax.....	do.....	1					1	1	1				4	3			1		1	24	4	43	
14	Fort Trumbull.....	New London, Connecticut.....	Captain Saunders.....	1st & 3d artilly	2				1		2	3	3	1		7	7			4		6	66	9	90	
15	Military Academy.....	West Point, New York.....	Major De Russey.....	Detachment.....												3	3			1		3	39		49	
16	Fort Columbus.....	New York, New York.....	Bvt. Lieut. Col. Fanning.....	4th artillery...	1			1		1	1	2	1			5	4			2		3	36	6	50	
17	Fort Hamilton.....	do.....	Bvt. Major Pierce.....	do.....	2					1	2	2	1			9	6			4		6	50	6	84	
18	Fort McHenry.....	Baltimore, Maryland.....	Bvt. Col. Walbach.....	1st artillery...	1		1			1						5	4			1		2	43	3	55	
19	Fort Severn.....	Annapolis, Maryland.....	Bvt. Major Erving.....	4th artillery...	1					1	1	1		1		3	2			2		2	55	4	64	
20	Fort Washington.....	On the Potomac, Maryland.....	Bvt. Major Mason.....	1st artillery...	1					1	1	1		1		4	4			2		1	39	3	50	
21	Fort Monroe.....	Old Point Comfort, Virginia.....	Bvt. Maj. Helleman.....	3d artillery... 4th artillery... do.....	3 3 1					3	8	8	8	8	1	33	27			13		21	292	35	387	
22	Fort Johnson.....	Near Smithfield, North Carolina.....	Bvt. Major Churchill.....	1st artillery...	1					1	1	1	2			3	3			1		2	38	5	47	
23	Beaufort.....	Beaufort, North Carolina.....	Bvt. Major Kirby.....	do.....	1					1				1		3	4			2		3	28	2	40	
24	Fort Moultrie.....	Charleston, South Carolina.....	Major Gates.....	2d artillery...	1							3				6	6			3		4	60	5	79	
25	Castle Pinckney.....	do.....	do.....	1st artillery...	1			1								6	6			3		4	60	5	79	
26	Augusta Arsenal.....	Augusta, Georgia.....	Lieutenant Herring.....	2d artillery...	Det.					1						1						2	13	1	16	
27	Oglethorpe Barracks.....	Savannah, Georgia.....	Bvt. Capt. Merchant.....	do.....	1					1		2	1			4	4			2		2	39	4	51	
28	Fort Marion.....	St. Augustine, Florida.....	Captain Drane.....	do.....	1					1	1	1	2			3	4			2		3	29	5	41	
29	Camp Armistead.....	Near Tellico Plains, Tennessee.....	Captain Belton.....	do.....	2					1	2	2				6	7			3		5	59	5	80	
					52	1	3	5	1	3	24	38	42	37	23	2	2	179	169	4		88	78	1,812	177	2,334

C.—Position and distribution of the troops in the eastern department, &c.—Continued.

No.	Posts.	Situation.	Commanding officers.	Regiment.	Number of companies.	Detached service.					With leave, or on furlough.					Present and absent.				
						Field officers.	Captains.	Subalterns.	Total commissioned officers.	Non-commissioned officers, &c.	Field officers.	Surgeons.	Assistant surgeons.	Captains.	Subalterns.	Total commissioned officers.	Non-commissioned officers, &c.	Subalterns without leave.	Non-commissioned officers sick, in confinement, &c.	Total.	Aggregate.
1	Fort Winnebago	Portage, Fox, and Wisconsin rivers	Lieut. Col. Cutler	5th infantry	4	2	3	5	3				1	1			163	177		
2	Fort Brady	Sault St. Marie, Michigan Territory	Captain Cobbs	2d infantry	2		2	2						5			104	113		
3	Fort Mackinac	Michilimackinac, Michigan Territory	Major Whistler	do	2	1	1	2									96	104		
4	Fort Howard	Green Bay, Michigan Territory	Brevet Brig. Gen. Brooke	5th infantry	4	1	2	3				1	1	2		3	163	180		
5	Fort Dearborn	Head of Lake Michigan, Illinois	Major Greene	do	2			2									85	93		
6	Fort Gratiot	Outlet of Lake Huron, Michigan Territory	Brevet Major Payne	4th artillery	2		4	4	1			1	1			3	92	102		
7	Fort Niagara	New York	Lieut. Col. Cummings	2d infantry	2	1	2	3	2								113	124		
8	Hancock Barracks	Holton Plantation, Maine	Brevet Major Clarke	do	4	1	3	4					1		8	161	175			
9	Fort Sullivan	Eastport, Maine	Captain Childs	3d artillery	1		2	2									42	49		
10	Fort Preble	Portland, Maine	Captain McClintock	do	1		3	3						1		42	49			
11	Fort Constitution	Portsmouth, New Hampshire	Captain Ansart	do	1		2	2							2	45	51			
12	Fort Independence	Boston, Massachusetts	Brevet Lieut. Col. Brooks	do	1		2	2	1						1	44	50			
13	Fort Wolcott	Newport, Rhode Island	Brevet Major Lomax	do	1		2	2	2				1			1	36	43		
14	Fort Trumbull	New London, Connecticut	Captain Saunders	1st & 3d artill'y	2		2	2	4			1	1		1	95	107			
15	Military Academy	West Point, New York	Major De Russey	Detachment													49	49		
16	Fort Columbus	New York, New York	Brevet Lieut. Col. Fanning	4th artillery	1		1	1									50	57		
17	Fort Hamilton	do	Brevet Major Pierce	do	2		4	4									84	94		
18	Fort McHenry	Baltimore, Maryland	Brevet Col. Walbach	1st artillery	1		1	1		1	1	1	3				55	62		
19	Fort Severn	Annapolis, Maryland	Brevet Major Erving	4th artillery	1		3	3									64	71		
20	Fort Washington	On the Potomac, Maryland	Brevet Major Mason	1st artillery	1		4	4									50	57		
21	Fort Monroe	Old Point Comfort, Virginia	Brevet Major Heileman	do	3															
				3d artillery	3	1	1	23	25	1			2	2	7	10	405	467		
				4th artillery	3															
22	Fort Johnson	Near Smithfield, North Carolina	Brevet Major Churchill	1st artillery	1		1	1									47	53		
23	Beaufort	Beaufort, North Carolina	Brevet Major Kirby	do	1		4	4									40	46		
24	Fort Moultrie	Charleston, South Carolina	Major Gates	2d artillery	1		4	5	2			1	1		3	84	95			
25	Castle Pinckney	do	do	1st artillery	1	1	4	5	2											
26	Augusta Arsenal	Augusta, Georgia	Lieut. Herring	2d artillery	Det.												16	17		
27	Oglethorpe Barracks	Savannah, Georgia	Brevet Captain Merchant	do	1	1	1	2				1			2	53	60			
28	Fort Marion	St. Augustine, Florida	Captain Drane	do	1		1	1								41	47			
29	Camp Armistead	Near Tellico Plains, Tennessee	Captain Belton	do	2		6	6				2	2			80	93			
					53	1	9	83	93	18		1	6	8	13	13	1	34	2,399	2,685

HEADQUARTERS OF THE ARMY, Washington, November, 1833.
 ADJUTANT GENERAL'S OFFICE, Washington, November, 1833.

ALEX. MACOMB, Major General, Commanding the Army.
 R. JONES, Adjutant General.

D.—Position and distribution of the troops in the western department, &c.—Continued.

	Posts.	Situation.	Commanding officers.	Regiments,	Number of companies,	Detached service.					With leave, or on furlough.					Subalterns, without leave.	Non-commissioned officers in confinement, sick, &c.	Total.	Aggregate.		
						Field officers.	Captains.	Subalterns.	Total commissioned officers.	Non-commissioned officers, &c.	Field officers.	Surgeons.	Assistant surgeons.	Captains.	Subalterns.					Total commissioned officers.	Non-commissioned officers, &c.
1	Fort Snelling	Upper Mississppi.....	Major Bliss.....	First infantry	3	2	4	6	4				2	2	1	3	106	119			
2	Fort Crawford.....	Prairie du Chien, Mich. Ter..	Colonel Taylor	do.	5	2	4	6	36		1		1	3	5	1	193	215			
3	Fort Armstrong.....	Rock Island, Ill.	Lieut. Col. Davenport.....	do.	2	1	2	3					1	1			69	79			
4	Fort Leavenworth	Right bank of the Missouri, near the Little Platte.....	Captain Wickliffe.....	Sixth infantry.....	4	2	4	6	13							3	124	138			
5	Jefferson Barracks	Near St. Louis, Mo.	Lieut. Col. Baker.....	Dragoons.....	5	2	3	7	12	3	1						643	692			
				Sixth infantry.....	6																
6	Fort Gibson	Arkansas Territory.....	Colonel Arbuckle.....	Seventh infantry	9	3	12	15	15				2	5	7		391	428			
7	Fort Smith.....	On the Arkansas.....	Captain Stuart	do.	1		1	1									49	53			
8	Fort Jesup	Near Natchitoches, La.....	Bvt. Brig. Gen. Leavenworth.	Third infantry	6	1	2	6	9	20		1		1	2	2	219	248			
9	Fort Towson.....	On the Kiamichi, Ark. Ter..	Lieut. Col. Yose.....	do.	4	1	2	3	5				1	1	1		180	195			
10	Baton Rouge	Baton Rouge, La.....	Captain Wilson.....	Fourth infantry.....	3	1	4	5	3				1	1			132	146			
11	New Orleans.....	New Orleans, La.....	Lieut. Col. Twiggs.....	do.	2	1	2	3	4			1		1	3		103	111			
12	Fort Wood	Chef Menteur, La.....	Bvt. Maj. Zantzingher.....	Second artillery.....	1		3	3	4					1	1		33	40			
13	Fort Pike.....	Petite Coquille, La.....	Bvt. Maj. Mountfort.....	do.	1		2	2					1	1			42	49			
14	Fort Jackson.....	Near New Orleans, La.....	Captain Baden.....	do.	1		5	5	3							1	33	40			
15	Fort Mitchell	Near Creek Agency, Ala.....	Bvt. Maj. McIntosh.....	do.	1		3	5						2	2		139	156			
				Fourth infantry.....	3	2	3	3	3				1	1			54	59			
16	Fort King.....	Alachua, Fla.....	Captain Graham	do.	1																
17	Key West.....	Key West, Fla.....	Bvt. Maj. Glassell.....	do.	1		1	1	2				1	1		1	23	28			
					59	3	20	65	88	112	1	1	2	5	19	28	10	8	12	2,533	2,796

HEADQUARTERS OF THE ARMY, Washington, November, 1833.
 ADJUTANT GENERAL'S OFFICE, Washington, November, 1833.

ALEX. MACOMB, Major General, Commanding the Army.
 R. JONES, Adjutant General.

E.

ADJUTANT GENERAL'S OFFICE, *Washington, November 1, 1833.*

Statement showing the whole number of recruits enlisted in the army from the 1st of January to the 30th of September, 1833, according to the latest returns.

GENERAL RECRUITING SERVICE, EASTERN DEPARTMENT—Lieut. Col. J. B. Crane, 2d artillery, superintendent:

At Albany, New York.....	65	At Louisville, Kentucky.....	2
Boston, Massachusetts.....	8	Middleburg, Vermont.....	24
Buffalo, New York.....	24	New York, N. Y.....	175
Baltimore, Maryland.....	88	New Bedford, Massachusetts.....	3
Burlington, Vermont.....	23	Providence, Rhode Island.....	3
Easton, Pennsylvania.....	84	Philadelphia, Pennsylvania.....	53
Fredericksburg, Virginia.....	4	Plattsburg, New York.....	30
Fredericktown, Maryland.....	109	Port Deposit, Maryland.....	20
Hartford, Connecticut.....	5	Rochester, New York.....	59
Ithaca, New York.....	13	Sackett's Harbor, New York.....	99
Lancaster, Pennsylvania.....	60	Utica, New York.....	19
Lynchburg, Virginia.....	5	Whitehall, New York.....	66
		—	1, 041

GENERAL RECRUITING SERVICE, WESTERN DEPARTMENT—Lieut. Col. Wm. S. Foster, 4th infantry, superintendent:

At Cincinnati, Ohio.....	3	At Maysville, Kentucky.....	2
Frankfort, Kentucky.....	1	Natchez, Mississippi.....	2
Lexington, Kentucky.....	3	Newport, Kentucky.....	9
Louisville, Kentucky.....	20	—	40

REGIMENTS.

In the dragoons.....			443
1st artillery.....	74	In the 3d artillery.....	38
2d artillery.....	34	4th artillery.....	64
		—	210
1st infantry.....	12	5th infantry.....	5
2d infantry.....	96	6th infantry.....	43
3d infantry.....	8	7th infantry.....	16
4th infantry.....	86	—	266
Detachment at West Point.....			9
Band at West Point.....			3
Detachment of orderlies at Washington.....			5
At ordnance depots.....			19

Total number enlisted from the 1st of January to the 30th of September, 1833..... 2, 036

Amount of recruiting funds advanced to officers from the 1st of January to the 30th of September, 1833.....	\$26, 973 19
Amount of those funds accounted for within the same period.....	21, 406 36
	—
Balance in the hands of recruiting officers on the 30th of September, 1833.....	5, 566 83
	—
Amount of recruiting funds advanced for raising the regiment of dragoons up to the 30th of September, 1833.....	5, 663 55
Amount of those funds accounted for up to the same period.....	2, 667 98
	—
Balance in the hands of dragoon officers on the 30th of September, 1833.....	2, 995 57

Respectfully submitted. "

R. JONES, *Adjutant General.*

Major General ALEX. MACOMB, *Commander-in-chief United States Army.*

F.

ADJUTANT GENERAL'S OFFICE, *Washington, October 22, 1833.*

SIR: Pursuant to your instructions, I submit the following estimate for the expenses of the recruiting service of the army for the year 1834:

"Extra pay" allowed under the law of March 2, 1833, as a bounty for re-enlistments, to wit:

Two months' "extra pay" for five hundred re-enlistments, at \$12 for each soldier.....	\$6, 000 00
It is calculated that on the 31st of December, 1833, there will remain in the treasury a balance of the appropriation for "bounties and premiums" for the current year amounting to.....	35, 388 00

From the above sum of \$35,388 <i>deduct</i> the amount that will be required, as above estimated, for "extra pay" allowed to re-enlisted soldiers for the year 1834.....	\$6,000 00
There will then remain in the treasury on the 31st December, 1833, a balance of the appropriation for the current year, under the head of "bounties and premiums," not now required for that object, amounting to	29,388 00
Total amount required to be appropriated for "extra pay," as a bounty for re-enlistments for the year 1834.....	<u>6,000 00</u>

CONTINGENT EXPENSES,

Including quarters, fuel, bunks, straw, compensation to citizen surgeons for examination and medical attendance, magistrates' fees for administering the oath of allegiance to recruits, and all other expenditures on their account, until put in march to join their regiments, at \$8 per man for 2,817 recruits, exclusive of the number (500) of soldiers that will, it is calculated, re-enlist	22,536 00
From the above sum of \$22,536 <i>deduct</i> the balance of appropriation for "expenses of recruiting" for the current year which it is calculated will remain in the treasury on the 31st of December, 1833.....	6,043 00
Total amount required to be appropriated for " <i>expenses of recruiting</i> " for the year 1834.....	<u>16,493 00</u>

RECAPITULATION.

Amount required for two months' " <i>extra pay</i> " allowed to each soldier who may re-enlist in 1834	6,000 00
Amount required for " <i>expenses of recruiting</i> " in 1834.....	16,493 00
Aggregate sum required to be appropriated for the recruiting service for the year 1834	<u>22,493 00</u>

REMARKS AND EXPLANATIONS.

The number of recruits, as above estimated for, to fill up the rank and file of the army for 1834 is calculated as follows:

The vacancies existing in the rank and file of the army on the 30th of September last, as exhibited by the latest monthly returns received, were.....	1,429
To which <i>add</i> the number of discharges that will take place by the expiration of enlistments from the 1st of October to the 31st of December, 1833.....	212
<i>Add</i> also the estimated number of casualties by <i>death, desertion, and discharges for disability, &c.</i> , for the same period.....	300
	<u>1,941</u>
From the above <i>deduct</i> the number of recruits in depot and not assigned to regiments... 459	
Also, the estimated number that may be enlisted between the 1st of October and the 31st of December, 1833.....	500
	<u>959</u>
Deficiency in the rank and file of the army on the 31st of December, 1833.....	982
To the above deficiency <i>add</i> the number of discharges that will take place by the expiration of enlistments from the 1st of January, 1834, to the 31st of December, 1834	935
<i>Add</i> also the estimated number of casualties by <i>death, desertion, and discharges for disabilities, &c.</i> , for the same period.....	1,400
Total number of recruits, including re-enlistments, required for the year 1834....	<u>3,317</u>

Respectfully submitted.

R. JONES, *Adjutant General.*Major General ALEXANDER MACOMB, *Commander-in-chief United States Army.*

REPORT OF THE QUARTERMASTER GENERAL.

QUARTERMASTER GENERAL'S OFFICE, *Washington City, November 27, 1833.*

Sir: In obedience to your order, I have the honor to report the operations of this department for the 1st, 2d, and 3d quarters of the present year, in addition to which I include that portion of 1832 not embraced in my last annual report.

The balance remaining to be accounted for by the several officers of the department at the date of that report amounted to \$87,230 14
To which is to be added:

1. Remittances, viz:

In the 4th quarter of last year.....	\$218,652 45
In the 1st quarter of the present year.....	198,049 86
In the 2d quarter of the present year.....	304,124 99

In the 3d quarter of the present year.....	\$383, 232 10	
In small sums during the year from other departments, not on requisitions from this office, but accounted for through it.....	37, 894 31	
Total amount of remittances.....		\$1, 141, 953 71
2. Proceeds of the sales of public property, either unfit for service or no longer required for public use, and rents received for public lands and buildings not required for military purposes.....		26, 221 15
3. Errors, overcharges, and disallowances credited by officers in their accounts with the department from the 2d quarter of 1829 to the 2d quarter of 1832, as ascertained by an examination of the several accounts.....		5, 506 27
Making the total to be accounted for.....		\$1, 260, 911 27
Of which there has been accounted for:		
1. By disbursements, viz: in the 2d and 3d quarters of 1832, not included in the last report, the accounts not having been received at its date, including an error in that report of \$480 44.....	\$12, 268 74	
In the 4th quarter of 1832.....	294, 601 11	
In the 1st quarter of 1833.....	169, 178 06	
In the 2d quarter of 1833.....	241, 100 03	
In the 3d quarter of 1833.....	450, 641 20	
		\$1, 167, 789 65
2. By deposits to the credit of the Treasurer of the United States.....		1, 835 14
3. By amount turned over to the Ordnance department by the assistant quartermaster at Detroit, being part of the proceeds of public property sold at that place.....		7, 000 00
Total accounted for.....		1, 176, 624 79
Leaving a balance to be accounted for.....		84, 286 48

The accounts of six officers remain to be received, which will reduce this balance \$10,629. The remainder is distributed among more than fifty officers, at the various posts in the Union, and is applicable to the service of the present quarter, and it is confidently believed that the whole of it will be applied to the proper objects, and accounted for at the close of the quarter.

The large amount of public property under the administration of the department is promptly accounted for by the officers who receive it, as well of the department as of the several corps of the army.

The balance remaining in the treasury of the appropriation for the Quartermaster's department proper, with the sums due to it for expenditures on account of other branches of service, will be fully sufficient for all demands against it for the remainder of the year; but it is apprehended there will be an arrearage on account of the appropriation for the transportation of the army, and also on account of that for the travelling allowance of officers.

Of the public works under the direction of the department, the military road in the State of Maine, which has been in a course of construction for several years, is now completed, and is represented by the officer charged with its superintendence to be of a superior character. Connecting, as it does, the resources of the Atlantic with an interior post on a distant frontier, it may be justly considered a work of importance, at least in its military relations.

The road from Fort Howard, Green Bay, to Fort Crawford, on the Mississippi river, has been surveyed and located during the present season. This is an important military communication, intended to connect three of the exterior posts on the northwestern frontier. To complete the work a further appropriation will be necessary.

The Washington and Jackson road, in the Territory of Arkansas, has been extended as far as the limited appropriation made at the last session of Congress for the purpose would warrant; but the road being a highly important communication, connecting the centre of the Territory with its frontier on the Red river, it should be put in a state to be used at all seasons of the year, for which purpose a further appropriation is required.

The road from Pensacola to Tallahassee, and thence to St. Augustine, in Florida, has been partially repaired, but the appropriations have been found altogether insufficient. Uniting, as it does, the posts on an important frontier, it should be kept at all times in good repair. I consider the small sums which have been appropriated for some years past, from their inadequacy, as money wasted. To put the road in good repair a liberal appropriation is required.

That portion of the road from Memphis, Tennessee, to Little Rock, Arkansas, lying between the latter place and St. Francis river, has been in a course of repair, in pursuance of the appropriation made for that object.

Measures were taken early in the year to procure a suitable site for the barracks authorized in the vicinity of New Orleans, but the malignant diseases which have prevailed there throughout the season have occasioned much delay, and prevented any conclusive arrangement being made. The officer charged with the negotiation has, however, been instructed to close with one of the several propositions made, and an experienced officer is on his way to New Orleans, with instructions to adopt immediate and energetic measures to accomplish the work; and unless the diseases which have proved so destructive should continue through the winter, it is believed that accommodations for two companies, at least, may be ready by the 1st of June.

Arrangements have been made for repairing the barracks and building a hospital at Baton Rouge, but a further appropriation will be necessary to accomplish the work in a suitable manner.

A site has been obtained for the barracks authorized to be erected in the city of Savannah, and the officer charged with the superintendence has obtained a part of the materials and has commenced the work. To complete it properly a further appropriation is required.

The barracks at Fort Crawford, owing to the interruption of operations by the presence of the cholera, and causes connected with our Indian relations in that vicinity, have not yet been completed. They are, however, in progress, and the work will be prosecuted as steadily as circumstances will permit.

Nor has it been practicable to complete the barracks at Fort Howard, Green Bay. They are also in progress, but another season and an additional appropriation will be required to complete them.

The storehouse authorized to be erected in Pittsburg, Pennsylvania, has been completed in accordance with the appropriation for that object, and the necessary repairs have been bestowed on the wharf at Fort Washington, Maryland.

In regard to the Delaware breakwater, the experiment has now been fairly made. That work already affords a good harbor for the vessels engaged in transporting the materials used in its construction, as well as for such vessels engaged in commerce as take shelter under it in time of storm.

General Bernard's estimate to complete the work was.....	\$2, 216, 950
The several appropriations up to this date amount altogether to.....	1, 160, 000

Leaving of the estimate not yet appropriated a balance of.....	<u>1, 056, 950</u>
--	--------------------

The whole length of the breakwater, according to the plan, is.....	2, 600 feet.
The deposit of stone already extends.....	3, 700 feet.
Of which there are elevated five feet above the plane of high water.....	1, 007 feet.
Nearly level with high water.....	950 feet.
Averaging fifteen feet above the sea bottom.....	743 feet.
	<u>2, 700 feet.</u>

The whole length of the ice-breaker, according to the plan, is.....	1, 500 feet.
The deposit of stone extends already.....	1, 400 feet.
Of which there are elevated above the level of high water.....	978 feet.
Level with high water.....	300 feet.
Averaging fourteen feet above the sea bottom.....	122 feet.
	<u>1, 400 feet.</u>

One hundred and fifty-four thousand four hundred and fifty-nine tons of stone were deposited during the past season, and if we had had money to pay for it, one hundred and fifty thousand tons more might readily have been deposited with but little increase of the contingent expenses of the work.

I have increased the estimate for the ensuing year eighty thousand dollars, because there is no longer any doubt of the great advantage of the work to the commerce of the country. Twenty thousand dollars of that sum is for a permanent light-house, to be placed on the western extremity of the breakwater. It is required even now to point out the entrance into the harbor during the night, and it can be constructed at less expense while the operations upon the breakwater are in progress than after they shall have terminated. If adequate appropriations be made the work may be entirely finished in the year 1835.

The claim for furniture for their quarters has been preferred from time to time by a portion of the officers of the army, but as such an allowance has never been authorized in the land service, either by law or regulation, I have not considered it proper to present an estimate for the funds required to provide it, but I consider it to be my duty to submit the subject for your consideration, and I respectfully recommend, should you approve of the measure, that the attention of Congress be invited to it, and that an appropriation be asked for at least sufficient to furnish the quarters of officers below the rank of brigadier general stationed at permanent posts. Furniture is furnished for naval officers when serving at sea and at the naval stations on shore. The officers of the army think they have an equal claim to it, for they cannot perceive that that which is right in relation to one service can be wrong in relation to the other.

I have the honor to be, sir, your obedient servant,

TH. S. JESUP, *Quartermaster General.*

Hon. LEWIS CASS, *Secretary of War.*

Nos. 3 and 4.

REPORT FROM THE ENGINEER DEPARTMENT.

ENGINEER DEPARTMENT, *Washington, November 23, 1833.*

SIR: In accordance with your instructions, I have the honor to submit the following report of the operations of this department during the year ending the 30th September last. It presents a general view of the state of the works under the direction of the department at that date, and is accompanied by statements marked A, B, and C. The first two relate to its fiscal concerns, and the last exhibits the works projected by the board of engineers which have not been commenced, and an estimate of their cost.

FORTIFICATIONS.

Fort Independence, Boston harbor.—In making the necessary preparations for commencing the repairs of this work, it was soon perceived that the amount of funds appropriated for that object would not be sufficient to effect it. The estimates were predicated upon the prices of materials and labor as they existed in 1831, since which they have risen about 25 per cent., judging by the best data that could be procured. Under these circumstances, it was deemed proper to limit the operations for the present on Castle island to the building of a sea-wall for its preservation, and the repairing of the southwest wharf. The former has been put under contract, and measures were taken for the early completion of the latter. An additional estimate for this fort will accordingly be submitted.

Fort Warren, George's island, Boston harbor.—The calls upon the department during the last season have been so numerous and of a nature so pressing as to render it impossible, with its limited means, to mature the plans for this work. Every effort in the way of preparation will, however, be made this fall and winter for the efficient prosecution of the preliminary works early next spring.

Fort Adams, Newport harbor, Rhode Island.—Great progress has been made in this work since my last report. The operations on it have been conducted in a manner altogether satisfactory. It is in a good state, and exhibits some of the finest specimens of workmanship to be met with in our public works.

Fort Hamilton, Narrows, New York.—There is a small amount of the last appropriation for this work yet unexpended in the hands of the agent. It will be applied, in the course of the coming year, to give the work that degree of finish which can only be attained after the lapse of sufficient time to allow the defects in construction that cannot be foreseen to develop themselves.

Fort Columbus and Castle William, Governor's island, New York.—Satisfactory progress has been made in the repairs of Fort Columbus, which will be completed, it is believed, this fall or early next spring. The operations for the repair of Castle William have been confined to the building of a wharf and the collection of materials, as it was deemed advisable to direct as much of the available means as might be found consistent with a due regard to economy to the attainment of one object at a time.

Fort Schuyler, Throg's Neck, East river, New York.—The attention of the officer charged with the construction of this fort has been directed principally to the accomplishment of such preparatory measures as shall enable him to commence and prosecute his operations with advantage as soon as the plans shall be matured and adopted. These are not yet in readiness, in consequence of incessant engagements of the officers of the department.

Fort Delaware, Delaware river.—The latter end of April a commencement was made on the Pea Patch island to construct the temporary quarters and workshops, preparatory to a demolition of the walls of the old fort. This object has been effected, and extended to provide for the accommodation of nearly all the laborers, mechanics, and others, whose time and services will be required in the construction of the work for the defence of this position.

Twenty-two thousand yards of the masonry of the old fort have been demolished by mining; 10,000 yards of the same have been removed, and transported to the exterior of the dike surrounding the island for its preservation; of which 300 running yards have been thus secured, and 400,000 bricks of the old work cleaned, preparatory to their being used in the construction of the new work.

To accomplish the removal of the material of the old fort, the most economical plan was to excavate the draining ditches of the island to such a size as would suit them for navigation with lighters. The extent of this excavation is 6,700 cubic yards.

Fort Monroe, Hampton Roads, Virginia.—A part of the funds placed at the disposal of the department for this work has been applied during the year to the objects specified in my last report. Although much has been done towards its completion, yet, owing to the great demand for labor, and the consequent difficulty in commanding it at Fort Monroe, though an advance of 15 per cent. was offered, the outwork on the front of attack is not in a state as far advanced as it was hoped it would be.

Fort Calhoun, Hampton Roads, Virginia.—By a reference to my last annual report, it will be perceived that it has for some time been a leading object at this work to compress the substratum, by the accumulation of materials upon it, to a state which will produce an equilibrium when it shall be required to sustain the weight of the walls and the armament of the fort. Twelve thousand five hundred tons of stone have been added to the mole, and eleven thousand eight hundred tons of building stone deposited on and near the walls during the year.

Fort Macon, Beaufort, North Carolina.—This work will be completed and ready for inspection by the middle of the present month. The works for the preservation of its site have been prosecuted with considerable advantage, and give promise that they will accomplish the desirable object for which they were begun.

Fort Caswell, Oak island, North Carolina.—As was anticipated in my last report, this fort will be completed and may be garrisoned before the end of this year.

Fortifications in Charleston harbor, South Carolina.—Castle Pinckney and Fort Moultrie have been much improved as regards their ability for defence, and the latter thoroughly repaired. Works to arrest the encroachments of the water on the site of Fort Moultrie have been commenced, but sufficient time has not yet elapsed to justify the expression of any opinion as to their ultimate effect. About 16,500 tons of stone have been added to the mole to be occupied as a foundation to Fort Sumter, and the necessary preparations made to commence the construction of this work as soon as the mole shall be finished.

Fort Pulaski, Cockspur island, Georgia.—About two months, at the commencement of the last working season at this work, were lost in consequence of the absence of the superintending engineer, who was withdrawn from his command to meet a pressing demand elsewhere. The work was prosecuted, however, with great efficiency during the remainder of the season, and the progress has been such as to give satisfaction. The means have been applied principally to meet the difficulties encountered in the foundations.

Fort Marion, St. Augustine, Florida.—The funds appropriated at the last session of Congress for this fort have been applied so far as it was deemed necessary for such a work; and operations have for some time been directed to the repairing of the sea wall connected with it, with a hope of accomplishing the object of the law on the subject by the middle of January or February.

Fort Pickens, Pensacola harbor, Florida.—The condition of this work is in a high degree satisfactory. The masonry, with the exception of a very small portion, is completed, and the entire work will, in all probability, be finished by the end of March next.

Fort at Foster's Bank, Pensacola harbor, Florida.—It was hoped, in the early part of the year, that the nature of the service would be such as to permit a convention of the board of engineers to revise, among others, the project for this work, and to fix its precise locality. This hope was, however, disappointed, and the funds have in part been, and the balance will be, applied to the collection of materials, and to making such preparations as will enable the constructing engineer to commence the work under the next appropriation to advantage, as soon as the plans shall be matured.

Fort Morgan, Mobile Point, Alabama.—This work will be completed and ready for inspection by the end of December next.

Fort Livingston, Grand Terre, Louisiana.—At the time of making the appropriation for this work, the land on which it was to be located was private property. Much time has unavoidably been consumed in effecting a purchase. The department has been assured, however, that the protracted negotiation with

the owner would soon be brought to a satisfactory termination, when the purchase and collection of materials will be made, preparatory to commencing the work with the next appropriation.

Contingencies of fortifications.—A considerable portion of the appropriation under this head has been applied during the year to the repairs of Fort Jackson, Battery Bienvenue, Tower Dupré, and Fort Wood, Louisiana, and Fort Washington, Maryland.

INTERNAL IMPROVEMENTS.

Chicago harbor, Illinois.—It being impossible to command the services of an engineer officer at this place, the works were given in charge to the commanding officer at Fort Dearborn. Owing to the position of Chicago, considerable difficulty was experienced in the early part of the season in procuring suitable materials and workmen to commence, as almost everything except timber and stone had to be drawn from Buffalo. The first proposals received, on the invitation of the commanding officer through the public prints, were rejected because of their exorbitant character. Proposals were again invited, and finally contracts made for the supply of a small quantity of stone and timber, more with the view to ascertain the resources of the country, where everything is new, and to create a competition, than with a hope of doing much in the way of construction during the past season. But little has been done, therefore, further than to collect some materials and workmen, and to construct a small portion of one of the piers. A commencement in a position like this is, however, of great value, and hopes are entertained of being able to prosecute operations with advantage during the next working season.

La Plaisance bay, Michigan.—Eight hundred and forty feet of new pier work were sunk at this place within the year; piles were driven nearly the whole length of the pier, and will be driven and secured by caps this fall. Considerable stone has been deposited in the pier, and, as far as the appropriation extended, the work has been prosecuted satisfactorily.

Oswego harbor, Sodus bay, Genesee river, Black Rock harbor, Buffalo harbor, and Dunkirk harbor, State of New York; Presque Isle harbor, State of Pennsylvania; Conneaut creek, Ashtabula creek, Cunningham creek, Grand river, Cleveland harbor, Black river, and Huron river, State of Ohio.—For the condition and progress made on these works up to the 30th September last, I beg leave to refer you to the annexed report of their general superintendents, marked D. From these it will be perceived that, although the operations at them continue to be attended with success, still much remains to be done before they can be completed in a solid and permanent manner; and as the expenditures on each already exceed the original estimated cost, and the amount required to place them in that condition is very great, it was thought advisable by the department that the subject should be brought fully to the consideration of Congress. With this view, a thorough inspection, to be made by a skilful and experienced engineer, was ordered during the last summer. His report on the subject, marked E, hereto annexed, is accordingly respectfully submitted. The estimates presented for these works are predicated on the recommendation of that officer and that of the local agents.

Kennebunk river, Maine.—The means provided for the works at the mouth of this river have been faithfully applied; the Hardin pier, so called, having been thoroughly repaired, with the exception, perhaps, of a small quantity of stone that may yet be required for the greater security of the work, which has been considerably extended, and which is much exposed to ice and drift-wood. Some additional work will be required to complete the improvement on the east side of the channel. It is deemed necessary to construct a pier of considerable length, extending from what is called the outer pier to the bar. The piers heretofore erected at this place are of wooden crib work, filled in with stone; and it has been observed that those which are up the river some distance are in a good state of preservation, while those lower down have been much injured by worms. Some, indeed, have been completely destroyed in the course of eight or ten years after their construction. For this reason the estimate for the additional pier alluded to contemplates the use of stone entirely.

Berwick branch of the Piscataqua.—The improvement in this river at Quamplegan rapids has been completed. There is now an unobstructed passage over the rapids of nearly six feet at mean high water.

Merrimack river, Massachusetts.—Some additions have been made within the year to the breakwater in course of construction to improve the navigation of the river at Newburyport. The work is represented as being in good condition.

It is thought that the erection of a pier, to extend from Badger's Rocks to Salisbury Head, would greatly improve the navigation of the river; an estimate for which is accordingly submitted and recommended for favorable consideration.

Deer island, Boston harbor.—The works for the preservation of this island have been prosecuted with much success, and it is expected that the whole of the masonry will be completed by the middle of this month. Four thousand tons of rough stone have been placed in the breakwater in front of the sea wall during the year; 2,000 tons more will be added during the present season, leaving only 4,000 tons to complete that work and the connecting breakwater between the principal walls.

Plymouth beach, Massachusetts.—The operations at this place have been of the same character as those of the previous year. They have been directed to the extension (about 510 feet) of the stone wall to the west of the breakwater, and to repairing the beach by planting grass. The grass is represented as doing well, and the condition of the beach generally as being good.

Provincetown, Massachusetts.—About 220 acres of ground were planted with beach grass during the last spring, besides repairing many places previously planted, but which had been injured by the encroachments of the sand.

Hyannis harbor, Massachusetts.—The breakwater at this place has been much improved and considerably increased since my last report. The additional length constructed within the year is about 230 feet, giving a length of 820 feet completed. Its entire length, when finished, will be 1,320 feet, leaving, therefore, 500 feet yet to be constructed.

Mill river, Connecticut.—The additions to this work have been completed, and are represented as having accomplished the objects for which they were made.

Harbors of Newcastle, Marcus Hook, Chester, and Port Penn, Delaware river.—The operations at the harbors on the Delaware river have been confined to the harbor of Marcus Hook, from which, by means of a steam dredging machine, 15,369 cubic yards of earth have been excavated and removed, forming a safe and secure retreat for about twenty sail of vessels. Some progress has been made in repairing one of the piers forming this harbor, using stone for all that part above the low-water mark.

To persevere upon the plan heretofore pursued is not deemed advantageous towards effecting the

desired object; any results accomplished by it would not, it is believed, be attended by a permanent good. The estimate presented for the service of the year is, however, to continue the operations upon the present plan.

Ocracoke inlet, North Carolina.—Though much retarded on account of tempestuous weather and the breaking of machinery, the operations at this place have been attended with considerable success, and with the most flattering effects upon the navigation through the inlet. A dredging machine has been kept at work when the weather would permit in Wallace's channel, from which about 34,000 cubic yards of earth have been removed within the year. A navigation of eight feet has been obtained through this channel.

Cape Fear river.—The jettee near Barnhard's creek, on the eastern side of the river, and the one near Old Town, on the western side, have been completed; that near Barnhard's creek continued to wash up during the last winter; and nearly the whole of the labor applied this year has been for the purpose of keeping these two jetties in repair. Notwithstanding the difficulties that have heretofore attended the construction of jetties, it is confidently anticipated that a navigation of fourteen feet water will be obtained when they are permanently secured.

Savannah river, Georgia.—An officer has been engaged during the year in making an examination of this river between its mouth and Savannah with a view to obtain the data necessary to enable the superintending engineer to apply the funds appropriated therefor to the best advantage. This examination is nearly brought to a close, when active operations will be commenced for the removal of obstructions, suitable preparations in the way of boats and machinery being in the course of preparation for the purpose.

Inland navigation between the St. John's and St. Mary's.—The improvement contemplated here requires the agency of a steam dredging machine. To have purchased one from the small appropriation placed at the disposal of the department would have so far exhausted it as to have left little or nothing for the prosecution of the work. Under these circumstances it was thought advisable to do nothing till the improvement of the Savannah river, and that at the St. Mark's or Apalachicola, would admit of the boats employed at these places being transferred to the St. John's and St. Mary's. Nothing, therefore, has as yet been done.

St. Mark's harbor and river, Florida.—A canal has been opened through the natural bridge on the St. Mark's. Owing, however, to the unexpected appearance of rock at this place much of the money which it was hoped might be applied to the improvement of the river above has been expended on it, and will render an additional appropriation necessary. The object of this appropriation will be to open the river to the only convenient place of landing for the upper country, and to deepen the channel already made, and that over the outer bar, at the entrance into the river, for the admission of large vessels drawing fifteen feet.

Ochlochney river, Florida.—The appropriation for the improvement of this river has been applied to the removal of the logs and trees which obstruct its navigation from its channel. The whole will be expended by the middle of the present month.

Apalachicola river and harbor.—Although the improvements contemplated at this place have been prosecuted under many disadvantages, owing to the difficulty of procuring laborers during the past season, yet, what has been done is of a character altogether satisfactory, and seems to promise a success beyond the most favorable expectations. The part of the channel that was deepened to ten feet has been increased by the action of the current to from twelve to fourteen.

Escambia river, Florida.—This river was surveyed in July last to ascertain the nature of the required improvement, and to obtain an estimate of its probable cost. In the following month the work was let out on contract, and will be completed this fall, leaving a portion of the funds unexpended.

Harbor of Mobile, Alabama.—The progress here has been satisfactory. The breadth of the bar at Choctaw Pass, or length of channel to be cut through it, is 620 yards; 580 were executed with a width of 100 feet on the 30th September; and the remaining 90 yards are, no doubt, finished ere this. Operations will be continued till the means are exhausted in increasing the width of the channel.

Pascagoula river, Mississippi.—Owing to a difficulty with the contractor the operations at this place have not been of a satisfactory character. The work was not resumed till the 17th June last, since which time nothing has been done further than to make some repairs of boats, machinery, &c. It was expected that the dredging machine would be in operation by the 1st instant.

Red river, Louisiana.—The removal of the great raft from the bed of this river has been shown, by the operations of Captain H. M. Shreve, during the last summer, to be perfectly practicable. He was at work at it till the means at the disposal of the department were exhausted; and his success leaves the most ample testimony of his great zeal and ability. Captain Shreve's report on this subject is so interesting that I deem it proper to lay it before you entire. It is herewith appended, marked F; and I would earnestly recommend for favorable consideration the estimate submitted with it for the prosecution to completion of this great work.

Arkansas river, Arkansas Territory.—The examination of this river was made by an officer of the engineers early in the spring, and the boats, machinery, &c., under the personal direction of Captain Shreve, commenced the removal of obstructions to its navigation in the early part of August last. At the latest advices not much had been done, however, owing to the unfavorable state of the water; but this winter, while operations will be suspended on the Ohio by reason of the ice, it is intended to concentrate a force on the Arkansas, and to prosecute the work to the extent of the available means.

The report of the officer who made the examination of this river above alluded to, being of an interesting character, is hereunto annexed, marked I.

Mississippi and Ohio rivers.—For the progress made in the improvement of these rivers, I beg leave to refer you to the accompanying report from the superintendent, H. M. Shreve, marked G.

Cumberland river, Tennessee.—Operations were commenced on this river 16th October, and continued till the 7th December, 1833. Owing to the unusual high state of the water little was done towards the improvement of its navigation other than the cutting away of the timber overhanging its banks on the island chutes and deep bends between Nashville and Harpeth island, and making the necessary preparation for prosecuting the work as soon as the water and season would permit. The work was resumed on the 1st of January last, since which time the operations have been directed with much success to improving the river at Harpeth shoals and their vicinity, to the cutting away of the hanging timber from the banks, and to the removal of logs, &c., from the sand bars.

Road from Memphis, on the Mississippi, to William Strong's house, on the St. Francis.—An examination and survey have been made of the country between the two points above named, with the view to the

location of this road; but the reports and drawings thereon not having been received, nothing has been done by this department. As soon as the reports shall be received the location and construction of the road will be commenced without loss of time.

Cumberland road in Ohio.—The affairs of this part of the national road have been managed in a manner highly satisfactory. The operations on it, though much influenced by the prevalence of the cholera in the section of country through which it passes, have been prosecuted with a zeal and ability highly creditable to the officer charged with their direction. The bridges between Zanesville and the 21st mile west from thence, inclusive, have been repointed and put into complete order; the culverts which had given way in consequence of bad material and workmanship have been taken down and rebuilt; the masonry between Hebron and Columbus, a distance of 27 miles, has been completed, with the exception of two small bridges, one on the 51st and the other on the 53d mile, declared defective in workmanship, and not accepted from the contractors. The masonry west of Columbus remains nearly in the state described in my last annual report, the existence of the cholera having prevented any improvement in it. Preparations have been made to construct the abutments for the bridges over the canal at Hebron, and the Scioto at Columbus; those for the former bridge will most likely be completed this fall. The wooden superstructure over the canal feeder on the 32d mile, Blacklick creek on the 43d, Big Walnut on the 46th, and Alum creek on the 50th mile west of Zanesville, have all been finished. The superstructure over the canal at Hebron will probably be completed this year, and the timber for that over the Scioto will be got out this winter. The superstructure over Little Darby, which was damaged in April last by a tornado, has been repaired and strengthened by additional bracing. The first stratum of metal is in course of preparation to cover the road between the 22d and 32d miles, inclusive, west of Zanesville. Measures were taken to have this metal prepared and put upon the road by the 1st of August last, but the efforts of the contractors were defeated by the prevalence of disease and the increased demand for labor. The second stratum of metal was to have been put on by the 1st of last month, but the distance of the stone to constitute this layer, added to the causes already adverted to, rendered this impossible. The third and last stratum of metal is undergoing preparation to be placed upon the road as soon as broken, between Zanesville and the 21st mile west from thence, inclusive. The time limited by the contracts for completing this part of the road was the 1st of August last, but some of the causes which operated against the advancement of the road in the neighborhood of Hebron have operated to its prejudice in this. It is confidently anticipated, however, that these 21 miles will be finished within the present year, when they will be turned over to the State. The grade has been completed by this time as far as Columbus, by which there is a saving of five hours in the passage of the mail between Zanesville and Columbus, which commenced running on this road in July last. The clearing and grubbing will most likely be completed as far as Springfield, 43 miles west of Columbus, by the end of the present month.

Cumberland road in Indiana.—An officer of engineers is at present engaged in making an inspection of the road through this State, and his report will be laid before you as soon as received, the report of the superintendent of the eastern division being of a character so general as to render it impossible to get at the exact condition of the road. The western division, beginning at Indianapolis, will soon be in a travelling condition for a distance of 33 miles west; the grading, bridging, and culverts being finished by this time, excepting the bridges at White river on the 1st, and Mill creek on the 27th mile; both of which will, most likely, be finished by the end of the year. The contracts for the present year, on the western division, are for such work as was deemed necessary to bring the road into immediate use as far as the western boundary of the State. These contracts, therefore, embrace the entire distance from the 34th to the 71st mile, inclusive; and the works provided for by them have progressed in a manner altogether satisfactory to the superintendent. When these contracts shall be completed, carriages will be able to travel, with but trifling interruption, from Indianapolis to the eastern boundary of Illinois.

Cumberland road in Illinois.—A belief was induced in the early part of the year that the affairs of this part of the road were conducted in a manner not likely to be productive of results desired by the government; and, therefore, an officer of engineers was instructed to make an inspection of the road and its concerns, and to report the result for subsequent action. Before the inspection was made, however, a direct charge was preferred, from a source that seemed to require consideration, impeaching the moral character of the superintendent in a particular that could not well be true without being accompanied by dereliction of official duty. It was, therefore, deemed necessary to suspend the superintendent till the facts in the case could be ascertained. An investigation was had of the affairs of this road, and it is shown that a state of things existed which rendered any progress in the way of extension, during the present year, totally inconsistent with a proper regard for the public interest; and it is not perceived how anything further can be done till the blunders, but too palpable on almost every part of the road, shall have been repaired, and a system established which will prevent their recurrence, and restore a wholesome state of things on this important national work.

Cumberland road east of the Ohio.—The repairs of this part of the national avenue have progressed well. In Maryland, three thousand two hundred and thirty-seven rods have received the entire covering of stone, and are completed; two thousand eight hundred and thirty-four rods have received a covering of nine, sixteen hundred and ninety-seven of six, and twenty-seven of three inches of metal. Three thousand nine hundred and eleven rods have been graded and are ready to receive the covering; and for which there are, on the line of the road, six thousand one hundred and thirty-eight perches of broken or prepared, and upwards of seven thousand perches of rough stone. In Pennsylvania, six thousand nine hundred and ninety-three rods of the road have been completed; ten thousand and ten rods have received a covering of nine inches, six hundred and ninety-two of six, and three thousand five hundred and ninety-five of four and a half inches of metal. Four hundred and ninety-four rods of the road are graded and ready to receive its cover; and there are near the road side 7,611 perches of prepared, and 2,236 perches of rough stone. In Virginia, eight hundred and twelve rods have been covered with four and a half inches of metal, and one hundred and seventy-six with three inches. Eighteen hundred and fifty-five rods of the road have been graded, and are ready for receiving the metal; and for which there are, on the line of the road, eight thousand three hundred and fifty perches of prepared, and twelve thousand six hundred and forty-five perches of rough stone. Besides this, there is a considerable quantity of stone out at the different quarries, which will be hauled to the road and prepared during the winter. Five thousand four hundred and fifty-three cubic yards of masonry have been constructed on different parts of the entire road. The new location to turn Wills's mountain has been opened, and considerable progress made in the bridge to cross Wills's creek.

An examination was made of the Cumberland road east of the Ohio in 1827, for repairing it upon the

plan of its original construction, when it appeared that 75⁵/₈ miles of the old pavement were in good order, and required three inches of broken stone for a covering to restore it to its primitive state; estimated to cost \$3 75 per rod. That 32⁷/₈ miles required four and a half inches of stone, and 21¹/₂ miles required six inches of stone, broken to four ounces in weight; and that the masonry might cost eleven thousand dollars; and the whole road, thus repaired, would cost \$230,274.

In February of 1826 it was estimated that the sum of \$278,983 would be sufficient to repair the whole road upon the McAdam plan; and in May, 1827, a period of sixteen months, the superstratum or cover of reduced stone had been worn and washed away to an extent almost incredible, and proved that too great a reliance was placed upon the layer of large stone, as there were not so many of them as of good a quality as was first supposed. To have effected the same repair in 1827, as was contemplated in 1826, would have required an additional sum of \$50,000, making \$328,983 necessary to repair the road, upon the best information to be obtained at that period. The utter destruction of the road was foreseen at that time, unless measures were taken to repair it thoroughly; it being then in a "most wretched" condition.

In July, 1832, it was determined to repair the road effectually from end to end, and cede it to the respective States through which it passed, after which the repairs were to be met by the tolls collected from the travelling on it.

The system adopted was that extensively used in England, and known by the name of its inventor, McAdam. The condition of the road at this period made very extensive repairs necessary, commencing from the grade, there being neither side drains, ditches, nor culverts, for draining the water; presenting no better condition for the basis of repairs on the McAdam system than what is called a "rough grade," with the large bridges.

Rather than make a partial repair by distributing the sum appropriated over the whole line of 132 miles, the parts through the mountains being in the worst condition, and, from the face of the country, most difficult to travel, were first commenced; the supposition of finding good stone in the bed of the road, wherewith to make "McAdamized metal," proved fallacious; not a perch was found through the whole mountain district, the bed being composed of soft sandstone. This, when broken to four-ounce pieces, and used for a covering, is, in the course of three months, reduced to sand, and washed by the heavy rains from the road into the ditches and drains, making it worse than useless to depend upon any of the varieties of sandstone. Under these circumstances but one course was left, and that was to procure the only suitable material the country produced—*limestone*. The natural position of this stone is under the sandstone, and found only in the lowest valleys, often in the beds of creeks, covered with several feet of earth, and distant from the line of the road. Through the mountains it is found in few positions. The expense of repairing the road with a good material, and the only one of this character found in the country, is far greater than anticipated, before these facts were known. Another heavy item in the expense of repair is the condition of the masonry; this having been exposed for a long time to the weather, without coping to throw off the rain and snow, is now in a dilapidated condition, requiring a considerable portion to be renewed.

Under these circumstances, the cost of putting the road in such a condition as will justify toll being exacted is so far beyond that at first anticipated as to make it proper to draw the particular attention of Congress to the estimate for the year, based upon the facts herein stated. It will be perceived that the sum asked for the service of the year is to finish all that part lying between Cumberland and the Monongahela river, and commence that part situated between this river and the Virginia line, and to finish the sixteen miles in Virginia; making the sum required to repair the whole road, on the McAdam plan, not less than \$645,000, of which the resources of that region of country will advantageously admit of \$300,000 being expended during the year.

Should it, however, be the determination of Congress to make a partial repair of this great national line of communication between the western waters and the Atlantic, the estimates would be materially varied. Leaving the masonry in its present ruined state, constructing no more culverts to throw the water under the road, abandoning the McAdam plan of repair, and merely opening the ditches and drains, and to restore the grade with earth, the cost would be, for the part between Brownsville and West Alexandria, upon which, as yet, nothing has been done, 42 miles \$50, 000
 For the 16 miles in Virginia, (finishing the masonry on Wheeling Hill)..... 20, 000
 For the first 10 miles in Maryland 25, 000
 For the remaining 22 miles in Maryland..... 22, 000
 For the part through Pennsylvania, heretofore partially McAdamized, 41 miles 30, 000

147, 000

This, however, effects nothing more than making a clay road, by no means suited to the immense travel passing the mountains by this route, and when finished soon destroyed by the rains which would wash the earth from the face of the road into the valleys.

To use stone found on the roadside is, as before remarked, worse than useless, the expense of applying it being very great, and when applied soon ground to sand and washed away. Hence, it will be far better to apply the sum that may be appropriated for a partial repair to form a clay road over the old bed than attempt to apply sandstone that is no better, costs more, and is as soon washed away.

The road repaired in this manner will not justify tolls being exacted, as in the fall and spring of the first year it will be next to impassable, and good only for the first two or three summers. Another mode of repair might be adopted, viz: that of restoring the grade by breaking up the sandstone to twelve-ounce pieces and covering it with earth. The result of this would be, after a year or two, when the earth had washed from the surface, an irregular mass of rough stone much like the road in its present condition. The cost of this might be \$200,000.

A more particular estimate for these partial repairs is not submitted, as they cannot be recommended, and the necessary information has not been collected to prepare one.

Road from Columbus, Georgia, to Line creek, Alabama.—This road has been located, after a careful examination of the country through which it passes, and its construction will be prosecuted with as much despatch as circumstances will permit. The greater part of the road is in a district of country entirely uninhabited. This will render it a matter of some difficulty to procure labor and supplies; but the depart-

ment has the assurances of the agent that every effort will be made to complete the road as speedily as possible.

Road from Detroit to Chicago, Michigan.—The contracts for the construction of this road, entered into last year, extended as far as the 132d mile west from Detroit. The contractors were actively engaged on the 30th September, and hopes were entertained that they would be able to complete their engagements by the 30th October. Additional contracts were made in June last for different parts of the road as far as the 157th mile. Upon examination, it was found that, between the 150th and 157th mile, the country is extremely broken, and the travelling not only difficult but dangerous; it was therefore deemed advisable to contract for this part of the road this year, and to postpone until the next the portion between the 132d mile, where the contracts of last year terminated, and the commencement of the broken district. This has been done.

Road from Detroit to Saginaw.—The contracts entered into last year for the construction of the Saginaw road will have been complied with, it is believed, before the termination of the present fall. Twelve additional contracts for making eight miles of this road, ending with the first half of the 65th mile, were made last June. They provide for the completion of that part of the road by the 1st of September next, and no doubts are entertained of the contractors being able to comply with their engagements on this and the Chicago road.

Road from La Plaisance bay to meet the Chicago road from Detroit.—Twenty-seven miles of this road have been put under contract; four miles were completed on the 30th of September; eight were expected to be finished by the 30th ultimo. The contractors are laboring on twelve more, and hopes are entertained that all will be done by the 31st of January next.

Road from Detroit to the mouth of Grand river.—On ten miles of this road the first class of operations, consisting of clearing and grubbing, excepting on one mile, will be completed by the close of the season. The appropriation now asked for is intended for the continuation of the plan at present adopted.

Road from Detroit to Fort Gratiot.—This road was put under contract last season to its termination, and would have been completed before the close of this had not some sections of it been under water for a great portion of the time, thereby preventing their being worked upon. It will, however, be made passable by the end of the year.

Northern boundary of Ohio.—The officer charged with collecting data preparatory to the adjustment of this line has been engaged with an assistant in a reconnoissance to determine the stations and points where the more important instruments are to be used, and to ascertain more accurately the extent and nature of the duty required by the law creating this service. This was deemed necessary before ordering all the instruments; and accordingly complete sets of observations were made for the determination of the latitude and longitude at and near the four principal points, viz: on Gull or Ship island, in Lake Erie; at the north point of Maumee bay or Bay Point; the south bend of Lake Michigan; and near the same parallel on the Mississippi.

Military Academy.—This institution continues to prosper; and for more particular information respecting it I beg leave to call your attention to the report of the board of visitors, herewith, marked H. An appropriation was made at the last session of Congress for the erection of two buildings much needed at the academy. One is for a place of divine worship, the other for the exercise of the cadets in the winter and in times of bad weather generally. On drawing up plans, it was found that they would exceed the amount appropriated; and it was, therefore, deemed proper to defer their erection till the facts could be submitted to Congress, and its further action in the matter be had. An estimate exhibiting the difference of cost will be submitted.

Board of engineers.—The members of the board of engineers have been engaged in making inspections of the various works in the vicinity of their respective stations, in addition to the specific duties with which they are individually charged.

Office of the chief engineer.—Besides the current business of the office, the nature of which remains the same as heretofore, a number of the works under the department have received my personal attention. In the course of the year I made, in accordance with the regulations, a tour of inspection, embracing the Cumberland road in the States of Maryland, Pennsylvania, Virginia, and Ohio; the harbor improvements on the south shores of Lakes Erie and Ontario; and the works of fortifications at Hampton Roads, Pea Patch island, New York harbor, and Narragansett Roads.

In conclusion, I would respectfully renew the suggestions offered in my previous reports that the means of the department are entirely inadequate to meet the numerous calls upon it for officers. Permit me, therefore, to call your attention again to the subject of an increase of the present corps of engineers, agreeably to the plan heretofore recommended; it is deemed a measure of indispensable necessity for the public interest.

All of which is respectfully submitted.

Hon. LEWIS CASS, *Secretary of War.*

C. GRATIOT, *Brig. Gen. and Chief Engineer.*

A.—Table exhibiting the fiscal concerns of the Engineer department for the year ending September 30, 1833, in which the funds that had accrued within that period, and the manner of their accruing, are stated and accounted for by showing their application; and showing also the amounts expended upon the several works under construction.

Designation of the appropriations and the objects to which they are applicable.	Available for 1833, and whence derived.			Amounts available accounted for.			Aggregate accounted for, corresponding with the aggregate available.
	From appropriations for 1833.	From balances remaining undrawn from the treasury, and remaining in the hands of agents, on the 30th of September, 1832.	Aggregate available.	Amount applied, corresponding with the amount of accounts rendered for settlement to the 30th of September, 1833.	Amount undrawn from the treasury October 1, 1833.	Balances in the hands of agents October 1, 1833.	
FORTIFICATIONS.							
Fort Adams, Newport harbor, Rhode Island.....	\$100,000 00	\$86,583 22	\$186,583 22	\$133,151 03	\$29,180 00	\$24,252 19	\$186,583 22
Fort Hamilton, New York harbor, New York.....		5,789 63	5,789 63	2,097 25		3,701 38	5,798 63
Fort Lafayette, repairs at, New York harbor, New York.....		2,906 62	2,906 62			2,906 62	2,906 62
Fort Columbus and Castle William, repairs at.....	50,000 00	29,020 87	79,020 87	52,899 83	23,000 00	3,121 04	79,020 87
Fort Monroe, Virginia.....	46,000 00	35,552 64	81,552 64	51,548 18	18,200 00	11,804 46	81,552 64
Fort Calhoun, Virginia.....	75,000 00	30,452 81	105,452 81	68,252 81	37,200 00		105,452 81
Fort Macon, North Carolina.....		25,601 91	25,601 91	21,948 21	2,319 79	1,333 91	25,601 91
Fort at Oak island, North Carolina.....	22,900 00	2,924 87	25,824 87	12,914 87	12,910 00		25,824 87
Fort at Cockspar island, Georgia.....	75,000 00	30,161 48	105,161 48	54,156 51	36,800 00	14,204 97	150,161 48
Fortifications at Charleston harbor, South Carolina.....	75,000 00	68,610 74	143,610 74	124,355 50	12,489 59	6,765 65	143,610 74
Fort at Mobile Point, Alabama.....	50,000 00	46,228 01	96,228 01	67,509 90	25,790 65	2,927 46	96,228 01
Fortifications at Pensacola, Florida.....	132,000 00		132,000 00	126,350 50	5,649 50		132,000 00
Preservation of George's island, Boston harbor.....		674 49	674 49		220 00	454 49	674 49
Preservation of Castle island and repair of Fort Independence, Massachusetts.....	17,000 00	20,000 00	37,000 00	538 41		36,461 59	37,000 00
Fort on George's island, Boston harbor, Massachusetts.....	25,000 00		25,000 00		25,000 00		25,000 00
Repairs at Fort Marion and reconstructing sea wall at St. Augustine, Florida.....	20,000 00		20,000 00	4,296 72	13,000 00	2,703 28	20,000 00
Repairing a wharf at Fort Independence, Massachusetts.....	1,500 00		1,500 00			1,500 00	1,500 00
Fort on Throg's Neck, East river, New York.....	25,000 00		25,000 00	3,000 00	23,000 00		25,000 00
Fort Delaware, rebuilding, Delaware river.....	50,000 00		50,000 00	26,964 66	20,000 00	3,035 34	50,000 00
Fort on Foster's bank, Pensacola harbor, Florida.....	25,000 00		25,000 00	4,058 51	18,000 00	2,941 49	25,000 00
Fort on Grande Terre, Barrataria, Louisiana.....	25,000 00		25,000 00		25,000 00		25,000 00
Contingencies of fortifications.....	10,000 00	9,146 12	19,146 12	9,045 44	7,206 89	2,893 79	19,146 12
	824,400 00	393,662 41	1,218,062 41	763,088 33	333,966 42	121,007 66	1,218,062 41
INTERNAL IMPROVEMENTS.							
Repairing the Cumberland road east of the Ohio river.....	125,000 00	142,733 61	267,733 61	192,130 40	39,000 00	36,603 21	267,733 61
Repairing the Cumberland road in Virginia.....	34,440 00		34,440 00	25,634 00	4,440 00	4,365 16	34,440 00
Construction of the Cumberland road in Ohio, west of Zanesville.....	130,000 00	107,199 08	237,199 08	112,103 59	100,019 22	25,076 27	237,199 08
Continuing the Cumberland road in Indiana.....	100,000 00	122,641 63	222,641 63	106,654 03	115,055 00	932 60	222,641 63
Continuing the Cumberland road in Illinois.....	70,000 00	95,284 00	165,284 00	81,773 25	72,984 00	10,526 75	165,284 00
Continuing the road from Detroit towards Chicago.....	8,000 00	20,068 18	28,068 18	11,956 54	15,568 18	543 46	28,068 18
Continuing the road from Detroit to Fort Gratiot.....		20,553 06	20,553 06	10,267 38		10,285 68	20,553 06
Continuing the road from Detroit to Saginaw bay.....	15,000 00	16,484 97	31,484 97	7,205 75	21,029 13	3,250 09	31,484 97
Road from Detroit to Grand river.....	25,000 00	3,500 00	28,500 00	4,971 76	15,000 00	8,528 24	28,500 00
Road from La Plaisance bay to intersect the Chicago road.....	15,608 76	15,000 00	30,608 76	6,899 36	21,287 89	2,421 51	30,608 76
Road from a point opposite to Memphis to W. Strong's house, on the St. Francis river, in the Territory of Arkansas.....	100,000 00		100,000 00		100,000 00		100,000 00
Road from Line creek, Alabama, to the Chattahoochee, opposite Columbus, Georgia.....	20,000 00		20,000 00	301 50	19,500 00	198 50	20,000 00
Improving the navigation of the Ohio, Missouri, and Mississippi rivers.....	50,000 00	39,700 00	89,700 00	61,200 80	20,550 00	7,949 20	89,700 00
Improving the Ohio and Mississippi rivers from Pittsburg to New Orleans.....		52,445 69	52,445 69	42,145 69	10,300 00		52,445 69
Improving the navigation of the Red river, Louisiana and Arkansas.....		22,271 87	22,271 87	21,632 22		639 65	22,271 87
Improving the navigation of the Arkansas river.....		15,000 00	15,000 00	318 36	681 64	14,000 00	15,000 00
Removal of obstructions to the navigation of the Savannah river, between the mouth thereof and the city of Savannah.....		25,000 00	25,000 00	1,345 04	20,000 00	3,654 96	25,000 00
Improving Cape Fear river below the town of Wilmington, N. C.....	28,000 00	20,740 73	48,740 73	25,272 08	21,781 00	1,687 65	48,740 73
Carrying on the improvement of Ocracoke inlet, N. C.....	16,700 00	16,390 50	33,090 50	21,082 31	11,400 00	608 19	33,090 50
Deepening the channel through the Pascagoula river, State of Mississippi.....		15,715 24	15,715 24	1,306 39	13,900 00	508 85	15,715 24
Deepening the channel through the Pass au Heron, Alabama.....		4,643 51	4,643 51	360 87	3,050 00	1,232 64	4,643 51
Improving the harbor of Mobile, Alabama.....		10,821 25	10,821 25	6,349 83		4,471 42	10,821 25
Removing obstructions to the river Apalachicola, Florida.....	8,700 00	842 08	9,542 08	4,006 80	3,700 00	1,835 28	9,542 08
Improving the harbor and river of St. Mark's, Florida.....	1,500 00	8,653 93	10,153 93	8,851 54		1,302 39	10,153 93
Completing the improvement of the inland channel between St. Mary's and St. John's, Florida.....	9,000 00		9,000 00		9,000 00		9,000 00
Removing obstructions and improving the navigation of the Escambia river.....	5,000 00		5,000 00	108 50	4,850 00	41 50	5,000 00
Improving the navigation of Ochlochney river.....	5,000 00		5,000 00	3,587 87		1,412 13	5,000 00
Improving the harbor of Chicago, Illinois.....	25,000 00		25,000 00	6,012 50	7,940 00	11,047 50	25,000 00

A.—Table exhibiting the fiscal concerns of the Engineer department, &c.—Continued.

Designation of the appropriations and the objects to which they are applicable.	Available for 1833, and whence derived.			Amounts available accounted for.			Aggregate accounted for, corresponding with the aggregate available.
	From appropriations for 1833.	From balances remaining undrawn from the treasury, and remaining in the hands of agents, on the 30th of September, 1832.	Aggregate available.	Amount applied, corresponding with the amount of accounts rendered for settlement to the 30th of September, 1833.	Amount undrawn from the treasury October 1, 1833.	Balances in the hands of agents October 1, 1833.	
Removing sand bar at the mouth of Merrimack river, Mass.	\$4,900 00	\$3,885 34	\$8,785 34	\$1,325 34	\$7,400 00	.....	\$8,785 34
Preservation of Plymouth beach, Massachusetts.....	600 00	2,207 47	2,807 47	2,438 33	.....	\$369 14	2,807 47
Preservation of the beach at Provincetown harbor, Mass.....	.....	4,695 64	4,695 64	4,465 23	239 41	.....	4,695 64
Removing the bar at the mouth of the harbor of Nantucket, Massachusetts .....	.....	9,083 11	9,083 11	.....	4,910 00	4,173 11	9,083 11
Preservation of Deer island, Boston harbor, Mass. ....	.....	54,564 16	54,564 16	20,558 13	19,110 00	14,866 03	54,564 16
Breakwater at Hyannis harbor	5,000 00	6,270 87	11,270 87	10,248 20	395 00	627 67	11,270 87
Removing obstructions at Lovejoy's Narrows, Kennebec river, Maine .....	.....	600 00	600 00	263 91	336 09	.....	600 00
Removing obstructions in the Berwick branch of the Piscataqua river, Maine .....	.....	435 81	435 81	435 00	.....	.....	435 81
Repairing piers at the entrance of Kennebec river, Maine .....	.....	1,700 00	1,700 00	1,700 00	.....	.....	1,700 00
Improving the navigation of the harbor of Mill river, Conn.....	.....	3,973 48	3,973 48	3,973 48	.....	.....	3,973 48
Improving the harbor of Saco, Maine.....	.....	22 78	22 78	22 78	.....	.....	22 78
Piers and mole at Oswego, New York.....	8,400 00	5,775 85	14,175 85	10,572 56	1,962 00	1,641 29	14,175 85
Piers at Buffalo, New York.....	31,700 00	6,747 35	38,447 35	20,795 12	13,052 80	4,599 43	38,447 35
Piers at Dunkirk harbor, New York.....	.....	7,720 07	7,720 07	6,621 81	.....	1,098 26	7,720 07
Piers at Black Rock harbor, New York.....	.....	3,900 28	3,900 28	3,435 99	.....	464 29	3,900 28
Improving the entrance of Genesee river, New York.....	15,000 00	3,450 87	18,450 87	15,490 43	1,000 00	1,960 44	18,450 87
Removing obstructions at the mouth of Big Sodus bay, N. Y. ...	15,000 00	4,040 68	19,040 68	17,341 92	1,000 00	698 76	19,040 68
Piers at La Plaisance bay, Michigan Territory .....	.....	8,123 07	8,123 07	7,568 63	.....	554 44	8,123 07
Removing obstructions at Ashtabula creek, Ohio.....	3,400 00	3,303 78	6,703 78	2,187 38	3,664 98	851 42	6,703 78
Removing obstructions at Cunningham creek, Ohio.....	500 00	304 05	804 05	732 13	.....	71 92	804 05
Removing obstructions at Huron river, Ohio .....	.....	1,047 38	1,047 38	515 38	390 51	141 49	1,047 38
Removing obstructions at Grand river, Ohio .....	.....	4,704 20	4,704 20	.....	1,036 49	3,667 71	4,704 20
Improving Cleveland harbor, Ohio .....	.....	5,012 11	5,012 11	3,811 22	203 61	997 28	5,012 11
Removing sand bar at the mouth of Black river, Ohio	2,400 00	4,982 41	7,382 41	6,002 68	319 40	1,060 33	7,382 41
Improving the mouth of Conneaut creek, Ohio.....	.....	5,568 62	5,568 62	4,449 48	664 48	454 66	5,568 62
Improving the harbor of Presque Isle, Pennsylvania.....	6,000 00	2,465 14	8,465 14	7,377 42	.....	1,087 72	8,465 14
Improving the harbors of Newcastle, Marcus Hook, Chester, and Port Penn	4,000 00	8,609 20	12,609 20	5,819 47	950 00	5,839 73	12,609 20
Improvement of the navigation of Cumberland river, Tenn....	.....	30,000 00	30,000 00	14,437 67	8,000 00	7,562 33	30,000 00
	888,848 76	968,883 05	1,857,731 81	936,150 70	715,670 83	205,910 28	1,857,731 81
LIGHT-HOUSES.							
Light-house at the harbor of Buffalo, New York .....	.....	3,200 00	3,200 00	3,200 00	.....	.....	3,200 00
Beacon-light at the entrance of the harbor of Erie, Pa. ....	.....	.....	.....	.....	.....	.....	.....
Light-house at Cleveland harbor .....	.....	151 92	151 92	.....	.....	151 92	151 92
Beacon-light at Grand river, Ohio .....	.....	3,351 92	3,351 92	3,200 00	.....	151 92	3,351 92
Observations preparatory to the adjustment of the northern boundary line of Ohio	13,610 00	.....	13,610 00	.....	7,500 00	6,110 00	13,610 00
MILITARY ACADEMY.							
Defraying the expenses of the board of visitors.....	2,000 00	.....	.....	.....	.....	.....	.....
Fuel, forage, stationery, printing, &c.....	8,500 00	.....	.....	.....	.....	.....	.....
Repairs, improvements, and expenses of buildings, grounds, woods, &c.....	4,000 00	.....	.....	.....	.....	.....	.....
Pay of adjutant and quartermaster's clerks.....	900 00	.....	.....	.....	.....	.....	.....
Increase and expense of library	1,400 00	.....	.....	.....	.....	.....	.....
Philosophical apparatus	890 00	.....	.....	.....	.....	.....	.....
Models for the department of engineering.....	600 00	.....	.....	.....	.....	.....	.....
Models for the drawing department, repairs of instruments .....	.....	15,533 19	52,298 19	24,825 24	18,903 00	8,569 95	52,298 19
Models for the mathematical department, &c.....	900 00	.....	.....	.....	.....	.....	.....
Miscellaneous items and incidental expenses	1,575 00	.....	.....	.....	.....	.....	.....
The erection of a chapel	10,000 00	.....	.....	.....	.....	.....	.....
The erection of a building for military and other exercises. ..	6,000 00	.....	.....	.....	.....	.....	.....
	36,765 00	15,533 19	52,298 19	24,825 24	18,903 00	8,569 95	52,298 19
LITHOGRAPHIC PRESS OF THE WAR DEPARTMENT.							
For the services of a lithographer and the expenses of the lithographic press of the War Department	7,500 00	14 45	764 45	742 04	.....	22 41	764 45
EXECUTIVE BUILDING OCCUPIED BY THE WAR DEPARTMENT.							
For fitting up the basement rooms of the Executive building occupied by the War Department.....	2,500 00	.....	2,500 00	2,093 94	.....	406 04	2,500 00

B.—Statement showing the amount of money drawn from the treasury, and remitted to the officers and agents disbursing under the Engineer department, from October 1, 1832, to September 30, 1833, inclusive; and the amount of accounts rendered by them respectively within the same period.

Names.	On what account.	Amount remitted.	Amount of accounts rendered.
Colonel J. G. Totten	Fort Adams.....	\$152,426 41	\$133,151 03
Colonel S. Thayer.....	Military Academy.....	13,761 09	16,110 61
	Contingencies of fortifications	685 00	.....
	Castle island and Fort Independence.....	37,000 00	533 41
	Wharf at Fort Independence	1,500 00	.....
Major R. E. De Russey.....	Fort Hamilton	1,450 00	2,097 25
	Fort Columbus and Castle William	27,724 00	18,341 91
	Military Academy.....	9,150 00	8,714 63
Captain J. L. Smith	Fort Macon.....	14,000 00	11,937 97
	Fort Columbus and Castle William	27,000 00	34,557 92
	Fort at Throg's Neck.....	3,000 00	3,000 00
Captain George Blaney.....	Fort at Opk island	9,990 00	12,914 87
	Cape Fear river.....	18,807 00	25,272 08
Captain W. H. Chase	Fortifications at Pensacola.....	126,350 50	126,350 50
	Fort on Foster's bank	7,000 00	4,058 51
	Escombria river.....	150 00	108 50
Captain R. DeLafield	Cumberland road east of the Ohio	190,000 00	167,111 28
	Cumberland road in Virginia.....	30,000 00	25,634 84
	Harbors of Newcastle, &c.....	7,500 00	2,274 59
	Fort Delaware.....	30,000 00	26,964 66
Captain A. Talcott.....	Fort Monroe.....	52,500 00	51,548 18
	Fort Calhoun	68,000 00	68,252 81
	Ohio boundary line.....	6,110 00	.....
Captain W. A. Eliason	Fortifications at Charleston.....	108,400 00	124,335 50
Lieutenant George Dutton.....	Fort Macon.....	6,500 00	10,010 24
	Ocracoke inlet.....	17,300 00	21,082 31
Lieutenant H. Brewerton	Cumberland road, Ohio, west of Zanesville	120,900 00	112,103 59
Lieutenant J. K. F. Mansfield	Fortifications at Savannah.....	62,600 00	54,156 51
	Cumberland road east of Ohio	35,000 00	25,019 12
	Savannah river.....	5,000 00	1,345 04
Lieutenant C. A. Ogden.....	Fort at Mobile Point.....	56,000 00	67,509 90
	Mobile harbor.....	.....	6,349 83
	Pass au Heron .....	.....	360 87
	Pascagoula river .....	.....	1,306 39
Lieutenant S. Tuttle.....	Pea Patch island.....	.....	243 33
	Harbors of Newcastle, &c.....	3,950 00	3,544 88
	Fort Marion, repairs and sea-wall	7,000 00	4,296 72
Lieutenant A. H. Bowman	Contingencies for fortifications	2,500 00	6,447 37
Lieutenant W. H. C. Bartlett.....	.....do.....	300 00	281 01
	Fitting up basement rooms in the executive building occupied by the War Department.....	2,500 00	2,093 94
Lieutenant T. S. Brown	Arkansas river.....	1,000 00	318 36
	Road in Illinois	40,000 00	29,229 36
Major H. Whiting.....	Fort Gratiot road, Mich.....	15,000 00	10,267 38
	Saginaw road, Mich.....	.....	3,484 63
	Grand River road, Mich.....	10,000 00	1,471 76
Major M. Mason.....	Contingencies of fortifications	285 00	965 32
Major B. K. Pierce.....	.....do.....	950 00	130 80
Major G. Bender.....	Chicago harbor.....	17,060 00	6,012 50
Captain H. Smith	Oswego harbor.....	220 00	200 02
	Piers at La Plaisance bay.....	5,932 96	5,433 27
	La Plaisance Bay road	4,850 00	4,434 39
Lieutenant E. S. Sibley	Detroit and Chicago road	12,500 00	11,956 54
	La Plaisance Bay road	3,600 00	1,593 53
	Piers at La Plaisance bay.....	2,140 11	2,135 36
	Saginaw road, Michigan	4,000 00	3,722 12
Captain N. Baden.....	Contingencies of fortifications .....	.....	454 48
Lieutenant G. M. Long	St. Mark's river and harbor	9,430 00	8,851 54
	Appalachicola river	5,000 00	4,006 80
	Ochohoney river	5,000 00	3,587 87
	Oswego harbor.....	.....	5,583 85
Lieutenant D. D. Tompkins.....	Contingencies of fortifications	1,420 00	766 46
Lieutenant W. G. Williams.....	Oswego harbor.....	6,410 00	4,788 69
Lieutenant R. C. Smead.....	Lithographic press	764 45	742 04
Lieutenant J. R. Irwin.....	Sodus bay.....	16,500 00	17,341 92
General J. G. Swift.....	Genesee river.....	15,700 00	15,490 43
Thomas B. Smith	Deer island	35,190 00	20,588 13
Ezra Crowell.....	Hyannis harbor	10,565 00	10,248 20
John McIlroy.....	East division of the road in Indiana.....	23,700 00	44,975 53
Homer Johnson	West division of the road in Indiana.....	42,500 00	47,273 36
W. C. Greenup	Cumberland road in Illinois.....	37,000 00	52,543 89
Ashbel Dart.....	Conneaut creek.....	4,430 00	4,449 48
Jeremiah Sturges.....	Mill river	3,710 43	3,973 48
A. W. Walworth	Cleveland harbor.....	3,700 00	3,811 22
H. W. Shreve	Ohio and Mississippi rivers, act of May 24, 1824	68,850 00	61,200

B.—Statement showing the amount of money drawn from the treasury, &c.—Continued.

Names.	On what account.	Amount re- mitted.	Amount of ac- counts ren- dered.
H. W. Shreve.....	Ohio and Mississippi rivers, act of March 2, 1831.....	\$22,000 00	\$42,145 69
	Red river	21,663 00	21,632 22
	Arkansas river.....	14,000 00	.....
William McKnight	Cumberland river	22,000 00	14,437 67
Jabez Wright	Huron river.....	300 00	515 33
Henry Phelps.....	Grand river.....	2,500 00	.....
M. Hubbard	Ashtabula creek	500 00	2,187 38
Thomas M. Clark.....	Merrimack river .....	.....	1,385 34
A. S. Bowley.....	Provincetown harbor.....	4,456 23	4,456 23
Jos. Bradford	Plymouth beach	1,396 65	2,438 33
B. Palmer	Kennebunk river, (piers).....	1,700 00	1,700 00
T. Ferguson	Piscataqua river.....	.....	435 81
Jos. D. Selden	Dunkirk harbor	5,200 00	6,621 81
	Buffalo harbor	20,000 00	20,796 12
	Black Rock harbor	2,600 00	3,435 99
	Light-house at Buffalo.....	2,500 00	3,200 00
	Presque Isle harbor	7,500 00	7,377 42
	Black river	6,200 00	6,002 68
	Cunningham creek	500 00	732 13
Commissioners Godfrey and Marsh.....	Road from Detroit to Grand river of Lake Michigan.....	3,500 00	3,500 00
John Martin	Road from Line creek to the Chattahoochee river, Georgia.....	500 00	300 50
Peter Grant.....	Kennebec river .....	.....	263 91
D. Granger.....	Harbor of Saco, Maine .....	.....	22 78
		1,813,527 83	1,715,068 56

C.

Table exhibiting the works projected by the board of engineers, which have not been commenced, and the estimate of their cost.

FIRST CLASS—TO BE COMMENCED AS SOON AS POSSIBLE.

Designation of the works.	Estimate.
Fort St. Philip, Louisiana.....	\$77,810 79
Fort at Sollers's Point flats, Patapsco river	673,205 44
Fort Tompkins, New York	420,826 14
Redoubt in advance of ditto	65,162 44
Fort at Wilkins's Point, New York	456,845 51
Fort at Dumpling's Point, Rhode Island.....	759,946 57
Fort at Rose island, Rhode Island.....	82,411 74
Dikes across west passage Narraganset roads, for the defence of Boston harbor.....	205,000 00
Fort on Nantasket head	539,000 00
Lunette in advance of ditto.....	79,000 00
Redoubt No. 2, in advance of ditto.....	32,000 00
Redoubt No. 1, (on Hog island,) in advance of ditto.....	29,000 00
Dike across Broad Sound Passage.....	140,000 00
Cutting off the summit of Gallop island.....	2,429 00
Narraganset bay, Rhode Island, (works for the defence of Conanicut island).....	220,053 43
	3,782,691 06

SECOND CLASS—TO BE COMMENCED AT A LATER PERIOD.

Designation of the works.	Estimate.
Tower at Pass au Heron, Bay of Mobile	\$16,677 41
Fort at Hawkins's Point, Patapsco river	244,337 14
Fort at St. Mary's, Potomac river	205,602 33
Fort opposite the Pea Patch, Delaware river	347,257 71
Fort at the Middle Ground, outer harbor of New York.....	1,681,411 66
Fort at the East bank, outer harbor of New York.....	1,681,411 66
Fort Hale, Connecticut	31,815 83
Fort Wooster, Connecticut.....	27,793 34
Fort Trumbull, Connecticut.....	77,445 21
Fort Griswold, Connecticut.....	132,230 41
Fort on Fort Preble Point, Portland harbor, Maine.....	103,000 00

SECOND CLASS—Continued.

Designation of the works.	Estimate.
Fort on House island, Portland harbor, Maine.....	\$32, 000 00
Fort Pickering, Salem.....	116, 009 00
Fort for Nangus Head.....	35, 000 00
Fort Seawell, Marblehead.....	116, 000 00
Fort for Jack's Point, Marblehead.....	96, 000 00
Fort on Baldhead, North Carolina.....	120, 000 00
Fort on Federal Point, North Carolina.....	12, 000 00
	5, 075, 982 70

THIRD CLASS—TO BE COMMENCED AT A REMOTE PERIOD.

Designation of the works.	Estimate.
The rafts to obstruct the channel between Fortress Monroe and Fort Calhoun.....	\$240, 568 00
Fort on Craney Island flats.....	258, 465 14
Fort at Newport News.....	244, 337 44
Fort at Naseway shoal.....	673, 205 00
For the defence of Patuxent river:	
Fort on Thomas's Point.....	173, 000 00
Fort on Point Patience.....	164, 000 00
Fort on the Narrows of Penobscot river.....	101, 000 00
	1, 854, 575 58

RECAPITULATION.

First class, (15).....	\$3, 782, 691 06
Second class, (18).....	5, 075, 982 70
Third class, (7).....	1, 854, 575 58
	10, 713, 249 34

D.

ERIE, PA, October 18, 1833.

SIR: In compliance with the orders and regulations of the Engineer department, the following report in relation to the public works of internal improvements on the south shore of Lake Erie is most respectfully submitted:

Black Rock harbor, N. Y.—The money which has been applied to the works this season has been principally in procuring stone for the mole on Bird island, and in repairing the traverse pier. No report has been made by the superintendent of the progress and condition of the works. I have been informed that a plan has been made out for enlarging or extending the works, and sent to Colonel Totten, the cost of which is estimated at \$20,000. Information through that channel to the department may be expected.

Buffalo harbor, N. Y.—The public works for securing the harbor at Buffalo have the appearance of great strength and durability. The importance of this port may be learned from the collector of the customs. The schedule of shipping belonging to this port, and the amount of exports, will show the great amount of business transacted. The whole front wall of the mole on the south side of the harbor, together with the coping and flagging, are completed. The new light-house on the mole head is complete in every part. An estimate of funds required for 1834 accompanies this report.

Dunkirk harbor, N. Y.—This harbor is formed by two points projecting into the lake; the western pier extends into the lake 416 yards; for extending the pier 158 yards further, and constructing the eastern breakwater, an estimate accompanies this report. The works which have been already constructed stand well and in good condition; the piers are all filled in with stone, level with the top timbers, based upon solid rock, and planked. The pier has been extended this season 113 yards. This harbor has at its entrance 12 feet of water, and from 12 to 15 on the anchorage.

Presque Isle harbor, Pa.—The north breakwater of this harbor is now connected with the main land of the peninsula, and filled in with brush and stone; it has been extended this season 400 yards. The stone in the piers have settled about two feet on an average, the planks have been taken off, and the piers filled to a level with the top timbers, and replanked as far as the old ones would answer; the whole will be covered as soon as plank can be obtained. The depth of water has been increasing in the channel every year from the commencement of the works; 12 feet of water may be carried the whole length of the channel to the entrance of the bay, and then 9½ feet to the borough pier, which is one and a half miles from the entrance. This harbor is capacious, when compared with others on this lake, and very important to the country. It is the most suitable point for a naval station on the south shore of the lake. These works, as soon as

practicable, should be placed on a permanent footing. In 1830 a breach was made through the south pier at its junction with the south breakwater, but as no serious injury has been felt and the channel has continued good, it has remained in the same situation ever since. The deep basin has, however, been worn in the channel, and the standing work endangered by being undermined. Colonel Totten, of the engineer corps, recommends its being filled in without delay. The appropriation will be only sufficient to secure the other part of the works, leaving this until further appropriations are made. To strengthen these works, large quantities of stone and brush are required to be placed on each side of the piers and breakwater, the whole length, to prevent them from being undermined, and the sand from being driven through by the current and waves. An estimate is made out for this purpose, likewise for closing the breach at the junction of the south breakwater and pier, and filling in the deep basin worn by the current surrounding this breach. The breach at the head of the peninsula, (five miles from the entrance,) which was mentioned in my last annual report, has been thoroughly examined by Colonel Totten, and it is presumed that some plan will be recommended to prevent its increase.

Conneaut creek, Ohio.—These piers extend into the lake 415 yards. The depth of water in the channel at its shoalest place is eight and a half feet. The stone in the piers have settled very considerably, and must be filled in even with the top timbers; some large stone are required around the head of the piers, and on the outside mixed in with brush. An estimate of the expense accompanies this report. 202 yards of pier have been constructed since the 30th of September, 1832. A simple dredging machine has been built this season for deepening the channel, which is now in operation and doing well, removing from six to eight cords per day of hard clay pan.

Ashtabula, Ohio.—These piers extend into the lake 428 yards; if they were extended 150 feet further, and spread so as to give additional width at the entrance, greater safety would be given to vessels entering the harbor, especially when the wind and waves are high. A rock lies across this channel about 200 yards from the head of the pier, and extending 200 feet in length, six and a half feet below the surface of the water, the whole width of the channel. The machinery for cutting up this rock was in operation when last there, and worked to good advantage. The superintendent informs me that the chisel has again failed, but he is in daily expectation of a very substantial one from Pittsburg. I am fully in the belief, notwithstanding the bad success this season, that the plan is a good one, and that the rock will be removed at a less expense than any other plan suggested. An estimate accompanies this report for extending the piers, and for filling in where the stone have settled.

Cunningham creek, Ohio.—This is an open pier extending into the lake, and bridged. The appropriation of \$500 last winter appears insufficient to complete the work or pier head; more money will be required. The pier head was constructed on a larger scale than the plan laid down, and more stone and timber were required than was called for by the former statement. An estimate for completing this pier and enlarging the works accompanies this report.

Grand river, Ohio.—These piers extend into the lake 480 yards, and will admit vessels drawing 12 feet of water, a greater depth than could have been wished, as greater quantities of stone are required to fill in the piers, and to secure them in their place against the effect of the current. Large quantities of stone and brush are required to be placed on each side of the piers, the whole length, to give them additional strength. Estimates are therefore made out, and accompany this report.

Cleveland, Ohio.—The piers at this harbor extend into the lake 525 yards, giving a depth of water in the channel of eleven and a half feet at its shoalest place. This harbor is one of great importance; it must, from its local situation, be the great centre for business on the lake shore for the State of Ohio. The Erie and Ohio canal enters this harbor, extending 330 miles to Portsmouth, at the mouth of the Scioto river. The quantity of business transacted at this place is shown by the collector of the customs in a document herewith transmitted. Large quantities of stone and brush are required to secure and strengthen these works. An estimate for that purpose is made out, and accompanies this report.

Black river, Ohio.—These piers are extended into the lake 417 yards, with an opening of 200 feet; the shoalest place in the channel is seven and a half feet. The works stand well. The stone in the piers have settled nearly two feet on an average; a quantity of stone is required to fill them even with the top timbers. A deposit of stone and brush on the outside of the piers would give additional strength to the works, and prevent the sand, which is constantly accumulating, from being driven through the piers. This being effected, a brush would be formed alongside the piers, and thereby a strong barrier erected for the preservation of the works. The western pier has been extended this season 30 yards, filled in with stone, and planked; and 150 yards of the eastern pier, which was in an unfinished state, have been completed. The eastern pier is to be extended 30 yards further, agreeably to the original plan. A dredging machine has been constructed for deepening the channel, by removing the hard clay pan at its bottom, and is now in operation, and works to good advantage.

Huron harbor, Ohio.—The depth of water in this harbor at its shoalest place is eight feet. The works are in good condition. Some considerable stone will be required for filling the piers, where they have settled, even with the top timbers, and quantities of stone and brush on each side of the piers, to give strength to the work, and prevent the sand from being driven through the piers into the channel. The entrance to this harbor is only 140 feet; this is too narrow for safety. If these piers were extended into the lake 200 feet further, on an angle that would give an additional width of 100 feet, the entrance into the harbor would be more safe, and damage less frequent. An estimate for repairing and extending these works accompanies this report.

It gives me much pleasure to communicate to the department the result of the experiments made in constructing harbors on the south shore of Lake Erie. The extending of parallel piers from the mouths of rivers across the beach and sand-bars into the lake has exposed the sand to the action of the current, by the force of which the bars have been removed; and in no instance has it failed, unless interrupted by rock and clay pan, of giving sufficient depth of water for the largest class of vessels navigating the lake, thereby rendering it easy to obtain a safe harbor at any of the given points. It was problematical at the commencement of these works what would be the result of the first operation, but experience has shown that could the effects have been foreseen, the same plan would have been pursued; of course, no money has been lost in experiments. These works will be kept in repair, and strengthened by enlarging the base on each side the piers with brush and stone, and obtain in a few years a stable foundation. To secure this most important end, they will require constant watchfulness and annual appropriations, but small when compared with national advantages. Beacon light-houses to all the harbors on the south

shore of Lake Erie are required for the safety of navigation. Estimates have been heretofore made out and transmitted to the department.

Very respectfully, your most obedient and humble servant,

JOSEPH D. SELDEN, *Agent*.

Brigadier General C. GRATIOT, *Chief Engineer*.

OFFICE OF IMPROVEMENT OF NAVIGATION OF GENESSEE RIVER AND BIG SODUS BAY,
Geneva, New York, October 6, 1833.

Annual report of the state of the works constructing under the law of Congress for the improvement of the navigation of Genessee river, and for removing obstructions at the entrance of Big Sodus bay, on Lake Ontario, New York, for the year ending September 30, 1833.

The materials used in the construction of these works, to wit, timber, iron, and stone, and the form of the piers, to wit, a succession of cribs united, being the same as those used and applied in previous years, they need not be again described in this place, save a reference to the plans.

At Genessee river the quantity of work accomplishing and to be finished this year (1833) amounts to twenty-eight piers or cribs, each 30 feet in length and 20 feet wide, sunk and extending from the existing range of piers into the lake at the mouth of the river in a depth of 12 feet water, the extreme crib being 30 feet square, the average height of these cribs from the bed of the lake to the top of the piers being 17 feet. The whole length of the pier, including that to be finished this year, amounts to 4,712 feet.

At Big Sodus bay there have been constructed and sunk, during the same time this year, twenty-seven similar cribs or piers, of the dimensions of 30 feet by 18, in 12 and 13 feet of water, the cribs averaging a depth of 18 feet from the bed of the lake to the top of the pier. The whole length of the pier, including that to be finished this year, amounts to 5,378 feet.

The works at both harbors standing firmly, and answering the purposes for which they are erecting. So far as the nature of the respective beds of the lake have effected, that at Genessee river, being movable sand, is cleared away from seven to twelve feet, the depth of fourteen feet being the object required; and that at Sodus bay, being sand and gravel and pebbles, has been washed off from seven to nine feet, the depth of fourteen being also the object here required.

The expenditures for materials and workmanship from the appropriation of \$15,000 for each harbor are exhibited in the accounts and vouchers in the Engineer department.

It was my expectation last year that it would not be necessary to extend the pier-work of these improvements any further into Lake Ontario than will be finished in the present year. Some changes in the form of the shoals near the piers, and a movement of sand towards their extremities, make it necessary to extend the piers somewhat further, to wit: at Genessee river the movement of the shoal near the west pier has occasionally deposited at the end of the pier, but the deposit has not been permanent. To insure safety in this matter, an addition of two hundred yards of pier will insure a fourteen-foot water navigation, which will involve an expense of \$15,000. Such have been the advantages to the navigation by these piers, that it is the general wish to make the channel safe and easy for any depth not exceeding sixteen feet of water, which would involve an expense of \$7,500 in addition, as the estimates exhibit.

At Big Sodus bay the movement of sand and gravel on the shoal between the west T and the shore adjacent to the light-house make it desirable to extend the west T about one hundred yards, and the east T about fifty yards, which will involve an expense of \$8,000, as the estimates exhibit.

By the accompanying sketch it will be seen that Point Charles is connected with the main land by a narrow isthmus. From causes that have most probably originated in the reaction of the waves about the Sodus piers, the northeastern projection of Point Charles, and the shore continued therefrom to the isthmus, have been much abraded. Before the piers were commenced, the rolling of the sea expended its force upon the Long Point beach within the bay. Since the works have been constructed, the reacting waves from the sides of the piers have commingled themselves with the currents that set east or west, as the winds have influenced them, and expended some of their force upon Light-house Point and Point Charles; the latter being affected because the prevalent winds are from the west. Light-house Point has been protected by a pier, which, although too small, evidently shows its good effects in protecting the shore there. I propose a similar protection at Point Charles; and as this promontory lies immediately adjacent to the low part of the narrow isthmus, I propose that a range of small piers, six feet by four, be made to cover the northeast point and extend to the isthmus, and thus effectually protect that shore and prevent a breach through to the bay, which is now seriously threatened, and which, if permitted, might change the channel from the lake into the bay. By an estimate it will be seen that that work would cost \$8,000.

Conformably to what has been stated in previous annual reports upon the removal of obstructions at Sodus bay, I now proceed again to refer to that subject. The bed of the lake between the piers at the entrance of this harbor is sand, gravel, and pebbles, forming just below the surface a hard pan, a connexion aided in its formation by a deposit of iron, and is of a thickness between one and three feet; through this pan I have been in the habit of driving piles, consequently the pan can be broken through, and enough of it turned over and taken away to secure a channel for a navigation of fourteen feet of water where the least depth is now nine feet. The machinery which I recommend to apply to this work, is to be driven by a twenty-horse power steam-engine, acting upon an iron plough running in an iron frame attached to iron axletrees and iron wheels, to be moved over the bed of the channel by gauging the plough to the requisite depth; and after running out one furrow, and dredging out the excavation, to regauge the plough to the additional depth of another furrow, until the channel is opened to five feet below the present surface, on a line of 500 yards in length and 20 yards wide, which would leave banks on either side of the channel 80 yards wide, a pan sloping up to the base of the piers.

The accompanying plan will show the construction of the plough, and the estimates will show that the expense of this work will be \$14,000 for the first year, and \$6,000 for the second year. In my opinion, the work can be done in two years.

When these harbors were commenced, they were deemed experiments. To produce a conviction of their practicability and usefulness, the cheapest and most temporary materials have been applied; the result has been thus far satisfactory. The material chiefly used at Genessee river and Sodus bay has

been timber secured by iron bolts and oak treenails, and ballasted with stone. This work below the surface of the water will endure a great length of time; but that which is above water, and alternately wet and dry, must of necessity decay in a few years. To render, therefore, these works permanent, it will be necessary to apply a structure of stone above low water.

In observing the action of the waves upon structures intended to impede their motion, I do not think that slopes form the best breakwaters, because they serve to lead the surge. Perpendicular walls aid better to resist the action of waves than slopes, for in such cases I have noticed that the violence of the coming surge is in part expended upon the retreating volume of water that is below the surface adjacent to the upright wall of timber, so that the force of the wave is at least divided between the "undertow" and the face of the structure.

I would therefore recommend that the works at Genesee river and Sodus bay be permanently secured by perpendicular walls of stone constructed upon the present piers, commencing below the lowest stage of water, and extending four feet above the surface of high water; using stones of large dimensions for the faces exposed to the waves, clamping them together with copper; using small stone for the inside faces, and filling the space between the faces with fragment stones, and covering the whole with large stone. The quarries on Genesee river and near Sodus bay can afford an abundance of materials. I subjoin an estimate for such a work at both harbors.

1, 000 cords of building stone, in lengths of not less than four feet, at \$7.....	\$7, 000 00
800 cords, not less than 2 feet, at \$5.....	4, 000 00
3, 000 cords of fragment stone, at \$3.....	9, 000 00
20, 000 pounds copper bolts, at 25 cents.....	5, 000 00
Workmanship and contingencies.....	13, 500 00

For Big Sodus bay..... 38, 500 00

The greater facility of procuring stone upon Genesee river would diminish the item of stone \$4, 000, so that the expense for Genesee river would be..... 34, 500 00

Respectfully submitted.

J. G. SWIFT, *Agent.*

Gen. CHAS. GRATIOT, *Chief Engineer, Washington, D. C.*

P. S.—I append a letter from the ship-owners and captains at the port of Genesee.

Estimate of funds requisite to conduct the United States pier work at Genesee river, New York, for the year 1834.

800 sticks of timber, 30 feet long, at \$1 25.....	\$1, 000 00
400 sticks of timber, 25 feet long, at 1 00.....	400 00
1, 200 sticks of timber, 20 feet long, at 75.....	900 00
6, 000 lbs. iron bolts, at 10 cents.....	600 00
1, 780 cords of stone, at \$2 50.....	4, 450 00
Constructing 70, 000 feet of pier, at 7 cents.....	4, 900 00
Contingencies and expenditures.....	2, 750 00
	<u>15, 000 00</u>

Estimate to extend the piers to 16 feet water.

400 sticks of timber, 30 feet long, at \$1 25, and 1, 000, 20 feet, at 75 cents.....	1, 250 00
5, 000 iron bolts, at 10 cents.....	500 00
1, 000 cords of stone, at \$2 50.....	2, 500 00
Constructing 40, 000 feet of pier, at 7 cents.....	2, 800 00
Contingencies.....	450 00
	<u>7, 500 00</u>

Amount of both estimates..... 22, 500 00

J. G. SWIFT.

Estimate of funds requisite to conduct the United States pier work at Big Sodus bay, New York, for 1834.

400 sticks of timber, of 30 feet, at \$1 25.....	\$500 00
200 sticks of timber, of 25 feet, at 1 00.....	200 00
600 sticks of timber, of 18 feet, at 50.....	300 00
3, 000 lbs. iron bolts, at 10 cents.....	300 00
900 cords stone, at \$3.....	2, 700 00
Workmanship of 30, 000 feet of timber, at 7 cents.....	2, 100 00
Superintendence and contingencies.....	2, 000 00
	<u>8, 100 00</u>

For protecting Point Charles.

1, 200 sticks of timber, average 18 feet, at 50 cents.....	\$600 00
5, 000 white oak treenails, at 10 cents.....	500 00
1, 000 cords of stone, at \$3.....	3, 000 00
5, 000 lbs. iron bolts, at 10 cents.....	500 00
Workmanship of 40, 000 feet, and contingencies.....	3, 400 00
	<hr/>
	8, 000 00
	<hr/>
Amount of both estimates	16, 100 00

J. G. SWIFT.

Estimate of funds requisite to construct and work a steam-engine, dredging machine boat, plough, and implements to excavate the hard pan at the channel of Big Sodus bay, New York, in 1834 and 1835.

One twenty-horse power steam-engine.....	\$3, 000 00
Copper boiler, gratings, and extra shafts.....	1, 400 00
Chain pump, gearing, and dredging shaft.....	1, 200 00
Vessel for the same, with frames and wheels.....	1, 700 00
One wrought iron plough, 300 lbs.....	300 00
Wrought iron carriage, wheels, and scows.....	300 00
Four chain cables.....	400 00
Iron dippers, rakes, crane, and chains.....	475 00
Two gondolas and cranes.....	225 00
Four anchors.....	400 00
	<hr/>
	9, 400 00
One steam-engine and 8 hands.....	1, 500 00
Fuel, repairs, and contingencies.....	3, 100 00
	<hr/>
For the first year.....	14, 000 00
	<hr/>
New work, engineer, hands (2d year).....	6, 000 00

J. G. SWIFT.

PORT OF GENEVA, N. Y., *September 30, 1833.*

SIR: On the eve of your departure for the seat of government, we, the residents, ship-owners, and captains at this port, are desirous of expressing our approval of the operation of the piers now under progress; and, at the same time, we give our testimony to the improvement that has already been effected in the navigation of the channel to the lake. We beg, respectfully, to suggest it as our opinion that the works ought to be so extended as to give a depth of 16 feet of water; and we are strongly impressed with the conviction that if this could be accomplished in one season, it would be done at considerably less expense than the same object could be attained in more distant appropriations.

We take this opportunity to express our good wishes to yourself, and are, sir, your obedient servants,

FREDERICK BUSHNELL.

JNO. MONON.

G. C. LATTA.

D. S. HOLDEN.

DAVID WHITE.

AMOS EMERSON.

JAMES CURRIER.

HENRY BENTON.

Gen. J. G. SWIFT, *Geneva, N. Y.*Oswego, *October 9, 1833.*

SIR: I have the honor to forward herewith my monthly and quarterly returns due at this time, and also my annual report of the progress of operations since January 1, 1833, prior to which time I have no data left me by the former agents on which to found a narrative.

The operations since I took charge of the work are comprised in the following particulars, viz:

1st. Repairing the damages sustained by the west pier last winter. In doing this I followed the plan suggested in Captain Smith's letter of the 15th April last, and referred to in mine of April 22.

2d. Completing the counterfort to the east pier, (marked B in the accompanying sketch of the piers,) which was built up nearly to the water's edge last fall by Lieutenant Tompkins.

3d. Building the counterfort (marked A) to support that part of the west pier which was injured last winter. This is completed now with the exception of planking. I have purposely delayed completing it in order to give the man who furnishes the stone for filling it (who is also the contractor for supplying

stone for the mole) an opportunity of furnishing them as they come from the quarry with the large stone, by which means I get them cheaper than I could if the quarry had been worked on purpose for them, but principally for the purpose of letting it get perfectly and firmly settled before building the part above water.

4th. Prosecuting the construction of the stone mole for the protection of the west pier. This is under contract to Mr. H. I. Cary, of this place, to the extent of the appropriation, to be completed this fall. The season has been boisterous to an unprecedented extent. There has been on an average this summer (or since the contract was made) scarcely six days in a month in which scows could go out with stone. In consequence of this it will be late before the contract will be completed; but as the principal part of the stone which remains to be delivered is to be placed above the water, and can be lifted over the pier with cranes even in rough weather, I confidently anticipate its completion this fall. In the accompanying draught of "profile No. 1," two irregular lines drawn across the profile of the mole represent sections of the present mole as it will be when the stone contract is completed. The upper one represents a section anywhere between the pier head and the counterfort, (marked C,) which is the part most exposed to injury; the lower one represents a section anywhere from that point to the west end of the pier.

Agreeably to your directions I visited Buffalo in July last for the purpose of collecting such information in regard to the public works in that harbor as might be applicable to the construction of similar ones in this harbor, where I met by appointment Colonel Totten, then inspecting those works. It is in accordance with his suggestions that I have prepared the accompanying estimates and drawings of works which are deemed necessary for the permanent security of this harbor.

For securing the present structures, \$38,569, the amount of the estimate for finishing the mole according to "profile No. 1," is required. The rock bottom precludes the use of piles and makes it necessary to have a more extended base. This mole is deemed a perfect security as long as the timber remains sound; but to make it permanent, the estimates for finishing the west pier according to "profile No. 3" are submitted.

I also forward an estimate and plan for the foundation of a light-house to be placed at the entrance of the harbor. I presume the drawing will sufficiently explain the manner in which it is proposed to build it. The crib work is intended to be filled up with broken stone and fine gravel, and grouted. The estimate for the light-house itself is founded on the actual cost of the one at Buffalo, and therefore the different items are not enumerated.

The reasons for selecting the end of the east pier for the location of the light-house are: 1st, the water is not so deep there as at the end of the west pier, and the bottom is better, being flat rock, as far as I have been able to ascertain; (there is a quantity of loose stone on some part of it which it will be necessary to remove before a thorough examination can be had;) 2d, it is more accessible in bad weather; and, 3d, there are five acres of ground and a house belonging to the United States for a light-house keeper on this side and near the pier.

It is proposed to get the limestone estimated for at Chaumont bay, near Sackett's Harbor, by contract, and the other stone from the quarries heretofore worked adjacent to the pier. These quarries are on the State lands, and I have obtained from the State the exclusive privilege of quarrying stone in them for the public works. I would therefore suggest that it will probably be cheaper for me to work these quarries myself than to get these stone by contract, for I can work them as cheap as a contractor can, and what would be his profits in one case would be saved to the government in the other. Add to this the advantage of having everything done just in the manner and at the time it is wanted to be done, which can never be the case with a contractor.

The information which you directed me to obtain respecting the tonnage of the port, &c., &c., will be forwarded in a few days, as soon as the collector has completed the examinations necessary for obtaining it. I send enclosed in a roll with the drawings a map of the village of Oswego.

I have the honor to be, very respectfully, your obedient servant,

R. C. SMEAD, *Lieut. 4th Art. on Eng. duty.*

Gen. CHARLES GRATIOT, *Chief Engineer, Washington, D. C.*

E. .

Fort Adams, *Newport Harbor, November, 9, 1833.*

SIR: In compliance with the tenor of a letter from the Engineer department of June 24, I have visited and inspected the following works of harbor improvements on the shores of Lakes Ontario and Erie, namely, Oswego, Big Sodus bay, Genesee river, Black Rock, Buffalo, and Dunkirk, in the State of New York; Erie, in the State of Pennsylvania; Conneaut creek, Ashtabula creek, Cunningham creek, Grand river, Cleveland harbor, Black river, and Huron river, in the State of Ohio. And in further compliance with that letter, I have now the honor to submit the following report on the actual condition of those works severally, and on "the amount of funds required to complete each according to the present plans, or according to such modifications of them as may seem proper to attain the end contemplated in constructing these works."

I may here remark, once for all, in relation to a "project for keeping them in good order and repair after they shall be finished," which I am required to submit, that no better mode has occurred to me than to commit them severally when finished to the supervision of the collector of the customs, inspector of the revenue, or light-house keeper, with instructions to report at stated times as to their condition, to keep a strict eye to their preservation from wanton injury or depredation, to apply immediate repairs to slight injuries, and to notify the department promptly of all serious accidents. An increase of salary accompanying these new duties would give them an attractive character, and insure their faithful observance.

Very respectfully, your most obedient servant,

JOS. G. TOTTON, *Lieutenant Colonel of Engineers, Brevet Colonel.*

Gen. C. GRATIOT, *Chief Engineer, Washington, D. C.*

Oswego harbor, N. Y.—The mouth of the Oswego river is an open roadstead, having no shelter from the dangerous winds which blow from the northern quarter ; all winds from west round through the north to the northeast driving the waves directly into the roadstead.

Two opposite, low, sandy points make out from the shores at the immediate embouchure, narrowing the channel somewhat and affording a partial shelter within. This sheltered space is, however, very circumscribed, quite shallow, and the access to it against a current that is at times rapid; so that this inner space very imperfectly answers the purpose of a harbor.

To obtain a quiet and sufficiently capacious anchorage, a pier beginning about 1,200 feet from the mouth of the river has been run out from the western shore, first north 230 feet, then north about 55° east, 1,155 feet to the channel. The channel being 250 feet broad, a pier to the east thereof continues on the prolongation of the west pier (N. 55 E.) 644 feet, and thence in a southeasterly direction 222 feet, to the shore near old Fort Oswego. These may be designated harbor piers. From near the eastern extremity of the west harbor pier, and at right angles thereto a channel pier runs a distance of 126 feet into the lake. These piers (see plan herewith) vary in their width at top, according to their situation, from 24 to 27 feet. They are built of side and central timbers, running longitudinally and connected by numerous cross-ties; the sides next the lake, and the top being covered with planks and the interior space being filled with stones. A number of buttresses, similar in construction to the piers, have been placed against the inner side of the harbor piers, to strengthen them against the shock of waves; and with a similar object, stones have been thrown against the lake side of the west harbor pier so as to form a mass rising next the pier, near to the surface of the water, and having a base of from twice to twice and a half the altitude.

The effect of these works just described is to give a capacious harbor, perfectly safe in all winds, of easy access, and deep channel and anchorage.

During the present year the operations on the harbor must be confined to finishing the buttress marked b, erecting the buttress a, so as to occupy all the space between the buttresses c and d, in consequence of the force of the sea having curved in the pier opposite this space; repairing some other damages done to this pier and adding to the quantity of stone thrown against the lake side of the west pier; all these matters involving an expenditure of about \$8,000.

Although the development of the works for the formation of the harbor is complete, much remains to be done to give them present stability, and still more to give them permanency. The effects of the sea, urged by violent storms, upon the west pier, have been already noticed; planks were torn off, timbers displaced, and even the whole mass of the pier in one place bent inward. All further action of this sort must be prevented by adequate provision in the first place, otherwise extensive annual repairs will be called for, and these annual repairs will become more and more difficult and expensive. A large deposit of stones has been made on the outside of the west harbor pier, but as the top of this mass scarcely reaches to the surface of the water, the wave rolling up the slope impinges with great violence upon the whole of the upright and uncovered portion of the pier; the wave should either be carried by the slope towards the top, and sometimes, no doubt over the top, or the pier should be raised so high, the outer surface being everywhere sloped, that the wave cannot reach the top. The first should be the preparatory, the second the ultimate profile of the pier. These profiles are marked in the drawing No. 1 and No. 2. To give to this pier the form of No. 1, will cost, by the estimate of the agent \$38,569 00

The entrance to the harbor is now but little benefitted by the light-house on the hill near Fort Oswego. This leads vessels towards, but does not show the entrance into, the anchorage. Either of two modes may be adopted; a beacon or small light may be placed at the entrance, and both this and the present light be kept up, or a lofty permanent light-house may be constructed at the pier, abandoning the old one. From the actual condition of the latter, this mode may in all respects be the most economical.

The position for a light-house will be just within the terminating buttress at the western end of the east harbor.—(See plan.) A permanent foundation for this light-house, enclosed by strong pier work according to the drawings herewith, is estimated to cost 4,651 45
A permanent light-house, in all respects like the one at Buffalo, erected on this foundation, is estimated at 5,500 00

From observations made at this harbor and elsewhere along the lakes, it appears that where the water is so deep that the waves do not break upon the natural bottom, they are best resisted by a vertical structure. This remark is known to be in direct opposition to prevailing notions, and to almost all practice; still it is now advanced with confidence, and may ere long be again urged more at large; at any rate, there is some direct proof in relation to the east harbor pier. In consequence of a strong conviction of the soundness of this opinion, the agent at Oswego was requested to "observe the east pier very carefully in every blow, and let me have his (your) opinion whether, if it be made vertical with a strong wall, it will not do without a breakwater outside of it." The answer is: "I have had an opportunity of witnessing two pretty severe blows from the northeast, in which it would naturally be supposed that the east pier would be most exposed; but the flooring (top) was scarcely wet, while the west pier was continually covered by immense sheets of water; and the same happens in all blows that I have observed." "There has never been any stone thrown outside of the east pier, but a few washed out of the crib while they were sinking them, making an irregular bank a foot or two thick in some places." These circumstances induce the recommendation to make no change in the east pier, but such as is required to give durability to the work, to wit: by substituting above water strong stone walls for the work now in wood. The present broad mass of stones on the outside of the west harbor pier makes the application to it of the principle here announced impossible. The sloping profile must, in that case, be continued and perfected.

The expense, then, of placing the present work beyond accident, and of lighting the entrance, will, by these estimates, be 48,720 45
Of which all may be expended to advantage, according to the calculations of the agent, next year, excepting the cost of the superstructure of the light-house, namely 5,500 00

Leaving, as required for the services next year 43,220 00

All the sustaining parts of these structures are, as before mentioned, of wood; and all the wooden parts above water are, of course, rapidly decaying. The contemplated labors of the next year have reference to a future substitution, which is unavoidable, of an imperishable material for the decaying portions, and, as there is much to do in this way, the succeeding year should begin the substitution.

To give the west harbor pier a permanent character, the profile No. 2 is recommended.

The cost will be.....	\$33,842 00
To give the same character to the east harbor pier, profile No. 3 is recommended. The cost is estimated at.....	22,960 00
To build the light-house.....	5,500 00

Making the total estimated expense of finishing the works at this harbor in a substantial and durable manner.....	105,522 45
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Big Sodus bay.—The artificial works at this harbor are as follows: 1. A harbor pier, 2,138 feet long, running in a course a little north of east from the neck which connects Long Point with the main shore.—(See plan.) 2. Another harbor pier, 1,372 feet long, running a little north of west from the northwest extremity of Point Charles. 3. A channel pier running nearly north 640 feet from the outer end of the first mentioned harbor pier; and, 4. A channel pier running nearly north for 180 feet, and a little east of south about 150 feet from the outer end of the eastern harbor pier. The distance between the two channel piers giving access to the harbor, is 475 feet. The piers are in part fourteen feet, and in part eighteen feet wide; they are formed of timber sides connected by cross-ties, a floor of logs and top of planks, the interior being filled with stones. In a few places, as seen in the plan, the piers are reinforced by buttresses of timber filled with stones.

The works thus far described were commenced in 1829, and finished last year. They appear to have perfectly resisted the action of the waves, and being founded on a bottom of coarse sand and pebbles, have settled but very little in any place. The draught of water into the harbor is represented as having been increased by these constructions from less than eight feet to nine feet.

The work now in progress consists of an extension northward of the west channel pier 210 feet, and of the east channel pier 690 feet. It is supposed that these extensions will be completed this year with the present appropriation.

To complete the improvement of this harbor it is proposed:

1. To extend the western channel pier northward 300 feet, in order to keep the outside sand, which is said to be moved by the current towards the channel pier, from being lodged near the entrance between the channel piers. This work may be executed in 1834, and is estimated to cost..... \$7,000 00
2. To erect a narrow pier along the back of Point Charles, and along the outside of the narrow part of the beach that connects this point with the main land, for the purpose of guarding the shore from the wash of the sea, which is now wearing it away. This pier will be about 1,800 feet long. To be erected in 1834, and estimated to cost..... 8,000 00
3. To dredge a channel for a length of about 500 yards, 150 feet wide, and six feet deep, which will give a draught of fifteen feet of water into the bay. Including machinery and all other expenses, this operation will cost, it is supposed, \$20,000, of which \$14,000 may be refunded in 1834, and \$6,000 in 1835..... 20,000 00

The substance to be dredged is represented to be a concretion of sand and iron, forming a mass of considerable, though not stony hardness. It is penetrated by the piles that have been driven on parts of the structure, and may, no doubt, be broken up and removed by ploughs and scrapers. The nature of this bottom promises permanency to any excavation that may be made in it.

Total estimated cost of completing the present project.....	35,000 00
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The sum just stated, viz: \$35,000, will give to Sodus bay all that was originally looked for, namely, a good depth of water in the channel; a spacious and perfectly safe anchorage in all weathers, and, during daylight, an easy entrance. Two other indispensable qualities will still remain to be provided; these are, ready access by night, and such a strong and durable character in the works themselves that the advantages mentioned may be secured for all future times. The first of these requisites may be had by the erection of a beacon-light near the end of one of the channel piers, of which the expense will vary according to the mode of construction. If of wood, and founded on a pier of timber and stone, the expense may be about..... 2,700 00

Like all the other harbor improvements on Lakes Ontario and Erie, the operations at Sodus must, thus far, be considered as experimental; indeed, the problem as to this place is not even now fully solved, because, although a perfect shelter has been obtained for the deep water within the bay, sufficient depth of water over the bar (between the piers) does not yet exist.

There is no reason, however, to doubt the full success of the dredging process, and it is important now to look forward to the means that, in that event, will be needed to impart durability to those portions of the work which (to save cost, in the uncertainty of the issue) were erected of perishable materials.

All the wood work of the piers above the lowest water of the lake will have decayed in eight or ten years. To substitute a facing of large stones for the outer and of smaller stones for the inner side of the piers, making with these strong stone walls, laid in hydraulic mortar, filling the space between the walls with inferior stones, and paving the top with large stones, will cost, it is supposed, about.....	40,000 00
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This latter operation need not be begun for some time, and, in fact, it may be best to wait, in order closely and fully to observe the effect of weather, of the ice, and of waves upon the structure. Careful observation during two or three years may point out important matters of detail in the conversion of this timber work into stone work.

According to these estimates, the future operations at Sodus bay will require the expenditure of.....	77,700 00
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Mouth of Genesee river.—The object of the improvements of the mouth of this river was to remove from between certain limits a body of sand lying off the mouth, through which there was a crooked channel with but from six to seven feet draught.

To accomplish this object (beginning in 1829) two parallel piers were run into the lake from the points which form the mouth of the river.—(See the plan.) The piers are distant from each other 360 feet. At the close of 1832 the west pier was 1,720 feet long and the east pier 1,830 feet long. There have been added, and will be finished this year out of the appropriation, 585 feet to the west and 527 feet to the east pier, making the former 2,305 feet and the latter 2,407 feet long. The effect on the bottom between the piers has perhaps fully realized the most sanguine hopes; the channel is now straight, and has a depth of 11 feet in the shoalest place. Where the depth was originally but 4, 5, or 6 feet, there is now 16 and 17 feet. The force of the current which has wrought this change has also operated to cause an unequal subsidence in parts of the piers; any further action of this sort may, however, be effectually prevented, and, it is believed, has been, by a small deposit of stones at the foot of the piers. The piers are of timber sides and cross-ties, are filled with stones, and are from 18 to 20 feet wide; as yet, their stability has been in no perceptible degree impaired by the violence of storms. In order to obtain a depth of 15 or 16 feet water, it will be necessary to advance the piers further into the lake, because the shoalest part of the channel is at and near the ends of the piers. It is supposed that a further prolongation of 900 feet will give the depth required. This prolongation may be executed in 1834, and, according to the estimate of the agent, will cost \$22, 500 00
There should be a beacon-light near the end of one of the piers—estimated cost 2, 700 00

Total cost of bringing the works, in their present form, to completion 25, 200 00

The remarks made on the perishable nature of the materials employed in the construction at Oswego and Sodus, apply equally to these. Thus far this experiment has been completely successful, and there is no reason to doubt a proportional triumph over natural obstacles for the additional means which it is proposed to apply. It becomes necessary, therefore, to know what must be done to give permanency to these important improvements.

Adopting a plan similar to that recommended for Sodus—that is, converting the timber work, above water, into masonry of the best kind, the expense is estimated to be about 34, 000 00

Making the total cost of the future operations at the mouth of the Genesee river 59, 200 00

Black Rock harbor.—It is through the artificial harbor that the great western canal of the State of New York gains access to Lake Erie; and it is by means of a large lock at the foot of the harbor that vessels passing between Lakes Erie and Ontario, through the Welland canal and Niagara river, avoid the Black Rock rapids. The pier which forms the harbor, by separating it from the river and keeping the waters up to their lake level, runs south, nearly parallel with the east shore of the river, from the upper end of Squaw island to within a short distance of Bird island.—(See sketch herewith, A.) As the canal enters the Niagara river near the lower end of Squaw island and leaves it again opposite the point just indicated, this portion of the harbor is also a portion of the canal, the pier and the dike on Squaw island forming its western margin. This portion of the pier and the dike was constructed by the State of New York.

At the point A commences the work executed under appropriations from Congress. The pier diverges at this point towards the western end of Bird island, and continues 415 yards, to B; it then runs south to the island, a distance of 158 yards, to C; and, lastly, it runs easterly to the eastern end of the island, to D, a distance of 200 yards.

Bird island is a mere ledge of rocks, scarcely rising in any place above the surface of the lake. This ledge has, however, considerable breadth, though lying chiefly under water, and occasions very heavy breakers in certain frequent winds. A pier was first built upon this island (from C to D) of timber; this was thrown down by the surf, and the operations of this year have been the substitution, in part, of a mole of large stones. The funds available under the last appropriation are, however, inadequate to such a construction as will insure its stability. The exposure is such that only a work massive in itself, and made up of large stones, laid on the exterior side with great care, in the manner adopted at the Buffalo mole, can be expected to withstand the violent action to which it will be exposed. At the eastern extremity of this mole there must be erected a beacon-light. This beacon, aided by the neighboring light-house at Buffalo, will afford safe conduct into the harbor in almost any state of weather. The additional appropriation needed for completing the mole, C D, and for erecting the proposed beacon-light, is estimated to be \$3,000.

The appropriations by Congress for this harbor were founded on a project submitted by Major Maurice in the year 1828; which project, besides suggesting the works now finished or in progress, contemplated the erection of a pier or mole to commence on the east shore, within the jaws of the harbor, and extend obliquely into the lake in the manner represented at E. One object of this mole was to render the harbor more safe and tranquil by making it more close, and preventing the recoil of the surf into it from the adjoining beach; but another and principal object was to arrest the sand moving along the shore, and prevent its entrance and accumulation in the harbor. The sand thus borne along was, before the formation of the basin, carried away by the rapid current of the river. Now it is deposited just within the mouth; and although it has not as yet produced any serious inconvenience to the navigation, it threatens seriously to obstruct it, unless arrested by some suitable means. The proposed mole it is thought will be an effectual barrier.

The fact of a progressive motion of the sand along the shore is evident, in a greater or less degree, in many places on the lake. The cause is not obscure, and serves to explain the shutting up of certain rivers in the summer, the wearing away of points of land, &c. Taking the present case—suppose the wind to blow in the direction *a b*.—(See sketch.) Let *c* be the point at which a wave, rolling up along the line *a b*, first begins to disturb the bottom, and *d* the highest point on the shore to which the wave is driven; a particle of sand may, therefore, be transported by the wave from *c* to *d*. The wave was constrained to pursue the course *c d* by the direction of the wind, but in recoiling it will obey only the law of gravity, and instead of retracing its path and leaving the particle of sand where it was taken up, it must retire by the line of greatest declivity of the shore, which is *d e*, (at right angles to the shore,)

leaving the particle at *e*, advanced by the distance *c e*, on its journey towards the mouth of the harbor. The succeeding wave lifts the particle from *e* to *f*, and falls with it from *f* to *g*, and so on. All winds (as *a b*) blowing into the quadrant *e h*, tend to move the sand towards the harbor, while such as blow into the quadrant *e i*, for example, *k d*, tend to cause an opposite motion. But the former are the prevailing winds of the year, and having, moreover, an extensive range along the lake, they drive a heavy surf upon the shore in question, while the latter winds are but occasional, and, blowing off the land over only a narrow surface of water, cannot produce at this point waves of much comparative force. The balance of tendencies is, therefore, very decidedly towards the Black Rock harbor. It may here be observed that this motion of the sands must be at the expense of the shore towards the mouth of Buffalo creek, because the mole at the mouth of that creek prevents a supply of material from being furnished by the beach further south.

It is proposed to extend the new pier from the shore to about 20 feet water, which will give it an average depth under water of about 13 or 14 feet; to form it as high as the water's edge of cribs of strong timber, well framed and fastened together, and filled with stones, and to construct that part of it which will be above low watermark of massive stones, the side walls being laid in hydraulic mortar, and in such a manner as effectually to resist the operation of the surf and ice.

The expense of constructing the pier may be estimated at \$20,000.

Total estimated expense of completing Black Rock harbor, \$23,000.

Buffalo harbor.—The works at this harbor consist (see plan) of a mole, chiefly of stone, which runs from near the old lighthouse, northerly about 290 feet, to the south shore of Buffalo creek, and thence (making an angle of about 120° with this first part) about N. 73° W., say 1,500 feet into the lake. The top of so much of this mole as projects into the lake is 16 feet above the water and 12 feet wide; this top, near the end, gradually curves to the south and swells out into a breadth sufficient to afford room for a lighthouse; the part of the mole which lies upon the shore is but 12 feet higher than the surface of the water, and does not exceed 9 feet in width at the top. On the exposed side, that is to say, on the south, a varying slope, gentle everywhere, but becoming more and more gradual as the distance from the shore is increased, extends from the summit of the structure to the bottom of the lake. By a gradual change of direction this slope is made to enclose the mole-head and foundation of the lighthouse in such a manner as to cause a considerable enlargement at this part of the work. At the foot of this slope has been driven a row of contiguous piles, and another similar row has been driven at the intersection of this slope with the surface of the water. Between these two rows the mass is to be made up of large stones, thrown in without particular regard to the positions respectively occupied by them. Within the inner row the surface is to be formed of large flat stones, placed carefully in courses upon their ends or edges, being thus deeply embedded, giving to each other mutual support, and exposing their edges only to the action of the sea; this portion of the work is well advanced. The summit of the mole is now in part, and will be wholly, covered by a horizontal layer of large flat stones, accurately adjusted to each other and well-bedded on the smaller stones beneath. On the inner or channel side of the top there is a vertical fall of 12 feet down to the surface of what is denominated the tow-path; this fall being effected by a wall laid in mortar. Access is gained to the top from the tow-path by several sets of stone steps projecting from the wall. The channel side of the tow-path was built of "crib-work," and part of the operations of this year has been the substituting a strong stone wall for the upper parts of this crib-work.

On the north side of the channel is a timber pier, filled in with stones. It is nearly parallel with the mole, and is distant from it in the narrowest part of the channel about 200 feet. This pier is about 1,250 feet long, the outer end being about 600 feet less advanced into the lake than the end of the mole. This pier is about 15 feet broad.

It is designed to give to this pier the permanent character which already belongs, for the greater part, to the mole, and for this purpose to raise a wall on the channel side from a little below the surface of the water to 3 feet above water; to pave the summit with large stones, making it 20 feet broad, and to form a slope of two to one on so much of the north side as extends beyond the beach, at the same time driving a row of contiguous piles along the inner side.

At the end of the mole stands a lofty stone lighthouse of most beautiful and substantial workmanship.

The expenditure of existing appropriations, which must probably be carried somewhat into the next year, will, it is supposed, complete the north pier, the inclined surface and summit of the mole and the lighthouse, deposit the stones still required in the space marked *w*, excavate the spaces marked *x y z*, to a depth of 10 feet, and, in short, do all that was contemplated when the estimate of September 30, 1832, was made.

The progress of operations, and the present condition of the works have, however, suggested other matters of importance. 1st. To prevent undermining, either by the swell or by freshets in the creek, it is proposed to drive a row of contiguous piles along the side of the tow-path for the whole length of the mole, and as far as the United States ground extends; cost \$2, 400 00

2d. The last estimate contemplated for the tow-path wall, dry stone masonry. It is now proposed to build this wall with hydraulic mortar, which will cost in addition. 2, 900 00

3d. Instead of loose, small stones for pavement of tow-path, it is now recommended to use large flat stones; these, with the extra labor, will cost. 7, 140 00

4th. It was last year proposed to extend the tow-path 100 feet further up the creek; it seems necessary now to extend it to the limit of the United States land, which will cost. \$2, 160 00

Deduct last year's estimate for the 100 feet 800 00

1, 360 00

5th. Easterly of the boundary of the United States land, there is a point projecting into the creek, (marked *z*), and forming an impediment to the navigation just where the creek makes a considerable bend. This should be so excavated that there may be a depth of 10 feet water in a continuous line with the same depth along the side of the mole; estimated expense 6, 200 00

Supposed cost, over and above the present appropriation, of bringing the works at Buffalo to entire completion. 20,000 00

Dunkirk harbor.—Dunkirk harbor is an open bay of more than a mile across from cape to cape, and offering no natural shelter from winds blowing from the northern quarter. To provide this shelter, a breakwater has been built on a shoal which lies off the middle of the bay, and a pier has been run off towards the breakwater from the western shore. The former is about 1,400 feet long, and the latter 1,564 feet long. Both these are strongly framed timber structures, filled with stones.—(See the sketch.)

About \$4,800, which was available for this year, will have been expended in the construction of the outer 320 of the pier.

The original design for this harbor, made by Major Maurice, is said to have contemplated the extension of the pier about 300 feet, the breakwater about 600 feet further eastward. The protection afforded by the present works would, it is thought, be improved by such extensions, to a degree fully proportionate to the additional cost; at the same time that the eastern channel would not be changed, and the western would be left of ample depth.

To extend the pier 300 feet is estimated to cost.....	\$6, 006 80
To extend the breakwater 600 feet is estimated to cost.....	9, 511 50
Add for contingencies, &c., near 10 per cent.....	1, 481 70
The works thus arranged will afford a very excellent anchorage, having by daylight an easy entrance. It is, however, believed to be indispensable to light the immediate entrance by a beacon, which, of wood, will cost—say.....	2, 700 00

Making the additional expenditure required to complete the works in their present form amount to.....	19, 700 00
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No appearances give reason to doubt the stability of the present works; but they cannot be said to be complete so long as the parts above water are of materials rapidly decaying. It will be absolutely necessary in some few years to build above water strong stone walls in lieu of the present timber facings, and to cover the tops of both pier and breakwater with pavements of large flat stones, all laid in hydraulic mortar. Data for an estimate are not at hand.

Erie harbor.—This harbor, about four miles long and nearly two miles broad, is formed by what has long been denominated “Presque Isle.” This is a low, sandy tract of ground, stretching out from the main shore, first being quite narrow, in a northeasterly direction, then gradually increasing in breadth, and turning more and more easterly, and finally, having acquired a breadth of more than a mile, terminating abruptly nearly north of the town of Erie. This tract has several deeply indented bays at its eastern end, encloses several ponds, and is in general thickly covered with woods.—(See plan.)

At the time the improvements of this harbor were first projected there existed but one inlet. This was at the east end, and through it there was one crooked and intricate channel of about 5½ feet water. After the works of improvements were well advanced, and had already been attended by the most happy results, giving a draught of 12 feet through a straight channel, a new inlet was unexpectedly made through a narrow part of the Presque Isle, near the west end of the harbor. Before adverting to the probable consequences of this breach, it is proper to describe the actual condition of the works at the eastern entrance, and such further operations as may be there called for.

From a point on the main shore, which considerably narrows the entrance, (see plan,) a line of harbor pier, six feet wide, was run north 19 west 1,700 feet towards the southeastern point of the Presque Isle; pursuing the same course, the pier, with a breadth of 10 feet, was prolonged 317 feet further. At this point began the south channel pier, which was run first, north 35 east 482 feet, being 10 feet broad, and then north 63 east 302 feet, with a breadth of 12 feet. On the prolongation of the south harbor pier the distance across the channel is 600 feet; and at the east end of the south channel pier the channel is 375 feet wide. The north channel pier projects into the lake a distance of 1,017 feet beyond the prolongation just mentioned, and into the harbor a distance of 246 feet, the course of the whole pier being north 63 east; its width is generally 13 feet.

The north harbor pier was extended, in the first instance, north 17 west, 673 feet, to a low point. This point, however, by the action of waves and current, changed its place; thus making it necessary to connect the pier with it in its new position, which was done by extending the pier north 27 west, 1,050 feet. In consequence of still further changes in the form and position of this point, it became at last necessary to diverge, and to carry the pier a further distance of 1,284 feet, to be there united with another point more inland, leaving the outer point as an exterior breakwater. This harbor pier is six feet wide.

The last-mentioned length of 1,284 feet falls within the operations of the present year, during which it will be completed. The amount now available will also fill the harbor and channel piers entirely full wherever there is a deficiency of stones; will, besides, cause a deposit of stones to be made for the security of the east end of the south channel pier, and will supply all deficient planks in the tops of the piers.

In regard to a portion of the future operations on the harbor, perhaps the most distinct idea can be formed from the instructions which, in reference thereto, were left with the agent. They are, therefore, in part, here transcribed.

“A very careful sounding should be made along both sides of the piers and breakwater, (harbor and channel piers,) and off at the several distances of, say 15, 30, and 45 feet. These soundings should be laid down upon a plan of the works drawn on a very large scale. Lines of soundings should also be run across the channel at about every 50 feet, and entered upon the same drawing.

“Wherever these soundings show that the sand has been grooved out next the works, stones should be thrown in until they rise three or four feet above the proper bottom, and have a slope of two base to one altitude.

“In certain places it may be advisable to throw in these stones upon a stratum of brush-wood. In case these stones are thrown into a place exposed to a heavy swell they should be large; if not so exposed, they may be small. The east end of the south channel pier should be reinforced with a mass of large stones without delay.

“It is considered very important that the soundings above-mentioned should be taken and protracted on the plan with great accuracy, so that, being done from time to time, (the dates always being entered,) the progress of every change in the bottom may be distinctly seen. What will it cost to place these stones? Can they be thrown in this year?”

As no estimate is made by the agent, in a letter lately received from him, for throwing stones along the sides of the piers, it is presumed the soundings above directed showed the bottom next the piers to

be undisturbed. The above-mentioned reinforcement of the east end of the south channel pier will be effected by the funds in hand.

"One of the most important future operations will be the closing the present breach at the junction of the south pier and south breakwater, (south channel pier, and south harbor pier.)

"To do this I would recommend that two rows of piles be driven as in this sketch: the piles being about 8 or 9 feet apart in each row, and the rows being from 20 to 30 feet apart, according as they can be made to embrace more or less closely the ruins of the old work; but whatever may be the separation of the rows, the several parts of the rows should be accurately straight. These rows should overlap upon the present fixed parts from 15 to 30 feet. The piles being driven and secured to each other at top by temporary ties, small stones should be thrown into the hole at and near the breach, until a level surface has been formed therewith 15 feet below the surface of the water. Curbs of strong timbers, well secured by cross-ties, should then be sunk in close contact with the piles, and so as to occupy all the space between the piles. These cribs being filled with stones, a bank of stones, about 6 feet high and 12 feet broad, should be added on each side of the crib-work. A section of this work is here given. What will it cost?"

The estimate furnished for this object amounts to \$3,045.

The breach just described was made by the very same action of the water as is relied on to maintain a straight and deep channel between the piers. The action, however, at this particular point was greater than was looked for; a portion of the pier work was undermined, upset, and ruined; and so great, at times, was the current through the breach that the sand of the bottom was scooped out to a depth of 30 feet. This breach must now be repaired with such precaution as will avert any similar accident for the future. These precautions are indicated in the instructions just quoted.

Up to this moment this project for the improvement of the harbor has never been brought to bear fully upon its object. The line across the inlet has, indeed, been complete; that is to say, it has connected the two shores once or twice; but before sufficient time had elapsed to give the maximum result as to the channel, either the waters had worked a passage round the south end of the harbor pier, or they had found an outlet through the breach, thereby materially weakening the action in the channel. Notwithstanding these divisions of the current, however, the experiment, as has been stated, is successful, a deep and direct channel into the harbor having been substituted for one that was both shallow and intricate. But it will not answer to leave the works in their present state, because the breach will be progressively enlarged by the undermining of more and more of the piers, and at last the current through the channel will be so reduced that the passage may be closed by a new deposit of sand.

The first object, then, must be to bring the piers, in their present form, to entire completion, by connecting them securely with the shores, so that no water shall pass around them; by fully loading them with stones, so as to give strength to resist the shocks of waves, ice, &c.; by protecting their bases from the undermining force of the current; and by closing the breach, so that all the passing water at the end of the harbor shall be limited to the channel.

As before stated, the estimated expense of these operations, over and above the sum now available, is \$3,045.

Before the formation of the new inlet at the west end of the harbor, especially after some progress had been made in the works, there was no visible reason to doubt the happy issue of the experiment. Is there any reason to doubt it now? This is an important question, and one which at this moment does not, probably, admit of an answer. If the new inlet is to cause a diminished depth of water through the eastern entrance, this new inlet must be closed; if, on the other hand, no sensible effect is produced on the eastern entrance, and none upon the depth in the harbor, then two things may be done: 1st, precautions may be taken to guard the Presque Isle from a further spread of the inlet; or, 2d, a western entrance may be formed with part of, if not all, the qualities of the eastern; and should the latter result be obtained, the valuable properties of this harbor would be greatly enhanced. Can this question be solved now? In other words, can the best mode of operation be hit upon now with that degree of certainty which would warrant the considerable expenditures required? It is thought not. There is good authority for stating that the depth through the new inlet is less now (by about two feet in the deepest) than it was some months ago. There is also good authority for stating that the current through the eastern channel has not greatly lessened, and it is certain that the depth through this channel is still quite sufficient; and though there is no mode of ascertaining accurately whether this channel remains unchanged, has somewhat lessened or increased its depth, there is, at least, no direct evidence that the draught has been at all reduced. If, then, no injurious consequences have resulted to the old inlet from the new, while the former has been in a state not admitting the full display of its improving tendencies, it seems advisable to wait for this display before a decision is had on the project to be applied to the western entrance. While there was but one shallow and sluggish channel into the harbor, it would have been a bold scheme that contemplated the formation of two artificial channels, wrought to considerable depths solely by the rapidity of the current. One such channel has, however, already been produced; and present appearances, and circumstances which have developed themselves during the progress of the operations, show that a second is certainly not beyond the scope of possibilities.

A short delay will not at any rate be attended with any evil; and in the meantime measures may be taken which will make the government to decide correctly either upon closing the inlet, leaving it open with some precautions against a further extension, or forming a second artificial channel. The measures adverted to besides the completion of the present works as herein advocated, and the minute soundings at the eastern entrance as directed in the instructions above quoted, include a survey of the harbor and Presque Isle, and accurate and numerous soundings over the whole harbor, in the new inlet, and in the lake opposite. The survey and soundings being made on a drawing thereof made to a large scale, new sets of soundings should be marked at least every three or four months; the places of the new soundings corresponding as near as possible with the places of the old.

Should any changes be in progress a year or eighteen months will fully show their nature and tendencies. And unless the whole truth in relation to this matter be known, that is to say, unless it be known whether the bottom be unchangeable, or, if otherwise, to what extent and in what manner changes are being wrought, it would be only by hazard that a suitable system of operations could be selected.

Finally, under these views of the whole subject, it is recommended—

1st. To cause the present works to be brought to completion, and to be secured against any further injury or accident for any cause.

2d. That directions be given to attend closely to the instructions above quoted in relation to the soundings at or near the pier and in the channel.

3d. That a survey be made of the whole harbor and Presque Isle, including very numerous soundings over the whole harbor, through the new inlet, and in the lake opposite thereto; and that a new series of soundings, always as nearly as possible in the same spots, be taken every three or four months and noted upon the map, together with any changes that may have been made in the form of the shore.

So much is yet indeterminate as to future labors in this harbor, that it would be useless now to attempt an estimate of the ultimate expense.

Mouth of Conneaut creek.—The works for the improvement of the entrance to Conneaut creek consist of two nearly parallel piers which run first north about 330 feet and then northwesterly about 800 feet into the lake; at this distance the piers diverge and continue 120 feet further, causing the channel, which is elsewhere about 100 feet broad, to be increased to 176 feet.—(See plan.)

Previous to the erection of these piers the mouth of the creek was often during a low state of the water therein entirely closed, being shut up by a dry sand bank. Now, excepting at one spot where there is a narrow gravel bank with 8 feet water over it, the channel varies from 9 to 16 feet, and remains equally deep at all seasons.

The \$3,500 (about) available for these works in the beginning of the year will suffice, it is thought, to complete them in their present form, the operations being confined to finishing some wood work, throwing stones next the bottoms of the piers in certain places, and dredging out the gravel bar.

A beacon-light which should be placed on the end of one of the piers, will cost, say \$2,700.

The conversion of the upper parts of these wooden piers into strong stone walls, which will be indispensable in a short time, will involve a considerable additional expense. There are now, however, no data whereon to found an estimate of their cost.

Mouth of Ashtabula creek.—This creek, like the Conneaut, was sometimes entirely closed by a dry sand bank, and the works of improvement designed here, as there, to keep the channel permanently open, have been attended by a like result. Here, however, a bed of rock was encountered by the current, which, of course, set limits to its effects.

The works consist of two nearly parallel piers of timber filled with stones. They are about 1,250 feet in length, running nearly north into the lake, and are 14 feet wide.

The width of the channel, owing to the piers not being perfectly straight, varies from 100 to 145 feet.

Although the piers, as delineated on the plan herewith, are complete as to the wood work, a quantity of stone in addition will be required to increase their stability; cost estimated at..... \$425 00

It is deemed expedient to prolong the west pier up the river so as to unite with the bulk-head marked *a*, and to extend both piers about 150 feet further into the lake to enable the current to remove the sand bar lying off the entrance. These operations will cost.... 7, 591 40

The rock before spoken of as arresting the action of the current, allows a draught into the river of not quite 7 feet over the rock, and at the same time secures from disturbance the lighter materials of the bottom for some distance both within and without the ledge. This is evident from the plan. Fortunately this rock is of so soft a texture that it is broken up rapidly by the machinery now in operation.

The expense of taking out the rock remaining after the year's operations for a channel 60 feet wide and 10 feet deep, is estimated at..... 4, 600 00

To show the way into the harbor at night a beacon-light at the end of one of the piers is indispensable; estimated cost..... 2, 500 00

15, 116 40

Deduct amount available after this year's operations..... 3, 717 27

11, 399 13

Add 2½ per cent. for disbursement..... 284 98

11, 684 11

Amount required for next year's operations..... 11, 684 11

The succeeding year's work should consist in enlarging the rock excavation as much as can be done without endangering the piers; the cost thereof is set down at..... 3, 075 00

14, 759 11

Making the total expense of bringing the temporary works to completion..... 14, 759 11

As in several other cases the cost of substituting stone for the timber work above water cannot well be ascertained. That expenditure will, however, be unavoidable at no distant day.

Mouth of Cunningham's creek.—The object of the improvements at this place was to obtain shelter for vessels independent of all access to the creek; and for this purpose Major Maurice designed two parallel piers to run into the lake at the distance of 475 feet from each other. This wide space to be nearly covered in front by an isolated pier or breakwater lying still further in the lake, and running parallel with the shore. The parallel piers were to be formed of cribs, or small piers separated from each other, for water way, about 30 feet, and connected at top by bridging. The breakwater to be solid from end to end.—(See plan No. 1.) In execution of this project the works for the western pier have been carried out the intended distance, and are represented as having already rendered very great service to the navigation of the lake, although as yet inadequate to the demands of business.

Of about \$500 available for the operations of the present year, it will be expended upon the piers marked *a* and *b*, without bringing them to completion. In the opinion of the local agent, observation and experience have shown that the plan of Major Maurice would be improved by converging the eastern pier towards the western, as shown on No. 2 of the plan, as thereby, while the harbor would be sufficiently capacious and expense less, a better shelter would be afforded either independently of the breakwater or with an equal length of breakwater.

The expense of completing the present pier, together with some repairs in the wood work, may be estimated at..... \$500 00

The expense of constructing the eastern pier according to No. 2 of the plan, is estimated at 6, 665 20

The expense of erecting the breakwater according to No. 2 of the plan, is estimated at.... 6, 388 90

A beacon-light, say..... 2, 000 00

15, 554 10

Making, for the purpose of completing the harbor, a further appropriation necessary, of 15, 554 10

Giving a permanent character to those works will require the future application of stone work for the wood work that is out of order. The cost thereof cannot now be calculated.

Fairport, mouth of Grand river.—The works at the mouth of this river are two piers, separated about 200 feet, and running a nearly north course, about 600 feet beyond the original shore, into the lake. At this distance the eastern pier terminates; but the western turns a little westward, and proceeds 150 feet further. Within the original line of the shore the western pier continues first south about 200 feet, and then southwest 308 feet, to the left bank of the river. The eastern pier runs within the same line a nearly south course for about 400 feet, where it joins the private wharfs.—(See plan.)

During the summer the mouth of this river was often entirely closed, while now there is a straight and free channel of at least twelve feet depth.

About \$1,200, which was available for the present year, will have been expended in driving piles, in planking, and in throwing stones into the two piers.

A foundation has been laid near the end of the east pier, for a beacon-light. The light-house has yet to be erected, and will cost, say \$—.

Not having received from the agent the estimate asked of him, of the necessary future expenditures at this harbor, the amount cannot now be stated.

Cleveland harbor.—The map of the mouth of the Cuyahoga river, herewith, shows that a draught of at least eleven feet of water can now be carried between the piers into the river, although the mouth, previous to these improvements, was, at times, entirely closed.

The piers, which have wrought this important change, are, for the greater part, parallel, running about 1,200 feet into the lake, and having between them a channel of about 200 feet in width. At the outer extremity of the eastern pier is a beacon-light, which it is designed to reinforce by some additional pier work; and it is also designed to add a wing and pier head to the western pier. At the beach, or shore of the lake, the two piers diverge considerably as they extend up the river, in order to their being firmly united with the shores. The pier work is generally from ten to twelve feet broad, and rises about four feet above the surface of the lake.

The sum of about \$3,400, which was disposable at the commencement, will all be required for the operation of the year, in placing stones within and by the sides of the piers, adding some timber work, &c. Recent soundings have shown that to guard the piers from the undermining action of the current, stones must be deposited to the amount of \$4,800. In addition, stones must be thrown into the piers wherever they have settled. For these materials, for brush wood, for labor and contingencies, &c., the whole expense is estimated at.....

For an addition to the eastern pier head to protect the beacon-light	\$7,200 00
For a wing and pier head to the western pier.....	1,569 50
	4,545 70
Making a present additional appropriation necessary of.....	13,315 20

In the future change of the upper perishable portions of these works into stone, it should be borne in mind that the present height of these works, and all others on the lake, excepting those at Buffalo, is too little, especially for works in stone. The beacon-light pier head is here about 7½ feet above the surface; still high seas roll over it. The rest of the work being but about four feet, is of course swept by much more moderate seas. It is now often an undertaking of no little danger and difficulty to get access to the beacon-light at times when the light is most needed.

Mouth of Black river.—The piers which form the entrance into Black river are separated about 200 feet, and extend into the lake from the original beach, one about 1,300 feet, the other about 1,000 feet. The mean course is just N. 62 W., and then N. 46 W.—(See plan.)

The mouth of this river is not known to have been entirely closed, although the depth has been sometimes not more than three feet. At present there is everywhere a sufficient depth of water; namely, from ten to fifteen feet, except on a shoal which extends from pier to pier, not far within the mouth of the harbor. On this shoal there is but 7½ feet in the channel, and five feet near the piers.

The sum of \$4,700 (about) which was applicable to expenditures here within the year, will have all been disbursed in erecting the head of the west pier, marked *b*, and in dredging at the shoal.

In prolonging the east pier, (*b* and *c*), filling the piers with stones wherever deficient, protecting them at their bases wherever required, excavating the channel and also the shoal in advance of *c*, erecting a beacon-light, &c., &c., it is estimated that a further sum will be expended of \$17,700.

Mouth of Huron river.—The mouth of this river, like several others mentioned, was, before the construction of the harbor works, often completely shut up by a bank of sand. Now, as shown on the plan, there is a straight channel of from ten to twelve feet depth.

The piers are nearly parallel, being 140 feet apart at the outer, and 170 feet at the inner end. Their whole length is about 1,400 feet, and they project into the lake about 1,000 feet. Their breadth varies, according to circumstances, from eight to eighteen feet, and they rise five feet above the water.

The sum remaining unexpended of not far from \$500 will probably be sufficient to replace the few stones that have sunk from the piers.

It seems advisable, for the safety of vessels entering the harbor, to construct a head about 90 feet long to each of the piers. These should stand obliquely to the direction of the piers, so as to increase the width of the entrance. As the agent did not furnish an estimate thereof, the cost cannot be here stated.

A beacon-light on one of the piers will be indispensable, and may cost \$2,700.

The future cost of replacing the upper timber work with strong walls cannot now be estimated.

Before closing this report it is thought proper to recommend that instructions be given to the agent at each of these harbors to make without delay (if not already made) an accurate survey of the works now erected, drawing a plan thereof on a large scale; to make very numerous soundings within the channel, and off from the piers, noting the results upon the map; to repeat these soundings at intervals of three or four months, making them always in the same lines, and as near as possible in the same places; and, in order to secure this agreement as to the places of the soundings, to cause the piers to be permanently marked at the points whence the lines of soundings are run. To show, in part, the manner in which these surveys and soundings should be made, a sketch (on a small scale) is given herewith.

In conclusion, it is but just to mention that to all the works examined there seemed to have been applied a judicious system of operations and a watchful care of the public interests.

All which is respectfully submitted.

JOSEPH G. TOTTEN, *Lieutenant Colonel of Engineers, Brevet Colonel.*

F.

Report of work done at the Great Raft on Red river, Louisiana.

On the 1st of April last I arrived at the foot of the raft with four steamboats, namely, the snag-boat Archimedes, the Souvenir, Java, and Pearl, all belonging to the United States, and one hundred and fifty-nine men, including officers, mechanics, cooks, laborers, &c. At ten o'clock that day commenced work, and proceeded into the raft on that day about two miles, but found the current so slack that the timber, when separated, would not float off. The dead water extended at that time about forty miles below the raft. On the 12th I began to pass the timber out of the river into the low bottoms and bayous that pass off from the main bed of the river, to the lakes and swamps. Those bayous I have filled up in as effectual a manner as it was practicable at the high stage of water that prevailed during my stay at the raft, throughout the whole distance I proceeded. By that means I forced the water which was carried off by the bayous to pass again down the old channel, which has produced a current from the extreme upper end of my operations to the original foot of the raft, and forty miles below, of three miles an hour. In the distance of seventy-one miles which I proceeded into the raft, I found the mass of timber in fifty-six sections covering about one-third of the whole surface of the water. In many places the timber was quite solid to the bottom of the river, which I found to be an average of twenty-five feet deep. Many places, however, immediately above or below a section of the raft, the water did not exceed fifteen feet, until after the raft was removed, and a current produced by opening a free passage for the water, when those banks of mud all disappeared in a short time, and left a uniform depth of twenty-five feet. The islands that had been formed by the location of the raft have all been taken out, by drawing the trees that grow on them out by the roots, and the action of the water on the mud and sand of which they had been formed. All the timber that leaned over the water in such a manner as to obstruct the navigation has been taken away as effectually as it could be done in high water. The navigation is now good for steamboats as high up as the Caddo agency, seventy-one miles above where I found the foot of the raft in April last. Still, great improvement may be made on the same distance, by cutting away the growth of timber that has sprung up within the natural banks of the river, quite down to its extreme low water bed, since the formation of the raft. This, however, is absolutely necessary, and must be done to put the river in a situation to carry the entire mass of drifting timber that annually falls into it out to the Mississippi, and by that means effectually prevent a removal of the raft. It will also be necessary to extend that work to the head of the raft, or as high up as the timber may have grown up so as to form obstructions to the passage of the timber that must pass down in the spring freshets. The mouths of the bayous which have been cut out from the main bed to the swamp must also be carefully stopped up, so as to turn the water back into the original bed, which has sufficient capacity to carry off the whole column of water so soon as the raft is removed and the channel brought back to its original course, which must be the consequence of filling up the bayous, and taking the timber out of the bed through the main river. This work can be most effectually done during low water. It will be advisable to do it in the months of October, November, and December. The same men may be continued through the high water season. By this means the whole work can probably be done by one expedition, from, say, 1st of October to 1st of June.

From the best information I have been able to obtain there yet remains about seventy miles in length of the great raft. I have passed through thirty miles of the remaining raft, which I found to differ but little from that already removed either in character or quantity. But near the head of the raft the labor will be much increased, owing to the strength, size, and quantity of timber. Having more recently fallen into the river, many of the trees still retain their branches and roots, which will make them much more difficult to remove than timber that has been lying in the water so long as to lose the tops and roots by decay. Under these circumstances, I am induced to believe that an appropriation of \$10,000 will be as little as the whole work can be effectually completed for, if done in a proper manner, and so finished as to be permanent and free from all risk of a re-formation, which must undoubtedly take place if the timber is not cleared out of the bed of the river in such manner as to prevent the drift logs from lodging on the banks. To accomplish the work will probably require about the amount of labor and expenditure shown by the accompanying estimate.

That the removal of the raft can be accomplished there is no doubt. Nothing is required but the necessary funds in the hands of an individual who possesses the requisite skill with sufficient energy to put that skill in operation.

As relates to the expense of removing the raft, it will be repaid at least threefold by the lands that must evidently be redeemed on the immediate line of the raft. All that land is of a first rate quality for the growth of cotton, and there is now growing the best tobacco made in the United States on several improvements now in cultivation on the river about midway of the raft.

I am, sir, respectfully, your obedient servant,

HENRY M. SHREVE, *Superintendent, &c.*

G.

Annual report of work done for improving the navigation of the Ohio, Mississippi, Red, and Arkansas rivers, ending the 30th September, 1833.

In the months of October, November, and December, 1832, January, February, and March, of this year, the steam snag-boats Helepolis and Archimedes removed from the bed of the Mississippi river 1,293 snags. The same boats in August and September, 1833, removed from the bed of that river 667 snags, in

all 1,960 snags during the year. The crews of the same boats have, within the year, felled from the falling-in banks of the Mississippi (at times when the water was too high to remove snags, and when the engines of the boats were out of repair) about 10,000 trees. During the month of November last those boats were engaged in removing the Choctaw Indians from Memphis, Tennessee, and Vicksburg, Mississippi, to the mouth of the Arkansas river.

One hundred men were employed in August, September, October, November, and December, 1832, felling timber on the banks of the Mississippi river, and cutting snags from the dry bars and island chutes. They proceeded from St. Louis to the mouth of the St. Francis river, distant five hundred miles, where they cleared the timber from all the falling banks and dry sand bars. The last-named work (felling timber from the banks of the river) is thought by many persons to be an injury and not an improvement to the river. I am, however, of a very different opinion. I believe it to be the only effectual mode of removing obstructions from the shores, and of great importance to the improvement of the channel. This opinion has been formed from actual observation. For some five or six years the trees have been cut from the falling banks of the river nearly all the distance for the first three hundred miles below the mouth of the Ohio, where the shores of the river are comparatively clear of snags, logs, and roots, safe to land at with a flat boat, and in the stream the accumulation of snags is not more than half so great as in those parts of the river where the timber has not been felled from the banks; nor are the banks safe to land at with any description of boat, in consequence of the bends where the banks fall in being very much obstructed along the shores with the trees, roots, and logs that are falling in with the banks. Many persons object to felling the timber above alluded to, alleging that the stumps roll in as the bank caves in, and lie on the bottom, forming a dangerous obstruction to the navigation. This I view as an erroneous opinion. Every man well acquainted with the character of the Mississippi river must recollect that the banks that fall in are washed by the deepest and most rapid portion of the stream; consequently, when a stump slides from its foundation it sinks below the draught of any craft that can navigate the river, as the bends where the banks fall in are universally from ten to fifteen feet deeper than the best channels over the bars that stretch across the river from the foot of one bend to the head of the next at almost every point in the river. Where the timber falls in the root sinks, and the top either floats and forms a snag or the top of the tree lies on the bank and keeps the shores perpetually obstructed to such an extent that a flat boat attempting to land at them (and if caught in a gale of wind they are obliged to pull for the first bend they can make) are frequently stove and lost; and if they make the land they are liable to be sunk by the trees falling on them. That work has, however, been abandoned for the present year, very much against my judgment.

During the last year several steamboats have been lost by striking logs or snags; but none of them were good and substantially built boats. I would here beg leave to observe that a great many of the boats now navigating the Mississippi river are very light timbered, just sufficient to hold the plank together to bear caulking; consequently, if one of those boats strikes a snag, drift log, or anything of sufficient weight to fracture the plank, the boat is stove and sunk. The inquiry is then made, what did she strike? The universal reply is one of Schriver's stumps; but if it was a stump, and a first rate substantial boat were to strike it, she would evidently be stove, for a stump is one of the most dangerous description of obstructions that could be in the river. But I have not known a good substantial steamboat to be stove, excepting one, for the last four years. The heavy boats of three hundred tons and upwards are nearly all stout well built boats, and from their greater draught of water are more liable to strike than those of a smaller class, and if they do strike, must receive a much heavier shock from their greater weight and greater speed with which they run, for the largest boats are universally the swiftest. Yet but one of that class of boats has been stove in the Mississippi river in the last four years; consequently, I am of the opinion that almost all the losses of steamboats for the last four years, from being stove, have occurred from the insufficiency of the boats, and not from the stumps, to which nearly all the losses are charged. I am of the opinion that the Mississippi river is at this time as safe to navigate, except in extreme low water, as it will ever be. For the improvement of the extreme low water navigation of that river much is yet to be done. To execute that part of the work it requires extreme low water, which continues but a short time each year, consequently requires a longer time to complete.

In the Ohio river there was a dam built last fall at French island, one at Three Mile island, nearly completed; the dams commenced at the Scuffletown bar and the Three Sister islands were finished. At all those places the improvement effected has been quite equal to my most sanguine expectations. They were formerly the most difficult and shoalest bars on the Ohio river, at which no difficulty is now experienced by any boat that passes. At the head of Cumberland island a dam was commenced in September, 1832, which was so far completed as to produce a material change in the channel to the left side of the island, and probably would have been completed last year had not the cholera made its appearance among the laborers engaged in the work, about the 25th of October, which suspended the work for six weeks. A rise of water on the 13th of December made it necessary to close the whole operation for the year. In August last the work was again commenced at that dam, and has since been progressing as fast as circumstances will permit. In consequence of the prevalence of the cholera last fall, and again in the summer of this year, laborers have been difficult to obtain. There are now about 200 men employed on the work. The dam is finished, except closing the pass through it, which was necessarily left for the passage of boats, until the chute to the left of the island had sufficiently washed out and deepened to admit boats navigating the river to pass through it. There is now, within a few inches, as much water through the chute as there is on many of the bars between it and Louisville; and doubtless before the dam is so far completed as to prevent the passage of boats through it, there will be much more water through the chute than can be found in many other parts of the river above. My present calculation is to finish the dam before the rise of water in the winter stops the work, which, when done, will be a lasting and valuable improvement. The advantage gained by its construction is to make the Ohio river navigable on that side of the island in which the Cumberland river enters, which has heretofore been obstructed by a sand bar several feet above the level of low water. At the extreme low water last year there has not been less than eighteen inches over that bar. At this time there is three feet, and a large portion of the boats pass that channel; and, when the dam is completed, the bar will evidently entirely disappear. One of the shoalest bars in the river, situated at the foot of the same island, will be effectually improved by the same dam. Those immediately interested in the navigation of the Cumberland river, and the citizens of Smithland, a flourishing town at the mouth of that river, were apprehensive that if a dam was built at the foot of the island, and below the mouth of the Cumberland river, the passage up the Ohio to the mouth of the Cumberland river would be materially injured at low water. They therefore

petitioned the Secretary of War to instruct me to commence and build the dam required at the head of the island where it is now building. To those petitions I respectfully beg leave to refer, as also to my instructions on the subject. I commenced the dam, believing it to be a practicable undertaking, and of great importance to the navigation of both the Ohio and the Cumberland rivers. My opinion has been strengthened by the construction of the dam as far as it had been done. It has, however, required much more labor and time than I anticipated, and will yet require much to finish it. The rock of which it is constructed has been quarried out of a solid limestone rock. The length of the dam is about a half a mile, the average depth of water at its lowest stage about twelve feet; the top of the dam is raised four feet above the surface of low water; its base will average thirty feet. Of the complete success of the improvement I have now no doubt. It is now absolutely necessary to finish it at as early a day as possible. To accomplish that object every exertion in my power is now making.

For a statement of the operations at the great raft in Red river I beg leave to refer to my report on that subject, under date of the 30th of July last. A rough sketch of the Red river, the bayous, lakes, and swamps where the raft is situated, is herewith forwarded. It was taken from the foot of the raft to Coate's bluff as I passed up; from thence to the head—from the best information I could obtain. It is by no means strictly correct, but will convey a more correct idea of the country than can be otherwise given.

Preparations were made for removing the snags in the Arkansas river in August last. But when the steam snag-boats entered that river it was found too low to operate with those boats, and but twenty snags were removed. So soon as the water rises in the approaching winter that work will be begun and executed to as great an extent as the appropriation for that purpose will admit.

I am, sir, very respectfully, your obedient servant,

HENRY M. SCHREVE, *Superintendent, &c.*

Brigadier General C. GRATIOT, *Chief Engineer, Washington.*

H.

The board of visitors who have been invited to be present at the general examination of the cadets of the United States Military Academy, in order that the War Department may be correctly informed of the condition and management of the academy, have attended the examination of all the classes, and are perfectly satisfied with the progress made by the cadets in the several departments of their studies in which they were examined.

At the request of the superintendent, a committee, appointed by order of the board, assigned the subjects to each individual of the class, in order to avoid all suspicion of the examining professor having adapted the subject to the capacity and attainments of the cadets, so as to exhibit an appearance of greater proficiency than the class really possesses.

The first class was examined in military and civil engineering, in mineralogy, rhetoric, ethics, and constitutional and national law, and in infantry and artillery tactics, and in each of these departments exhibited proofs of their application and attainments, and of the zeal, capacity, and industry of the professor and assistants. The cadets of this class will leave the academy well fitted to fulfil the great objects of the institution, viz: to introduce into the armies of the United States all the modern improvements in the art of war, and the high state of discipline which distinguishes the best armies of Europe; to disseminate throughout our country a knowledge of military tactics and engineering, so as to furnish the means of rendering our militia, as well as our regular army, an efficient arm of defence in time of war; and to provide officers properly instructed and fully capable of superintending the construction of fortifications for the permanent defence of our maritime frontier, and of works connected with the internal improvement of the country.

The cadets of the second class were examined in chemistry and natural philosophy, and showed a degree of proficiency very creditable to the professors and assistants who have been charged with their instruction in these departments. The board would here remark that, in their opinion, it would be expedient to establish a permanent professor of chemistry. The important discoveries made and still making in this department of science, and its application to the useful arts, as well as its connexion with the means of preserving the health of the soldier in camps and barracks, render it important that it should be taught in this academy; and it is obvious that it requires great application, experience, and long practice to teach a science which must be illustrated by experiments made before the pupil. It is believed to be difficult to acquire the art of instructing youth in any department of literature or science, but it is especially so in those which require skill in demonstrating theories and principles by experiments. Instruction in such branches ought not to be entrusted to officers liable to be frequently removed.

The third class were examined in mathematics and French. There is no institution that we are acquainted with where this department of science in its higher branches is more thoroughly taught than in this academy. The high attainments and unwearied industry of the professors and assistants, together with the great application and capacity of the cadets of the third class, were exhibited throughout the course of this examination in a manner highly satisfactory to the board.

The examination in French was very creditable to the teachers and cadets of this class. They appeared to be well instructed in the grammar of this difficult language, conjugating the regular and irregular verbs very correctly, and they translated it into English with great facility, which is all that is deemed requisite; the principal object of this course being to enable the cadet to consult the best French authors on military science.

As there are at least one hundred and sixty students to be taught in this language, it is believed by those best acquainted with the subject that another teacher in this branch ought to be added to those already employed.

The fourth class were examined in mathematics and French. The cadets of this class evinced a degree of proficiency in the elementary branches of mathematics highly creditable to the gentleman who is charged with this department of their studies. Whatever may be the talents and application of the student, he cannot make any proficiency in this essential department of study, which may be considered as the foundation of all military education, unless his studies are directed by a person not only profoundly versed in the science, but possessed of great experience in the art of instructing youth; and

the board would take this opportunity of remarking, that to remove such an instructor from the academy for the purpose of substituting another, who, whatever his talents and acquirements may be, does not possess the same experience and practice in teaching, cannot but be prejudicial to the interests of the academy, and would be unjust to the cadets.

The government exacts from them, especially in the department of mathematics, a degree of proficiency which they cannot obtain without the assistance of competent instructors; and they may be exposed to be turned back as deficient, or to be dismissed as incapable of going through the course of studies in the academy, because the instructor provided for them is incompetent or inexperienced.

The board is induced to make these remarks from having had before them a late order of the commander-in-chief containing regulations sanctioned by you, which, if applied to this academy, would seem calculated to affect very materially the instruction of the cadets. It appears to them that the regulation requiring all officers who have not served with their regiments for three years to join their respective corps, as it will remove nearly all the assistant professors from the academy, would be attended with very great inconvenience at any time; and, at this period, when the superintendent, who has so long presided over this institution with such signal ability and success, is about to retire, such a change would seriously embarrass his successor. This embarrassment will be increased by the effect of the regulation, which takes from the superintendent the power of nominating the officers to be detached for that service. He is supposed, from his situation, to be better acquainted than any one else with the acquirements and moral character of the graduates; and as the responsibility rests with him, it appears but just that he should have the power of selecting his assistants. It is deemed important that the course of studies should be steady, and keep pace with the improvements which daily take place in the progress of science. This would be impracticable if the assistant professors were frequently changed and selected from officers who had graduated prior to the introduction of the improvements now taught in this institution throughout every department of science. Indeed, it would appear advisable that the professors, who have evinced so much capacity in imparting instruction to youth, should be offered every inducement to remain by being permanently attached to the institution, and receiving some additional allowance for services materially affecting the future character and efficiency of the army, and which, if they were rendered in any literary institution in the country, would command much higher pecuniary rewards.

The board attended the battalion, light infantry, and artillery drills, and had every reason to be satisfied with the instruction of the cadets in their field exercises. They were present likewise in the laboratory when the cadets exhibited their proficiency in pyrotechny, and they subsequently saw them throw shells, and fire at the target with light and heavy pieces of artillery, all which they executed with a precision rarely equalled, and not surpassed in any school of practice in Europe.

This is the more remarkable from the state of the pieces used for practice. They are very defective, and the board recommend that the several pieces of ordnance which are required for the instruction of the cadets by their able and scientific instructor should be furnished of the best quality and most approved construction.

Much credit is due to the officer charged with the instruction of the cadets in this department. He has compiled a practical treatise on military pyrotechny, and translated an excellent elementary treatise on the forms of cannon, and various systems of artillery, and another on the theory and practice of gunnery, from the French of Professor Persy, of Metz, all of which, with numerous plates illustrating the subjects, have been published in the lithographic press in the academy.

The cadets are encamped two months in every year, and during that period are instructed in all the duties of the soldier in active service, in the use of instruments, and in the application of the different branches of science necessary to a knowledge of their profession. Whether this practical course of the application of science to the purposes of military and civil engineering may not be usefully extended is worthy of consideration.

The library of the academy contains a very valuable collection of works adapted to the peculiar objects of this institution. It is rich in works on military science and on civil engineering, and contains a valuable series of military history, and the best geographical and topographical maps of the states of Europe to illustrate this important study. It is true that in works on polite literature it is as yet rather deficient, although the selection has been very judicious; but, however desirable it may be to augment the number of volumes on miscellaneous subjects, the real object of the institution must be kept steadily in view; and it will continue to be the duty of the superintendent to purchase, in preference to all others, books relating to the sciences taught in this academy, and to supply the necessary works on architecture, chemistry, geology, mineralogy, and moral science, in which the library is still very deficient.

The philosophical apparatus and astronomical instruments are of the best kind and of the latest invention, but many more are required fully to illustrate the course of natural philosophy.

The building which contains the library and philosophical apparatus is both unsafe and unstable, and the rooms are so small and inconvenient as not to admit of the necessary arrangement and display of them for useful purposes. Many instruments of the philosophical apparatus, which are delicate in their structure and uses, and require to be very nicely and accurately adjusted, are exposed to be injured by the constant and violent shaking of the edifice; and the finer astronomical instruments cannot be used from the same reason, and from want of space. A large telescope is placed in a detached building entirely unsuited to its uses.

For these reasons, and from the intrinsic value of the books and instruments, the board recommend the erection of a fire-proof building, with an observatory annexed to it.

Upon a careful and minute examination of the public buildings of the academy, it has been found that they are inadequate to the purposes of the institution, and are not only badly constructed, but entirely too limited to afford comfortable or proper accommodations for the cadets who are lodged in them.

A number of cadets are from necessity crowded into a small room, which must produce a prejudicial effect upon their studies, their morals, and their health. That they have been exempt hitherto from the diseases which are engendered in confined and crowded apartments is due altogether to the admirable system of internal police and strict attention to cleanliness which distinguish every department of this institution.

There is, besides, a want of accommodations for the assistant professors, and the quartermaster, paymaster, and adjutant are without offices. For all these purposes nearly fifty new rooms are required. The board would recommend that the superintendent be instructed to furnish a plan of a building,

capable of uniting all the accommodations required by the officers and cadets now at the academy, and of being extended whenever the government may think it expedient to enlarge this institution, and render it proportionate to our vast territories and rapidly increasing population; and that whenever it may be thought proper to erect the building now called for, it may be so constructed as to form part of an edifice hereafter to be completed with more extensive accommodations.

On examining into the fiscal concerns of the academy, the board have every reason to be satisfied that great economy has been exercised in the administration of this department of the institution, and cheerfully bear testimony to the order and regularity with which the books are kept, and the receipts and disbursements accounted for, as well as to the integrity and judicious economy with which the finances of the academy are administered.

There are several subjects the importance of which is fully understood and acknowledged by the superintendent and academic staff, but which are not taught in this institution for want of time. In military and civil engineering it is thought that the following might be introduced with great advantage to the cadets: A course of applied mechanics on the investigation and description of some of the most useful machines employed in the construction of public works. Some practical exercises in the field, such as laying out and throwing up some of the works of a campaign, which are most ordinarily used; batteries, trenches, cavaliers, the manner of conducting saps, the construction of gabions, and fascines, &c., &c., and a course of topography as applied to military reconnoissances; indeed, such is the vast importance of this branch, that a new department, embracing the whole subject, could not fail to be very advantageous to the military student.

In the department of natural philosophy many important practical illustrations might be advantageously introduced. At present the experimental part of the course is principally confined to the illustration of such facts and general principles as may be established by experiments exhibited in the presence of the entire class. These illustrations are attended with the most beneficial effects, as they serve to make a very forcible impression on the mind of the student; but they are alone insufficient. It is frequently important that the student should not only be acquainted with the name and use of an instrument, but that he should be able to employ it himself. This can only be done when sufficient time is allowed for each student to make frequent use of such instruments under the immediate direction of the professor.

This deficiency is particularly felt in the course of astronomy, where an intimate acquaintance with the use of instruments and the habit of submitting the data furnished by observation to the process of calculation are essentially necessary to enable the student to apply his theoretical knowledge to useful purposes. The instruction in practical astronomy is altogether too limited, the time which can be devoted to this object being scarcely more than sufficient to permit the professor to make the students acquainted with the objects of the few instruments in the possession of this department. This is certainly a great defect. Important lines are frequently required to be established as boundaries between States and Territories of neighboring nations, where the accurate use of instruments is of the last importance, and the cadets of this academy ought to be practically taught to use them with perfect correctness.

The principles of strategy or grand tactics might be taught with advantage.

It is true that there is no work treating of those subjects which is sufficiently condensed, and, at the same time, perfectly unexceptionable in its principles and illustrations; but the same industry and talent which has furnished text-books in other departments of military science might be employed for this purpose with great success, and furnish a series of lectures embracing a definition of the technical terms employed and such general principles as admit of the clearest and most exact illustration.

It appears always to have been desirable that cavalry tactics should be taught at a great national military academy. This branch has hitherto been totally neglected; but it has become more essentially necessary since this arm has been added to the regular army of the country. The service of cavalry and horse artillery ought to form a part of the practical instruction of this academy, and the board respectfully recommend this subject to your consideration. As the cadets are now occupied sedulously every hour of the day in the prosecution of the studies now taught in this institution, it will be necessary, if these subjects are deemed of sufficient importance to be added to the present course, that the term of the academic study should be extended, or the qualifications required on entering the academy should be made much greater than they now are. They are lower than is required by any literary institution in this country; and no doubt the frequent dismissal of those young men who cannot keep up with their class arises principally from this cause. Parents ought to be informed of the great advantage their sons would derive the first year of their course at this academy by being well grounded in the classes in arithmetic and algebra, and in the rudiments of the French language.

The manner in which the cadets are furnished with clothing was a subject of inquiry by the board, who were satisfied that this was done in the most economical manner. Their mess-room was inspected while the cadets were at their meals, and the board were satisfied that the steward fulfilled his contract faithfully, and supplied the tables with abundance.

An inquiry having been made into the manner in which the cadets are supplied with the class-books and stationery, the board are satisfied, after a complete investigation, that the cadets are supplied with all such articles at a lower price than they can be purchased for in New York, and on the most convenient, just, and economical manner, and that the arrangement made by the superintendent in this particular is marked by the same prudent economy, order, and intelligence which characterized the management of the institution.

The board, having learned that the present superintendent of the Military Academy, whose health has suffered from his close attention to the affairs of the institution, has been called to the performance of other duties, cannot forbear to express the very high sense they entertain of his merit and services during the long period of his command at this station.

To the knowledge acquired with this view by Colonel Thayer, the Military Academy of the United States owes its present admirable organization; and to his zeal, capacity, and unwearied attention to his duties is to be attributed the high state of discipline and improvement of the institution. To his exertions we owe, in a great measure, the success of this establishment, the extensive usefulness of which needs only to be understood by the nation to be fully appreciated.

Independently of serving to disseminate over the vast territories of the United States knowledge of a description which cannot enter into the usual course of studies in other academies, and furnishing the means of rendering most effective our army and militia, of securing our frontier, and improving the communication throughout the States, it is calculated to elevate the moral state of the military profession in

our country, the importance of which to the general interests of the nation cannot be too much insisted upon.

The annals of history prove that success in arms is one of the most fruitful sources of personal popularity; and, in a country where the soldier is still a citizen and may be called upon to share in the civil government or rise to the highest honors of the state, the standard of study and discipline cannot be too high which develops his talents and forms his character. The same annals show that, at the close of successful wars, the liberties of a country depend, in a great measure, upon the character of its armies. At such a period the fortunate soldier possesses power and great and probably well-earned popularity; and, if his character is not as elevated by nature or education as to lead him to prefer the solid fame of having preserved the liberties of his fellow-citizens to the glitter of false ambition, and to sacrifice all personal views of aggrandizement to the good of his country, he may plunge the state into anarchy or rivet upon his fellow-citizens the chains of despotism. If ever the liberties of the States of Europe shall be recovered, it will be effected through the improved condition, character, and education of their officers and soldiers; and, while we indulge the hope that the liberty of these States rests upon too firm a basis to be overthrown by the ambition of those who compose our armies, it cannot be concealed that, if they were not instructed, their ignorance and depravity might seriously endanger the peace of the country.

The board have observed with some regret that the old works in the neighborhood of the academy have been, in some instances, disturbed. They ought, in their opinion, to be preserved as monuments of the glorious struggle which secured our independence. The contemplation of such memorials cannot fail to have a beneficial effect. They are calculated to inspire all Americans with sentiments of exalted patriotism, and to remind them of the extraordinary efforts and great sacrifices made by our forefathers to achieve the liberty and independence of the country, and cannot fail to lead them to form virtuous resolutions, and to reflect that, as heirs of the immortal fame of their ancestors, they are bound to emulate their glorious career, and preserve their bright inheritance with the same inflexible courage and undeviating purpose.

STEPHEN VAN RENSSELAER, *President.*

JOHN FORSYTH.

JOSEPH C. YATES.

JAMES FENNER.

JOHN A. TOMLINSON.

FRANCIS B. POVALL.

RICHARD POLLARD.

GEO. READ.

JAMES RODGERS.

CHARLES COFFIN.

J. R. BURDEN.

I. S. SKINNER.

LEVIN GALE.

JAMES RUSSELL.

T. HARTLEY CRAWFORD.

E. BANKS.

JOHN R. FENWICK, *Brigadier General.*

JAMES BANKHEAD, *Colonel U. S. A.*

J. R. POINSETT.

ERASTUS ROOT.

JOHN NORVELL, *Secretary.*

The SECRETARY OF WAR.

I.

St. Louis, Mo., May 8, 1833.

SIR: In obedience to your instructions of the 6th of February, directing me to proceed to Arkansas Territory and make an examination of the Arkansas river, from Cantonment Gibson to its mouth, with a view "to the removal of such snags, sawyers, sunken timber, rafts, and detached masses of stone, or boulders, as may offer obstructions to its safe navigation," I proceeded forthwith to discharge the duty, and have the honor to make the following report:

The Arkansas ranks next to the Missouri in size and importance, among the western tributaries of the Mississippi. Rising in the Rocky mountains, it pursues a course variously estimated, by its windings, to be from 2,000 to 2,500 miles in extent, and enters the Mississippi at latitude 33° 56' north and longitude 14° 10' west. In its general character and the color of its waters it bears a strong resemblance to Red river. The quantity of water it discharges is great, but less than is due to its immense extent, which circumstance is explained by supposing that a large proportion of that which it receives near its source is absorbed in its passage through the sandy and arid soil of the upper part of its course. In its floods it is extremely irregular, both as to season and quantity. The flood from the Rocky mountains, which is the principal one, takes place usually in June, bearing, in this particular, a resemblance to that of the Missouri; but from a late period in the fall through the winter and spring the river is subject to various partial rises, proceeding from its more important lower tributaries, which vary very much in the time of their occurrences, in their extent, and in their duration. During the present season there was a flood in January, reaching to within two or three feet of ordinary high water, and since that time, by a succession of partial rises, the river has been generally kept in good boating order for the lower six hundred miles of its course, and this occurrence is not unfrequent. At other times the river, in January, February, and the early part of March, is at its extreme low stage. A gentleman well acquainted with the navigation of the Arkansas informed me that on one occasion, in endeavoring to reach Fort Gibson in a steamboat from the mouth, he was five times obliged to lay by for want of water, and five times was helped onwards by sudden rises, before he succeeded in reaching his destination. When the river is rising very fast the boats are sometimes obliged to lay by for a short time, in consequence of the strength of the current.

From the best information I could obtain, there appears, on an average, to be a difference of 25 or 30 feet between the levels of high and low water—in some places more and in some less. In general, the lowest water is expected in the four months from the middle of July to the middle of November, and at this season the steamboats are usually entirely withdrawn from the river.

Cantonment Gibson is situated on the left bank of the Grand river, two miles from its entrance into the Arkansas, and by the course of the current, according to popular estimate, about 640 miles from the mouth of the latter. Grand river is a considerable stream, flowing from the north, and though it cannot be said to be navigable for steamboats, yet its floods, when they occur, insure for the time the navigation of the Arkansas as high as the garrison. The Verdigris, another considerable stream, enters the Arkansas half a mile above the Grand river, on the same side with it, and from one point the Grand river, the Verdigris, and the Pawnee or Arkansas proper, appear to diverge as from a common centre. The waters of the Verdigris and Grand rivers are clear. Forty miles from the mouth of the Grand river, descending, the Arkansas receives from the left the Illinois, a considerable stream, whose waters are also clear, and whose influence on the navigation of the main channel is sensibly felt. Four miles lower the Arkansas receives from the right the Canadian, by far its most important tributary. This stream is said to be navigable for a considerable distance; its waters have the red color of those of the Red river, and its confluence produces a visible effect on the navigation of the Arkansas. At Fort Smith, about 120 miles from Cantonment Gibson, the Arkansas receives from the right the Poteau, a fine stream, which pours a considerable accession of water into the principal river.

The point of junction of the Canadian and Arkansas may, I think, with propriety, be called the head of steamboat navigation on the Arkansas. Between that point and Fort Gibson the chances of getting up and down with safety, and without detention, in a boat of any considerable draught of water, are too precarious to be at all relied upon. No steamboat captain, in entering the Arkansas from the Mississippi, can feel any certainty of reaching the garrison though the water be ever so high below. The flood may be out of the Illinois, the Canadian, or the Poteau, in which case he can of course get no higher than the confluence of those streams with the main current, or, if the rise proceeds from the Grand river, the Verdigris, or the Arkansas, it will, in the greater number of cases, have run off before a boat can traverse the space below. A very small steamboat, by remaining at Fort Smith, or the garrison, and watching the floods, may be very useful, and I understand it is contemplated by the Quartermaster General's department to adopt this course for the transportation of the large amount of stores required at Fort Gibson, which is now the focus of our relations with numerous powerful tribes of Indians.

Between Fort Smith and Little Rock, the Arkansas receives from the north the Mulberry, and from the south the Petit Jean and the Fouche La Féve, all small streams, but said to be navigable by keel-boats. Besides these, which are the most important, the Arkansas receives many other tributaries above Little Rock; below that point, from the peculiar formation of the country, and the proximity of White river on the north, and the Ouachita, &c, on the south, its secondary streams are very few and generally very small.

For purposes of description, the Arkansas from Cantonment Gibson to the mouth may be considered as divided at Little Rock into two parts, which differ from each other essentially in general features and character. From Fort Gibson to Little Rock it is commonly called three hundred and seventy miles, or from Fort Smith two hundred and fifty, and from Little Rock to the mouth about two hundred and seventy. These numbers are those on which the pilots nearest agree, but the distances are not accurately known, and are probably overrated. Above Little Rock the banks of the river are occasionally rocky; sometimes for considerable distances rocky bluffs one hundred and fifty or two hundred feet high rise directly from the water; at other places, particularly high up, flat ledges of rock run nearly, or quite across the bed of the stream. Where the hills recede from the banks, the intervening space is filled up by fertile bottoms of various widths, as on the Ohio, and these bottoms are usually higher and more out of the reach of inundations than in the lower division of the stream. The scenery bears, in places, a great resemblance to that of the Upper Mississippi. Coal of excellent quality, and in vast quantities, is said to be found in the sandstone formation high up this part of the river. The reaches are generally longer; the stream pursues a more direct course and is much wider and shallower than below, and has numerous middle bars and quicksand shoals, rendering the navigation intricate, except at the highest stages of water, from the circumstance that the channel at such places is liable to shift at every flood. There are also in this part of the river many gravel bars, having on them those irregular roundish elevations called "potato hills" by the pilots, and which, I am informed, are occasionally liable to shift their places during freshets. Of the part from Cantonment Gibson to the mouth of the Canadian I have already spoken. The two principal obstructions there are shallow rapids, from seventeen to twenty miles below the cantonment called the "Devil's race ground," and a cascade called Webber's falls, about forty miles below the garrison. At this place there are flat, rocky ledges, extending almost entirely across the stream, with rapids for two or three miles, and a depth of channel, as I learn, not exceeding at low water from eight to twelve inches. Neither of these places, in the opinion of those who best understand them and who are most interested in their improvement, will admit of any amelioration. From Fort Smith to Little Rock the navigation is better, though the shallow bars obstruct it very much, and in two or three places the channel, when the waters are low, is very crooked and narrow, being confined by gravel bars on one side and ledges of rock on the other. It is unnecessary to enumerate these difficulties here, as they will sufficiently appear on the map and sketches with which I shall accompany this report, and are, besides, not the kind of obstructions to which my attention was particularly directed in your instructions. Improvements were, however, suggested to me at one or two points by intelligent individuals, which I have noted on the sketches for the information of the department.

At Little Rock is seen the last rock which is visible upon the river. From that point to its mouth the Arkansas runs entirely through an alluvial country. From sixty to ninety miles below Little Rock the river is touched on the right by four red clay bluffs, from thirty to sixty feet in height, covered in part with pines, and which bear a striking resemblance to the "Chickasaw bluffs" of the Mississippi. This part of the river has not in general more than one-third the breadth which exists in places above, and the channel is proportionately deeper. The Arkansas in this feature resembles the Red river, the Mississippi, and other similar streams. Below Little Rock the course of the river is remarkably devious, even among the crooked streams of the southwest; numerous places appear where "cut-offs" have been formed, and a few years must produce many others. The river does not, I should imagine, exceed, in its average breadth, two hundred and fifty or three hundred yards; the curvature of the bends is very great and the points frequent. There are, towards the upper part of this section, several shoal bars which obstruct the navi-

gation, particularly a bar called "Dog Tooth bar," about four miles below Little Rock, which may possibly admit, at a future day, of some improvement, as is indicated on sketch No. —. About twenty-five miles, by the course of the stream, above the proper mouth of the Arkansas, there is a channel leading from it to White river, of six or eight miles in length, which enters the White river about eight miles above its mouth, and which is usually designated by the local name of "the Cut-Off." In this cut-off the water flows indifferently from the Arkansas to the White river, or from the White river to the Arkansas, as either happens to be the highest. When steamboats can navigate the Arkansas to Little Rock they can always pass through this opening, though at the very lowest stages there is occasionally not water enough for keel-boats, and in some instances, though very rarely, the channel has been dry. At present the steamboats which navigate the Arkansas enter it from the Mississippi, exclusively by the mouth of White river and this cut-off; and though, as I am informed, four or five steamboats have, at various times, entered the Arkansas by its main channel, some of the best pilots on the river have never seen the last twenty-five miles of its course. This has arisen from the fact that the principal, and, indeed, for many years, the only landing for the Arkansas has been on the Mississippi, at the mouth of White river. But the Arkansas proper, below the cut-off, is a fine, deep, navigable stream, with no obstruction which does not equally encumber the latter; and as an establishment is now forming at its junction with the Mississippi, it cannot be doubted that in future years it will be, at least, as much frequented as the channel which is now exclusively used. It appears to me that the two entrances are equally entitled to the attention of the government.

Of the impediments to navigation, to which my attention was particularly called by the department, there do not exist, in the part of the river which I saw, any "rafts" which require removal, nor, as far as I could learn, after diligent inquiries, are there any "detached masses of stone or boulders," which in any way impede the passage of boats; but of "snags, sawyers, cypress stumps, and sunken logs," there are such numbers as to render it a matter of surprise that more accidents have not occurred from them. Nothing but extreme care, great skill, the most anxious attention in running at night, and laying by altogether when it was too dark to distinguish objects with tolerable clearness, could have prevented the most serious results. Between Little Rock and the mouth of the river, in particular, the snags are remarkably numerous, and in some places, at low water, there is barely room for a boat to pass between them, as many as forty or fifty having to be removed from single bends. To designate particularly where these obstructions occur, would be to identify individually nearly every mile of the river. Where the stream flows through alluvial flats, it may safely be asserted that wherever there is a bend, there are falling banks, and wherever there are falling banks, there are snags to be removed from the channel. Except where the river flows at the foot of a hill, or past rocky shores, the bends succeed each other almost without interruption; and even in the straight reaches of four or five miles in length, which sometimes occur, a few snags are to be seen, which have drifted down from the falling banks above. It may in general be stated that the snags are much less numerous above Little Rock than below it; and on the sketches which will accompany this report, exhibiting in detail every part of the river, with its channels, sand-bars, shoals, reefs of rock, &c., I shall mark those bends which are particularly bad. Judging from the number of prostrate trees at some of the falling banks, which bore marks of having recently fallen, I should infer that the river acts upon the friable soil on its borders with very great force, and all observation and testimony agree in proving this to be the case.

The question of the practicability of removing these obstructions has fortunately been entirely settled by the success of Captain Shreve on the Ohio and Mississippi rivers; and as to the expediency of the measure, little doubt can be entertained, after a very slight examination of the importance of this navigation to an extensive territory, which is fast increasing in population and wealth, and which is destined very soon to be received as a State into the American confederacy. There are already five or six steamboats regularly employed in the trade of this river during the boating season, besides one or two others which make an occasional trip, and this number must soon be increased to supply the wants of a country which is rapidly filling up with emigrants. The larger class of these boats carry from 100 to 125 tons, and draw, when loaded, from four to five and a half feet of water; others draw, when light, two feet, and even less. The boating season begins late in the fall, or early in the winter, and sometimes continues without much interruption through the winter and spring and early part of summer; occasionally, however, it is subject to long and tedious interruptions, from the lowness of the water; but I believe it has rarely happened that there has not been time to transact the necessary freighting business of the country in steamboats, before the low water of the latter part of summer and autumn has suspended that kind of navigation, though trips up stream in keel-boats have occasionally had to be made at a great expense to supply some urgent demand. The best informed steamboat captains and pilots, with whom I have conversed, agree in saying that in general one foot more of water may be counted upon up to Little Rock than from thence to Fort Smith, and that in ordinary low water there is usually from two to two and a half feet on the shallow bars between Little Rock and the mouth of the river.

By the law of the 3d of July, 1832, with an extract from which I was furnished by you, \$15,000 are appointed for improving the navigation of the Arkansas, "provided the Engineer department, after due examination, is satisfied that, during a portion of the ensuing year, the men and machines now employed in removing obstructions in the Ohio and Mississippi rivers can be more usefully employed in removing those of the Arkansas river." In obedience to your instructions, I saw Captain Shreve in Louisville, Kentucky, and obtained from him the size and draught of the different boats used by him, together with much other valuable information. The Helepolis snag-boat draws about six feet of water, the Archimedes snag-boat about three feet three inches, and the double flatboats, used for pulling up snags in shallow water by manual labor, by a purchase similar to that on the snag-boats, can work in water from one and a half to two feet deep. The Helepolis probably draws too much water to be used to advantage in the Arkansas, except perhaps in the first sixty or eighty miles from its mouth at a medium stage of the river, but the Archimedes can doubtless work to great advantage for considerable lengths of time, when the Mississippi is too high to admit of work being done on it, as for instance, in June and the early part of July of this season, after Captain Shreve's return from the raft of the Red river, and the double flatboats will at all times be very efficient engines at low water.

With regard to the estimate of the expense, which I am required by your instructions to furnish, I must speak with exceeding diffidence, both from the very irregular nature of the work itself, and my own want of experience. No better method occurred to me than to endeavor to ascertain as nearly as possible the number of snags which would require removal, and to fix the cost at the same price for each that it was stated by Captain Delafield to have amounted to on the Mississippi river. This rate may be too high,

because the snags in the Arkansas are in general smaller than those in the Mississippi, or it may be too low, because there may not be the same facility in disposing of the roots of the snags in the upper part of the Arkansas that there was in the deep water of the bends of the Mississippi; experience alone, after partial trial, can lead to definite and accurate results. The water not having been quite at its lowest stage when I examined the river, I am not able to state accurately the number of snags which are in the way, but I counted all those which were visible, and made diligent inquiries of persons upon whose judgment and experience I thought I could rely, with a view to ascertain the additional allowance to be made for those concealed, and I confidently expect that the numbers which I shall give will not be found to vary materially from the truth. In Grand river, below Fort Gibson, there are numerous bad snags and logs, and in the 120 miles from the cantonment to Fort Smith I estimate the whole number to be 241. In this part of the river the steamboat *Spy* struck a snag about the 1st of April last, and was lost. From Fort Smith to Little Rock the number of snags is 502, and from Little Rock to the mouth of White river 1,356. In the Arkansas, below the cut-off, the number is 50; making the whole number 2,149, which, at eight dollars a piece, would amount to..... \$17,192 00
Add this amount for contingencies..... 2,808 00

And we have for the whole cost of removing the snags..... 20,000 00

I have marked on the sketches three or four places where cypress stumps occur in the channel; they are considered more dangerous than snags, and the expense of their removal is included in the preceding estimate. If the snag-boats should be ordered to the Arkansas, I would recommend that the usual channel to Little Rock should first be cleared out, and that, of that part, the worst bends should be first remedied. In this way the navigation will in the shortest time receive the greatest benefit, and afterwards the other parts of the river can be cleared in regular succession.

It will be perceived that, in this estimate, I have made no provision for cutting the timber from the falling banks. Should this be thought advisable by the department, it might require, to do it thoroughly from Cantonment Gibson to the mouth, that chopping should be done over a surface equivalent to one—say two hundred miles in length by fifty yards in breadth—or 3,636 acres, which, for falling the trees from the river, and detaching the principal branches from the trunk, to prevent the tree from lodging on the bottom when floated off by high water, might cost six dollars per acre—or, for the whole, \$21,816. At present, however, I should not recommend this measure, unless the question of its efficacy is considered as having been sufficiently settled by the experience on the Mississippi. The objections which are urged against it there apply with still more force on the shallower waters of the Arkansas. I have made careful inquiries on the subject, and have found a decided feeling against the plan in the mind of every steamboat captain and pilot with whom I have conversed. It is alleged that the stumps of the trees which wash out from the falling banks, although they at first sink in the deep water of the bends, are occasionally drifted by the force of the current down to the shallow bars below, when, sitting flat on the bottom of the river, and solidly imbedded in the mud, with the stump part up, they become much more dangerous than snags, because they yield less to the force of a blow from a steamboat, and because they are concealed under the water. The pilots generally say that, as a choice of evils, they prefer that the trees should fall into the river *whole*, in order that the small proportion of them which become snags may be *seen*, and avoided, until the snag-boats in their regular trips can pull them up, and remove them out of the way. This is a question which my own observation does not enable me to decide, but at least it seems certain that, from the rapid encroachments which the Arkansas makes in its falling banks, clearing off the timber for a width of 50 yards would be but a partial remedy, and it might not be worth what it would cost.

As the general result of my examination, I would respectfully recommend to the department to issue instructions to the superintendent of the improvements on the Ohio and Mississippi rivers to commence the improvement of the Arkansas by the removal of the snags, sawyers, sunken logs and cypress stumps, and to progress with it at such times and with such force and machinery, as he shall judge fit, consistently with the terms of the law making the present appropriation, until the whole shall be completed, or the appropriation exhausted.

In conclusion, I beg to express my obligations to the many gentlemen who have, with so much readiness, furnished me with most of the information embraced in this report and the accompanying sketches.

I have the honor to be, very respectfully, your obedient servant,

T. S. BROWN, *Lieutenant M. Corps of Engineers.*

No. 5.

REPORT OF CHIEF OF THE TOPOGRAPHICAL BUREAU.

TOPOGRAPHICAL BUREAU, *October 19, 1833.*

Sir: In obedience to your instructions of the 30th of August last, I have the honor to submit to you—

1. A statement, marked A, exhibiting the amount drawn from the Treasury Department and remitted to the disbursing officers under this bureau from October 1, 1832, to September 30, 1833, inclusive, and also of the amount of accounts rendered.

2. Statement, marked B, exhibiting the amount of money drawn from the treasury under special acts of Congress for surveys, to whom remitted, and the amount disbursed.

The topographical and civil engineers have been employed upon and the funds appropriated for surveys for the year 1833 have been applied to the following objects, viz:

1. In surveying the country between the waters of St. Andrew's bay and the river and bay of Chattahoochee, and between Pensacola bay and Bon Secour, along the northern coast of the Gulf of Mexico, with a view to ascertain the practicability and cost of canals to connect said bays and rivers, under the act of Congress of July 4, 1832.

2. In surveying the route for a road in the Territory of Arkansas, from a point opposite Memphis to the house of William Strong, or some other point on the St. Francis river, under the act of March 2, 1833.

3. A brigade of engineers was directed to make a survey of White and St. Francis rivers, in the Territory of Arkansas, under the act of March 2, 1833. After repairing to Arkansas for the purpose of carrying the object of the act into effect, it was found to be impracticable on account of the rise of the waters of those rivers and the approach of the sickly season.

4. An examination of the Arkansas river, in compliance with the provisions of the act of Congress approved July 3, 1833.

5. A survey of a route for a road from Chicago, on Lake Michigan, to Fort Howard, on Green bay.

6. A survey of Portland harbor, Maine, with a view to the erection of a breakwater.

7. A survey of Provincetown harbor, Massachusetts, with a view to the erection of fortifications for its defence.

8. A survey of Throg's Point, New York, with a view to the erection of fortifications for the defence of the city of New York.

9. A reconnoissance of a route for a railroad across the southern part of the State of Vermont.

10. A survey of Burlington bay, Vermont, and Port Kent and Plattsburg harbors, New York, with a view to their improvement.

11. A survey of Vermilion river, Ohio, with a view to its improvement.

12. A survey between the Pearl and Yazoo rivers, Mississippi, with a view to their connexion by a railroad or canal; also, a survey of the Yazoo Pass, in the same State.

13. A survey of the southern shore of Lake Huron and the eastern shore of Lake Michigan, in the Territory of Michigan.

14. A survey of the Potomac river, from Georgetown to Alexandria, with a view to its improvement.

15. In completing the report and drawings of a survey of a canal route from Connecticut river to Lake Winnipisseogee, New Hampshire, by the way of the Oliverian and Baker's rivers.

16. In completing the drawings of a canal route to unite the waters of Lake Champlain with those of the Connecticut by the valleys of the Onion and Wells's rivers, in the State of Vermont.

17. In completing the report, maps, and estimates of the Taunton and Weymouth canal.

18. In completing the drawings of the reconnoissance of the sounds of North Carolina.

19. In completing the drawings of a survey in order to ascertain the military defences of St. Mary's river, Maryland.

20. In completing the drawings of a survey of Georgetown harbor, South Carolina, with a view to its military defence.

21. In making an estimate of the cost of constructing a canal to connect the waters of the Atlantic with those of the Gulf of Mexico.

22. In completing the reports and drawings of the survey for a route for a railroad from Williamsport, Pennsylvania, to Elmira, New York.

23. In completing the report and drawings of a route for a railroad from New London, Connecticut, to Worcester, Massachusetts.

24. In completing the report and drawings of a survey for a route for a railroad from the Hudson river to the Portage summit of the Ohio canal.

25. In completing the report and drawings of the survey of the Neversink river, New York.

26. In completing the report and drawings of a route for a railroad from Stonington, Connecticut, to Providence, Rhode Island.

27. In completing the surveys, reports, and estimates of a route for a railroad from Mad river to Lake Erie, in the State of Ohio.

28. In surveying the Monongahela river with a view to its improvement.

29. In superintending the construction of the Boston and Providence, Baltimore and Susquehanna, and Paterson and Hudson railroads.

30. In superintending the construction of the Potomac bridge.

31. In superintending the construction of the aqueduct across the Potomac river.

32. In paying the salaries of the civil engineers and agents employed on several of the foregoing items of duties.

Having concluded these details, allow me again to call your attention to the necessity so severely felt of a reorganization of the corps of topographical engineers.

I have had the honor previously of laying before you statements which have fully demonstrated both the economy and importance of the change proposed, and have had the satisfaction of seeing in your annual reports to the President that these expositions and recommendations met with your decided approbation. And, in addition to the reasons for this measure heretofore submitted, allow me now to add the increased necessity for an accurate survey of our extensive western lakes now so much frequented, and of which comparatively so little is known. I will also, on the same account, allude to the survey of the coast. As this work progresses, additional aid will be required, and we are at this moment without the means of furnishing to the highly scientific gentleman who superintends it the number of assistants required to prosecute the work with all the vigor which even the present condition of its operation admits.

The military committees of both houses of Congress have also for several years past reported bills embracing the most desirable views on this subject, but which, from the press of more important questions, were not prosecuted to the ultimate consummation of law. Under these circumstances, I may be pardoned for not again repeating these detailed exhibitions, and may be allowed to state, in general terms, that the present corps of topographical engineers consists of six majors and four captains. To these we have been obliged to add, by details from the army, twenty lieutenants from other corps, and also have been obliged to employ thirteen citizens in the capacity of civil engineers, who are paid out of the appropriation for surveys. And yet, for want of means, we have had to postpone surveys in several highly interesting localities.

The form of organization proposed, and which has received the sanction of the reports of the military committees, is that of a regimental organization, which has also the advantage of harmonizing with our existing military establishments, and by that will save the proposed corps from the reproach of endeavoring to obtain for itself any undue advantages in points of rank and promotion.

This organization will embrace one colonel, one lieutenant colonel, two majors, ten captains, ten first lieutenants and ten second lieutenants. To these might be attached, if required, ten brevet lieutenants from the Military Academy, according to the existing laws. And, as the duties of the corps require its members to be mounted, I will respectfully suggest the propriety of its being allowed the pay and emoluments of dragoons.

of previous advances, amount to \$2,288,472 54, and that but \$37,354 58 remain to be accounted for. I am officially informed that Paymaster Massias has expended the balance reported against him, and that his accounts will be forwarded in a few days, which will reduce the amount to be accounted for to \$14,701 40. This balance is in the hands of the late Paymaster Wetmore, who resigned on the 1st of May. He claims credits to which the accounting officers do not think him entitled, and will probably require the disputed items to be decided by a court of law.

The duty and responsibility of the officers of this department have been unusually heavy the past year, in consequence of being required by a late act of Congress to pay the large body of militia called into service. I was fearful that it would be impossible for the department to perform this duty without delaying settlements with the regular troops to periods that would produce serious inconvenience and much complaint, but I am happy to state that, through the ability and indefatigable exertions of the officers employed in paying the militia, the regular troops have suffered less inconvenience than was anticipated, and, in my judgment, much less than it would be prudent to expect hereafter. It therefore becomes my duty respectfully to invite your attention, and through you the attention of Congress, to this subject.

When the military establishment was reduced in 1821 fourteen paymasters were retained, and one for the engineer corps and West Point. Since then the number of troops has increased seven hundred, the number of posts is near one-third more, and the annual disbursements half a million of dollars greater than they then were, while the number of paymasters remains the same, and, in addition to the increased duty in paying the army, they are now required to pay the militia whenever called into service.

It is not in the power of the department, with the present number of paymasters, to indulge them with furloughs, as other officers are, and great inconvenience is felt if one is prevented by sickness or any other cause from performing his duty.

Under such circumstances, I earnestly solicit you, sir, to recommend to Congress to provide by law for the appointment of three additional paymasters, also to amend the law requiring paymasters to select clerks from the rank and file of the army, (where suitable qualifications cannot always be found,) and to authorize the appointment of citizens, with salaries not to exceed \$500 per annum.

Respectfully, your obedient servant,

N. TOWSON, *Paymaster General.*

HON. LEWIS CASS, *Secretary of War.*

Statement of moneys drawn from the appropriations for the Pay department and remitted to the disbursing officers on account of payments for the 4th quarter 1832, and the first three quarters 1833; the amount unexpended and forming part of their estimates for the 4th quarter 1833; the balances to be accounted for; the periods to which the troops have been paid, and accounts rendered.

1833.]

Paymasters.	Amount of funds remitted in the fourth quarter of 1832 and the first three quarters of 1833.					Amount unexpended and forming part of their estimates for the fourth quarter of 1833.					Balances remaining to be accounted for.					Periods to which the troops have been paid and accounts rendered.
	Pay and subsistence.	Forage.	Clothing of servants.	Bounties.	Amount.	Pay and subsistence.	Forage.	Clothing of servants.	Bounties.	Amount.	Pay and subsistence.	Forage.	Clothing of servants.	Bounties.	Amount.	
Thomas Wright.....	\$87,048 00	\$1,640 00	\$850 00	\$362 00	\$90,000 00	\$7,374 02½	.....	\$377 85½	.....	\$7,751 88	.....	.....	.....	.....	.....	September 1, 1833.
Asher Phillips.....	75,000 00	.....	.....	.....	75,000 00	6,981 24	.....	.....	.....	6,981 24	.....	.....	.....	.....	.....	Do.
Alphonso Wetmore *.....	28,056 00	700 00	500 00	744 00	30,000 00	.....	.....	.....	.....	.....	\$14,701 40	.....	.....	\$14,701 40	.....	Sept. 1; officers to Oct. 1, 1833.
Benjamin F. Larned.....	50,809 00	2,400 00	1,661 00	230 00	55,100 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	September 1, 1833.
David S. Townsend.....	76,674 00	1,649 00	793 00	284 00	79,400 00	3,968 42	\$324 78	1,051 79	.....	5,344 99	.....	.....	.....	.....	.....	.....
C. B. Talmadge†.....	51,500 00	900 00	500 00	400 00	53,300 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Daniel Randall.....	80,051 00	2,222 00	1,115 00	1,712 00	85,100 00	3,648 76	.....	.....	.....	3,648 76	.....	.....	.....	.....	.....	Do.
C. H. Smith.....	103,104 00	1,376 00	1,200 00	320 00	106,000 00	3,600 32	.....	.....	.....	3,600 32	.....	.....	.....	.....	.....	Do.
A. A. Massias.....	75,820 00	1,550 00	1,230 00	1,700 00	80,300 00	.....	.....	.....	.....	.....	21,553 18	\$300 00	\$300 00	\$500 00	22,653 18	July 1, 1833.
T. P. Andrews.....	137,300 00	2,900 00	1,650 00	150 00	142,000 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	November 1, 1833.
Edmund Kirby.....	101,612 00	1,188 00	650 00	150 00	103,600 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	September 1, 1833.
L. G. De Russey†.....	73,130 00	2,290 00	1,370 00	300 00	77,000 00	18,523 78	.....	.....	.....	18,523 78	.....	.....	.....	.....	.....	May 1 and September 1, 1833.
William Platt.....	91,000 00	4,300 00	1,400 00	300 00	97,000 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	November 1, 1833.
R. A. Forsyth.....	42,510 00	1,490 00	800 00	.....	44,800 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Sept. 1 and Nov. 1, 1833.
A. D. Stewart.....	168,000 00	1,200 00	800 00	.....	170,000 00	18,717 69	.....	.....	.....	18,717 69	.....	.....	.....	.....	.....	July 1, 1833.
William S. Harney.....	69,128 00	592 00	280 00	.....	70,000 00	1,602 99	.....	.....	.....	1,602 99	.....	.....	.....	.....	.....	September 1, 1833.
T. J. Leslie.....	133,867 00	1,144 00	717 00	72 00	135,800 00	3,982 52	.....	.....	.....	3,982 52	.....	.....	.....	.....	.....	Do.
Unexpended balances of the third quarter 1832, forming part of the estimates of the fourth quarter 1832.....	79,261 03	1,693 27	2,232 90	2,385 34	85,572 54	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Balances of 1832, unaccounted for in the last statement.	4,500 00	.....	.....	.....	4,500 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
MILITIA.	1,523,370 03	29,144 27	17,848 90	9,109 34	1,584,472 54	68,399 74½	324 78	1,429 64½	.....	70,154 17	36,254 58	300 00	300 00	500 00	37,354 58	.....
Thomas Wright||.....	186,000 00	.....	.....	.....	.....	759 34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Asher Phillips ¶.....	50,000 00	.....	.....	.....	.....	7,854 33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
B. F. Larned.....	33,000 00	.....	.....	.....	704,000 00	4,410 15	.....	.....	.....	15,955 22	.....	.....	.....	.....	.....	.....
T. P. Andrews.....	230,000 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Edmund Kirby.....	200,000 00	.....	.....	.....	.....	2,931 40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total of army and militia.....	.....	.....	.....	.....	2,288,472 54	.....	.....	.....	.....	86,109 39	.....	.....	.....	.....	.....	.....

* Resigned May 1, 1833.

† Dead.

‡ Four companies at Fort Towson paid only to May 1, it being impracticable to visit that post between that time and October 1.

§ Balance due Paymaster Forsyth, \$3,829 75.

|| In addition to the \$186,000, Paymaster Wright has disbursed \$60,506 62, received of Paymaster Andrews.

¶ In addition to the \$50,000, Paymaster Phillips has disbursed \$50,000, received of Paymaster Andrews.

No. 7.

REPORT OF THE COMMISSARY GENERAL OF SUBSISTENCE.

OFFICE OF THE COMMISSARY GENERAL OF SUBSISTENCE, *Washington, November 21, 1833.*

SIR: In conformity with your instructions of the 30th August ultimo, I have the honor to present a statement exhibiting the moneys remitted and charged to contractors and to the disbursing officers of this department in the first, second, and third quarters of the year, together with the balances in possession of the latter on December 31, 1832, amounting to.....\$367,829 93
To which is to be added the amounts due them on the settlement of their accounts..... 296 66

Aggregating.....	368,126 59
The amount accounted for during the same period is.....	311,244 87
<hr/>	
Leaving a balance of.....	56,881 72
From which is to be deducted this sum, charged to Captain James Monroe, late of the army, being in suit.....	\$4,319 94
This sum being a balance due by Lieutenant A. H. Morton December 31, 1832.....	902 85
Also this sum due by Lient. R. W. Burnet at the period of his resignation.....	219 39
<hr/>	
Making together.....	5,442 18

And leaving..... 51,439 54
actually in the hands of the assistant and acting assistant commissaries applicable to the expenditures of the fourth quarter of the year, and being \$14,328 60 less than the balances on December 31, 1832.

Of this sum (\$51,439 54) \$13,600 were remitted to distant posts so late in the third quarter as to render the accountability of it in that quarter totally impracticable.

In opposition to the amount charged to Captain Monroe and in suit, he alleges to have claims more than sufficient to expunge it; and should a decision of the case be favorable to government, the security given by Captain Monroe for the debt is considered perfectly ample.

The pay of Lieutenant Morton was placed under stoppage the moment that he failed to render his accounts with that regularity required by the act of Congress concerning the disbursement of public money. Should, however, the amount stopped be inadequate to cover the charge, the securities in this case, as well as in that of Lieutenant Burnet, are equivalent to the amounts due.

During the period embraced in the statement 123 officers have disbursed the moneys applicable to the commissariat, of whom there are only seven whose accounts have not been received, and they stationed at remote posts; and although it is highly probable that they may reach the office in a few days, yet their reception would not materially affect the result presented; and it is confidently believed that the operations of the year will terminate without the loss of a single cent to the government in this branch of its service.

Very respectfully, your most obedient servant,

GEO. GIBSON, *Commissary General of Subsistence.*

Hon. LEWIS CASS, *Secretary of War.*

Statement exhibiting the moneys remitted to contractors from January 1 to September 30, 1833, and the moneys accounted for by them during that period; the balances in the hands of the disbursing officers of the department December 31, 1832; the moneys remitted to them in the first, second, and third quarters of 1833; the sums charged to them as transfers from one officer to another; sales to officers on the frontier posts; sales of empty barrels, boxes, &c.; and the amounts accounted for by them for the same period; together with the balances in their possession at the expiration of the third quarter of the year.

Names.	Balances on hand December 31, 1832.	Remitted.	Charged as transfers, sales to officers on the frontier posts, &c.	Total charged.	Accounted for.	Balances due to assist. commissaries Sept. 30, 1833.	Balances due from assistant commissaries Sept. 30, 1833.	Remarks.
J. Hindman Barney .....contractor.....		\$4,650 94		\$4,650 94	\$4,650 94			
Samuel and Isaac Bell.....do.....		25,819 21		25,819 21	25,819 21			
D. & H. Cothrel.....do.....		1,248 30		1,248 30	1,248 30			
Gidings, Baldwin & Co.....do.....		690 55		690 55	690 55			
Hill & McGunnege.....do.....		2,532 89		2,532 89	2,532 89			
Chauncey P. Ives.....do.....		670 35		670 35	670 35			
Krepps & Sloan .....do.....		8,076 73		8,076 73	8,076 73			
George Lowry.....do.....		2,658 68		2,658 68	2,658 68			
Charles Moody.....do.....		837 02		837 02	837 02			
Oliver Newberry.....do.....		4,710 41		4,710 41	4,710 41			
Edward Simms.....do.....		1,224 12		1,224 12	1,224 12			
Joseph G. Sise.....do.....		1,306 83		1,306 83	1,306 83			
William Stewart.....do.....		24,954 09		24,954 09	24,954 09			
M. V. Thomson.....do.....		124 75		124 75	124 75			
Joel Turnham.....do.....		3,142 73		3,142 73	3,142 73			
G. B. Wilson & Co.....do.....		2,700 68		2,700 68	2,700 68			
E. A. & W. Winchester.....do.....		15,334 00		15,334 00	15,334 00			
Joshua Yeaton.....do.....		1,110 61		1,110 61	1,110 61			

Statement exhibiting the moneys remitted to contractors, &c.—Continued.

Names.	Balances on hand December 31, 1832.	Remitted.	Charged as transfers, sales to officers on the frontier posts, &c.	Total charged.	Accounted for.	Balances due to assist. commissaries Sept. 30, 1833.	Balances due from assistant commissaries Sept. 30, 1833.	Remarks.
R. H. L. Amistead.....special contr.		\$36 40		\$36 40	\$36 40			
B. C. Blincoe.....do.....		13 13		13 13	13 13			
N. G. Cheesebro'.....do.....		75 17		75 17	75 17			
James Campbell.....do.....		48 45		48 45	48 45			
T. B. Coleman.....do.....		484 80		484 80	484 80			
E. S. Comstock.....do.....		161 00		161 00	161 00			
B. S. Cook.....do.....		59 75		59 75	59 75			
Cullum & Foley.....do.....		105 02		105 02	105 02			
W. O. Chilton.....do.....		36 60		36 60	36 60			
Samuel Davis.....do.....		550 88		550 88	550 88			
Arthur Fulton & Co.....do.....		46 60		46 60	46 60			
Samuel Humes.....do.....		453 53		453 53	453 53			
Gurdon Huntington.....do.....		41 40		41 40	41 40			
R. H. Hurbut.....do.....		61 01		61 01	61 01			
Elihu Jefferson.....do.....		321 98		321 98	321 98			
R. Kirkpatrick.....do.....		461 78		461 78	461 78			
Hoel Lawrence.....do.....		1,472 18		1,472 18	1,472 18			
R. Hargreave Lee.....do.....		429 10		429 10	429 10			
John B. Lindsey.....do.....		850 16		850 16	850 16			
R. W. Lockerman.....do.....		327 53		327 53	327 53			
Paul Marshall.....do.....		50 49		50 49	50 49			
H. K. Mitchell.....do.....		103 68		103 68	103 68			
Robert Moulson.....do.....		613 43		613 43	613 43			
P. Nelson.....do.....		4 50		4 50	4 50			
Simon Nelson.....do.....		1 92		1 92	1 92			
Caswell Poe.....do.....		100 32		100 32	100 32			
John Price.....do.....		152 45		152 45	152 45			
Edward Roberts.....do.....		133 56		133 56	133 56			
John J. Salvage.....do.....		444 60		444 60	444 60			
David S. Skaats.....do.....		7 50		7 50	7 50			
Samuel Smith, jr.....do.....		506 00		506 00	506 00			
Ezra Smith.....do.....		416 58		416 58	416 58			
Caleb Thaxter.....do.....		26 04		26 04	26 04			
Oliver G. Terry.....do.....		126 22		126 22	126 22			
G. E. Walker.....do.....		80 00		80 00	80 00			
Wm. T. Ward.....do.....		51 96		51 96	51 96			
Jacob Wiest.....do.....		543 22		543 22	543 22			
A. Williamson.....do.....		278 62		278 62	278 62			
Amos Wood, jr.....do.....		422 25		422 25	422 25			
Lieut. E. B. Alexander.....A. C. S.	\$1,407 99	2,100 00	\$3,307 32	6,815 31	4,618 86		\$2,196 45	Disbursing.
Lieut. R. B. Alden.....A. A. C. S.		300 00	51 74	351 74	351 74			Closed.
Lieut. R. Anderson.....do.....		450 00		450 00	312 04		137 96	Disbursing.
Lieut. E. B. Babbitt.....do.....		900 00	2,255 48	3,155 48	868 50		2,286 98	Do.
Captain N. Baden.....do.....	67 23	500 00	105 59	672 82	672 82			Closed.
Lieut. J. W. Bailey.....do.....		250 00	253 87	508 87	441 79		67 08	Disbursing.
Lieut. F. N. Barbarin.....do.....	160 33	750 00	5 66	915 99	939 36	\$23 37		Do.
Lieut. E. K. Barnum.....do.....		1,100 00		1,100 00	1,093 34		6 66	Do.
Captain Joshua B. Brant.....do.....	22,077 84	12,000 00		34,077 84	34,077 84			Closed.
Lieut. Harvey Brown.....do.....	2,639 51	27,100 00	895 11	30,634 62	24,627 72		6,006 90	Disbursing.
Lieut. R. W. Burnet.....do.....	219 39			219 39			219 39	Resigned.
Captain J. R. Butler.....do.....		350 00	8 17	358 17	329 50		28 67	Disbursing.
Lieut. George Caldwell.....do.....	48 85			48 85	42 97		5 88	Due on settlement.
Lieut. L. F. Carter.....do.....	2,197 43	5,000 00	2,510 92	9,708 35	6,927 61		2,780 74	Disbursing.
Lieut. J. A. Chambers.....do.....	111 98		397 53	509 51	389 55		119 96	Do.
Lieut. W. S. Chandler.....do.....		300 00		300 00	300 00			Closed.
Lieut. John Childs.....do.....	12 70	3,050 00		3,062 70	2,525 33		537 37	Disbursing.
Lieut. James Clyman.....do.....		1,650 00	42 50	1,692 50	1,685 27		27 23	Do.
Lieut. Charles O. Collins.....do.....			1 00	1 00	1 00			Closed.
Lieut. E. F. Covington.....do.....	71 86			71 86	71 00		86	Due on settlement.
Lieut. G. H. Crossman.....do.....	1,745 64			1,745 64	1,745 64			Closed.
Lieut. O. Cross.....do.....			1,550 19	1,550 19	1,550 19			Do.
Major T. Cross.....do.....		3,264 69		3,264 69	3,264 69			Do.
Major F. L. Dade.....do.....		100 00		100 00			100 00	Disbursing; remitted late in the quarter, Sept. 30.
Lieut. F. L. Dancy.....do.....		650 00	59 78	709 78	635 36		74 42	Disbursing.
Lieut. J. F. Davis.....do.....	1 30			1 30			1 30	Due on settlement.
Lieut. J. P. Davis.....do.....			273 10	273 10	65 45		207 65	Account of 3d quarter not received.
Captain G. S. Drane.....do.....	637 37			637 37	637 37			Closed.
Lieut. Justin Dtmick.....do.....	98 53	1,250 00	352 23	1,707 76	1,724 12	23 36		Disbursing.
Lieut. R. S. Dix.....do.....			109 76	109 76	109 76			Closed.
Lieut. A. B. Eaton.....do.....	99 44	1,500 00	1,270 86	2,870 30	1,712 37		1,157 93	Disbursing.
Lieut. N. J. Eaton.....do.....	1,185 15	3,500 00	1,290 41	5,975 56	4,651 29		1,324 27	Do.

Statement exhibiting the moneys remitted to contractors, &c.—Continued.

Names.	Balances on hand December 31, 1832.	Remitted.	Charged as transfers, sales to officers on the frontier posts, &c.	Total charged.	Accounted for.	Balances due to assistant commissaries 30th September, 1833.	Balances due from assistant commissaries 30th Sept., 1833.	Remarks.
Lieut. A. G. Edwards A. A. C. S.			\$111 48	\$111 48	\$123 10	\$11 62		Due on settlement.
Lieut. George Fetterman do		\$1,700 00	202 28	1,902 28	723 17		\$1,179 11	Disbursing.
Lieut. A. C. Fowler A. C. S.	\$173 38	1,500 00		1,673 38	1,383 26		290 12	Disbursing; account for 3d quarter not received.
Lieut. J. S. Gallagher do	479 07	500 00	95 83	1,074 90	1,061 78		13 12	Do.
Lieut. J. R. B. Gardiner A. A. C. S.	758 78			758 78			758 78	Accounts not received.
Capt. Wm. M. Graham do		100 00	298 95	398 95	220 99		177 96	Disbursing.
Lieut. J. B. Grayson do			231 83	231 83	231 83			Closed.
Capt. Tim. Green do	291 88	3,100 00	325 29	3,717 17	3,209 90		507 27	Disbursing.
Lieut. G. S. Greene do	6 10	1,000 00	77 79	1,083 89	765 85		318 04	Do.
Lieut. J. Green do		500 00	227 23	727 23	592 71		134 52	Do.
Lieut. J. K. Greenough do	918 04		839 72	1,757 76	647 03		1,110 73	Do.
Lieut. J. Gibson do	12 50		525 68	538 18	538 18			Closed.
Capt. E. Harding do	135 56	400 00		535 56	554 89	19 33		Disbursing.
Lieut. J. W. Harris do	144 66		41 98	186 64	246 97	60 33		Due him on settlement.
Lieut. W. L. Harris do			1,002 86	1,002 86	349 94		652 92	Disbursing.
Lieut. D. S. Herring do			90 00	90 00	51 82		38 18	Do.
Lieut. R. Holmes do	4,670 67	1,324 68		5,995 35	5,995 35			Closed.
Lieut. W. Hoffman do			49 95	49 95	49 95			Do.
Lieut. Joshua Howard do	69 89	350 00		419 89	373 77		46 12	Disbursing.
Lieut. W. L. Howell do			12 48	12 48	12 48			Closed.
Lieut. A. A. Humphreys do		310 00	135 76	445 76	445 86	10		Due him on settlement.
Lieut. L. T. Jamison do	614 27	700 00	1,065 04	2,380 31	1,322 05		1,058 26	Disbursing.
Capt. H. Johnson do		550 00		550 00	575 60	25 60		Due him on settlement.
Lieut. J. F. Kennedy do			812 82	812 82	812 82			Closed.
Lieut. J. W. Kingsbury do	491 83	18,000 00	542 08	19,033 91	7,750 21		11,283 70	Disbursing; \$11,000 remitted late in 3d qr.
Lieut. J. J. B. Kingsbury do			548 91	548 91	333 93		214 98	Disbursing; account 3d quarter not received.
Major R. M. Kirby do		275 00	119 93	394 93	279 58		115 35	Disbursing.
Lieut. E. M. Lacey do	421 40	917 20	354 92	1,693 52	314 90		1,378 62	Disbursing; account 3d quarter not received.
Lieut. Charles H. Larned do		500 00		500 00			500 00	Do.
Lieut. Francis Lee do	1,252 13			1,252 13	1,252 13			Closed.
Col. Wm. Lindsay do	83 37	100 00		183 37	102 37		86 00	Disbursing.
Lieut. T. B. Linnard do	53 98	400 00		453 98	356 65		97 33	Do.
Capt. G. Loomis do		250 00		250 00	250 00			Closed.
Capt. Allen Lowell do	398 08			398 08	398 08			Do.
Lieut. T. J. McKean do		350 00	59 60	409 60	409 60			Do.
Lieut. G. W. McClure do	2 25			2 25	2 25			Do.
Lieut. J. Macomb do			254 00	254 00	254 00			Do.
Lieut. H. S. Mallory do		5,050 00	299 88	5,349 88	5,328 25		21 63	Disbursing.
Major Milo Mason do			181 54	181 54	91 66		89 88	Do.
Capt. Charles Mellon do		200 00		200 00	83 38		116 62	Do.
Lieut. M. E. Merrill do	400 00	750 00	1,074 30	2,224 30	2,162 97		61 33	Disbursing; account 3d quarter not received.
Lieut. D. S. Miles do			263 20	263 20	263 20			Closed.
Capt. James Monroe do	4,319 94			4,319 94			4,319 94	In suit.
Lieut. Lewis N. Morris do		600 00	354 86	954 86	954 86			Closed.
Lieut. Gouv. Morris do		2,500 00	54 95	2,554 95	2,553 53		1 42	Disbursing.
Lieut. P. Morrison do	1,546 77	13,392 19	137 51	14,976 37	13,973 39		1,002 98	Do.
Lieut. A. H. Morton do	902 85			902 85			902 85	Pay stopped.
Major John Mountfort do	62 47	300 00	4 50	366 97	366 97			Closed.
Lieut. George Nauman do	30 42	700 00	3 21	733 63	702 30		31 33	Disbursing.
Lieut. F. D. Newcomb do	800 00		1,041 85	1,841 85	1,865 54	23 69		Do.
Lieut. William S. Newton do	144 30	300 00		444 30	444 30			Closed.
Lieut. William Palmer do	43 55	150 00	269 70	463 25	463 25			Do.
Lieut. R. P. Parrott do	61 76	1,850 00	8 25	1,920 01	1,908 71		11 30	Disbursing.
Lieut. W. N. Pendleton do			441 45	441 45	401 78		39 67	Do.
Lieut. J. W. Penrose do			191 64	191 64	94 64		97 00	Do.
Lieut. D. Perkins do		100 00		100 00				Closed.
Lieut. W. H. Pettis do			383 42	383 42	383 42			Do.
Lieut. R. H. Peyton do	53 41		27 15	80 56	45 14		25 42	Disbursing.
Lieut. G. J. Raines do	201 58		1 75	203 33	1 24		202 09	Do.
Lieut. S. Ringgold do			2 85	2 85	2 85			Closed.
Lieut. R. H. Ross do			19 98	19 98	19 98			Do.
Lieut. S. L. Russell do	217 59	700 00	576 63	1,494 22	1,111 18		383 04	Disbursing.
Lieut. R. Sevier do	351 50	1,400 00	608 76	2,370 26	1,166 18		1,204 08	Do.
Lieut. R. C. Sinead do	814 05		28 50	842 55	841 02		1 13	Due on settlement.
Lieut. J. R. Smith do	44 82	400 00	414 97	859 79	859 79			Closed.
Lieut. R. P. Smith do		550 00	144 86	694 86	635 07		59 79	Disbursing.
Lieut. J. B. Scott do	78 37	550 00	4 00	632 37	632 13		24	Do.
Lieut. E. V. Sumner do	8,103 42	1,240 00		9,343 42	9,256 41		87 01	Do.

Statement exhibiting the moneys remitted to contractors, &c.—Continued.

Names.	Balances on hand December 31, 1832.	Remitted.	Charged as transfers, sales to officers on the frontier posts, &c.	Total charged.	Accounted for.	Balances due to assistant commissaries 30th Sept., 1833.	Balances due from assistant commissaries 30th Sept. 1833.	Remarks.
Capt. J. P. Taylor.....commissary.		\$8,050 00		\$8,050 00	\$6,249 75		\$1,800 25	Disbursing.
Lieut. F. Taylor.....A. A. C. S.			\$318 56	318 56	318 56			Closed.
Lieut. R. E. Temple.....do		200 00		200 00	95 58		104 42	Disbursing.
Lieut. E. Trenor.....do		1,300 00	180 00	1,480 00	490 09		989 91	Do.
Lieut. R. C. Tighman.....do		1,150 00		1,150 00	1,150 00			Closed.
Capt. Charles Thomas.....do		250 00		250 00	163 66		86 34	Disbursing.
Lieut. A. W. Thornton.....do	\$64 43	1,000 00	552 98	1,617 41	1,643 68	\$26 27		Do.
Lieut. W. A. Thornton.....do		500 00		500 00	577 96	77 96		Due him on settlement.
Lieut. D. D. Tompkins.....do		600 00		600 00	559 57		40 43	Disbursing.
Lieut. D. Tufts.....do	108 93	500 00	406 05	1,014 98	1,020 01	5 03		Do.
Lieut. D. Van Ness.....do	60 80	5,800 00	18 05	5,878 85	4,019 55		1,859 30	Do.
Lieut. F. Vinton.....do			227 19	227 19	80 61		146 58	Do.
Lieut. J. R. Vinton.....do	778 99		100 88	879 87	475 65		404 22	Do.
Lieut. R. D. A. Wade.....do	43 35	650 00	5 25	693 60	606 72		91 88	Do.
Lieut. W. Wall.....do	7 13	550 00	30 36	587 49	547 07		40 42	Do.
Lieut. George Watson.....do			982 07	982 07	982 07			Closed.
Capt. Clifton Wharton.....do		200 00		200 00	14 94		185 06	Disbursing.
Lieut. L. B. Webster.....do	218 71		43 24	261 95	122 56		139 39	Do.
Lieut. William Wells.....do	2 75	450 00	346 60	799 35	616 37		182 98	Do.
Lieut. J. West.....do		100 00		100 00	100 00			Closed.
Major H. Whiting.....do	2,144 82	3,500 00	1,702 72	7,347 54	2,677 93		4,669 61	Disbursing.
Lieut. T. J. Wilkinson.....do	160 71	100 00	279 57	540 28	330 95		202 33	Do.
William Williams.....sutler.			83 48	83 48	83 48			Closed.
Lieut. J. H. Winder.....A. A. C. S.		250 00	704 99	954 99	954 99			Do.
Col. W. J. Worth.....do	30 11	200 00		230 11	230 11			Do.
Major R. A. Zantzinger.....do	195 33			195 33	181 68		13 65	Due on settlement.
Total amounts.....	65,768 14	263,501 77	33,560 02	367,829 93	311,244 87	296 66	56,881 72	

RECAPITULATION.

Total amount charged.....	\$367,829 93
Balances due to assistant commissaries on the settlement of their accounts.....	296 66
Accounted for....	368,126 59
	311,244 87
	56,881 72
Deduct this sum, charged to Capt James Monroe, late of the army, being in suit, and opposed to which he alleges to have claims sufficient to expunge the charge.....	\$4,319 94
Deduct the amount charged to Lieut. A. H. Morton, resigned, whose pay has been stopped for some time, with a view to cover the charge.....	902 85
Deduct this sum, due by Lieut. R. W. Burnet at the period of his resignation.....	219 39
	5,442 18
Leaving the actual balance in the hands of the assistant and acting assistant commissaries to be accounted for in the 4th quarter of the year.....	51,439 54

GEO. GIBSON, Commissary General of Subsistence.

OFFICE OF THE COMMISSARY GENERAL OF SUBSISTENCE, Washington, November 20, 1833.

No. 8.

REPORT FROM THE ORDNANCE DEPARTMENT.

ORDNANCE OFFICE, Washington, November 15, 1833.

SIR: In obedience to your order of the 30th August last, I have the honor to transmit a report of the general result of the proceedings and operations of this department between October 1, 1832, and September 30, 1833.

The papers marked A and B present a general view of these concerns during the last-mentioned period, as well in regard to the amounts of the expenditures under the several heads of appropriations as in reference to their objects and to the various ordnance stations where they have been made.

The first of these (A) shows the whole amount of funds remitted from the treasury to disbursing officers and contractors in this department during the year 1832 to have been.....\$869,820 36
That the portion of that sum which was expended and accounted for during the same period amounted to..... 836,816 00

And that at the close of that year there remained unexpended and in the hands of disbursing officers the sum of..... 33,004 36
A balance which it may be proper to remark was promptly liquidated by the responsible disbursing officers early in the first quarter of 1833.

Statement B exhibits the total amount of funds remaining in the hands of disbursing officers at the

close of the year 1832, and which have been remitted to them and to contractors during the first, second, and third quarters of the year 1833. This amount will be seen to have been.....\$806,714 28
 And the portion of this sum expended, and for which accounts have been rendered, during the same period will be seen in the same statement to have amounted to..... 732,661 05

The unexpended balance exhibited in the same statement as being in the hands of disbursing officers at the close of the third quarter of 1833 having been..... 74,053 23

Statement C presents a view of the general result of the operations at the several arsenals and armories of the United States in the manufacture, repair, and purchase of some of the principal articles of ordnance, ordnance stores, and building materials. It exhibits the result of these operations to the extent to which they have been completed during the year between October 1, 1832, and September 30, 1833, indicating among other articles of ordnance and ordnance stores which have been fabricated or procured, the following, viz:

Of artillery: 212 32-pounder cannon; 1 42-pounder casemate carriage; 1 32-pounder casemate carriage; 9 24-pounder casemate carriages; 17 24-pounder barbette carriages; 5 10-inch sea-coast mortar beds; 77 field artillery carriages, complete.

Of small arms manufactured at the national armories: 25,291 muskets, complete; 3,290 Hall's rifles.

Of accoutrements for small arms: about 4,550 sets for infantry, 2,031 sets for riflemen, and 1,260 sets for cavalry.

Statement D shows the extent of the operations during the year between October 1, 1832, and September 30, 1833, which have occurred in procuring ordnance and ordnance stores, under the act of 1808, for arming and equipping the militia of the States and Territories. This statement presents also a view of the expenditures under the act, which have resulted during the same period in procuring the stores, amounting for all objects to \$231,144 05.

It exhibits among other articles of ordnance stores procured, 67 field carriages with their implements, complete; 11,180 muskets, complete; 1,500 Hall's rifles; 4,549 sets infantry accoutrements; 1,900 sets rifle accoutrements; and 1,085 (pair) holsters.

Statement E exhibits the amount of ordnance and ordnance stores, valued in muskets, which have been apportioned for the year 1832 to the several States and Territories, under the act of 1808, for arming and equipping the militia—this apportionment being founded on the most recent returns of the strength of the militia as made by the adjutant general of the militia of the several States to the adjutant general of the army.

Statement F shows the several articles of ordnance and ordnance stores which have been distributed to the militia of the States and Territories during the year between October 1, 1832, and September 30, 1833.

Statement G presents a view of the quantity of the munitions of war issued by this department during the year between October 1, 1832, and September 30, 1833, to the army and the engineer department. In this it will appear that 28 24-pounder iron cannon and carriages, with equipments complete, 497 small arms, and 1,135 sets of infantry accoutrements, are among the principal articles issued.

Statement H exhibits the operations of the public lead mines during the year ending September 30, 1833; and statement I the quantity of lead made at these mines in each year from the year 1821 (when their superintendence was transferred from the Treasury to the War Department) to September 30, 1833. By these statements it will appear that the quantity of lead manufactured during the last year amounts to..... 7,941,792 lbs.

Which exceeds the production of the preceding year by..... 3,659,916 "

That the rents which have accrued during the past year amount to..... 472,645 "

Being an excess over the production of the last year of..... 233,747 "

That the whole quantity of lead manufactured at the mines since their control has been transferred to the War Department amounts to..... 63,845,740 "

And that the rents which have accrued since that period amount to..... 5,246,839 "

Of this quantity—

First. There have been issued to the engineer department to be used in the construction of the fortifications..... 2,021,702 "

Second. There are due to the United States, yet to be collected..... 211,094 "

Third. There are deposited in store at the mines..... 131,277 "

And the remainder, amounting to..... 2,882,766 "

has been issued at various periods since 1821, from the stores of the mines, for service at the armories, arsenals, and depots.

Although from this statement the utility of the mines to the government is obvious, yet the retaining possession of the lands on which they are situated is scarcely a secondary consideration when contrasted with the benefits to be derived from their permanent settlement by persons engaged in the various pursuits of life. As such settlement appears to be universally desired by the inhabitants of the mineral regions, and as it is confidently believed that the sale of the lands would cause the country to be immediately and densely settled by a population which would give confidence and security to the frontier settlement, I would therefore respectfully recommend that the earliest measures be taken for the sale of the mineral lands, and that the rights of pre-emption be secured to the present occupants.

Should it not, however, be the present policy to the government to dispose of the mineral lands, some further legislation in regard to mining will be necessary, as the act of the 3d of March, 1807, containing all the authority on the subject of lead mines, has no reference to those of copper, yet discoveries of copper ore have been recently made in the Territory of Michigan and elsewhere, and are now beginning to attract attention. And if it be thought desirable to ascertain their value, which can alone be done by practical operation, a law authorizing the mines to be leased will be necessary.

The lead mine region has been extended to the west bank of the Mississippi and greatly enlarged by the treaty of September 21, 1832, with the Sac and Fox Indians. The lands ceded by that treaty embrace the mines hitherto denominated "Dubuque's Mines," which are supposed to be rich in mineral ore, although as yet they have been but partially wrought.

The operations at the national armories and at the various arsenals of construction and deposit during the past year have been conducted with improved ability and economy, and have been followed by the most satisfactory results. This may be also said with regard to the business of collecting the materials and erecting the necessary workshops, storehouses, and magazines on the sites adopted for the

arsenal in Florida on the Apalachicola, and for the arsenal in the Territory of Michigan near the city of Detroit, which were authorized by the acts of the 5th of April and of the 28th June, 1832.

The former of these arsenals will occupy a healthful eminence on the left bank of the Apalachicola, near the junction of the Flint and Chattahoochee, and at the distance of about sixty-five miles from the mouth of the Apalachicola. It will have all the advantages of steamboat navigation to the sea-coast, and all the facilities of transportation presented by the great mail route passing the site of the arsenal and traversing the Territory from St. Augustine to Pensacola.

The new arsenal in the Territory of Michigan will be situated upon a high sandy ridge on the right bank of the river Rouge, and on the great road from the city of Detroit to Chicago. It will be built at the distance of ten miles from Detroit, and at about fifteen miles to that city by the river Rouge, which is navigable to the site of the arsenal during nine months of the year. These two arsenals are principally intended as places of deposit and repair, but they will be constructed in such a manner as to enable their operations to be so extended (whenever any emergency shall require it) as to make them also places of construction.

The arsenal on the river Rouge will be a source for supplying munitions of war to the militia and military posts of the Northwest and Michigan Territories, and to the militia of the northern parts of the States of Illinois, Indiana, and Ohio. It is intended to replace the old depot of munitions of war, hitherto inconveniently situated in the city of Detroit, and which will be abandoned so soon as the new arsenal buildings are sufficiently advanced to receive the munitions now in depot.

The superior facilities for the transportation of munitions of war which are afforded at all seasons from the city of New York to the various important points of the sea-coast; the fact that the communication by the North river with the great arsenal at Watervliet is annually closed by ice during four months of the year, joined to the absolute necessity of new buildings having due reference in their construction to the new fortifications now progressing within the harbor of New York, render it necessary to establish a small depot on Governor's island, from which supplies might be furnished to the south when the North river is closed, and which would also be adequate to all the exigencies of the service within the harbor.

The position of the St. Louis arsenal, in the State of Missouri, near the city of St. Louis, on the right bank of the Mississippi, and the advantages of communication afforded by that river and its tributary streams for the supply of munitions of war to the States on the Upper and Lower Mississippi, render it necessary that this arsenal should be one of the largest class, and that it should be accommodated with the enlarged means which are proportioned to its great natural advantages, and suited to the accomplishment of all the purposes of construction, repair, and deposit. The general arrangements for its completion have been made, and the funds necessary for the year 1834 have been asked for in the estimate.

Of the appropriation of \$100,000 for the armament of the new fortifications, which has been annually made since the year 1827, the sum of \$85,000 has been allotted to the founderies during each of the two last years, for the manufacture of cannon and artillery projectiles; while the balance (\$15,000) of the appropriation during each of those years has been assigned for the manufacture of gun-carriages, mortar beds and their equipments, for the sea-coast, and for procuring the necessary supply of timber for seasoning, that, in the event of any emergency, the operations at the arsenals for the armament of the fortresses may be extended without unnecessary delay. By this assignment of the appropriation it will yield annually about one hundred and eighty cannon of the heavier calibres, thirty sea-coast gun-carriages, with their implements and equipments, and one hundred sets of timber for the same.

It has been determined to apply a partial armament of one heavy battery to all the new fortifications which may be occupied by the army, and in the accomplishment of this object Fort Jackson, commanding the passes of the Mississippi to New Orleans, and Forts Wood and Pike, controlling those to that city by Lake Pontchartrain, have been armed each with one battery of twenty-four pounders, the same having been also effected with regard to Fort Monroe, Virginia, and to Fort Moultrie and Castle Pinckney, in the harbor of Charleston, South Carolina.

The very superior pattern, manufacture, and material of these armaments enable them to fulfil all the conditions of sea-coast defence which are required by the construction of the new fortifications.

The complete armament and equipment of the corps of artillery and infantry have been effected during the last and the present year, with small arms and accoutrements of the most recent and improved pattern, and of a superior quality of material and manufacture.

It is inferred from your letter to this office of the 23d ultimo, and from the results of the investigations you have directed to be made into the processes and practical effects of the existing system for the settlement of the property accounts of this department, that you are now assured of its inadequacy and of the utter impossibility of its attaining, without additional legislative aid, that vigor and efficiency which are so necessary to prevent extensive waste and ruin in the vast and increasing amount of public property which is intrusted to the agents of this department.

I have now the honor to submit, agreeably to your orders of the 23d ultimo, such views as may have a tendency to remedy the serious inconveniences to which your attention has been directed.

It is well known that the high state of perfection which has been attained in the settlement of all accounts of disbursements is mainly attributable to the beneficial operation of the "act concerning the disbursement of public money," approved January 31, 1823, and to that of the "act to prevent defalcation on the part of the disbursing agents of the government, and for other purposes," approved January 25, 1828. A law, therefore, applicable to the settlement of the property accounts of the Ordnance department, and similar in its provisions to this last, together with the adoption of the regulations on this subject which you have directed to be drawn up and submitted to the board of ordnance, would remedy all defects in the existing system for the settlement of the property accounts.

I have the honor to state that the new regulations which you directed to be drawn up in this office for the government of the Ordnance department have been completed, agreeably to your general instructions, after diligent investigation of the subject, and, it is hoped, in such manner as to combine all the advantages of experience and general knowledge which may be required to govern the extensive operations of this department with the necessary system, and to impress them with the requisite energy and efficiency.

Agreeably to your orders, the proposed regulations have been submitted to a board of experienced field officers of the corps of ordnance, the result of whose deliberations, after having been reviewed in this city, together with the regulations drawn up in this office, were submitted on the 1st instant for the action of the board of ordnance now assembled in this city, and of which the major general commanding the army is president. I have the honor to be, sir, your obedient servant,

GEO. BOMFORD, *Colonel of Ordnance.*

Hon. LEWIS CASS, *Secretary of War.*

A.

Statement of the money expended through the Ordnance department in the year 1832.

Officers' names.	Stations.	AMOUNT OF SUMS REMITTED, INCLUDING THE BALANCES IN THE HANDS OF AGENTS JANUARY 1, 1832.										Amounts expended and accounted for.	Balances remaining unexpended in the hands of the disbursing officers, December 31, 1832.	
		Appropriations.												
		National armories.	Current expenses of the ordnance service.	Arsenals.	Arsenal in Florida.	Amount of fortifications.	Arming and equipping the militia.	Extending walls and embankments.	Erecting forging shops.	Erect'g dwelling-houses.	Slating roofs of work-shops.			Total amount.
Charles Howard	Armory, Springfield, Massachusetts.	\$183,309 50					\$4,613 73		\$2,755 37		\$187,923 23	\$187,028 25	\$894 98	
Daniel Bedinger	Armory, Harper's Ferry, Virginia...	212,680 17					204 65	\$4,300 00		\$3,714 38	\$3,200 00	224,141 79	2,712 78	
Captain C. Mellon	Arsenal, Kennebec, Maine		\$1,373 31	\$5,130 00			6 48					6,509 79	252 77	
Major H. K. Craig	Arsenal, Watertown, Massachusetts.		2,086 38	1,900 00			129 27					4,115 65	3,633 94	
Lieut. J. M. Washington	Arsenal, Champlain, Vermont		926 13	20 41								946 54	946 54	
Lieut. Colonel G. Talcott.....	Arsenal, Watervliet, New York.....		19,033 23	10,055 76		\$167 41	11,947 29					41,263 69	37,376 35	
Captain J. S. Abeel	Arsenal, Rome, New York		1,969 09									1,969 09	1,969 09	
Major R. L. Baker.....	Arsenal, Alleghany, Pennsylvania ..		10,478 43	7,769 92			18,726 38					36,974 73	32,766 54	
Lieut. Colonel J. B. Walbach and Lieut. Colonel W. J. Worth	Arsenal, Frankford, Pennsylvania ..		5,758 05	4,374 65			1,142 58					11,275 28	10,041 14	
Lieut. Col. J. Bankhead and Lieut. R. D. A. Wade	Arsenal, Pikesville, Maine.....		637 20			137 70						774 90	625 20	
Captain J. Symington	Arsenal, Washington City		8,067 75	9,050 00		4,194 08	9,788 42					31,100 25	30,736 24	
M. C. Buck	Arsenal, Bellona, Virginia.....		3,019 32									3,019 32	2,950 47	
Lieut. Col. A. C. W. Fanning	Arsenal, Augusta, Georgia.....		2,070 00	150 00								2,220 00	1,678 17	
Lieut. R. B. Lee and Lieut. W. Wheelwright.	Arsenal, St. Louis, Missouri.....		4,801 17	8,810 01			150 00					13,761 18	13,397 05	
Capt. W. Smith and Capt. J. A. J. Bradford..	Arsenal, Mount Vernon, Alabama			16,021 06								16,021 06	16,021 06	
Lieut. F. L. Jones and Lieut. R. Anderson...	Arsenal, Baton Rouge, Louisiana ..		2,889 57	547 12			145 77					3,583 46	2,739 67	
Lieut. J. Howard	Depot, Detroit, Michigan Territory ..		972 53	2,900 00								3,872 53	2,394 18	
Captain S. Perkins.....	Depot, New York.....		2,725 86	1,200 00			25,017 26					28,943 12	22,637 31	
Captain B. Huger	Depot, Fort Monroe.....		5,261 72	5,260 00		8,898 28						19,420 00	13,513 38	
D. S. Gaillard	Depot, Charleston, South Carolina ..		345 69									345 69	188 47	
Captain J. Hills.....	Mount Vernon, Florida.....				\$5,000 00							5,000 00	1,561 44	
Captain T. C. Legato.....	Lead mines, Galena, Illinois.....		2,920 59									2,920 59	2,606 01	
Sundry persons for cannon and small arms ..						82,875 35	135,854 43					218,729 78	218,729 78	
Settlements on audited accounts.....		1,043 43	1,143 07				90 41					2,276 91	2,276 91	
Total.....		397,033 10	76,539 00	73,168 93	5,000 00	96,272 62	207,816 67	4,300 00	2,755 37	3,714 38	3,200 00	869,820 36	836,816 00	33,004 36

B.

Statement of the money expended through the Ordnance department during the first, second, and third quarters of the year 1833.

Stations.	Amount transmitted in the first, second, and third quarters of 1833, and remaining in officers' hands at the close of the year 1833.	Amount of accounts rendered in the first, second, and third quarters of the year 1833.	Balances remaining in officers' hands October 1, 1833.
Armory, Springfield, Massachusetts.....	\$161,887 14	\$141,632 14	\$20,355 00
Armory, Harper's Ferry, Virginia.....	183,500 31	174,613 93	8,886 38
Arsenal, Kennebec, Maine.....	5,938 77	2,548 25	3,390 52
Arsenal, Watertown, Massachusetts.....	5,900 21	3,456 23	2,443 98
Arsenal, Champlain, Vermont.....	310 00	310 00	.....
Arsenal, Watervliet, New York.....	35,287 34	34,350 28	937 06
Arsenal, Rome, New York.....	1,500 00	1,469 67	30 33
Arsenal, Alleghany, Pennsylvania.....	22,633 19	17,947 56	4,685 63
Arsenal, Frankford, Pennsylvania.....	12,512 93	10,411 02	2,101 91
Arsenal, Pikesville, Maryland.....	649 70	545 41	104 29
Arsenal, Washington City.....	21,416 02	20,366 85	1,049 17
Arsenal, Bellona, Virginia.....	1,229 85	1,218 83	11 02
Arsenal, Augusta, Georgia.....	541 83	220 20	321 63
Arsenal, St. Louis, Missouri.....	15,737 73	12,599 78	3,137 95
Arsenal, Mount Vernon, Alabama.....	13,300 00	6,142.04	7,157 96
Arsenal, Baton Rouge, Louisiana.....	2,347 79	1,526 29	821 50
Arsenal, Florida, Florida Territory.....	30,338 56	22,704 21	7,634 35
Depot, Detroit, Michigan Territory.....	24,910 55	24,910 55	.....
Depot, New York.....	35,637 58	28,906 65	6,730 93
Depot, Fort Monroe.....	20,736 62	17,290 78	3,445 84
Depot, Charleston, South Carolina.....	3,595 73	3,586 00	9 73
Lead mines, Galena, Illinois.....	4,536 58	3,738 53	798 05
Sundry contractors for cannon and small arms.....	196,634 11	196,634 11	.....
Settlements on audited accounts.....	5,531 74	5,531 74	.....
Total.....	806,714 28	732,661 05	74,053 23

ORDNANCE OFFICE, Washington, November 15, 1833.

GEO. BOMFORD, Colonel of Ordnance.

C.

Statement of work done, and articles procured and repaired, at the arsenals and armories of the United States, from October 1, 1832, to September 30, 1833, inclusive.

MADE AND PROCURED.			
6-pounder brass cannon.....	1	Sponges and rammers.....	270
32-pounder iron cannon.....	212	Worms and staves.....	120
24-pounder iron cannon.....	1	Ladles and staves.....	70
6-pounder iron cannon.....	2	Tompsons.....	136
Muskets, complete.....	36,471	Lead aprons.....	84
Hall's rifles, complete.....	1,520	Tarpaulins.....	6
Hall's rifles, without bayonets.....	3,270	Priming horns.....	24
Swords, artillery.....	1,100	Handspikes.....	91
Screw-drivers.....	12,309	Prolongs.....	45
Wipers.....	21,341	Bricoles.....	1,043
Ball-screws.....	3,681	Implement straps.....	210
Spring vices.....	1,209	Portfire cases.....	16
Flint caps.....	33,688	Portfire clippers.....	35
42-pounder casemate carriage.....	1	Tube pouches or boxes.....	5
32-pounder casemate carriage.....	1	Gunners' haversacks.....	13
24-pounder casemate carriages.....	9	Sponge buckets.....	92
24-pounder barbette carriages.....	17	Sponge covers.....	292
12-pounder field carriages.....	4	Linstocks.....	69
6-pounder field carriages.....	65	Portfire stocks.....	192
10-inch sea-coast mortar beds.....	5	Gunners' belts.....	8
8-inch howitzer carriage.....	1	Thumbstalls.....	50
5½-inch howitzer carriages.....	2	Cannon wads.....	3,185
6-pounder caissons.....	8	Cannon scrapers.....	8
Iron truck wheels.....	46	Garrison water-buckets.....	42
Iron traverse wheels.....	53	Budge barrels.....	51
		Verifying instruments for cannon and small arms.....	19

D.

Statement of the arms, accoutrements, &c., procured, and of the expenditures made under the act for arming and equipping the militia, from the 1st October, 1832, to the 30th September, 1833.

ARMS, ETC., PROCURED.

Muskets, complete.....	11, 180
Rifles, (Hall's,) complete.....	1, 500
Sets of infantry accoutrements.....	4, 549
Sets of rifle accoutrements.....	1, 901
Rifle flasks, copper.....	6, 251
Belt plates.....	3, 611
Artillery swords.....	1, 100
Artillery sword belts.....	3, 016
Sabre belts.....	1, 720
Cavalry cartridge-boxes.....	1, 307
Holsters, pairs.....	1, 085
Hides of buff leather.....	800
Six-pounder iron cannon.....	1
Six-pounder cannon balls.....	6, 435
Six-pounder field carriages, with equipments, complete.....	63
Twelve-pounder field carriages, with equipments.....	4
Six-pounder field carriages, timber, sets.....	47
<hr/>	
Expenditures, viz:	
Amount paid for arms, &c., procured.....	\$229, 092 51
Amount paid for inspection, packing boxes, storage, and distribution of the arms, &c., to the several States and Territories.....	2, 051 54
	<hr/>
	231, 144 05
	<hr/>

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 15, 1833.*

E.

Apportionment of arms to the militia for the year 1832, under the act of 1808, for arming and equipping the whole body of the militia.

States and Territories.	Date of return.	Number of militia.	No. of arms apportioned in muskets.
Maine.....	1832	40, 006	455
New Hampshire.....	1832	28, 025	319
Massachusetts.....	1832	46, 796	533
Connecticut.....	1832	26, 034	296
Rhode Island.....	1832	5, 950	69
Vermont.....	1824	25, 581	291
New York.....	1832	186, 223	2, 122
New Jersey.....	1829	39, 171	447
Pennsylvania.....	1832	182, 285	2, 077
Delaware.....	1827	9, 229	105
Maryland.....	1832	46, 450	530
Virginia.....	1832	102, 971	1, 173
North Carolina.....	1832	65, 754	750
South Carolina.....	1832	51, 112	582
Georgia.....	1831	42, 832	488
Kentucky.....	1832	65, 852	750
Tennessee.....	1832	72, 991	832
Ohio.....	1832	132, 161	1, 506
Louisiana.....	1829	14, 808	169
Indiana.....	1832	53, 913	614
Mississippi.....	1830	13, 724	156
Illinois.....	1831	27, 336	312
Alabama.....	1829	22, 446	255
Missouri.....	1830	5, 326	61
Michigan.....	1831	5, 476	62
Arkansas.....	1825	2, 028	23
Florida.....	1831	827	9
District of Columbia.....	1832	1, 249	14
Total.....		1, 316, 615	15, 000

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 15, 1833.*

F.

Statement of the ordnance and ordnance stores distributed to the militia under the act of April, 1808, from the 1st October, 1832, to the 30th September, 1833.

	Equal in value to muskets.
5 six-pounder iron cannon and carriages, with equipments, &c., complete.....	154
100 rifles.....	123
143 Hall's rifles.....	193
544 muskets, complete.....	544
1, 220 pistols.....	751
610 sabres.....	281
400 artillery swords.....	131
1, 047 sets rifle accoutrements.....	176
60 sabre belts.....	3
60 pair holsters.....	14
100 sets accoutrements for Hall's rifles.....	12
50 sets infantry accoutrements.....	9
100 artillery sword belts.....	9
60 cavalry cartridge-boxes.....	2
Total.....	2, 402

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 15, 1833.*

G.

Statement of the artillery, small arms, accoutrements, and other ordnance stores issued to the troops and the engineer department, from October 1, 1832, to September 30, 1833.

24-pounder iron cannon.....	28	Bayonet scabbards.....	37
6-pounder iron cannon.....	3	Bayonet scabbard belts.....	3
24-pounder casemate carriages, complete.....	12	Gun slings.....	3
24-pounder barbette carriages, implements, &c., complete.....	16	Brushes and picks.....	33
6-pounder field carriages, implements, &c., complete.....	3	Sets of infantry accoutrements.....	1, 135
Sponges for cannon.....	76	Sword belts.....	3
Bricoles.....	92	Belt plates.....	6
Prolongs.....	6	Musket flints.....	16, 650
Tarpaulins for guns.....	2	Cannon powder, pounds.....	10, 700
Linstocks.....	13	Musket powder, pounds.....	900
Portfire stocks.....	13	Cannon cartridges.....	24
Gunners' haversacks.....	8	Musket cartridges.....	196, 250
Gins and falls.....	5	Cartridge bags, flannel.....	4, 540
Sponges and rammers.....	19	Flannel, yards.....	25
Ladles and worms.....	4	Cannon cartridge, musket cartridge, and portfire paper, pounds.....	225
Handspikes.....	14	Portfires.....	436
24-pounder cannon balls.....	606	Priming tubes.....	16, 500
24-pounder canister shot, stands of.....	100	Slowmatch, pounds.....	126
12-pounder cannon balls.....	100	Pulverized sulphur, pounds.....	100
6-pounder cannon balls.....	400	Fuses, number.....	50
24-pounder grape-shot, stands of.....	100	Pulverized charcoal, pounds.....	100
18-pounder grape-shot.....	100	Litharge, pounds.....	5
18-pounder canister shot.....	100	Lampblack, pounds.....	11
12-pounder grape-shot.....	100	Paper cartridge bags, flannel bottoms.....	600
12-pounder canister shot.....	100	Whiting, pounds.....	20
6-pounder grape-shot.....	300	Cast steel, pounds.....	10
6-pounder canister shot.....	100	Cannon scrapers, number.....	2
Sheet brass, pounds.....	2	Files, number.....	18
Bar copper, pounds.....	10	Signal rockets.....	100
Fuse saws, number.....	2	Lead, pounds.....	532, 042
Fuse setters, number.....	2	Twine, pounds.....	9
Fuse rasps, number.....	2	Lacquer for cannon, gallons.....	23
Fuse mallets, number.....	2	Paints, assorted, pounds.....	14
Gunners' gimlets, number.....	4	Linseed and neatsfoot oil, gallons.....	34
Gunners' hammers, number.....	3	Spirits of turpentine, gallons.....	8
Copper adzes and drivers, number.....	3	Paint brushes.....	27
Muskets, completed.....	264	Shell hooks.....	2
Rifles, completed.....	180	Copper funnels, set.....	1
Sergeants' and musicians' swords.....	3	Powder measures, number.....	13
Cavalry sabres.....	50	Shot gauges, sets.....	7
Cartridge-boxes.....	6	Plank, two-inch, feet of.....	200
Cartridge-box belts.....	3	Nails, pounds.....	6
		Priming horns, complete.....	58

Statement of the artillery, small arms, accoutrements, and other ordnance stores—Continued.

Copper tacks.....	1, 200	Laboratory knives.....	12
Portfire cases.....	7	Scales and weights.....	1
Thum-bstalls.....	15	Yarn, pounds.....	50
Tube pouches.....	10	Beeswax, pounds.....	28
Lead, red, pounds.....	5	Antimony, pounds.....	10
Lead, white, pounds.....	269	Whiskey, gallons.....	10
Cartridge formers, sets.....	2	Pitch, barrels.....	1
Musket bullet moulds.....	3	Compasses, pairs.....	2
Bullet clipper.....	1	Sieves.....	4
Priming tubes, empty.....	4, 000	Portfire clippers.....	8
Mealed powder, pounds.....	200	Junk wads.....	200
Scissors, pairs.....	24		

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 15, 1833.*

H.

Statement of the operations of the United States lead mines in the vicinity of Fever river, from the 30th September, 1832, to the 30th September, 1833.

Pounds of lead made during the year.....	7, 941, 792
Pounds of lead which have accrued as rent the present year.....	472, 645
Rent lead remaining due September 30, 1832.....	132, 183
Total of rents due in the year ending September 30, 1833.....	604, 828
Pounds of lead received as rent in the year ending September, 1833.....	393, 734
Rents remaining due September 30, 1833.....	211, 094

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 15, 1833.*

I.

Statement of the lead made annually at the United States lead mines from the year 1821, when their superintendence was transferred from the Treasury to the War Department, to the 30th September, 1833.

Periods.	Fever river.	Missouri.	Total.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Lead made from 1821 to September 30, 1823.....	335, 130		335, 130
Lead made in the year ending September 30, 1824.....	175, 220		175, 220
Do.....do.....do.....1825.....	664, 530	386, 590	1, 051, 120
Do.....do.....do.....1826.....	958, 842	1, 374, 962	2, 333, 804
Do.....do.....do.....1827.....	5, 182, 180	910, 380	6, 092, 560
Do.....do.....do.....1828.....	11, 105, 810	1, 205, 920	12, 311, 730
Do.....do.....do.....1829.....	13, 343, 150	1, 198, 160	14, 541, 310
Do.....do.....do.....1830.....	8, 323, 998	8, 060	8, 332, 058
Do.....do.....do.....1831.....	6, 381, 900	67, 180	6, 449, 080
Do.....do.....do.....1832.....	4, 281, 876		4, 281, 876
Do.....do.....do.....1833.....	7, 941, 792		7, 941, 792
Total.....	58, 694, 488	5, 151, 252	63, 845, 740

NOTE.—The total amount of rent accruing for the above periods is 5,246,839 pounds.

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 15, 1833.*

No. 9.

REPORT OF THE SURGEON GENERAL.

SURGEON GENERAL'S OFFICE, *October 23, 1833.*

SIR: In compliance with your instructions, I have to state the amount drawn and remitted to the acting apothecary at New York during the first three quarters of this year has been \$3,700; the amount of accounts rendered and settled in the same period has been \$6,458.

There has been, during the same period, advanced to the officers of the Quartermaster's department, on account of the Medical department, \$7,804 72, for which accounts have been rendered and settled to the amount of \$4,460 47.

Very respectfully, your obedient servant,

JOS. LOVELL, *Surgeon General.*

HON. LEWIS CASS, *Secretary of War.*

No. 10.

REPORT OF THE COMMISSARY GENERAL OF PURCHASES.

COMMISSARY GENERAL'S OFFICE, *Philadelphia, October 10, 1833.*

SIR: In obedience to your instructions, dated on the 26th of April and 27th of September, 1833, I have prepared and have now the honor of enclosing my moneyed estimates for 1834, marked A and B, as follows, viz:

A. For clothing, camp equipage, &c., for one year, ending October 31, 1835.....	\$230, 748 01
B. For the expenses of the Commissary General's office for the year 1834.....	7, 050 00
Total.....	<u>237, 798 01</u>

I likewise enclose six statements, Nos. 1 to 6, prepared by order of the War Department, as follows, viz:

No. 1. Of moneys drawn from the appropriation for the Purchasing department (for 1833) during the first three quarters of 1833.

No. 2. Of moneys received and disbursed during the first three quarters of 1833, on account of the Purchasing department.

No. 3. Of moneys received and disbursed during the first three quarters of 1833, on account of furnishing the regiment of United States dragoons with clothing, equipments, &c.

No. 4. Comparative statement of the cost of clothing, &c., for the United States army during the years 1832, 1833, and 1834.

No. 5. Statement of the cost of clothing for the United States army during the year 1834.

No. 6. List of persons employed in the Purchasing department during the year 1833, showing the amount of compensation allowed to each, and the State or country in which he was born.

I have not deemed it safe to make any deduction from the moneyed estimate for supplies of clothing, &c., that may remain on hand after the issues for this year have been made, not knowing to what extent orders may have to be drawn on the supplies in store and to be in store previous to the termination of the year.

The orders for the recruiting service, in addition to the full supplies for the respective regiments, having greatly increased the issues beyond the amount anticipated, leaves a doubt on my mind as to the propriety or safety of making any deduction.

A difference between the cost of some articles of clothing (particularly coats) will be observed in favor of the provision for 1834. The alteration of the uniforms obliged me to pay a high price for those to be provided for 1833. The time and experience afforded by the period of one year has enabled me to reduce the cost of the coats from 62 cents to 70 cents each.

If any further information is necessary in relation to statement No. 6, I beg leave to refer you to my communications to General Wool and to Major Garland, dated April 9 and 12, 1833.

I have the honor to be, sir, with high respect, your most obedient servant,

C. IRVINE, *Commissary General of Purchases.*

Hon. LEWIS CASS, *Secretary of War.*

P. S. The duplicates will be forwarded early next week.

No. 1.

Statement of the moneys drawn from the appropriation for the Purchasing department for 1833 during the first three quarters of the year 1833.

1833.		
March 21	By Secretary of the Treasury's warrant, No. 515.....	\$35, 000 00
May 10	.....do.....do.....1, 026.....	26, 124 87
June 10	.....do.....do.....1, 285.....	44, 379 82
July 12	.....do.....do.....1, 545.....	29, 336 31
August 12	.....do.....do.....1, 858.....	33, 033 34
Sept. 9	.....do.....do.....2, 046.....	26, 397 00
		<u>194, 271 34</u>

COMMISSARY GENERAL'S OFFICE, *Philadelphia, October 10, 1833.*

C. IRVINE, *Commissary General of Purchases.*

Hon. LEWIS CASS, *Secretary of War.*

No. 2.

Statement of moneys received and disbursed during the first three quarters of 1833 on account of the Purchasing department.

To amount of moneys drawn from the Treasury Department between January 1 and September 30, 1833, as per statement No. 1.....	\$194, 271 34
By amount expended during the 1st quarter of 1833, passed to the credit of C. Irvine, commissary general of purchases, per account settled by the Second Auditor of the Treasury Department.....	\$25, 575 70
By amount expended during the 2d quarter of 1833 and credited as above, per account settled by the Second Auditor of the Treasury Department.....	83, 452 37
By amount expended during the 3d quarter of 1833, as per account in preparation for transmission to the Second Auditor of the Treasury Department for examination and settlement.....	87, 543 31
	<u>196, 571 38</u>
Deduct this sum, \$10,053, belonging to the appropriation of 1832, and remaining unexpended January 1, 1833, as per settlement by Second Auditor of the Treasury Department.....	10, 053 00
Amount of disbursements on account of appropriation for 1833.....	<u>186, 518 38</u>
Balance unexpended of moneys received on account of the appropriation for 1833 during the first three quarters of said year.....	<u>7, 752 96</u>

COMMISSARY GENERAL'S OFFICE, Philadelphia, October 10, 1833.

C. IRVINE, Commissary General of Purchases.

Hon. LEWIS CASS, Secretary of War.

No. 3.

Statement of moneys received and disbursed during the first three quarters of the year 1833 on account of furnishing the regiment of United States dragoons with clothing, equipments, &c.

To amount of moneys drawn from the Treasury Department, say warrant No. 1541, July 12, 1833.....	\$20, 000 00
By amount expended during the 2d quarter of 1833, passed to the credit of C. Irvine, commissary general of purchases, as per account settled by the Second Auditor of the Treasury Department.....	\$861 62
By amount expended during the 3d quarter of 1833, as per account in preparation for transmission to the Second Auditor of the Treasury Department for examination and settlement.....	16, 134 11
	<u>16, 995 73</u>
Balance unexpended of moneys received during the first three quarters of 1833 on account of the regiment of United States dragoons.....	<u>3, 004 27</u>

COMMISSARY GENERAL'S OFFICE, Philadelphia, October 10, 1833.

C. IRVINE, Commissary General of Purchases.

Hon. LEWIS CASS, Secretary of War.

No. 4.

Comparative statement of the cost of clothing, &c., for the United States army during the years 1832, 1833, and 1834.

Garments, &c.	Price in 1832.	Price in 1833.	Price in 1834.
Forage caps, artillery and infantry.....	\$1 30	\$0 75	\$0 75
Forage caps, dragoons.....		87½	87½
Uniform caps, artillery and infantry, with metal equipments.....	2 28	2 72	2 72
Uniform caps, dragoons.....		2 78	3 56
Epaulettes for non-commissioned staff, pairs.....		2 37½	2 37½
Epaulettes for corporals, pairs.....		1 10	1 10
Epaulettes for sergeants, pairs.....		1 30	1 30
Shoulder knots, (worsted wings,) pairs.....	53	60	60
Aiguillettes, each.....		1 40	1 40
Sashes, each.....		2 25	2 25
Pompons, non-commissioned staff.....		37½	37½
Pompons, artillery.....	20	20	23
Pompons, infantry.....	20	20	20
Woollen overalls, sky-blue, sergeants, (gray).....	2 37½	307½	3 07½

No. 4.—Comparative statement of the cost of clothing, &c.—Continued.

Garments, &c.	Price in 1832	Price in 1833	Price in 1834.
Woollen overalls, sky-blue, privates.....	\$2 37½	\$2 75½	\$2 75½
Drilling overalls, privates.....	59½	61½	61½
Drilling overalls, sergeants.....	82	84½	84½
Infantry sergeants' drilling jackets, with sleeves.....	1 01	1 01	1 01
Infantry privates' drilling jackets, with sleeves.....	75	75	75
Artillery privates' drilling jackets, with sleeves.....	80	80	80
Artillery sergeants' drilling jackets, with sleeves.....	1 06	1 06	1 06
Artillery sky-blue cloth jackets, with sleeves, (gray).....	2 95	3 12½	3 12½
Infantry sky-blue cloth jackets, with sleeves, (gray).....	2 89	3 06½	3 07½
Cotton shirts, privates.....	51	51	51
Cotton shirts, sergeants.....	64½	64½	64½
Flannel shirts.....	1 29	1 29	1 29
Drawers, pairs, Canton flannel, (flannel).....	97½	60	60
Laced boots, pairs.....	1 44	1 50	1 50
Stockings.....	35½	35½	35½
Blankets.....	3 00	2 87½	3 00
Greatcoats, sky-blue cloth, (gray).....	7 52	7 93¾	7 93¾
Leather stocks.....	15	15	15
Knapsacks.....	1 51	1 60	1 60
Haversacks.....	25¾	25¾	25¾
Infantry coats, sergeants, corporals, and privates, average.....	5 30½	7 66	7 04
Infantry coats, musicians.....	7 52	8 50	7 80
Infantry coats, chief musicians.....	7 52	10 31	9 61
Infantry coats, sergeant majors and quartermaster sergeants.....		9 30	8 68
Artillery coats, sergeants, corporals, and privates, average.....	5 48	7 82	7 20
Artillery coats, musicians.....	7 67	8 83	8 13
Artillery coats, sergeant majors and quartermaster sergeants.....		10 13	9 51
Cloth jackets, dragoons.....		4 99	4 99
Dragoon privates' woollen overalls.....		4 03	4 03
Dragoon sergeants' woollen overalls.....		4 20	4 20
Dragoon drilling overalls, privates.....		1 11	1 11
Dragoon drilling overalls, sergeants.....		1 40	1 40
Dragoon uniform coats, blue.....		7 12	7 12
Dragoon musicians' coats.....		7 80	7 80
Dragoon greatcoats.....		9 44	9 44

COMMISSARY GENERAL'S OFFICE, Philadelphia, October 10, 1833.

C. IRVINE, Commissary General of Purchases.

Hon. LEWIS CASS, Secretary of War.

No. 5.

Statement of the cost of clothing, &c., for the United States army during the year 1834.

Forage caps, artillery and infantry.....	\$0 75
Forage caps, dragoons.....	87½
Uniform cap, artillery and infantry, with metal equipments.....	2 72
Uniform cap, dragoons, with metal equipments, except grenade.....	2 78
Epaulettes for non-commissioned staff, pairs.....	2 37½
Epaulettes for corporals, pairs.....	1 10
Epaulettes for sergeants, pairs.....	1 30
Shoulder knots for infantry and artillery, pairs.....	60
Aiguillettes, each.....	1 40
Sashes.....	2 25
Pompons, non-commissioned staff.....	37½
Pompons, artillery.....	23
Pompons, infantry.....	20
Woollen overalls, sky-blue, sergeants.....	3 07½
Woollen overalls, sky-blue, privates.....	2 75½
Drilling overalls, privates.....	61½
Drilling overalls, sergeants.....	84½
Infantry sergeants' drilling jackets, with sleeves.....	1 01
Infantry privates' drilling jackets, with sleeves.....	75
Artillery privates' drilling jackets, with sleeves.....	80
Artillery sergeants' drilling jackets, with sleeves.....	1 06
Artillery sky-blue cloth jackets, with sleeves.....	3 12½
Infantry sky-blue cloth jackets, with sleeves.....	3 07½
Cotton shirts, privates.....	51
Cotton shirts, sergeants.....	64½

No. 5.—*Statement of the cost of clothing, &c.*—Continued.

Flannel shirts	\$1 29
Drawers, Canton flannel, pairs	60
Laced bootees, pairs	1 50
Stockings, pairs	35½
Blankets	3 00
Greatcoats, sky-blue cloth	7 93¼
Leather stocks	15
Knapsacks	1 60
Haversacks	25¾
Infantry coats, sergeants, corporals, and privates, each	7 04
Infantry coats, musicians	7 80
Infantry coats, chief musicians	9 61
Infantry coats, sergeant majors and quartermaster sergeants	8 68
Artillery coats, sergeants, corporals, and privates, each	7 20
Artillery coats, musicians	8 13
Artillery coats, sergeant majors and quartermaster sergeants	9 51
Cloth jackets, dragoons	4 99
Dragoon privates' woollen overalls*	4 03
Dragoon sergeants' woollen overalls*	4 20
Dragoon drilling overalls, privates*	1 11
Dragoon drilling overalls, sergeants*	1 40
Dragoon uniform coats, blue	7 12
Dragoon musicians' coats	7 80
Dragoon greatcoats*	9 44
Dragoon shoulder knots, (brass)	97
Dragoon brass grenades	18

The prices of the articles for dragoons marked thus *, being overalls and greatcoats, appear to be high, and is owing to the great quantity of materials used in them, the overalls being made shelavale fashion and the great coats having a cape unusually large.

COMMISSARY GENERAL'S OFFICE, *Philadelphia, October 10, 1833.*

C. IRVINE, *Commissary General of Purchases.*

Hon. LEWIS CASS, *Secretary of War.*

No. 10½.

Report from the Clothing bureau.

CLOTHING BUREAU, *Washington, December 2, 1833.*

SIR: I have the honor to report that the clothing furnished the army for the year commencing November 1, 1833, is of greatly superior quality to any which has heretofore been issued, and that the cost has not materially varied. In 1830 the cost of a soldier's clothing per year was \$31 29; in 1832, \$30 55, and in 1834 it will be \$30 93.

I am informed by the commissary general of purchases that owing to a rise in woollens and the large quantity required to be provided in consequence of a change of uniform, the effect has been not only to keep up the price of clothing but to prevent a portion of the troops from receiving an adequate supply as early in the season as has been customary.

It is proper to remark that the new uniform has given general satisfaction, both as to style and convenience, so far as information has been received at this bureau from the military posts.

Very respectfully, I have the honor to be, your obedient servant,

JNO. GARLAND, *Major, United States Army.*

Hon. LEWIS CASS, *Secretary of War.*

23D CONGRESS.]

No. 552.

[1ST SESSION.]

TRANSFER OF APPROPRIATION FOR THE ARMY FROM THE SUBSISTENCE TO THE MEDICAL DEPARTMENT.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 9, 1833.

To the House of Representatives:

I transmit herewith to the House of Representatives a communication from the War Department, showing the circumstances under which the sum of \$5,000, appropriated for subsistence of the army, was transferred to the service of the medical and hospital department, and which, by the law authorizing the transfer, are required to be laid before Congress during the first week of their session.

ANDREW JACKSON.

WASHINGTON, *December 6, 1833.*

WAR DEPARTMENT, *December 6, 1833.*

SIR: I transmit herewith a letter received from the surgeon general, dated 11th November ultimo, showing the necessity of a transfer of \$5,000, funds for the service of the medical and hospital department, and for what objects it is designed. Also, a letter from the Second Comptroller, dated 5th instant, stating that the transfer has been made accordingly from the appropriation for "subsistence of the army," under the authority vested in the President of the United States by the acts of 3d March, 1809, and 1st May, 1820, to be laid before Congress during the first week of their session, as required by the first-named act.

Very respectfully, your most obedient servant,

LEWIS CASS.

The PRESIDENT of the *United States.*

SURGEON GENERAL'S OFFICE, *November 11, 1833.*

SIR: The payments to private physicians having exceeded the amount estimated for the current year in consequence of the number necessarily employed to accompany detachments on the march and at the military posts, chiefly from the prevalence of the cholera on the southern and western frontiers, an estimate has been made for arrearages of the Medical department to the amount of \$5,000; and as this sum will be required to meet current expenses, I have to request that, agreeably to the 5th section of an act approved May 1, 1820, a transfer of that amount may be made from the appropriation for "subsistence of the army," to that for "medical and hospital department," having been informed that the state of the former appropriation will admit of such transfer.

Very respectfully, your obedient servant,

JOS. LOVELL, *Surgeon General.*

Hon. LEWIS CASS, *Secretary of War.*

TREASURY DEPARTMENT, *Second Comptroller's Office, December 5, 1833.*

SIR: The President of the United States, under the authority vested in him by the acts of 3d March, 1809, and 1st May, 1820, did, on the 22d November last past, by transfer appropriation warrant No. 1, direct a transfer to be made of the sum of five thousand dollars (\$5,000) from "subsistence of the army," to "medical and hospital department." The first-named act requires that a special account of moneys thus transferred shall be laid before Congress during the first week of their next ensuing session. I have, therefore, the honor to report to your department the fact of the transfer.

I am, very respectfully, sir, your obedient servant,

J. B. THORNTON.

Hon. LEWIS CASS, *Secretary of War.*

23D CONGRESS.]

No. 553.

[1ST SESSION.]

APPLICATION OF NEW HAMPSHIRE FOR A MORE PERFECT AND UNIFORM ORGANIZATION OF THE MILITIA OF THE UNITED STATES.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 12, 1833.

Resolved by the senate and house of representatives in general court convened, That the organization of the militia of the United States, being a matter entrusted by the Constitution to the general government, requires its attention, and can be only and efficiently and satisfactorily done by that government.

Resolved, That our senators in Congress be, and are hereby, instructed, and our representatives requested, to use their exertions to procure the passage of a law providing for a more perfect and uniform organization of the militia of the several States of the Union.

Resolved, That his excellency the governor of this State be directed to transmit to each of our senators and to our representatives in Congress a copy of the foregoing resolutions, and also a copy to the governors of the other States in the Union, with a view that the same may be submitted to their different legislatures.

Approved July 5, 1833.

A true copy:

RALPH METCALF, *Secretary of State.*

23D CONGRESS.]

No. 554.

[1ST SESSION.]

THE RIGHTS OF A SOLDIER NOT INVALIDATED BY APPEARING ON RETURNS AS HAVING
"DESERTED," THERE BEING PROOF OF HIS RETURN TO THE ARMY.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 19, 1833.

Mr. WARD, from the Committee on Military Affairs, to whom was referred the resolution requiring the committee to inquire into the expediency of granting a land warrant to the widow and children of George Ludlum, deceased, a soldier of the late war, reported:

That this subject has before been submitted to them, and that on the 21st day of January, 1833, they made upon it a favorable report, to which they now refer, as expressing, in detail, the reasons upon which that report was founded.

JANUARY 21, 1833.

The Committee on Military Affairs, to whom was referred the resolution requiring the committee to inquire into the expediency of granting a land warrant to the widow and children of George Ludlum, deceased, a soldier of the late war, submit the following report:

It appears from the certificate of the adjutant general, bearing date the 7th day of April, 1832, that George Ludlum enlisted as a private in Captain Van Buren's company of the 29th regiment United States infantry, on February 10, 1814, for the period of during the war, and that he is entered on the inspection returns of said Van Buren's company as having deserted on April 28, 1815.

It also appears from the certificate of Lieutenant Burr, of said regiment, bearing date June 13, 1815, that said Ludlum was absent, without *leave*, at the time the troops were paid off and discharged, but that he returned to Plattsburg a short time afterwards. It also appears that said Ludlum died some time after the close of the war, leaving a widow and several children.

The committee are of opinion that, as said Ludlum continued in the service until after the close of the war, and as he returned to Plattsburg a short time after the troops had been paid off, it is manifest he did not leave the service with a view of deserting, and they therefore consider that he was entitled to his discharge, and have reported a bill for the relief of his widow and children.

ADJUTANT GENERAL'S OFFICE, *Washington, April 7, 1832.*

By the inspection returns of Captain Van Buren's company of the line, 29th infantry, for February, 1815, it appears that George Ludlum, a private, enlisted on the 10th day of February, 1814, to serve during the war, and was then present. The inspection returns for April, 1815, report him to have deserted on April 28, 1815.

R. JONES, *Adjutant General.*

CAMP PLATTSBURG, *March 20, 1815.*

George Ludlum of the 29th regiment, Captain Van Buren's company, has permission to pass and re-pass the guards from the date hereof until further orders, being on duty regulated by me.

S. BURR, *Lieutenant 29th Infantry Commanding Company.*
ROCHESTER, *Captain 29th Company.*

PLATTSBURG, *June 13, 1815.*

This is to certify that George Ludlum, a private, formerly belonging to Captain Van Buren's company of the 29th infantry, is discharged from the armies of the United States; he being absent without leave at the time the company was paid off, is the reason that he has not a regular discharge.

S. BURR, *Lieutenant of 29th Infantry.*

I certify that I held the office of captain in the 29th regiment United States infantry during the late war, and was well acquainted with said Ludlum; and I further certify that he died some time after the close of the war, leaving a widow and several children.

A. WARD, *M. C.*

APRIL 7, 1832.

23D CONGRESS.]

No. 555.

[1ST SESSION.]

APPLICATION OF MISSOURI FOR THE ESTABLISHMENT OF A DEPOT OF ARMS NEAR THE NORTHWESTERN BOUNDARY OF THAT STATE.

COMMUNICATED TO THE SENATE DECEMBER 23, 1833.

To the honorable the Senate and House of Representatives of the United States in Congress assembled:

Your memorialists, the general assembly of the State of Missouri, would respectfully represent: That the exposed and unprotected frontier of this State lying west and north is an object of great anxiety to your memorialists. Rumors of Indian hostilities are unceasingly coming to our ears. Our Indian war is scarcely over before we are alarmed with the portentous news that the savages are making preparation for another. Our frontier inhabitants are unprotected, and deficient in arms and other munitions of war. They have not the means of protecting themselves against a sudden incursion of the savages. We respectfully ask, therefore, that the means of self-defence be placed within their reach, and that a depot of arms and the necessary munitions of war be located by Congress on the Upper Missouri and Mississippi rivers, at or near the northwestern boundary of the State. Such an auxiliary in time of war could not fail to afford a speedy and effectual succour, and in time of peace would greatly tend to restrain and preserve within proper bounds the turbulent and revengeful spirit of the border Indian tribes.

All which is most respectfully submitted.

Resolved, That the secretary of state forward to our senators and representatives in Congress copies of the foregoing memorial, in order that the same be presented forthwith to that honorable body for their consideration.

Approved February 12, 1833.

STATE OF MISSOURI:

The foregoing is a correct copy of the original now on file in the office of secretary of state of the State aforesaid.

In testimony whereof, I have herewith set my hand and affixed my official seal the 15th day of [L. s.] November, A. D. 1833.

JOHN C. EDWARDS, *Secretary of State.*

23D CONGRESS.]

No. 556.

[1ST SESSION.]

APPLICATION OF NEW YORK FOR AMENDMENTS TO THE MILITIA SYSTEM OF THE UNITED STATES.

COMMUNICATED TO THE SENATE DECEMBER 24, 1833.

RESOLUTIONS of the legislature of New York, to obtain such amendments of the militia system as may lessen its burden without impairing its efficiency.

The Constitution of the United States gives to Congress the power to provide for organizing, arming, and disciplining the militia. In pursuance of this grant of authority an act of Congress was passed on the 8th May, 1792, entitled "An act more effectually to provide for the national defence by establishing a uniform militia throughout the United States."

Under the provisions of this act every able-bodied free white male citizen between the ages of eighteen and forty-five years is required to be enrolled in the militia, and to provide himself with the necessary arms and equipments.

The condition of the country at that epoch in the history of the Union was such as to render an extensive enrolment indispensable. The federal government had but just gone into operation; our frontiers were exposed to the incursions of numerous Indian tribes; our population was thin and scanty when compared with the vast surface over which it was spread, and there was cause to apprehend that our dissensions with Great Britain, in consequence of the existence of unsettled questions between the two countries, might be revived. Under the influence of these impending dangers the militia system was framed and established, and, as might have been expected from the state of the country, its leading feature was an extensive enrolment.

Since the law of 1792 no act of Congress has been passed materially altering its provisions. On the other hand, the state of the country is totally changed. The sources of danger are diminished, and are more remote. The Indian tribes which hung upon our frontiers at the organization of the federal government have either migrated to more distant regions or have been subdued by the joint force of civilization and physical power. Our population is comparatively dense and powerful. We have no existing differences with foreign countries which are likely to lead to a breach of our relations of friendship with them.

Under this change of circumstances a less extensive enrolment would seem adequate to all the objects for which a militia is maintained. While the committee express this opinion, they wish to be understood as advocating no change in the militia system which would have the effect of impairing its efficiency. They consider it as intimately connected with the maintenance of our internal tranquility, and with the

preservation of that spirit of freedom on which the durability of our political institutions essentially depends. Every citizen is, from the nature of our social organization, a part of the public defence; and he is also, in the last resort, in common with his fellow-citizens, the safeguard of the liberties of all against the government itself. Thus it is that amendments to the Constitution of the United States have provided that "the right of the people to keep and bear arms shall not be infringed." It seems indispensable to the accomplishment of the objects referred to that every citizen should be armed, and that he should be subjected for a course of years to a system of exercise and discipline. The system should be limited in its application to such a period as will be sufficient to qualify those subjected to it for acting in concert and with efficiency on sudden emergencies until a more permanent force can be provided.

This object may be attained consistently with that of reducing the period of enrolment, and consequently diminishing the numerical force of the militia. For instance, if the enrolment in this State were to be diminished so as to include only such persons as are between the ages of twenty-one and forty years, our numerical force would be reduced from about 190,000 to about 140,000 men, and yet every citizen would pass through nineteen years of military discipline. As has already been observed, the act of Congress of 1792 requires every citizen duly enrolled to provide his own arms and equipments. This your committee consider wrong in principle and oppressive in practice.

In the price of arms the rich and the poor are required to pay the same amount. The contribution is a poll-tax, having no reference whatever to property. The personal service which every citizen renders is, of necessity, equal, as it is not capable of apportionment between individuals; and it may be considered just, because the personal rights of all are equal. But in providing arms and equipments every citizen renders a pecuniary service; and to make the contribution just, it should be apportioned upon the basis of property.

The established system is as unjust in principle as a rule of taxation which should require every citizen, without regard to his pecuniary ability, to contribute ten dollars, or any other specific sum, to the expenses of government. The injustice of the system is acknowledged by the act of Congress of 23d of April, 1808, which provides for arming and equipping the whole body of the militia of the United States by appropriating annually \$200,000 to that object. But although the principle for which the committee contend is admitted by this act, the provision which it makes is wholly inadequate to the object in view.

The defects in the established militia system, to which the committee have referred, are wholly beyond the reach of the legislative authority of the State. They can only be remedied by an amendment of the act of Congress of 8th of May, 1792; and although that part of the Revised Statutes which relates to the militia and the public defence is susceptible of some improvement, no alteration can be made in it which would have the effect of relieving the great body of the militia from any portion of the burden of military service.

The committee have, therefore, not deemed it advisable to report a bill providing for amending the Revised Statutes so as to remedy the inconsiderable defects which can be reached by our legislation; but they would respectfully suggest the adoption of a resolution instructing our senators and requesting our representatives in Congress to use their exertions to procure such amendments of the act of 8th of May, 1792, as shall provide for the existing deficiencies in the established organization of the militia without impairing its usefulness and strength.

STATE OF NEW YORK.

IN ASSEMBLY, *April 10, 1833.*

Resolved, (if the senate concur,) That our senators in Congress be instructed, and our representatives be requested, to use their exertions to procure such amendments of the act of Congress organizing the militia as shall relieve the people as far as practicable from the burdens of the system without impairing its efficiency.

Resolved, (if the senate concur,) That his excellency the governor be requested to transmit copies of these resolutions and report to our senators and representatives in Congress, and also to the governors of the several States, with a request that they may be laid before the legislatures thereof.

By order:

WILLIAM BAKER, *Speaker pro tem.*

Attest:

FRANCIS SEGER, *Clerk.*IN SENATE, *April 13, 1833.**Resolved*, That the senate do concur with the assembly in their said resolutions.

By order:

JOHN TRACY, *President.*

Attest:

JOHN F. BACON, *Clerk.*

ON CLAIM OF OFFICERS, NON-COMMISSIONED OFFICERS, AND PRIVATES OF THE ARMY FOR LOSSES SUSTAINED BY THE BURNING OF HANCOCK BARRACKS, IN MAINE.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 31, 1833.

Mr. RICHARD M. JOHNSON, from the Committee on Military Affairs, to whom was referred the memorial of sundry officers of the United States army stationed at Hancock barracks, in Maine, reported:

The petitioners set forth that, in consequence of one of the public barracks occupied by them having been destroyed by fire on the 10th of February, 1833, they sustained a considerable loss of furniture and personal apparel; that this loss was greatly increased by their personal exertions having been principally directed

to the preservation of the other buildings, and for which purpose the carpets and blankets belonging to both officers and men were used, and partially or wholly destroyed; that by these means and with great labor they were successful in saving the public property, at the great sacrifice of their own; and they further state that many of the non-commissioned officers and men of the command sustained a loss of clothing; for all which damage they pray for remuneration. The committee do not deny the facts set forth in the memorial, but believe them to be true; and they also are happy to find that the meritorious conduct of the officers was such as might have been anticipated. But, admitting all this, the committee cannot recognize the principle of remuneration in cases of ordinary fire or conflagration of the public barracks occupied by our troops: Therefore—

Resolved, That the prayer of the petitioners ought not to be granted.

23D CONGRESS.]

No. 558.

[1ST SESSION.]

ON THE CLAIM OF GENERAL ALEXANDER MACOMB FOR ALLOWANCES AND PAY UNDER HIS BREVET RANK.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JANUARY 8, 1834.

Mr. RICHARD M. JOHNSON, from the Committee on Military Affairs, to whom was referred the petition of General Alexander Macomb, reported:

That the petitioner claims certain allowances of pay under his brevet rank as major general which have never been allowed to him, but which he alleges have been allowed to others under similar circumstances, upon a fair construction of the laws regulating such matters. The committee do not conceive it to belong to them to undertake to give a construction to the laws on the subject of pay under brevet rank; that belongs to the accounting and executive officers of the War Department; and if General Macomb is entitled to relief under those laws, it is competent for the Secretary of War to grant him such relief as others have received under similar circumstances. The committee ask to be discharged from the further consideration of the subject, and that the petition and papers be referred to the Secretary of War for adjustment upon the same principles that have regulated similar allowances to others: Therefore—

Resolved, That the committee be discharged from the further consideration of the subject, and that all the papers be referred to the Secretary of War.

23D CONGRESS.]

No. 559.

[1ST SESSION.]

APPLICATION OF ARKANSAS FOR A REMOVAL OF THE TROOPS FROM FORT GIBSON TO FORT SMITH.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JANUARY 13, 1834.

MEMORIAL.

To the President of the United States:

The memorial of the general assembly of the Territory of Arkansas would respectfully represent: That the troops at Cantonment Gibson are of little or no utility to the citizens of the Territory, situated as they are within the confines of an Indian country. Should the citizens on and along the western line of the Territory be invaded by a savage foe, all communication between them and the troops at the cantonment could be intercepted, and before the troops could afford them any assistance their property would be plundered and their houses desolated. In the establishment of the garrison the government believed that they were affording full and ample security to the property and lives of the frontier people, and that it would aid in preserving peace among the Indian tribes. Even to the superficial observer it certainly must be manifest that their removal would greatly conduce to the safety of the frontier settlers, and it cannot reasonably be believed that it would have an injurious effect on the wise and humane policy of the general government in its effort to preserve peace among the Indians.

These were the main objects for the establishment of that garrison; and when it is recollected that but for the late Cherokee treaty the white settlements would have been adjacent to it, and that one of those objects can be better subserved by a removal to a point within the vicinity of the white settlements, your memorialists cannot but indulge a confident hope that the removal will be made. Your memorialists believe that old Fort Smith is the most eligible site, but there are others on the Arkansas river, within the vicinity of that place, which, upon an examination, might prove to be equally, if not more eligible than that place. Let the question be settled that the main objects of the government could be effected as well by a removal of the troops as by their continuation where they now are, and there are other

reasons so manifestly obvious why the removal should be made as to leave no doubt upon the mind of your memorialists of its expediency.

Fort Smith is the highest point of safe navigation on the Arkansas. At times of low water the public stores are transported from thence to the garrison with much trouble and great expense. Besides these two considerations, the supplies could be furnished by the citizens of the Territory much cheaper than they now are, as then they would have no Indian country to traverse.

These are the inducements which would tend to the benefit of the general government, and they appear to have sufficient weight to claim its consideration. To the citizens of the Territory the removal would be greatly beneficial in a commercial point of view, as it would open and afford to them a market for all their surplus produce. When your memorialists reflect that great advantages must and will result to the general government from the proposed measure, and that nothing would so much contribute to the safety of the western frontier people and their advancement in wealth, they cannot believe that an administration characterized by so many wise and benevolent acts will long hesitate in the performance of a measure against the practicability of which no reasonable argument can be urged.

JOHN WILSON, *Speaker of the House of Representatives.*

JOHN WILLIAMSON, *President of the Legislative Council.*

Approved October 23, 1833.

JOHN POPE.

23D CONGRESS.]

No. 560

[1ST SESSION.]

ON CLAIM OF DAVID KILBOURN FOR INDEMNITY FOR PROPERTY CONFISCATED IN CANADA, IN CONSEQUENCE OF HIS ACTING AS A SPY FOR THE AMERICAN ARMY DURING THE WAR OF 1812-15.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JANUARY 14, 1834.

Mr. THOMSON, of Ohio, from the Committee on Military Affairs, to whom was referred the petition of David Kilbourn, reported:

That on a careful examination of all the papers pertaining to this case, they find that on the 25th day of January, 1830, the petition of David Kilbourn was referred to the Committee of Claims; that on the 8th day of February following that committee was discharged from the further consideration of the claim, and it was referred to the Committee on Military Affairs; that on the 12th of that same month a bill was reported in favor of the petitioner, but did not pass at that session.

On the 12th of December, 1831, the subject was again referred to the Committee on Military Affairs, and that committee reported a bill for the partial relief of the petitioner on the 27th of the same month, but which did not pass until the — day of —, and only gave to the petitioner one thousand dollars as a consideration for his personal services and sufferings, but made no allowance for the losses and damages he sustained in the destruction and confiscation of his property, and that only for want of proof of a strictly legal character, as to the amount, value, and confiscation thereof, as will appear by a reference to the report of the Committee on Military Affairs made at that time, which report your committee now request may be taken and considered as a part of this report, and which is as follows:

FEBRUARY 12, 1830.

The Committee on Military Affairs, to whom was referred the petition of David Kilbourn, report:

That the petitioner sets forth that he is a native citizen of the United States, within which he remained until after the termination of the revolutionary war, when he removed into Upper Canada; that although residing in that province, his attachment to his country was undiminished, and he was always desirous of promoting its interests; that in the year 1813, at the solicitation and by the authority of General Wilkinson, then commanding officer of the American army upon the northern frontier, he engaged to examine secretly the British posts in Canada, to procure accurate information of their numbers and position, and to communicate the result to the American commander; that he executed this commission to the entire satisfaction of General Wilkinson, by whose agent he was promised ample compensation for his services, and indemnity against any loss which he might suffer for having undertaken them; that the enemy, having been informed of the petitioner's employment and acts, apprehended him, confined him in prison, treated him harshly, and purposed putting him to death, when he made his escape; that he was again taken, again subjected to similar ill treatment, and again threatened with death, which would inevitably have been his portion had he not a second time effected his escape; that after his escape he repaired to General Wilkinson's camp at the French Mills, who renewed to him his former promises, furnished him with money to defray his expenses to Sacket's Harbor, and recommended him to the quartermaster at that post, who employed the petitioner in his office; that from ill health he was obliged to relinquish this situation, since when he has resided in the State of New York, where he is now living under the complicated burdens of old age, infirmity, and indigence; and that since his compulsory abandonment of Canada, his property there, which he valued at ten thousand dollars, has been confiscated, and its proceeds paid into the provincial treasury. Under these circumstances, he prays that he may be compensated for his services, and indemnified for the loss of his property.

That such services as were performed by the petitioner would, if discovered, expose him to the penalty

of death, no other testimony is requisite to establish than the universal and well-known practice of nations in similar cases; that he did perform these services faithfully, and that they were highly useful and important, is proved most fully and satisfactorily; and that justice and policy would dictate that he should be liberally remunerated for them is unquestionable. It must be recollected that the petitioner was not a traitor to his country when he penetrated into the British encampments, but an American citizen. Had he been a traitor, whatever odium might have been attached to his conduct, our government would have been bound to reward his treason. The committee feel no hesitation in awarding to him what they consider to be a compensation for his services and the personal perils to which they exposed him, and for that purpose they report a bill. They entertain as little doubt as to the justice and policy of indemnifying the petitioner for any property which he lost by the execution of his dangerous commission; but as the testimony submitted to them is defective, both as to the value of the property which he alleges to have been confiscated and its confiscation, they recommend that no further allowance be made to him until he produces stronger evidence to substantiate these facts than the committee have been furnished with.

In the present state of this case, and from the view taken of it in the above report, your committee, to whom the subject has now been referred, believe that it is with the loss of property and consequent damage alone which the petitioner has incurred that they have now to do, and have therefore turned their attention entirely to those points in his case.

From an exemplification of the recorded proceedings had in the confiscation of the petitioner's real estate in Upper Canada, duly authenticated, now in possession of your committee, as well as an attested copy of the law of that province under which said confiscation was carried into effect, there can be no doubt as to the confiscation of the real estate of the petitioner. Your committee are therefore of opinion the fact of confiscation is fully established.

From the testimony of sundry credible persons as to the value of said real estate, as well as the value of the personal property of the petitioner, which he lost in consequence of his services rendered to the United States, as set forth in his petition, your committee are of opinion is fully made out and established; and although those persons differ in opinion as to the amount of the value, yet they all agree that it was valuable, and that the real estate is now much more valuable than at the close of that war.

The petitioner sets forth that he was at that time possessed of five hundred acres of back lands, as he styles them; but there is no evidence before your committee which goes fully to establish that fact, nor is there any record of their confiscation with his homestead farm, which is described in the exemplification above alluded to by metes and bounds most minutely. It is therefore to be understood that the committee, in making up their decision in this case, have not taken those back lands into the calculation.

That the petitioner faithfully fulfilled his engagement with General Wilkinson, and that to the entire satisfaction of the general, is abundantly proven by the testimony of General Smith, who, it appears, was the chief engineer, and agent for General Wilkinson to make said contract with the petitioner, and who did make it. Your committee are therefore of opinion that justice to the petitioner, as well as a matter of sound policy on the part of this government, requires and demands that Congress should make good all such contracts made by their generals, when there is no fraud made to appear.

The principle involved in this case, and at which some persons may be disposed to cavil, your committee will state, so far as they have examined and are informed, is by no means new; for the policy of the United States in remunerating refugees from the enemy for their losses began with the government, and has continued with its progress up to the present time. The promises made in the revolutionary war to the refugees from Nova Scotia and from Canada have been fulfilled by repeated acts of Congress since that period, and since the last war both land and money have been given to Canadian volunteers who were American born, and who suffered in their persons or in their property, or both, in the service of the United States.

Your committee are therefore of opinion that the government ought to make good its contract with this petitioner, and allow him remuneration for the damage he has suffered in its service, and have therefore reported a bill for his relief; but in so doing they have taken the lowest estimate as to the value of his property, both real and personal, that has been made under oath by persons of good character testifying thereto in the most solemn manner.

Certificate of Major General Brown in relation to David Kilbourn.

I knew David Kilbourn well as a settler in Upper Canada before the last war. He had a fine farm situated on the banks of the St. Lawrence, about eight miles above Ogdensburg. He always bore a good character, and was considered as a substantial and industrious farmer.

During the war he was, to my knowledge, employed on secret service to discover the force of the British at Montreal and at places on the St. Lawrence. In this business he was very faithful and active; and, while living in Canada as a man of character, he was able to collect much valuable information.

On the expedition down the St. Lawrence in November, 1813, just before we passed Prescott, Kilbourn came to me and gave me a minute statement of the force and position of the British at Montreal and at other posts, which, as I had afterwards means of ascertaining, was remarkably faithful and correct.

I knew of Kilbourn's detection by the British government, and of the total ruin which followed this discovery of the services he had rendered to the American army.

JACOB BROWN.

HEADQUARTERS, *Washington, January 27, 1827.*

C

UPPER CANADA, *District of Johnstown, County of Leeds:*

HENRY JONES, of the town of Brockville, township of Elizabethtown, in said county, merchant and postmaster at Brockville, duly sworn, says that he has resided for the last twenty-seven years in Brockville aforesaid, and during that time has been acquainted with the premises described as west half of lot No. 4, and east half of lot No. 5, in the first concession of said township, lying eighty rods in width on the river St. Lawrence, and extending in the rear so as to make two hundred acres of land, crossed by

the main road leading from Kingston to Montreal, and being about one and a half mile below the town of Brockville, being the same premises formerly owned and occupied by David Kilbourn, who left Canada during the late war with the United States. At the time said Kilbourn left Canada said premises comprised about one hundred acres or more of improved land, well fenced and under cultivation, the residue woodland; a dwelling-house some twenty-six by thirty-six feet, according to deponent's judgment, (having never measured the same,) two stories high, finished and painted; a building, he believes, about thirty feet square, used as a stable for horses, and for housing farming utensils, &c.; also a barn, forty feet or more in length. At the time of the late war, or immediately after, said premises, including permanent improvements, were worth, in my judgment, two thousand dollars. They have since increased in value, and, without any increase in the value of the improvements, are now worth, in my judgment, three thousand dollars. The woodland is now worth five pounds, Halifax currency, per acre.

HENRY JONES.

Sworn before me, at Brockville, 26th October, 1832.

JAMES MORRIS, *Justice of the Peace.*

UPPER CANADA, *District of Johnstown, County of Leeds :*

Charles Dunham, of the town of Brockville, township of Elizabethtown, in said county, and for a long time a merchant and innkeeper in said town, duly sworn, maketh oath and saith: That he is now 50 years old and upwards; has resided in said town of Brockville for 23 years and upwards last past, and during that time has been acquainted with the premises described as west half of lot No. 4, and east half of lot No. 5, in the first concession of said township; lying 80 rods in width on the river St. Lawrence, and extending in the rear so as to make 200 acres of land; crossed by the main road from Kingston to Montreal, and being about one and a half mile below said town of Brockville, and being the same premises formerly owned by David Kilbourn, who left Canada during the late war with the United States. At the time said Kilbourn left Canada said premises comprised about 100 acres or more of improved land, well fenced, and under good cultivation, the residue woodland; a dwelling-house about 26 by 36 feet, two stories high, well finished and painted; a building, he believes, about 30 feet square, used for a stable for horses and for housing farming utensils, &c.; also a barn, he believes, between 40 and 50 feet in length. At the time of said war, and immediately after, said premises, in deponent's judgment, were worth \$2,000. They have since increased considerably in value, and, without any increase in the value of the improvements, are now worth, in the opinion of this deponent, full \$3,000. The woodland is now worth \$20 per acre, and perhaps more.

CHARLES DUNHAM.

Sworn before me this 26th day of October, 1832, at Brockville.

ALEXANDER MORRIS, *Justice of the Peace.*

I certify that I have known Charles Dunham for upwards of 20 years, and consider him a person whose veracity may be relied on.

ALEXANDER MORRIS, *Justice of the Peace.*

BROCKVILLE, *October 26, 1832.*

STATE OF NEW YORK, *Oswego County, ss :*

George Fisher, of Oswego, in said county, counsellor-at-law, duly sworn, on oath says: That he has been acquainted with David Kilbourn, of Senba, in this county, for several years—he believes about seven; during that time said Kilbourn has sustained the character of an upright and honest man; during that time, and, as deponent has learned from his neighbors, for twelve years previous, he has been apparently very poor and destitute, until he received some aid from the government during the last summer. Some five or six years since he applied to deponent to aid him in obtaining a claim which he had on the government, and, after learning the particulars of his case, deponent aided him in procuring testimony to establish his claim, which was forwarded to Washington to be laid before Congress; but little or no progress was made in obtaining a decision until the session of 1829-'30, when the papers were again presented and referred to the Committee of Claims, of which the honorable Mr. Whittlesey was chairman. After some examination of the case was had, this deponent was advised by Mr. Whittlesey that, although his claim for losses *might* be just, and such as ought to be allowed, yet he deemed the proof defective in two respects: 1st. That a copy, or other satisfactory proof, of the proceedings in Canada against Kilbourn's estate should be produced, as it was believed it might be; 2d. That the *items* and the amount of *each item* of loss was not sufficiently stated and ascertained by the proof, so as to enable the committee to come to a satisfactory conclusion. Under these circumstances, Mr. Whittlesey advised this deponent that, as the service which had been rendered was probably important to the army as well as hazardous to Kilbourn, he thought a liberal allowance should be made on account of the *services* rendered, and the compensation for *losses* sustained might be left for a future application, when the defect in the proof on the two points specified might probably be supplied. Mr. Whittlesey further suggested to deponent that, as the *services* and the compensation proper to be allowed therefor concerned more particularly the policy of the army, it would be proper to have the papers referred to the Military Committee, to whose jurisdiction such a question more properly belonged. To this advice and these suggestions this deponent assented, and the papers were accordingly, on motion of Mr. Whittlesey, transferred from the Committee of Claims to the Military Committee, who promptly reported a bill allowing Mr. Kilbourn \$1,000 for his *services*. This bill failed in the Senate, as deponent understood, for want of time. *Such* a bill finally became a law, as deponent is informed, at the last session.

Deponent has been an agent in procuring for Kilbourn the desired proof from Canada, but has experienced much difficulty and delay in obtaining it. In order to effect what seemed not likely to be accomplished in any other way, deponent, during the month, (October, 1832,) made a journey to Canada, and

obtained, without much difficulty, a copy of certain proceedings against said Kilbourn's estate; but deponent found it more difficult to obtain testimony of other facts not of record, such as related to the value of property, the items and value of personal property held by Kilbourn, and the description and value of Kilbourn's "*back lands*." Several respectable gentlemen in the village of Brockville, apparently well acquainted with Mr. Kilbourn and with his former circumstances in Canada, and who gave Mr. Kilbourn an excellent character in all respects, *excepting only the circumstances attending his leaving Canada*, stated very freely in conversation Mr. Kilbourn's circumstances and property while in Canada, with which they appeared to be well acquainted, and yet refused to give any affidavit or other *written* statement which might be used to aid Mr. Kilbourn. From all that deponent could learn, it appeared that Mr. Kilbourn's personal property, or a large portion of it, especially such as consisted of stock, hay and grain, &c., had been taken after he left Canada by officers of the army, or by persons engaged in some way in supplying the army, relying chiefly upon the pressure of the times, public wants, and the prejudice existing against the owner; but to what amount or value deponent could not ascertain. From the concurrent statements of those who appeared to be well acquainted with the subject, deponent believes said Kilbourn possessed from \$500 to \$1,000 in personal property at the time he left Canada. Deponent further says that he has been partially acquainted with Henry Jones, esq., postmaster at Brockville, for some twelve or thirteen years, and believes him to be a worthy man, entitled to full credit in his statements. Deponent further says that, in October last, deponent had a conversation with Hon. Lebbeus P. Sherwood, one of the judges of the court of King's Bench in Upper Canada, now a resident of York, Upper Canada, but formerly of Brockville. In that conversation Judge Sherwood stated to deponent that he was well acquainted with said Kilbourn, and at the time he left Canada he believed his property was worth full \$4,000; but said judge declined giving any *written* statement to this effect, and only referred deponent to *others*, who, when called upon, declined in like manner as above stated. Deponent has made the foregoing statement at the request of Mr. Kilbourn, that he might have the benefit of such explanations as deponent was able to make.

GEO. FISHER.

Subscribed and sworn this 3d day of December, 1832, before me.

JOSEPH HUNT, *Commissioner of Deeds*.

STATE OF NEW YORK, *City and County of New York*:

Joseph G. Swift, of the city of New York, being duly sworn, saith: That in the year of our Lord 1813 he was attached to the army of the United States, under the command of General Wilkinson, in capacity of chief engineer, and was then and there directed by said General Wilkinson to perform a secret expedition into the province of Upper Canada, for the purpose of ascertaining the strength of the different posts of the enemy, and to procure some suitable person, in whom confidence could be placed, to aid in said expedition; that David Kilbourn was employed by said deponent, in pursuance of said order of said general; that said Kilbourn did undertake said expedition, and performed the services required; that he did make returns of his said expedition to said deponent, and to the satisfaction of General Wilkinson; that, on the engagement between said deponent and said Kilbourn, deponent informed said Kilbourn that if he should receive any damage in the performance of said expedition, the United States would doubtless remunerate him for his losses. What damage said Kilbourn did sustain deponent does not know, but understood said Kilbourn lost property to some amount by confiscation, and was under the necessity of flying for refuge to the United States. And further the deponent saith not.

J. G. SWIFT.

In testimony of the foregoing declaration, signed and sworn to in my presence, I have hereunto set [L. s.] my hand and affixed my official seal, in the city of New York, this 18th day of January, in the year of our Lord 1827.

E. FISHER, *Public Notary*.

STATE OF NEW YORK, *County of St. Lawrence*, ss:

I, Arnold Smith, of said county, do solemnly swear that during the late war of the United States against Great Britain I was requested by General Swift to employ a person in whom I could confide as a friend to the United States to perform an expedition through the Canadas. I did so by employing David Kilbourn, who executed his commission to the satisfaction of General Wilkinson, then commanding the United States army on the frontier, for whom it was intended that a promise was made that whoever would run the hazard should be protected, and indemnified should they sustain loss; that this promise was made by General Swift to me; that I delivered the commission to one William Wiley, as received from said Swift, who crossed the St. Lawrence for David Kilbourn; that he delivered the same to him; that a discovery of the expedition was made to the British government, and David Kilbourn taken, suffered a course of imprisonment, and effected his escape; that his property was confiscated in Canada, to the amount of which to me is unknown, and actually sold for the benefit of that government, and all this in consequence of performing that service; that your deponent is intimately acquainted with David Kilbourn and those circumstances.

ARNOLD SMITH.

Sworn and subscribed before me this 9th day of July, 1827.

SYLVESTER BUTRICK, *Justice of the Peace*.

"AN ACT to declare certain persons therein described aliens, and to vest their estates in his Majesty," passed March 14, 1814.

Whereas many persons, inhabitants of the United States of America, claiming to be subjects of his Majesty, and renewing their allegiance as such by oath, did solicit and receive grants of land from his Majesty, or became seized of lands by inheritance or otherwise within this province, which persons, since

the declaration of war by the said United States of America against his Majesty and his subjects of the United Kingdom of Great Britain and Ireland, have voluntarily withdrawn themselves from their said allegiance and the defence of said province: Be it enacted by the King's most excellent Majesty, by and with the advice and consent of the legislative council and assembly of the province of Upper Canada, constituted and assembled by virtue of and under the authority of an act passed in the Parliament of Great Britain, entitled "An act to repeal certain parts of an act passed in the fourteenth year of his Majesty's reign, entitled 'An act for making more effectual provision for the government of the province of Quebec, in North America, and to make further provision for the government of the said province,'" and by the authority of the same, that all such persons as aforesaid, who, having received grants of land, or may have become seized of lands within this province by inheritance or otherwise, as shall have voluntarily withdrawn themselves from this province into the United States of America since the 1st day of July, 1812, or who may hereafter, during the present war, voluntarily withdraw themselves from this province into the said United States, without license granted under the authority of the governor, lieutenant governor, or person administering the government of this province, shall be taken and considered to be aliens born, and incapable of holding lands within this province.

2. *And be it further enacted by the authority aforesaid,* That it shall and may be lawful for the governor, lieutenant governor, or person administering the government by commission, under the great seal of this province, to authorize any sheriff, coroner, or other person or persons in the several districts of this province, to inquire by the oath of twelve good and lawful men of their respective districts, and by inquisition indented under the hands and seals of the said jurors and of the said commissioner or commissioners, to return to his Majesty's court of King's Bench all such persons as aforesaid, who, seized of lands in the respective districts, shall have voluntarily withdrawn from the province into the United States of America since the said 1st day of July, and before the conclusion of the existing war with those States, without license granted under the authority of the governor, lieutenant governor, or person administering the government; and from and after the said finding by such inquisition, his Majesty shall become seized of the lands so found to have been in the seizin of such person on the said 1st day of July: *Provided always,* That nothing in this act contained shall be construed to prevent any persons interested in the said lands from traversing any inquisition or office respecting the same at any time within one year after the peace shall be established between his Majesty and the United States of America, or within one year after the finding of said inquisition.

3. *Provided always,* That nothing in this act shall extend or be construed to extend to affect the claim of any *bona fide* creditor, or to defeat any just lien or security of or upon any lands, tenements, or hereditaments whatsoever.

OSWEGO COUNTY, ss :—George Fisher, duly sworn, says that the foregoing is copied from a book entitled "The Statutes of the Province of Upper Canada," kept in the court-house in Kingston, Upper Canada, and which deponent was informed and believes is in truth what it purports to be.

GEORGE FISHER.

Subscribed and sworn this 31 day of December, 1832, before me.

JOSEPH HUNT, *Commissioner of Deeds.*

23D CONGRESS.]

No. 561.

[1ST SESSION.]

ON CLAIM OF CAPTAIN HUBERT LACROIX'S COMPANY, OF MICHIGAN, FOR PAY FOR SERVICES AS VOLUNTEERS IN THE WAR OF 1812-'15.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JANUARY 27, 1834.

Mr. E. WHITTLESEY, from the Committee of Claims, to whom was referred the petition of Francis Lasselle, for himself and the residue of a company commanded by Hubert Lacroix, of the Territory of Michigan, during the last war, where they survive, and for their representatives where they are dead, reported:

That the petitioner, at the last Congress, presented his petition for himself and others praying to be allowed the pay and emoluments of volunteers, under the act of February 6, 1812, having, as was alleged, volunteered for a year, and having been included in the capitulation on the 16th of August, 1812, and not exchanged until after the year expired. This company has been paid for its services from May 18, 1812, to August 16, 1812, that being the time the company was under arms. It appeared by papers furnished the committee by Mr. Hagner, that four companies were in the service of the United States from the Territory of Michigan, and composed a battalion, commanded by Major Witherill. That, previous to the war, an order was issued by the Secretary of War to the acting governor of the Territory of Michigan, "to embody and call into actual service four companies of militia, properly officered, under the command of a major, to arm them from the public arsenal, for which this will be, for the proper officer, a sufficient authority." That four companies were organized, and entered the service under the command of Major Witherill, and that, after the capitulation referred to, these companies claimed to be paid for a year as volunteers, as appeared by copies of letters written by Major Witherill, and by the copies of letters written by Colonel Watson, who was secretary to the acting governor, and took an interest in behalf of the Michigan volunteers and militia. It was contended if these troops could not be considered as volunteers for a year, and be paid accordingly, that they still were entitled to pay as militia during the time they were in captivity, and that they were such prisoners from August 16, 1812, until the time they were exchanged, or the territory was retaken, which, in either case, was more than a year. It was said their situation was entirely different from the militia from the State of Ohio, which were surrendered

at the same time, inasmuch as the Ohio militia returned to their homes and pursued their wonted avocations, whereas the Michigan militia, or volunteers, were prisoners if they remained in the Territory, and could not pursue any profitable employment, or they were driven from their Territory and their homes, and, being prohibited from entering the service, they were without any settled occupation. It appeared that the question was submitted to the then Secretary of War, Mr. Armstrong, who decided these companies were militia, and not volunteers, and must be paid accordingly. He adverted to the order above referred to, and said the order from the War Office was for detached militia, and that volunteers were not required by it; that the draft was made in execution of this order, and that no person was authorized to receive volunteers under the act of February 6, 1812, at Detroit.

There was testimony to prove that this company did volunteer under the provisions of the act of February 6, 1812, but it was not sufficient to satisfy the committee that the said company volunteered under said act; and a report was drawn up and assented to by the committee, but afterwards withheld at the request of Mr. Wing, who had charge of the claim, to enable those concerned to supply the deficiency of proof, if within their power.

The same testimony is again before the committee, and in addition thereto is the deposition of Colonel John Anderson. He testifies that in April, 1812, he commanded the 2d regiment of Michigan militia, and received direction from the acting governor, which was accompanied by the then late act of Congress, to ascertain whether he could raise a company of volunteers from his regiment for a year; that he called out his regiment, stated to them the wishes of the government, and read to them said act by which they were invited to volunteer; that thereupon a great proportion of the regiment volunteered, and from these a company was selected by lot, which immediately proceeded to choose their officers, when Hubert Lacroix was chosen captain, Francis Lasselle, lieutenant, and Duncan Reed, ensign; that he made a return of his proceedings to the acting governor, and in a few days the commissions were received by the officers. He states that Major Witherill soon after inspected the company, and took it into the service, and that it so remained in the service until the capitulation at Detroit, on the 16th of August, 1812; and that a part of the company was in the engagement with the enemy, under the command of Major Van Horne.

The individual accounts of the officers have been furnished to the committee by Mr. Hagner. The caption in each is:

"The United States

To (name of the officer) late (rank) of a volunteer company of Michigan militia in the service of the United States."

The service commenced, as stated in the accounts, on May 18, 1812, and ended on the 16th of August following. It should be noticed that these accounts were not made out until the year 1817, nor until after the department had decided they were only entitled to pay for the time they were in actual service. The accounts would necessarily be made out to conform to this decision. There was not a literal compliance of the act of February 6, 1812, in reporting the volunteers of Ohio to the Secretary of War, and formally accepting their services by the President; and in the first instance they were not allowed pay for a year. This is believed to have been the decision of the Secretary of War as to Captains Finlay's and McArthur's regiments; and that they were paid for the time they volunteered, by order of Mr. Madison, then President. Such decision was made as to the company commanded by Captain John Campbell. The Secretary of War ordered this company to be paid for six months, and would not recognize it as a part of the Ohio corps of volunteers, when it was afterwards proven, and known to one member of this committee, who drew most of the papers and orders relative to the subject, that this company volunteered for a year under the act of February 6, 1812. The officers of that company had made out their accounts for the period for which they were paid. It is, no doubt, the fact that in both cases the accounts were not made out until after the decision of the War Department was made, and then the accounts conformed to such decision as to the duration of the service. Congress has decided, in relation to the companies of Dequindre and Smith, that they were volunteers under the act of February 6, 1812, and they have been paid accordingly by a special act. The committee refer to a report relative to those companies. The testimony of Colonel Anderson has satisfied the committee, in connexion with other testimony and proofs, that the company commanded by Captain Lacroix did volunteer under the act of February 6, 1812, and are entitled to the same pay that others have received who volunteered under that act; and to enable them to obtain it the committee herewith report a bill.

23d CONGRESS.]

No. 562.

[1st SESSION.]

ANNUAL RETURNS OF THE MILITIA OF THE UNITED STATES FOR 1833.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 6, 1834.

WAR DEPARTMENT, February 3, 1834.

SIR: In obedience to the requisitions of the first section of the act of Congress of March 2, 1803, entitled "An act in addition to an act entitled 'An act more effectually to provide for the national defence by establishing a uniform militia throughout the United States,'" I have the honor to transmit herewith abstracts of the general returns of the militia of the United States, and of their arms, accoutrements, and ammunition, for the year 1833.

Very respectfully, your most obedient servant,

LEW. CASS.

HON. A. STEVENSON, *Speaker of the House of Representatives.*

Abstract of the general annual returns of the militia of the United States, by States and Territories, according to the act of March, 1803, for the year 1833.

33—A TOA

States and Territories.	Returns.		Infantry.							Cavalry.							Artillery.							
	For what year received.	Date.	Number of divisions.	Number of brigades.	Number of regiments.	Number of battalions.	Number of companies.	Commiss'ed officers, including general division, brigade, staff, &c.	Non-commiss'ed officers, musicians, and privates.	Total.	Number of divisions.	Number of brigades.	Number of regiments.	Number of battalions.	Number of companies.	Commiss'ed officers.	Non-commiss'ed officers, musicians, and privates.	Total.	Number of divisions.	Number of brigades.	Number of regiments.	Number of battalions.	Number of companies.	
Maine	1833	Dec. 31	8	16	55	.....	519	1,975	32,893	34,868	.....	.....	2	13	32	160	1,490	1,050	.....	.....	2	10	29
New Hampshire	1833	June 19	3	6	40	80	367	1,361	22,283	23,644	.....	.....	.....	36	138	1,270	1,408	.....	.....	.....	.....	.....	39
Massachusetts	1833	Dec. 17	7	16	55	.....	512	1,940	39,320	41,275	.....	.....	2	14	70	643	713	.....	.....	3	3	46	46
Vermont	1823	Mar. 20, 1824	4	10	35	.....	.....	1,330	21,790	23,120	.....	.....	.....	.....	123	1,302	1,425	.....	.....	.....	.....	.....	22
Rhode Island	1833	Dec. 31	.....	2	4	.....	21	101	992	1,093	.....	.....	.....	1	4	54	58	.....	.....	.....	.....	.....	4
Connecticut	1833	Jan. 22, 1834	3	6	25	25	260	953	18,533	19,486	.....	.....	5	.....	21	111	824	935	.....	1	7	.....	44
New York	1833	Dec. 31	30	59	253	8	2,200	8,711	144,596	153,307	3	7	26	2	112	589	5,152	5,741	4	11	41	3	285	
New Jersey	1829	Dec. 2	4	13	49	105	437	1,681	31,983	33,664	.....	.....	4	8	33	137	1,017	1,754	.....	.....	.....	.....	32
Pennsylvania	1830	Feb. 16, 1831	16	32	146	80	537	.....	.....	164,421	.....	.....	.....	.....	.....	.....	2,873	.....	.....	.....	.....	.....	.....
Delaware	1827	.....	1	3	10	.....	.....	371	7,861	8,232	.....	.....	.....	.....	32	234	266	.....	.....	.....	.....	.....	.....
Maryland	1833	Dec. 30	4	14	50	106	480	1,902	40,037	41,939	.....	.....	14	28	60	338	2,266	2,594	.....	1	2	3	33
Virginia	1833	Nov. 20	5	22	144	.....	1,006	3,446	85,737	89,183	.....	.....	5	.....	110	370	7,265	7,635	.....	.....	.....	.....	72
North Carolina	1833	Dec. 15	9	19	96	193	805	3,059	63,310	66,369	.....	.....	4	8	15	65	688	753	.....	.....	1	1	4
South Carolina	1832	Jan. 25, 1833	5	10	42	84	484	1,946	45,102	47,048	.....	.....	7	15	35	193	1,433	1,626	.....	.....	1	2	18
Georgia	1830	May 24, 1831	9	18	74	.....	777	2,676	39,653	42,329	.....	.....	.....	9	31	417	448	.....	.....	.....	.....	.....	1
Alabama	1829	Dec. 20	3	5	23	44	206	720	13,990	14,710	.....	.....	.....	.....	19	170	182	.....	.....	.....	.....	.....	.....
Louisiana	1829	Jan. 1, 1830	3	7	23	49	163	659	12,375	13,034	.....	.....	.....	14	7	149	156	.....	.....	.....	1	2	.....
Mississippi	1830	Dec. 6	2	6	26	613	12,989	13,602
Tennessee	1830	Dec. 31	6	3,570	50,637	50,207	775
Kentucky	1833	Dec. 10	14	29	117	234	869	3,475	58,079	62,154	.....	.....	.....	26	88	1,376	1,464	.....	.....	.....	.....	.....	6
Ohio	1832	Jan. 7, 1833	17	54	149	9	1,241	4,693	104,751	109,444	.....	.....	3	16	71	361	3,697	4,058	.....	.....	.....	4	32
Indiana	1832	Jan. 4, 1833	9	22	79	158	734	2,573	46,159	48,732	.....	.....	.....	.....	106	1,681	1,787	.....	.....	.....	.....	.....	.....
Illinois	1830	Jan. 1, 1831	2	5	28	70	204	856	.....	.....	.....	.....	.....	4	12	.....	.....	.....	.....	.....	.....	.....	.....
Missouri	1832	Feb. 13, 1833	4	12	37	.....	.....	197	2,618	2,815	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Michigan Territory	1831	Nov. 28	.....	.....	8	18	64	259	4,821	5,080	.....	.....	.....	3	12	134	146	1	3	.....	.....	.....	1
Arkansas Territory	1825	Dec. 16	.....	.....	9	.....	.....	145	1,740	1,885	.....	.....	.....	.....	12	131	143	.....	.....	.....	.....	.....	.....
Florida Territory	1831	Nov. 8	.....	.....	.....	.....	.....	43	784	827	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
District of Columbia	1832	Nov. 20	.....	1	3	6	22	90	1,098	1,188	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Abstract of the general annual returns of the militia of the United States, &c.—Continued.

States and Territories.	Returns.		Artillery.			Riflemen.							Aggregate.	Remarks.	
	For what year received.	Date.	Commission'd officers.	Non-commission'd officers, musicians, and privates.	Total.	Number of divisions.	Number of brigades.	Number of regiments.	Number of battalions.	Number of companies.	Commission'd officers.	Non-commission'd officers, musicians, and privates.			Total.
Maine.....	1833	Dec. 31.....	123	1,655	1,778					30	83	1,225	1,308	39,604	One company of cavalry, one of infantry, and five of light infantry; no returns received. Three companies of cavalry and one of artillery, amounting to one hundred and thirty-one, included in the aggregate.
New Hampshire.....	1832	June 19.....	111	1,485	1,596					30	82	1,091	1,173	27,952	
Massachusetts.....	1833	Dec. 17.....	224	2,761	2,985					41				44,973	
Vermont.....	1833	Mar. 20, 1824	83	953	1,036									25,581	The adjutant general says, "there are in the State 15 regiments and 91 companies of infantry, and 17 companies of light infantry. The whole number of militia enrolled is probably about 9,600."
Rhode Island.....	1832	Dec. 31.....	19	207	226									1,377	
Connecticut.....	1833	Jan. 22, 1834	224	2,771	2,995					25	76	1,294	1,370	24,786	The adjutant general reports the aggregate to be 188,456.
New York.....	1833	Dec. 31.....	1,019	12,371	13,390	2	4	29	3	144	649	9,310	9,959	182,397	
New Jersey.....	1829	Dec. 2.....	89	1,836	1,925					24	81	1,747	1,828	39,171	
Pennsylvania.....	1830	Feb. 16, 1831			3,661								11,330	182,285	
Delaware.....	1827		12	176	188						32	511	543	9,229	
Maryland.....	1833	Dec. 30.....	107	1,538	1,643			2	4	75	50	673	723	46,809	
Virginia.....	1833	Nov. 20.....	221	5,080	5,301					120				102,119	
North Carolina.....	1833	Dec. 15.....	17	197	214					12	34	1,128	1,162	68,498	
South Carolina.....	1832	Jan. 25, 1833	94	859	953					21	194	1,361	1,485	51,112	
Georgia.....	1830	May 24, 1831	3	52	55									42,832	
Alabama.....	1829	Dec. 20.....												14,892	The adjutant general reports the aggregate greatly below the real strength of the militia of the State.
Louisiana.....	1829	Jan. 1, 1830	55	719	774						60	784	844	14,808	
Mississippi.....	1830	Dec. 6.....									6	116	122	13,724	The governor reports no returns from several regiments, and says, "if a complete return could be had our militia would be at least 85,000."
Tennessee.....	1830	Dec. 31.....												60,982	
Kentucky.....	1833	Dec. 10.....	22	379	401					19	56	1,133	1,189	65,208	
Ohio.....	1832	Jan. 7, 1833	110	1,836	1,946			26	7	262	967	15,746	16,713	132,161	The adjutant general reports the strength of but two brigades, which is not more than the eighth part of the strength of the State.
Indiana.....	1832	Jan. 4, 1833	60	620	680						122	2,592	2,714	53,913	
Illinois.....	1830	Jan. 1, 1831								11	33			27,326	
Missouri.....	1832	Feb. 13, 1833												2,815	The governor reports the first regiment of infantry imperfect, the second only two companies returned, the fifth and ninth no returns received.
Michigan Territory.....	1831	Nov. 28.....	3	38	41						11	198	209	5,476	
Arkansas Territory.....	1825	Dec. 16.....												2,028	The adjutant general reports the militia to be about 4,000 effective men. The first and second brigades not heard from.
Florida Territory.....	1831	Nov. 8.....												827	
District of Columbia.....	1832	Nov. 20.....	2	23	25						4	32	36	1,249	
														1,284,284	

Abstract of the annual returns of the arms, accoutrements, and ammunition, &c.—Continued.

States and Territories.	Muskets.	Bayonets.	Cartridge-boxes and belts.	Bayonets, scabbards, and belts.	Brushes and picks.	Spare flints.	Ball cartridges.	Rifles.	Powder-horns.	Pouches.	Loose balls.	Pounds of rifle powder.	Horsemen's pistols.	Swords.	Swords, scabbards, and belts.	Knapsacks.	Haversacks.	Drums.	Fifes.	Bugles and trumpets.	Bells.	Remarks.	
Maine.....	25,565	25,535	20,717	17,571	16,880	85,104	26,701	1,570	1,061	1,051	111,820	13½	1,353	2,303	2,234	16,402	67	594	455	53	.....	
New Hampshire.....	22,022	21,854	15,604	14,609	14,419	30,692	4,000	1,300	538	439	2,769	.....	1,803	2,197	2,163	14,934	41	527	430	24	.....	
Massachusetts.....	13,713	13,743	14,681	13,910	15,045	46,815	213,369	2,274	1,701	1,726	28,569	531	570	1,882	294	12,642	129	426	290	74	1,832		
Vermont.....	15,986	15,081	17,696	11,910	15,436	23,110	.....	265	116	275	.....	.....	2,778	2,624	1,994	.....	13,508	422	469	7	.....	
Rhode Island.....	823	818	872	821	807	2,136	.....	.....	.....	.....	.....	.....	51	190	190	258	.....	36	23	.....	.....
Connecticut.....	19,958	19,952	16,098	16,096	12,878	110,612	208,110	1,707	537	578	16,947 lbs.	256	3,969	5,365	5,330	9,640	74	545	532	56	.....	
New York.....	30,866	29,195	33,497	29,127	18,063	49,271	9,115	29,616	25,110	22,812	59,245	3,848½	7,630	11,455	4,233	2,547	105	3,280	2,262	522	.....	
New Jersey.....	12,968	2,932	1,060	2,932	.....	.....	.....	764	117	94	.....	.....	1,308	2,339	2,339	.....	.....	387	349	51	.....	
Pennsylvania.....	18,144	.....	.....	.....	.....	.....	.....	9,253	.....	.....	.....	.....	1,134	1,342	.....	.....	.....	1,131	732	116	.....	Exclusive of those in arsenals.
Delaware*.....	840	818	384	79	164	374	
Maryland.....	17,386	12,733	12,516	3,905	577	9,520	66,814	2,158	1,116	1,922	11,658	160	480	1,264	1,115	2,219	2	120	.....	114	.....	
Virginia.....	37,181	36,857	6,564	.....	.....	300	2 boxes.	2,174	337	337	.....	.....	1,991	2,411	1,134	.....	.....	188	187	22	.....	
North Carolina.....	4,326	4,320	.....	.....	.....	.....	.....	15,368	.....	.....	.....	.....	572	2,730	.....	.....	.....	310	527	26	.....	
South Carolina.....	2,535	700	1,922	1,538	1,440	7,085	3,315	10,802	4,419	3,597	26,097	841	526	1,770	1,770	3,276	75	161	143	36	.....	
Georgia*.....	
Alabama.....	2,087	.....	.....	.....	.....	1,006	.....	367	725	395	2,165	229	121	375	124	.....	.....	49	51	4	.....	
Louisiana.....	1,000	1,000	550	550	550	2,000	2,000	206	6	.....	.....	.....	.....	100	100	500	.....	11	11	29	.....	
Mississippi*.....	
Tennessee.....	1,617	763	.....	763	.....	.....	.....	14,741	.....	10,828	.....	.....	.....	1,441	.....	.....	.....	412	373	.....	.....
Kentucky.....	2,860	2,370	2,333	1,281	360	10,548	9,307	5,062	4,930	4,038	20,914	479	699	2,179	1,632	289	16	215	173	17	.....	
Ohio.....	14,591	5,544	2,044	1,665	848	2,150	452	18,350	7,703	5,221	9,408	450½	3,073	4,298	4,101	112	193	984	714	85	.....	
Indiana.....	577	232	189	15	.....	10,000	.....	8,200	6,500	.....	48,000	1,200	350	780	780	.....	.....	288	400	20	.....	
Illinois*.....	
Missouri.....	
Michigan Territory.....	98	39	13	3	89	132	60	733	447	534	936	38	76	112	16	.....	.....	29	24	2	.....	
Arkansas Territory*.....	
Florida Territory*.....	
District of Columbia.....	144	144	144	144	66	18	76	

* No returns of arms received from these States.

† Shot guns included.

‡ Fusées included.

|| Powder-horns included.

NOTE.—This return of arms, &c., is taken from the returns corresponding in date with those which furnish the strength of the militia.

ADJUTANT GENERAL'S OFFICE, Washington, February 3, 1834.

R. JONES, Adjutant General of the Army.

23D CONGRESS.]

No. 563.

[1ST SESSION.]

REMONSTRANCE OF OFFICERS OF THE ARMY AND MILITARY ACADEMY AGAINST TAXING
THEIR PAY FOR THE SUPPORT OF WIDOWS AND ORPHANS OF DECEASED OFFICERS.

COMMUNICATED TO THE SENATE FEBRUARY 6, 1834.

Memorial of sundry officers of the army and Military Academy remonstrating against the passage of the "bill to provide for the support of the widows and orphans of such officers of the army as may die while in the service of the United States."

To the honorable the Senate of the United States:

The undersigned, officers of the army and of the Military Academy, have read a bill reported to the honorable House of Representatives January 8, 1834, by the Committee on Military Affairs, entitled "A bill to provide for the support of the widows and orphans of such officers of the army as may die while in the service of the United States."

It is, perhaps, a matter of reasonable doubt whether the provisions of this bill are applicable to the officers of the academy who are not also officers of the army; but as the term "military establishment" used in the bill is somewhat indefinite, and might be so construed as to include the academic officers, they have deemed it proper to unite with the other officers of the post in stating the reasons why, in the opinion of the undersigned, the bill ought not to become a law.

The undersigned have heretofore been under the impression that the compensation allowed by law to the officers in the employ of government was considered but a fair equivalent for services actually rendered.

They have not believed it to have been the intention of Congress to create sinecure places or to grant gratuitous allowances; and if this be so, it would seem to follow that the faithful discharge of the duties assigned to a public officer entitles him, as a matter of right, to the compensation allowed by law.

It is true that that compensation may at any time be altered by Congress; but it is respectfully submitted whether Congress can rightfully change it, unless, in their opinion, it be disproportionate to the value of the services rendered.

If these views be correct, the right which an officer acquires in the compensation for his services is a clear right of property; his compensation, whatever it may be, is as much his own as though he had earned it in any other occupation in life.

The bill to which your attention is called proposes to raise a fund by a general tax on the officers of the military establishment, for the benefit of the widows and orphans of such officers as may die in service. Should this be done, it would go to establish the principle that Congress possess the right to appropriate the earnings of one class of individuals to the benefit of another; for while the tax would fall on all the officers of the army, the benefits would be shared only by a few.

Should Congress pass the proposed bill, and thereby compel a general contribution, might not the friends of the present measure press an extension of the benefits of the fund to the families of all married officers whose pay is too limited to meet their necessary expenses? And would there indeed be any difference in principle between the two cases? If the family of one officer is so connected with the other officers of the army as to justify a tax for its maintenance, there is no reason why the tax should not be laid when the maintenance is required, whether it be before or after the death of its head.

But it may be urged in favor of the proposed bill that it creates a noble charity for the widows and orphans of meritorious officers; that it will extend relief to the bereaved and destitute when all other means have failed; and that a plan so benevolent in its objects and promising so much good, should disarm opposition and receive a unanimous support.

The undersigned hope that they are not destitute of the fraternal feelings which should unite the members of the military profession, and that they would wish to consider in a spirit of generous friendship the claims which the widow and children of a brother officer might have on their kindness and liberality. But the present bill proposes to measure these sympathies by a legal enactment, and fix, in dollars and cents, the amount which shall be given. It thrusts aside the hand of generous benevolence and opens the private purse by the stern requirements of law. It sets at naught the claims of relationship and kindred, and compels the officer to turn the current of his charities in a particular direction, instead of permitting it to flow in its natural channel, where, perhaps, it might carry joy and gladness to the aged and destitute parent. Might not Congress, in carrying out the principles which this bill would go to establish, compel the officers of the army to support the Colonization Society, the Bible Society, or to contribute to any or all of the noble charities of the present day?

All attempts which have heretofore been made to control the private affairs of individuals by acts of legislation have proved entirely abortive. So great, indeed, has been the unwillingness to extend legislation to the private affairs of life, that the opulent son is not compelled by law to support the infirm and destitute parent.

Even should Congress see fit to organize the association, would it be more than is due to the rights of the officers of the army to leave it optional with each whether or not he shall become a member? This would extend the benefits of the association to all who are willing to contribute to its support, without taking from the means of those who may, perhaps, remain single for the sole purpose of extending pecuniary aid to those dependent on their exertions.

The undersigned, having given some attention to this subject, hope it will not be deemed out of place for them to submit the subjoined calculations, which would seem to show that the provisions which the bill would make could not afford a competent support to those for whom it proposes to provide

Number of officers belonging to the military establishment, according to the present organization,
733.*

The proportion of these who are married is $\frac{1}{3}$.†

* This includes the professors and teachers at the Military Academy.

† It has been found that out of 630 officers, 295 are married or have families. Hence, 630 : 295 :: 733 : 343.

The yearly average of deaths, 18.*

The number of officers who will probably leave families, $8\frac{1}{2}$.†

Pay proper of officers belonging to the military establishment, \$325,994.‡

Pay proper of 235 cadets, \$45,120.§

Two and a half per centum per annum on the pay proper of officers and cadets, \$9,277.

Average pay proper of commissioned officers, \$444.

Two-thirds of which is \$296.

The average duration of human life between the ages of 21 and 50 (at which time nearly all the pensions would commence) is $22\frac{1}{2}$ years; but as the pensions to males will cease when they arrive at 18 years of age, the table has not been carried beyond the 18th year.

A table showing the operation of the proposed fund, allowing an annuity of \$296 each to the widows and orphans of eight officers of the military establishment, predicated on an assessment of $2\frac{1}{2}$ per cent. per annum on the pay proper of all officers and cadets.

Years.	Capital at the beginning of each year.	Interest at four per cent.	Amount of capital and interest	No. of pensioners each year.	Average remuneration to each.	Average amount of pensions.	Balance on hand at the end of each year.	Annual contribution.
1	\$9,277	\$371	\$9,648	8	\$296 00	\$2,368	\$7,280	-----
2	16,557	662	17,219	16	296 00	4,736	12,483	\$9,277
3	21,760	870	22,630	24	296 00	7,104	15,526	9,277
4	24,803	992	25,795	32	296 00	9,472	16,323	9,277
5	25,600	1,024	26,624	40	296 00	11,840	14,784	9,277
6	24,061	962	25,023	48	296 00	14,208	10,815	9,277
7	20,092	803	20,895	56	996 00	16,576	4,319	9,277
8	13,596	543	14,139	64	220 92	14,129	-----	9,277
9	9,277	371	9,648	72	134 00	9,648	-----	9,277
10	9,277	371	9,648	80	120 60	9,648	-----	9,277
18	9,277	371	9,648	144	67 00	9,648	-----	9,277

From this table it appears that the fund commences to diminish in the fifth year; that in the eighth year it is no longer large enough to pay pensions of two-thirds the average pay proper; and that, accordingly, the pensions for that year will average but \$220 92 each. For the tenth year they will be \$120 60, and so on, diminishing until the 18th year, (when we suppose that the number of pensioners will be at least the maximum,) at which time the average pension will be \$67.

The accompanying report will show the inadequacy of a much larger assessment (viz: 10 per cent. on the pay proper of all the officers for four years, and 5 per cent. thereafter) to carry into effect the objects proposed in the bill.

And your memorialists will ever pray, &c.

R. E. DE RUSSY, *Major of Engineers.*

CHARLES DAVIES, *Professor of Mathematics.*

THOMAS WARNER, *Chaplain, and Professor of Rhetoric and Moral Philosophy.*

EDWARD H. COURTENAY, *Professor of Natural and Experimental Philosophy.*

D. H. MAHANY, *Professor of Engineering.*

CHARLES R. LESLIE, *Teacher of Drawing.*

JOHN FOWLE, *Major 3d Infantry.*

THOMAS J. LESLIE, *First Lieutenant of Engineers.*

Z. J. D. KINSLEY, *First Lieutenant 3d Artillery.*

N. TILLINGHAST, *First Lieutenant 7th Infantry.*

L. B. WEBSTER, *First Lieutenant 1st Artillery.*

C. F. SMITH, *First Lieutenant 2d Artillery.*

W. F. HOPKINS, *Second Lieutenant 4th Artillery.*

THO. JEFFERSON CRAM, *Second Lieutenant 4th Artillery.*

A. E. CHURCH, *Second Lieutenant 3d Artillery.*

W. W. MATHER, *Second Lieutenant 7th Infantry.*

J. ALLEN SMITH, *Second Lieutenant 3d Artillery.*

J. BARNES, *Second Lieutenant 4th Artillery.*

M. KNOWLTON, *Second Lieutenant 1st Artillery.*

S. EASTMAN, *Second Lieutenant 1st Infantry.*

JAMES H. TAYLOR, *Second Lieutenant 3d Infantry.*

R. H. PEYTON, *Second Lieutenant 2d Artillery.*

S. C. RIDGELY, *Second Lieutenant 4th Artillery.*

B. R. ALDEN, *Second Lieutenant 4th Infantry.*

B. S. EWELL, *Second Lieutenant 4th Artillery.*

WARD B. BURNETT, *Brevet Second Lieutenant 2d Artillery.*

FREDERICK A. SMITH, *Brevet Second Lieutenant of Engineers.*

*The committee appointed by the officers at Washington, in 1828, to report on the subject of a provident society, found, by an examination of the Army Register, that there was a yearly average of deaths among the commissioned officers of 13 $\frac{1}{2}$. The number of officers in the army then was 542. Hence 542 : 13 $\frac{1}{2}$:: 733 : 18.

† Being 15-32 of 18.

‡ This does not include the extra pay enjoyed by officers of the line temporarily in the staff as aides-de-camp, adjutants, &c.

§ The monthly average of five years ending the 31st of December, 1833.

Proceedings of a meeting of officers held at the United States Military Academy, West Point, December 16, 1833.

Whereas the propositions for the formation of a provident society, which have recently been revived at several army posts, and the suggestion made by the Secretary of War in his last report, render it, in our belief, desirable that all interested should express their views on the subject; and as such an expression seems more particularly necessary since all who have yet spoken appear to consider that there can be but one opinion; we, the undersigned officers of the army stationed at the United States Military Academy, West Point, having at a former meeting referred the subject to a committee, do adopt the following report and resolutions:

REPORT.

The committee appointed to report on the subject of the formation of a provident society have taken into consideration the different plans which have, as far as their knowledge extends, been proposed for that purpose. These plans appear to be divisible into three kinds; of which some propositions embrace but one, others two, whilst others again embrace the whole. They are:

First. To secure an annuity for life, of a certain amount, to the widows and children of deceased officers.

Second. To secure a like annuity to officers who resign after a certain period of service.

Third. To secure the same to disbanded officers.

The committee will offer their views upon these in the order of the importance which seems to be attached to them respectively.

First. To secure an annuity to the widows or children of deceased officers.

Reference has been made here, on several points, to the excellent report of the committee appointed at a meeting of the officers in Washington in 1828,* which, from the official character and opportunities of information of those by whom it was made, offers the most satisfactory authority which can be expected. It will be assumed, in the words of that report, "that ten per cent. per annum for four years, and five per cent. thereafter, on pay proper, is the maximum rate of contribution; believing that the convenience, not to say the wants, of the officers will not permit a higher rate." Under the present organization of the army, the annual amount of the pay proper of all commissioned officers is about \$330,540, of which 10 per cent. is \$33,054, say \$33,000, which is the amount to be paid annually during the first four years, supposing that every officer subscribes; after which the amount will be one-half of this, or \$16,500, with an addition of \$600 arising from this, namely, that every successive year there will be a class of graduates from the United States Military Academy who will pay ten per cent. instead of five per cent., as the rest of the officers of the army. The annual sum to be paid, therefore, after the first four years, amounts to \$17,100.

In order to ascertain the number of claimants for each year, the result of the calculation in the report of 1828 is taken as correct. This result is 7. As the difference of the pay proper in 1828 and 1833 is owing to an increase in the number of officers, it would appear that if the number of claimants, when the pay proper is \$243,752, is 7, the sum \$330,540 must produce a proportionably greater number. This is found to be 9; which, therefore, will be taken as one of the elements of the calculation.

The next point to be determined is the average amount of the annuities. The average pay proper, leaving out of consideration brevet pay, is \$428 per annum; so that if the annuity is to be equal to the half pay of the officers, the average amount will be \$214, say \$200.

The last condition is the average duration of the annuities. Taking the calculations in the report of 1828 on this point, a reference to their statement is all that is necessary. This contains, first, a table from the calculations of the Pennsylvania Life Insurance Company, which gives the following data:

Persons 21 years of age will probably continue to live	28 years.
Persons 25 years of age will probably continue to live	26 years.
Persons 30 years of age will probably continue to live	23½ years.
Persons 35 years of age will probably continue to live	21½ years.
Persons 40 years of age will probably continue to live	20 years.
Persons 45 years of age will probably continue to live	18¾ years.
Persons 50 years of age will probably continue to live	17 years

Average. 22½ years.

The report goes on to say: "It is believed that the pensions of nearly all the widows will commence at periods of life between 21 and 50 years, which, according to the foregoing table, makes 22½ years the average continuance of life; but as it is probable the fund will be relieved by marriage, in which case the pension of the widow ceases, the committee have deducted 2½ years, and assumed 20 as the probable average duration of pensions of this class. It is true that, notwithstanding the marriage of the widow, the pension may be prolonged beyond the time assumed by the orphans who are under one year, or who may not be born until after the death of the father; but it is believed that these, as well as the 2½ years deducted, will be counterbalanced by the cases in which there are no children, or where the children have attained the age of 21 before the marriage of the widow.

Assuming, then, that all the officers of the army contribute during 4 years 10 per cent. of their pay proper, and 5 per cent. thereafter; that the surplus funds can be invested in stock yielding 4 per cent. interest, († the greatest to be depended on, if security of investment and unavoidable delays be considered;) that the number of annuities granted to widows or orphans annually will be 9, and that they will be continued on an average of 20 years: the following table will exhibit the state of the fund for every successive year.

This table has been calculated on the presumption that the payments of the annuities are all made at the end of every year, and that the first year's subscription is allowed to accumulate its whole interest before any demand is made upon it.‡

* Military and Naval Magazine for November, 1833, p. 176.

† See report of 1828.

‡ This assumption, as well as all the others which this report contains, is taken as favorable as possible to the provident society.

A.

Statement of the operation of a proposed fund for the payment of an annuity of \$200 each to the widows or children of officers, nine in number, during their natural lives, predicated on an assessment of 10 per cent. per annum on the pay proper of all officers for the first four years, and five per cent. thereafter.

Years.	Capital at the beginning of each year.	Interest on capital.	Amount of principal and interest.	Amount of annuities for the year.	Balance end of year.	Yearly contribution.
1	\$33,000	\$1,320	\$34,320	\$1,800	\$32,520	\$33,000
2	65,520	2,620	68,140	3,600	64,540	33,000
3	97,540	3,901	101,441	5,400	96,041	33,000
4	129,041	5,161	134,202	7,200	127,002	17,100
5	144,102	5,764	149,866	9,000	140,866	17,100
6	157,966	6,318	164,284	10,800	153,484	17,100
7	170,584	6,823	177,407	12,600	164,807	17,100
8	181,907	7,276	189,183	14,400	174,783	17,100
9	191,883	7,675	199,558	16,200	183,358	17,100
10	200,458	8,018	208,476	18,000	190,476	17,100
11	207,576	8,303	215,879	19,800	196,079	17,100
12	213,179	8,527	221,706	21,600	200,106	17,100
13	217,206	8,688	225,894	23,400	202,494	17,100
14	219,594	8,783	228,377	25,200	203,177	17,100
15	220,277	8,811	229,088	27,000	202,088	17,100
16	219,188	8,767	227,955	28,800	199,155	17,100
17	216,255	8,650	224,905	30,600	194,305	17,100
18	211,405	8,456	219,861	32,400	187,461	17,100
19	204,561	8,182	212,743	34,200	178,543	17,100
20	195,643	7,825	203,468	36,000	167,468	17,100
21	184,568					

The result of this calculation shows that the fund increases for fourteen years with a diminished increment; that at the end of the fifteenth, the capital remaining, to which the contribution of \$17,100 is to be added, viz: \$202,088, is less than the corresponding capital of the year before by \$1,089; and now that as the contribution for each year added to the interest of the capital for that year is less than the demand for annuities, the fund must diminish until it becomes extinct. This, by continuing the table, it is found to do in the 32d year, when it will not only be exhausted, but in debt to the amount of about \$6,000.

Thus it appears that the maximum contribution of the officers of the army is unable to provide the mere pittance of \$200 per annum for widows and orphans alone.

Second. To secure an annuity for life of a certain amount to officers who shall resign after a certain period of service.

The annuity generally proposed is half pay, and the period of service 25 years; a greater term would not be useful to the officers, a less would burden too much the provident fund.

It may be safely assumed that after 25 years' service the individual will be a captain, and probably a field officer. Supposing, however, four captains to resign for every two field officers, the average half pay will be about \$300, which will be adopted in the following calculations.

In order to ascertain the probable duration of the annuity, it must be recollected that the average age at which cadets graduate at the Military Academy is 22 years. The average age at resignation will therefore be 47 years. Taking the table of lives already given, where 45 years give $18\frac{3}{4}$, and 50 years 17 years, as the probable continuance of life, the intermediate number 47 will give about 18 years, which will consequently be the probable duration of the annuity.

The investment is supposed to be made on the same terms, and the tables below to be constructed on the same principles as in the previous case.

This table shows the following results, viz: that the fund to the end of the 18th year has continued to increase; but that if the annuities be increased by the annual increment for the 19th year, it begins to diminish. Consequently, 5 annuitants, at \$300 per annum each, can just be supported, if the average duration of their lives be taken at 18 years; but should the average be increased to 19 years by any circumstance, or should any unforeseen deficiency occur in the annual contributions or mismanagement of the fund, the capital will commence to decrease, and must be exhausted at the end of a certain term of years.

B.

Statement of the operation of a proposed half-pay fund for five officers, to receive \$300 per annum each, on retiring after 25 years' service, predicated on an assessment of 10 per cent on the pay proper of all officers for the first four years, and 5 per cent. thereafter.

Years.	Capital at beginning of each year.	Interest on capital.	Amount of principal and interest.	Amount of annuities for each year.	Balance end of each year.	Yearly contribution.
1.....	\$33,000	\$1,320	\$34,320	\$1,500	\$32,820	\$33,000
2.....	65,820	2,632	68,452	3,000	65,452	33,000
3.....	98,452	3,938	102,390	4,500	97,890	33,000
4.....	130,890	5,235	136,125	6,000	130,125	17,100
5.....	147,225	5,889	153,114	7,500	145,614	17,100
6.....	162,714	6,508	169,222	9,000	160,222	17,100
7.....	177,322	7,092	184,414	10,500	173,914	17,100
8.....	191,014	7,640	198,654	12,000	186,654	17,100
9.....	203,754	8,150	211,904	13,500	198,404	17,100
10.....	215,504	8,620	224,124	15,000	209,124	17,100
11.....	226,224	9,048	235,272	16,500	218,772	17,100
12.....	235,872	9,434	245,306	18,000	227,306	17,100
13.....	244,406	9,776	254,182	19,500	234,682	17,100
14.....	251,782	10,071	261,853	21,000	240,853	17,100
15.....	257,953	10,318	268,271	22,500	245,771	17,100
16.....	262,871	10,514	273,385	24,000	249,385	17,000
17.....	266,485	10,659	277,144	25,500	251,644	17,000
18.....	268,744	10,749	279,493	27,000	252,493	17,000
19.....	269,593	10,783	280,376	28,500	251,876	17,000

If now we calculate the result, supposing six officers on half-pay, at \$300 each per annum, it will be seen that the first table, A, calculated for nine persons, at \$200 per annum, must correspond exactly with one for six persons, at \$300 per annum. The difference is, that the annuities in the first case are for twenty years, and in the second for eighteen years. For eighteen years, therefore, the tables will be the same.—(See table A.)

The conclusion, from inspection, will be as before, that the fund commences to diminish in the fifteenth year, and must, from the principle mentioned in that calculation, viz., that the demand for annuities is greater than the annual contribution, added to the interest of the surplus capital, *diminish*, and *finally become extinct*. This will take place in the thirty-seventh year, as will be seen by continuing the table, the difference between the terms of extinction in the two cases being referable to the difference of the eighteen and twenty years.

Five, then, can be *just* supported, and *six* cannot. Let us now compare the numbers with the probable number of those who would retire on half-pay.

From a simple inspection of the army register we shall find that there are at least thirty officers, a majority of whom are above the rank of major, who are now, (in 1833,) and at least fifty who, in the course of four years, (and it cannot be expected that the fund will go into operation before that time,) will be, entitled to retire on the terms proposed. Of these eighty, it is fair to conclude that at least one-eighth, or ten persons, would gladly avail themselves of the opportunity offered to enter on other pursuits, with the certainty of half-pay for the remainder of their lives. The conclusion is evident. If six exhaust the fund in thirty-seven years, when the majority of annuities is for captains, how soon will ten exhaust it when we continue for several years to support exclusively officers above that rank?

A writer in the Military and Naval Magazine, in an article of the number for July, 1833, entitled "Hints for a Military and Naval Provident Society," has put forth a scheme which is fair enough at the first glance to a superficial reader, but which leads to results which will perhaps startle the proposer of it. His plan briefly is to accumulate, first, by subscriptions in both services of one month's pay proper, and after that of one week's pay proper, (or the one-fourth of the preceding,) a fund which, at the end of five years, shall amount to \$175,000. We shall now quote from the article:

"The regular interest of this sum, together with the amount of annual subscriptions, would enable the society to pay *forever thereafter*, to the families of those entitled to the benefits of the institution, the following rates of annuities:

	Per annum.
"To the widows or children of general officers of the army, and post-captains of five years and upwards.....	\$1,000
"To the widows or children of post-captains under five years, colonels and lieutenant colonels..	750
"To the widows or children of all other commissioned officers.....	500
"To the widows or children of all warrant officers.....	300

"Supposing the average yearly deaths to be one in fifty, as we have stated it, at the commencement of the sixth year there is to be paid of these annuities—

"Of the first class, three, at \$1,000.....	\$3,000
"Of the second class, five, at \$750.....	3,750
"Of the third class, seventeen, at \$500.....	8,500
"Of the fourth class, eighteen, at \$300.....	5,400
	<hr/>
	20,650

"Making an aggregate of \$20,650, and leaving a balance of interest and annual subscriptions of \$7,350 to be added to the next year's capital."

The great and fundamental error of the whole calculation is this: that the author of "Hints" has entirely forgotten that these annuities are *double* for the *second* year what they are for the first, treble for the third, and so on, according to the number of years from the beginning, *until the annuitants begin to die*. The table below will show him the true result of his plan. We shall allow him the benefit of six per cent. interest in the investment of the fund, as he has so taken it, although in our other calculations we have adopted only four per cent., in accordance with the report previously referred to.

C.

Statement exhibiting the operation of the annuity fund, as proposed by the author of "Hints for a Military and Naval Provident Society," July number, *Military and Naval Magazine*.

Years.	Capital at beginning of each year.	Amount of annuities for each year.	Balance after payment of annuity.	Interest on balance.	Yearly contribution.
First.....	\$175, 000	\$20, 650	\$174, 350	\$10, 461	\$17, 500
Second.....	202, 311	41, 300	161, 011	9, 660	17, 500
Third.....	188, 171	61, 950	126, 221	7, 573	17, 500
Fourth.....	151, 294	82, 600	68, 694	4, 121	17, 500
Fifth.....	90, 315	103, 250	12, 935	776	17, 500
Sixth.....	3, 789	123, 900	120, 111	7, 206	17, 500
Seventh.....	109, 817				

It appears from this, that in the eighth year from the first action on the subject, or the third from the first payment of annuities, the fund diminishes continually; that it is exhausted in the fifth year from the first payment, with a *deficit* of \$12,935; and that in only two years more the fund is in debt to the amount of \$109,817!

Third. To provide an annuity for disbanded officers.

The best reply to this proposition is found in an article of the November number of the *Military and Naval Magazine* for 1833, signed "Covington," whose remarks upon the whole subject appear to be very judicious.* His observation on the point before us is, "that, as to this class, a sufficient objection is found in the fact that a single act of legislation might create more pensioners than it would leave contributors," which objections we consider, with him, to be fully sufficient.

Your committee have thus shown (as they conceive) that the three plans, first, to secure an annuity for life to the widows or children of deceased officers; second, to secure a like annuity of half-pay to officers who shall retire after twenty-five years of service; and, third, to secure an annuity to disbanded officers, are each *separately* and *individually* impracticable; and, consequently, that any idea of uniting all, or any two of them, in one project cannot be entertained for a moment.

Apparently, the only practicable way, and certainly the most advantageous one, of accomplishing the end proposed is, not by the action of the officers of the army as a body in the formation of a provident society, but by the application of each individual officer who feels interested in the subject to a life insurance company for an annuity, either for his relatives after his death or for himself if he choose to resign after a settled term of service. That it is the most advantageous way appears from these considerations:

1. The amount of *capital* possessed by a life insurance company, which in the case of the New York Company is one million; whereas the capital of the provident society must be comparatively small.

2. The mode of administering the affairs of the company, which would be carried on by men of business, acquainted with a subject occupying their *undivided* attention; whereas the direction of the provident society would be confided to gentlemen of the army, necessarily, to a certain degree, unacquainted with the best mode of conducting a moneyed institution, and already provided with professional occupations of their own.

3. The large interest which (as in the case of the New York Company) each director is required to hold in the capital stock; whereas the directors of the provident society will be interested to a small amount only, and the security for their attention therefore less.

4. The supervision of some legal authority, (which in the case of the New York Company is the chancellor of the State;) whereas the provident society would have no legal supervision of any kind.

Different plans have been proposed, according to which, if a certain majority of the officers of the army agree to the formation of a provident society, the contributions of the rest are to be enforced by law.

The committee would regard any plan which proceeds upon compulsion as essentially unjust; but they think it worthy of remark that such a measure will operate with peculiar hardship upon those who already have relatives, not wives or children, to whom they are obliged to devote any saving which they may contrive to make, and also upon those who have already devoted a part of their pay to an investment in an insurance company, several instances of both of which are known to exist.

In conclusion, we regret that we are compelled to dissent from so many of our brother officers on a measure of so much importance; but we conceive that their interest, as well as our own, will be much better promoted by laying before them what we believe to be the truth, than by entering hastily, and without due consideration, into a scheme which bears so much more the aspect of resulting in an *improvident* than a provident society.

* To the same writer we must express ourselves much indebted for the republication in that number of the *report* we have so frequently referred to.

RESOLUTIONS.

Resolved, 1st. That we consider the establishment of a half-pay system for the support of old officers who may wish to retire, and of the families of those who may die in service, by deduction from the pay of officers of the army, as impracticable, inasmuch as it would require an amount of contribution greater than we could recommend to others or agree to ourselves.

Resolved, 2d. That the proposition to form a fund by compulsory contributions, by which married officers alone are to be benefitted, is, in our opinion, equally repugnant to the feelings of married and single officers.

Resolved, 3d. That the plans (as far as we know) heretofore proposed for the relief of aged officers, and of the families of deceased officers, are as unnecessary as impracticable, since the same advantages may be obtained with equal, if not greater, facility by individual applications to insurance companies.

Resolved, 4th. That we should consider any proceeding having for its object a tax on the officers of the army for the above-mentioned purposes, without regard to the wishes of those who may be opposed to the scheme, as illiberal in spirit as it would be unjust in principle.

Resolved, 5th. That the editor of the Military and Naval Magazine be requested to publish these proceedings in the next number of his journal.

JOHN FOWLE, *Major 3d Infantry.*
 N. S. HARRIS, *1st Lieutenant 3d Infantry.*
 N. TILLINGHAST, *1st Lieutenant 7th Infantry.*
 L. B. WEBSTER, *1st Lieutenant 1st Artillery.*
 C. F. SMITH, *1st Lieutenant 2d Artillery.*
 W. F. HOPKINS, *2d Lieutenant 4th Artillery.*
 T. JEF. CRAM, *2d Lieutenant 4th Artillery.*
 A. E. CHURCH, *2d Lieutenant 3d Artillery.*
 J. ALLEN SMITH, *2d Lieutenant 3d Artillery.*
 J. BARNES, *2d Lieutenant 3d Artillery.*
 M. KNOWLTON, *2d Lieutenant 1st Artillery.*
 J. C. CASEY, *2d Lieutenant 2d Artillery.*
 S. EASTMAN, *2d Lieutenant 1st Infantry.*
 W. E. BASINGER, *2d Lieutenant 2d Artillery.*
 J. H. TAYLOR, *2d Lieutenant 3d Infantry.*
 R. H. PEYTON, *2d Lieutenant 2d Artillery.*
 S. C. RIDGELY, *2d Lieutenant 4th Artillery.*
 B. R. ALDEN, *2d Lieutenant 4th Infantry.*
 B. S. EWELL, *2d Lieutenant 4th Artillery.*
 W. B. BURNETT, *Brevet 2d Lieutenant 2d Artillery.*
 F. A. SMITH, *Brevet 2d Lieutenant, Corps of Engineers.*

To the honorable the House of Representatives of the United States:

The subscribers, officers of the United States army, would respectfully submit their remonstrance against the passage of a "a bill," introduced into the House of Representatives the present session, "to provide for the support of the widows and orphans of such officers of the army as may die while in the service of the United States, by a deduction of 2½ per centum from the pay proper of the officers and cadets composing the military establishment," &c., &c.

The subscribers are opposed to this bill, upon the following considerations, viz:

That, while its object is undoubtedly to provide for such families as are left wholly unprovided for by the death of officers, a portion of the fund would be diverted to others entirely independent of it for support, thereby defeating the true object of the fund, as no discrimination in its application is established by the bill.

That, while it is compulsory upon those officers who are opposed to the bill to contribute to the fund, it must ever be repugnant to others that their families should benefit by it. The intended favor becomes an obligation when it ceases to be a free offering.

That, by contributing to such a fund, many officers would be deprived of means that are necessary to them for objects quite as urgent and incumbent upon them as the support of a wife and children, such, indeed, as induce them in many cases to remain unmarried.

That, by deducting from the pay of officers to apply the proceeds to even charitable objects, a principle is established of disposing of their property without allowing them a voice in its distribution. The amount and manner of a donation is determined by others than those who supply the means, and, as in all such cases, cannot fail to cause dissatisfaction both to the giver and receiver.

Finally, because the fund proposed to be raised will not be sufficient to answer its purposes, and nothing is guaranteed that a further tax may not be laid to enlarge it and its objects indefinitely. If the principle is acknowledged at all, there are no limits to its application.

R. S. BAKER,
Major United States Army.
 THOS. B. ADAMS,
Second Lieut. 2d Reg. Artillery.
 W. HOFFMAN,
Second Lieut. 6th Infantry.

ALLEGHANY ARSENAL, *Pittsburg, Pa., February 5, 1834.*

To the honorable the Senate and House of Representatives of the United States:

The memorial of the undersigned, a committee on the part of the officers of the army at this post, respectfully shows: That the bill before Congress, "for incorporating a provident society for the army," is, in its provisions, unjust to your memorialists as individuals, adverse to their rights, and that the means proposed are inadequate to the object designed to be effected. It is unjust to them, because it proposes to make them a party to an act without their assent. It is adverse to their rights, because it proposes, without their consent, to deduct two and a half per centum from their pay, to be applied to an object of which they disapprove. The reasons for that disapproval it is unnecessary here to state. It is sufficient to remark that the deduction is proposed to be made from their pay, given by law as compensation for their services, and therefore as much within their control as any other property in whatever way acquired.

It is neither the wish nor the object of your memorialists to defeat a scheme, of which different views seem to be entertained by others; your memorialists only claim that, if such a society be instituted, it may be placed on the footing of a voluntary association; that *they* may not be compelled, contrary to their own views of their own interest, to contribute to its support. And here your memorialists might rest; but having it within their power, as they conceive, to demonstrate that the means proposed by the bill are inadequate to the accomplishment of the objects designed to be attained, they consider it their duty to submit that demonstration, in order to warn others against the danger of painful disappointments when it may be too late to apply a remedy.

We have found that it would require at least 10 per cent. on the pay proper of officers and cadets to maintain a yearly addition of eight annuitants at the rate of annuity proposed to be given.

And your memorialists, as in duty bound, &c., &c.

C. M. THRUSTON, *Capt. U. S. A.*
ROB. ARCHER, *Ass. Surgeon.*
E. LYON, *Capt. 3d Artillery.*

FORT MONROE, *February 15, 1834.*

A "circular" letter, dated "United States Military Academy, West Point, New York, January 20, 1834," having been enclosed to several officers of the army at Smithville, North Carolina, all the officers at the latter place assembled for the purpose of expressing their opinions of the said *circular*, and on the bill now before Congress, of which it treats.

The officers at Smithville unanimously concur with those at West Point in their statements and reasons, generally, contained in the *circular*, in opposition to the bill.

We know not by whose application the bill was introduced into Congress, neither have we been consulted on the subject, nor advised in any manner that such a measure was in contemplation, and we cannot but be astonished at the introduction and maturity thus far, with so little apparent inquiry into the wishes of the officers of the army respecting a subject so personal and important to them, and to *them alone!* And yet it is equally wonderful that Congress, in the exercise of acknowledged wisdom and justice, should entertain a bill so new in its principles and so unequal in its operations; we say *new* in its principles because it is, so far as we are informed, the first instance in this country of exacting a contribution from the emoluments of office. It is unusual, except in cases of urgent necessity, to impose *direct* taxation. And it is not common to exact a bonus *after* the privilege is conferred. We admit that Congress may increase or diminish our pay, but we respectfully contend they have no just and legal right to *tax* it.

We are satisfied that, with the full consent of every officer of the army, at the commencement, as to expediency and constitutionality, the plan would very soon produce discontent and disappointment by its failure in fulfilling the objects intended. But we do not believe the measure would have the sanction, as to adequacy of means or justness of principle, of more than a small minority of the officers; and, indeed, it is presumed that but few of them have been informed of the plan proposed.

And here we take occasion to express our *belief* that the funds of the "*Provident Society*"—a project by many so fondly cherished—would fail to afford the relief anticipated by its projectors and friends.

We trust that when the national debt no longer hangs a burden upon the treasury, and the country prosperous and overflowing with wealth, Congress will have the magnanimity, with the entire approbation of our fellow-citizens, whom we profess to have served with fidelity, to make provision for those officers who shall have devoted the active part of their lives to the services and dangers of the military profession, and also extend aid and comfort to such of their widows and families as may need their fostering care, or who shall merit reward for their prudence, moral excellence, and praiseworthy lives.

In expressing our disapprobation of the bill, in plain and decided language, though we apprehend there has been some precipitancy, we do not wish or mean to speak with disrespect of any officer or other person, for we have no doubt that those who have interested themselves in support of the measure have done so from pure and honorable motives.

SYL. CHURCHILL, *Brevet Major 1st Artillery.*
GEO. BLANEY, *Captain Corps of Engineers.*
THOS. J. C. MONROE, *Assistant Surgeon.*
GEO. WATSON, *2d Lieutenant 1st Artillery.*

SMITHVILLE, *North Carolina, February 22, 1834.*

To the honorable the Senate and House of Representatives in Congress assembled:

Your petitioners would most respectfully represent that they have been informed, by a circular from West Point, of the introduction of a bill into the House of Representatives for the passage of an act to create a *provident* or *pension fund* by a *tax* on the pay of all officers of the army. Believing, as we do, that the passage of *such* an act for *such* a purpose would be an infringement of our individual and *private* rights guaranteed to us in common with all the citizens of our country; and further, that it would *fail*, or worse than fail, in the very charitable end it purposes, we think we need no argument to prove, after the

very able investigation and exposé of the *Provident Society scheme*, recently made and published by our brother officers at West Point. We, the undersigned, do therefore beg leave most earnestly to remonstrate against the passage of any such act.

All of which is most respectfully submitted .

J. GREEN, *Major 5th Infantry.*
 D. WILCOX, *Captain 5th Infantry.*
 J. M. BAXLEY, *Captain 5th Infantry.*
 L. F. JAMISON, *Lieutenant 5th Infantry.*
 O. K. SMITH, *Lieutenant 5th Infantry.*
 J. L. THOMPSON, *Lieutenant 5th Infantry.*
 P. MAXWELL, *Assistant Surgeon.*
 J. ALLEN, *Lieutenant 5th Infantry.*

FORT DEARBORN, *Illinois, March 3, 1834.*

23D CONGRESS.]

No. 564.

[1ST SESSION.]

ON THE EXPEDIENCY OF REMOVING THE TROOPS FROM FORT GIBSON TO THE WESTERN BOUNDARY LINE OF ARKANSAS.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 10, 1834.

Mr. RICHARD M. JOHNSON, from the Committee on Military Affairs, to whom was referred the memorial of the legislature of Arkansas,* praying for the removal of the United States troops from Fort Gibson to some eligible point on the Arkansas frontier, near the western boundary line of that Territory, reported:

That before Arkansas was formed into a territorial government the protection of our citizens and the interest of the United States in that quarter induced the government to establish a military post at the junction of the Poteau and Arkansas rivers. This post was called "Fort Smith," and for several years after its establishment was on the extreme western boundary line of that Territory, and entirely west of the settlements of the citizens of the United States. By an act of Congress approved in 1825 the western boundary line of Arkansas was removed forty miles (in a straight line) further west, and after the passage of that act, and after the line had been run, it was deemed expedient by the government to remove the garrison from Fort Smith to the extreme western boundary line of that Territory. The troops were removed, Fort Smith was abandoned, and Fort Gibson was established; and all the intermediate country thus acquired or added to Arkansas by the act of Congress aforesaid was organized into counties by the legislature of Arkansas and settled by our citizens. Afterwards, in 1828, the government, in opposition to the firm and spirited remonstrance of the legislature of Arkansas and the strenuous efforts of her delegate, ceded the country added as aforesaid to Arkansas to the Cherokee Indians; and, by a clause in the treaty with that tribe, the western line of that Territory was brought back and permanently fixed where it originally was before the passage of the act of Congress of 1825. The garrison, however, has not been brought back with the line. The troops intended for the protection of the citizens of Arkansas are still stationed at Fort Gibson, in the midst of the Cherokee nation, forty miles, in a straight line, and about eighty by the military road, from the settlements of our citizens. The garrison, situated where it now is, can afford but little protection to the citizens of Arkansas. It is believed by the committee to be bad policy to have an armed force stationed so remote from the frontier and in the midst of an Indian country.

As the present western boundary line is fixed by treaty, and probably will never be extended further west; and as the policy of the government has been and will be to settle various tribes of Indians permanently upon that frontier; and as, on that account, there will ever be a necessity to keep up a garrison there for their protection, the committee have no hesitation in unanimously recommending the removal of the garrison from Fort Gibson to some eligible point on the Arkansas river, near the western boundary line of Arkansas. They believe such a disposition of our troops would more effectually protect our citizens, and, at the same time, bring the troops nearer to the point from which they draw their subsistence and support. The committee refer to the memorial of the legislature of Arkansas Territory, and make it a part of this report. They therefore report a bill.

* See No. 559.

23D CONGRESS.]

No. 565.

[1ST SESSION.]

ON CLAIM OF AN OFFICER FOR EXTRA PAY WHILST COMMANDING TROOPS ENGAGED
IN OPENING MILITARY ROADS IN FLORIDA AND ALABAMA.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 27, 1834.

Mr. RICHARD M. JOHNSON, from the Committee on Military Affairs, to whom was referred the memorial of Lieutenant E. Philips, reported:

That it appears that the memorialist claims extra compensation, at \$1 25 *per diem*, for services performed as commanding a detachment of United States troops while engaged in opening and repairing certain roads in the Territory of Florida and State of Alabama. It was not the custom previous to June, 1828, to make extra allowances of pay to all the officers serving with troops employed in opening roads; but previous to that period, and subsequent to 1821, extra allowances have been granted, in several instances, to the officers who were *respectively charged with the superintendence, and were responsible for the execution* of such works. By copies of the orders it is shown that Lieutenant Philips was *not* in charge of the superintendence of the roads on which he was employed, but under that of officers of the Quartermaster's department, and the committee are unwilling to interfere in any cases of this kind; it must be left to the discretion and justice of the department to arrange and pay, as is now done for extra pay for extra services. It appears as if there was no law at the time granting extra pay for these extra services, if performed wholly by said petitioner; and although a practice has now obtained, it would open a field of troublesome and dangerous precedence to undertake now to allow extra pay for extra services, without law and without usage at the time of performing the extra service. *Resolved*, That the prayer of the petitioner ought not to be granted.

WAR DEPARTMENT, *February 17, 1834.*

SIR: I have the honor to transmit a report from the quartermaster general giving the information asked for in your endorsement upon the memorial of Lieutenant Philips for extra compensation.

Very respectfully, your most obedient servant,

LEWIS CASS.

Hon. R. M. JOHNSON, *Chairman of Committee on Military Affairs, Senate.*QUARTERMASTER GENERAL'S OFFICE, *Washington City, February 15, 1834.*

SIR: In relation to the claim of Lieutenant Philips for extra compensation for services performed in opening roads in Florida and Alabama, I have the honor to report that previous to June, 1828, it was not the custom of the War Department to make an extra allowance to all the officers serving with troops employed in opening roads; but the Secretaries, previous to that time, and subsequent to 1821, in several instances, made extra allowances to the officers who were respectively charged with the superintendence and were responsible for the execution of such works.

The orders (copies of which accompany the account of Lieutenant Philips) show that the roads on which he was employed were not under his superintendence, but under that of officers of the Quartermaster's department.

Lieutenant Philips presented a claim in November, 1830, for extra compensation. It was laid before the Secretary of War, who endorsed on the papers, "I cannot go back to admit claims for which at the time there was no law or regulation to authorize them."

There is now a regulation allowing eighty cents a day to all officers serving with working parties employed in erecting barracks or opening roads; and, considering the nature of the service, I think it a fair and equitable allowance. I return the papers in the case.

I am, sir, your obedient servant,

TH. S. JESUP, *Quartermaster General.*Hon. LEWIS CASS, *Secretary of War, Washington City.*

23D CONGRESS.]

No. 566.

[1ST SESSION.]

ON CLAIM OF A MAJOR OF THE LINE FOR ADDITIONAL PAY WHILE ACTING AS
QUARTERMASTER GENERAL, AND FOR AN ALLOWANCE FOR A CLERK WHILE
SETTLING HIS ACCOUNTS.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 27, 1834.

Mr. RICHARD M. JOHNSTON, from the Committee on Military Affairs, to whom was referred the claim of William Piatt, reported:

That it appears that the claim is for a difference of pay between the rank of a major in the line of the army and quartermaster general, amounting to \$583 86½, and for clerk hire from 1st May, 1815, to 14th December, of the same year, amounting to \$931 42. In the year 1813, the claimant was appointed

quartermaster general of the 7th military department, and stationed at New Orleans. That he was allowed a clerk at \$1,500 per annum, and paid him from the date of his appointment to the 14th December, 1815, the day on which the claimant's accounts were closed. In consequence of the amount of his disbursements as quartermaster general, and the complication of his accounts, connected with the military operations at New Orleans, during the attack on that city by the British forces, it was necessary to continue his clerk until the date above-mentioned. The claimant having served in the line as well as in his department, and being severely wounded, the active duties of the department devolved in a great measure upon the clerk, in addition to his ordinary business, thus rendering his presence necessary in order to assist in arranging his accounts, and give the necessary explanations in the course of their settlement; the accountant (Mr. Lear) admitted the account on the 1st May, 1815, but rejected the accompanying voucher, on the ground that the employment of a clerk after the 1st of May of that year was unnecessary.

The situation of quartermaster general is one of great responsibility and difficulty at all times, and peculiarly so during active operations in the presence of an enemy, even when every moment of his time is exclusively devoted to his appropriate duties. In this case a reference to the history of the period will show that he not only performed the duties of quartermaster general, and was responsible for his department in all its details, but that he performed distinguished services in the field, and was severely wounded. From the circumstances attending the case, and from the responsibilities attached to his department as quartermaster general, he could not safely have entered into the settlement of his accounts without the presence and aid of his clerk, who had acted as his assistant, and was acquainted with all the facts in relation to them; and as it could not be known, until the accounts were in the course of final settlement, what explanations might be called for, the same necessity existed for retaining the clerk until the accounts were closed. The money was *actually expended* by the claimant, as appears from the accompanying voucher. That it was *necessarily* expended, your committee do not doubt.

Your committee find that the Secretary of War, the quartermaster general, and the paymaster general, concur with them in opinion in this case.

The committee refer to the reports from the Secretary of War and quartermaster general, and make them a part of this report for publication. They therefore report a bill.

WAR DEPARTMENT, *February 6, 1834.*

SIR: I have the honor to transmit, for the consideration of the Committee on Military Affairs, certain documents respecting the claim of Colonel Piatt, for services in the army, and for expenditures in the quartermaster's department. The President, to whom the subject has been referred, is of opinion that so long a time has elapsed since the occurrence of the circumstances to which these documents relate, that it is inexpedient for the department to act upon them, and that they ought to be referred for the consideration of Congress. Under these circumstances, the matter is presented to the Committee on Military Affairs, with the statement, however, that the claim is well supported; and that were it not for the danger of entertaining such questions as a matter of ordinary occurrence after so long a delay has taken place, I should have no hesitation in allowing the demand, believing Colonel Piatt justly entitled to it.

Very respectfully, your most obedient servant,

LEW. CASS.

Hon. R. M. JOHNSON, *Chairman of the Committee on Military Affairs.*

To any one acquainted with military operations in time of war, it is hardly necessary to say that the situation of quartermaster general is one of great responsibility and difficulty at all times, and peculiarly so during active operations in the presence of an enemy, even when every moment of his time is devoted exclusively to his appropriate duties; but, in the case of Colonel Piatt, a reference to the history of the period will show that he not only performed the duties of quartermaster general, and was responsible for his department in all its details, but that he performed distinguished services in the field, and was severely wounded. From the circumstances attending his case, I have no hesitation, from my knowledge of the duties and responsibilities of the department, in expressing my decided opinion that he could not safely have entered upon the settlement of his accounts without the presence and assistance of the clerk who had acted as his assistant, and was acquainted with all the facts in relation to them; and as it could not be known, until the accounts were in the course of final settlement, what explanations might be called for, the same necessity, it seems to me, existed that the clerk should have been retained until they were closed.

The third section of the act of May 22, 1812, gives to the Secretary of War complete control of the case. The money was *actually* expended by Colonel Piatt, as appears by the accompanying voucher; that it was *necessarily* expended, I think, must be admitted, if the circumstances of the case be fairly considered. These two points established, the Secretary has the right, as I have no doubt he has the disposition, to grant the relief asked by Colonel Piatt.

Respectfully submitted.

TH. S. JESUP, *Quartermaster General.*

23D CONGRESS.]

No. 567.

[1ST SESSION.]

ON THE EXPEDIENCY OF COMMENCING THE WORKS AT SOLLERS'S FLATS AND HAWKINS'S POINT FOR THE DEFENCE OF PATAPSCO RIVER AND BALTIMORE CITY.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES MARCH 4, 1834.

Mr. R. M. JOHNSON, from the Committee on Military Affairs, to whom was referred a resolution of the 20th January, to inquire into the expediency of making appropriation for the commencement of the works of the first and second class, projected by the board of engineers for the defence of the river Patapsco and the city of Baltimore, reported:

To determine the question referred to it, the committee has not deemed it necessary to enter into a discussion of the general considerations which gave rise to the adoption of the system of fortification of which the works for the defence of the river Patapsco and the city of Baltimore constitute an important part, but has confined itself to an examination of the circumstances touching the expediency of commencing the construction of these works without further delay.

At the time of adopting a system of defensive works for the protection of the coast, it became necessary, owing to our inability to execute, at the same time, the whole system, to commence with those positions that must always possess a paramount influence upon the military and naval operations of the country, and would afford protection to our coasting trade, and preserve from violence the outlets of those great arteries of internal communication, to the wholesome and uninterrupted circulation of which we are so much indebted for the rapid and almost unparalleled development of our internal resources. This rendered it necessary to separate the many works composing the system into classes, these classes being determined by the efficiency of the works to meet the earliest possible emergency. At a single glance at the map of our indented and extensively developed coast, the eye is arrested by the Chesapeake, over almost every part of which, in its unprotected state, a hostile fleet might ride in safety, exacting contributions from those of the numerous inlets that have the ability to minister to its wants, destroying or crippling the sources along the borders from which its enemy might draw the means of resistance, and being thus in secure possession of a stronghold, would be enabled to intercept our coast trade, and destroy that between the eastern section of the Union and the West Indies altogether. When, with these considerations, we consider the vast connexion, by means artificial as well as natural, between the shores of the Chesapeake and almost every part of the country, it will readily be perceived why many of the works for the defence of the bay are arranged in the first and second classes.

The proximity of the city of Baltimore to the bay renders its situation, in a military point of view, dangerous. It is a great commercial depot, and would offer irresistible attractions to an enemy. In the present state of things he might, by a short march, and without the risk of separation from his fleet, from which he could have an easy landing, make himself master of the city, and even endanger it by a direct attack by water. To obviate this, two forts have been projected—one to occupy Sollers's Point flats, the other the point immediately opposite Hawkins's Point, about seven miles below the city. These works will force the enemy to land at a greater distance, thereby delaying his march, and gaining, in military operations, the all-important element, time for the arrival of militia. Two works of the first class have been commenced at Hampton Roads, viz: Forts Monroe and Calhoun, the former of which will soon be in readiness to receive its armament, and the latter will be completed at the earliest practicable day.

Although these works offer no impediment to an easy entrance to the Chesapeake, yet an enemy of ordinary intelligence would hardly incur the dangerous hazard of leaving them behind him in the possession of an adversary, with facilities to concentrate, within a short period of time, a naval force under its walls sufficient to prevent his subsequent egress, unless, to be sure, he had an object in view, the accomplishment of which was of more importance to him than the preservation of his fleet. This, with an enemy coming from abroad, and deriving his supplies from home, could hardly be the case with reference to a point so far in the interior as the city of Baltimore. This consideration takes much from the necessity of an immediate commencement of the works on the Patapsco, which, under other circumstances, would be imperative; and when it is recollected that there are many works of the first class, the early construction of which is of equal if not greater importance to the preservation of our great naval establishment and general commerce, the committee deem it inexpedient to commence, just at this time, the fortifications referred to in the resolution.

It also appears to your committee that the President of the United States, under whose authority new works are recommended to Congress, has declined to present these works at this particular period, on account of the appropriations which will be required by works now erecting and to be commenced. The committee are unwilling, without great necessity, to anticipate the wishes of the Executive on this subject, for fear of deranging the system. If the committee would do it in this case, they might undertake it in all cases; and Congress is not the most convenient tribunal to judge of the comparative importance of our various fortifications, and of the period of commencing the same. Notwithstanding these considerations, the committee recommend that the appropriation for the works aforesaid should be recommended at as early a period as the state of the Treasury and the other various works on hand will justify. The committee beg leave to be discharged from the further consideration of the subject.

WAR DEPARTMENT, *January 30, 1834.*

Sir: Agreeably to your request, I have the honor to transmit a report from the chief engineer upon the subject of the proposed works for the defence of the river Patapsco and the city of Baltimore.

This report will put the committee in possession of the views of the Engineer department, and of the board of engineers who projected the works referred to.

It is proper, however, to remark that there are considerations of a pecuniary nature connected with the commencement of these works, which the committee alone are competent to determine. The President, with whom I have conversed on the subject, is of opinion that without abandoning the original plan of

defence, there is, however, the less necessity for hurrying the construction of these works, in consequence of the near completion of the works at the mouth of the Chesapeake. The probability of any predatory incursion by detachments of a hostile fleet into the waters of that bay is certainly lessened by the formidable works at Point Comfort and the Rip Raps, and by the maritime force which, in time of war, will probably be stationed there.

Very respectfully, your most obedient servant,

LEW. CASS.

Hon. R. M. JOHNSON, *Chairman Committee on Military Affairs, House of Representatives.*

ENGINEER DEPARTMENT, *January 22, 1834.*

Sir: In obedience to your instructions, which accompanied your reference to this department of the resolution of the House of Representatives of the 20th instant, instructing the Military Committee "to inquire into the expediency of making appropriation for the commencement of the works of the first and second class, projected by the board of engineers for the defence of the river Patapsco and the city of Baltimore," I have the honor to state that the works projected by the board of engineers for the purpose mentioned are a fort to occupy Sollers's Point flats, in the Patapsco, and one to occupy Hawkins's Point, immediately opposite, the former being regarded as of the first, the latter of the second class. It may be proper to remark that the classification of these works has reference to the order as to time of their construction to meet the earliest possible emergency. The board of engineers say the proximity of Baltimore to the bay places that city in a dangerous situation. In the present state of things an enemy can, in a few hours' march, without being exposed to a separation from his fleet, after an easy landing, make himself master of that great commercial depot.

Baltimore requires for its security two forts in the Patapsco, one at Hawkins's Point, and the other at the extreme end of the flat of Sollers's Point. Besides the advantages which will result of obliging the enemy to land at a greater distance, thereby delaying his march, giving time for the arrival of militia, and preventing his turning the defensive position our forces might occupy, it will be impossible for him to endanger the city or its shipping by a direct attack by water. Concurring in the views expressed by the board of engineers, a commencement of the work projected for Sollers's Point was recommended in my annual report in the fall of 1831, as there was then a prospect that the services of an engineer could be rendered available for that purpose. During the last session of Congress an estimate for several new works, including the work for Sollers's flat, was submitted to the President, but the part for this was stricken from the list because it was deemed inexpedient to commence it just at that time.

I am, very respectfully, sir, your most obedient servant,

C. GRATIOT, *Chief Engineer.*

Hon. SECRETARY of War.

23D CONGRESS.]

No. 568.

[1ST SESSION.]

ON THE PERMANENT ESTABLISHMENT OF THE OFFICE OF COMMISSARY GENERAL OF SUBSISTENCE OF THE ARMY.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES MARCH 4, 1834.

Mr. RICHARD M. JOHNSON, from the Committee on Military Affairs, to whom the subject was referred, reported:

That they refer to the letter of the commissary general and to the documents accompanying the same, and make them a part of this report; they also report the bill recommitted to them with an amendment; also recommend that the law which is continued and made permanent be printed with this report and the other documents before referred to.

OFFICE OF THE COMMISSARY GENERAL OF SUBSISTENCE, *Washington, February 21, 1834.*

Sir: I have the honor to report that the act establishing the office of the Commissary General of Subsistence was passed on the 14th of April, 1818, to continue for five years, and was continued under the act of 2d March, 1821, reducing the army.

In consonance with the act of 14th April, 1818, the office was renewed on the 23d of January, 1823, being three months previous to the expiration of the act by which it was established.

It was again renewed on the 2d of March, 1829, to continue for five years, viz: to the 2d of March of the present year, and to the end of the next session of Congress thereafter, and no longer; but in order that the commissary general may be authorized to issue his proposals in July, 1834, for supplies the subsequent year, it is deemed advisable to ask an early legislation on the reorganization of the office.

The establishment of the commissariat was in its incipency entirely experimental, and its utility has for the last fifteen years been fully tested, both in the saving of large sums annually to the government and in the improvement of the component parts of the rations issued to the troops, producing the most salutary effects in the health as well as in the morals of the army. The former will appear in full force upon reference to a report made to Congress on the 14th of November, 1822, of a comparative statement

of the three years antecedent and three years subsequent to the commencement of its operations, by which it will be perceived that the difference in subsisting the same number of men, including the pay of the commissary general, his assistants, clerks' salaries, and the contingent expenses of the office, resulted in an actual saving of \$785,520 79, say, seven hundred and eighty-five thousand five hundred and twenty dollars and seventy-nine cents, and it is confidently believed that the difference between the old and the present system has since that period been much greater. The latter, as regards the improvement of the ration and the general health of the troops, is fully proven by reports from the various commanding officers at the different posts, and their hearty approval of the addition to the ration of beans and rice, and in the substitution of coffee and sugar for whiskey, which has been productive of the happiest results in the health and morals of the soldiers.

The act of the 14th April, 1818, authorized the appointment of as many assistant commissaries from the line of the army as the service might require; and the act of 2d March, 1821, reducing the army, limited the number of assistants to fifty, and at no time have the regular appointments exceeded the legal limit.

By statement A (the Army Register*) it will be perceived that there are forty-four military posts and twelve arsenals; at twenty-seven of the most important posts the issues to the troops are made by twenty-seven assistant commissaries, being the whole number regularly appointed and commissioned; seventeen minor posts and five of the arsenals have acting assistant commissaries appointed temporarily, either by the commissary general or by the commanding officer of the post; at the remaining seven arsenals assistant commissaries are not necessary. Thirty of these assistant and acting assistant commissaries, in addition to their commissariat duties, perform duties *in the line*, and also act as assistant quartermasters, for the whole of which duties their maximum pay is \$20 per month, in addition to their pay in the line of the army.

By the act of 2d March, 1821, reducing and fixing the military peace establishment, assistant quartermasters were made liable to perform the duties of assistant commissaries, but their number being so limited, and their duties extending to various posts, it has not been practicable for the commissary general to take advantage of their services except at a few posts, and then only for the purpose of making purchases for distribution to assistant commissaries at other posts where provisions could not be procured in the quantities required for the service.

A duty devolves upon the commissary general to make an annual statement to the Secretary of War of all officers who disburse moneys *on account of the commissariat* in the first, second, and third quarters of the year, and any person referring to those statements as data for the number of assistant commissaries would be led into a manifest error, from a supposition that they all acted and were paid for the whole year, whereas such is not the fact. This number of disbursing officers the commissary general is compelled to report, even if the expenditure does not involve a greater amount than one dollar, and it arises from the frequent change of officers from post to post, by which the officer arriving relieves the officer departing; from officers appointed temporarily by commanding officers of posts to perform the duties of those on furlough; by officers accompanying small detachments on extra service, and by officers accompanying detachments of recruits from the different rendezvous to their regiments, all of whom have small sums placed in their hands for the expenditures incident to the occasion, and all of whom are held strictly accountable for the funds received and disbursed, many of whom are not in actual employment as acting assistant commissaries more than a week or a fortnight, and who receive pay as such only for the period employed; and all officers on furlough lose their additional pay, and the officer temporarily appointed to perform the duty receives it.

By reference to statement B, taken at random, it will be perceived that in the issues on the two most prominent and expensive articles, viz: pork and flour, the wastage is very trifling, viz: on the former (pork) not quite one-fourth of one per cent.; on the latter (flour) not one-sixth of one per cent.; and on the smaller articles three and two-tenths per cent. during eleven years; whereas, under the system prior to the establishment of the commissariat, it was customary for the *government* to allow to every contractor relieving another a wastage of twelve and a half per cent. on three months deposit, and one cent per ration for issuing the remainder of said deposit.

Statement C exhibits the expenditures of the commissariat from its establishment in 1818 to the 9th of November, 1833, as rendered on that day to the Secretary of War, amounting to \$5,600,709 15; and statement D shows the losses sustained by the disbursing agents of the department for the same period, amounting to \$15,497 92, being only a fraction more than one-fourth of one per cent.

The object of the Secretary of War in the bill now proposed is to make the office equally permanent with the other military bureaus, and not to ask an increase of clerks, but to place those already employed upon an equality with clerks of the same grade in the civil bureaus; the chief clerks in all of which receive \$1,700, the next class \$1,400, and the third class \$1,400, making an aggregate of \$4,500; the three clerks in the Paymaster General's office receive \$1,700, \$1,100, and \$1,100, aggregating \$3,900; the three first clerks in the Pension office receive \$1,600, \$1,400, and \$1,400, aggregating \$4,400; and the three first clerks in the Indian bureau receive \$1,600, \$1,400, and \$1,000, aggregating \$4,000; whereas the three clerks in the office of the Commissary General receive an aggregate of only \$2,950, being \$1,550 less than the three clerks in the same grade in the offices of all the Auditors, the two Comptrollers, the Register, and Treasurer; \$950 less than the three clerks in the Paymaster General's office; \$1,450 less than the three first clerks in the Pension office; and \$1,050 less than the three clerks in the Indian bureau.

The clerks in the Commissary General's office have been employed there for some years, so that the object is not to ask for additional force, but to place those now employed, as an act of strict justice, in point of salary, in such a position as to receive a compensation equal to clerks of the same grades in civil bureaus, agreeably to the classification made by Congress in 1818, to which they are, from their services, fully entitled, being equally arduous and as faithfully performed as those of any clerks employed under the government.

Very respectfully, your most obedient servant,

GEO. GIBSON, *Commissary General Subsistence.*

Colonel R. M. JOHNSON, *Chairman Military Committee House of Representatives.*

* It was not deemed necessary to print the Army Register here.

B.—*Lieutenant A. W. Thornton acted as Assistant Commissary of Subsistence at Pensacola, from March 1, 1820, to March 31, 1831; during which period he received for issue the following provisions:*

	Pork.	Flour.
Total quantity received.....	5, 564 barrels.	11, 336 barrels.
Total amount of wastage charged.....	15 "	18 "

Wastage of pork, one-fourth of one per cent. in 11 years; of flour, one-sixth of one per cent. in 11 years.
The loss on the smaller articles averages three and two-tenths per cent. in eleven years' issues.

GEO. GIBSON, *Commissary General Subsistence.*

OFFICE OF THE COMMISSARY GENERAL OF SUBSISTENCE, *Washington, February 21, 1834.*

C.—*Statement of moneys expended in the Commissariat of the United States, from its commencement in 1818, to November 9, 1833, as reported to the Secretary of War on that day.*

For 1819		Appropriated. \$989, 213 00
1820		822, 048 00
1821		254, 654 60
1822		295, 657 00
1823		276, 100 00
1824		269, 347 00
1825		260, 429 55
1826		289, 100 00
1827		284, 900 00
1828		283, 200 00
1829		361, 450 00
1830		340, 500 00
1831		341, 300 00
1832		345, 000 00
1833		402, 850 00
Balance in the treasury November 9, 1833		5, 815, 749 15
Total expended.....		5, 600, 709 15

GEO. GIBSON, *Commissary General Subsistence.*

OFFICE OF THE COMMISSARY GENERAL OF SUBSISTENCE, *Washington, November 9, 1833.*

D.—*Statement of moneys lost to the United States by the disbursing agents of the Commissariat, from its commencement, in 1818, to November 9, 1833, as reported to the Secretary of War.*

Names.	Amount.	Remarks.
Lieutenant W. W. Outlaw.....	\$695 63	Dead.
Lieutenant A. M. Wright	396 24	Dead.
Lieutenant John Mackenzie.....	126 47	Dead.
Lieutenant J. M. Pentland.....	53 49	Out of service.
Lieutenant David Brooks.....	338 40	Out of service.
Lieutenant E. B. Griswold.....	1, 492 17	Dead.
Lieutenant Bradford Bradley	40 50	Out of service.
Lieutenant John Edmondson.....	928 59	Out of service.
Lieutenant Charles Harrison.....	1, 170 23	Dead.
Major T. Hempstead.....	4, 781 33	Military storekeeper, out of service; has made an arrangement with Mr. Crawford, when Secretary of the Treasury, to pay.
Lieutenant Q. B. Hieronimus.....	18 93	Dead.
Lieutenant J. B. Hobkirk.....	769 62	Dead.
Captain R. M. Humphreys	126 35	Dead.
Lieutenant R. Lyman	1, 209 17	Dead.
Lieutenant W. Mooklar	2 70	Dead.
Lieutenant Loring Palmer	2, 833 16	Out of service; pension of \$204 per annum, stopped to pay the amount.
Lieutenant George Templeman.....	1, 580 46	Out of service.
Lieutenant John Tucker	280 48	
	17, 843 92	
From which deduct.....	2, 346 00	Stopped from the pension of Lieut. Loring Palmer, say 11 years and 6 months, leaving only \$487 16 due on that account, which, if he lives, will all be paid.
Leaving the whole loss.....	15, 497 92	

GEO. GIBSON, *Commissary General Subsistence.*

OFFICE OF THE COMMISSARY GENERAL OF SUBSISTENCE, *Washington, November 9, 1833.*

Recapitulation of three years antecedent to the Commissariat.

Amount of subsisting the troops from June 1, 1816, to May 31, 1817, per statement of the Third Auditor	\$800, 377 72
Amount of subsisting the troops from June 1, 1817, to May 31, 1819, per statement of the Third Auditor	1, 561, 076 25
	<u>2, 361, 433 97</u>

Recapitulation of three years' administration of the Commissariat.

Amount of subsisting the troops from June 1, 1819, to May 31, 1821.....	\$1, 083, 142 25
Amount of subsisting the troops from June 1, 1821, to May 31, 1822.....	492, 790 93
	<u>1, 575, 933 18</u>
Total for three years antecedent to the commissariat.....	2, 361, 433 97
Total for three years under the commissariat.....	1, 575, 933 18
Difference in favor of the commissariat.....	<u>785, 500 79</u>

GEO. GIBSON, *C. G. S.*OFFICE OF THE COMMISSARY GENERAL OF SUBSISTENCE, *Washington, November 14, 1822.*NOTE.—Beans have been added to the ration *since* the commissariat was created.

Chapter 56, pages 44, 45, Acts 1st Session 15th Congress.—AN ACT regulating the staff of the army.

SEC. 6. *And be it further enacted,* That as soon as the state of existing contracts for the subsistence of the army shall, in the opinion of the President of the United States, permit it, there shall be appointed by the President, by and with the advice and consent of the Senate, one commissary general, with the rank, pay, and emoluments of colonel of ordnance, who shall, before entering on the duties of his office, give bond and security in such sum as the President may direct, and as many assistants, to be taken from the subalterns of the line, as the service may require, who shall receive twenty dollars per month in addition to their pay in the line, and who shall, before entering on the duties of their office, give bond and security in such sums as the President may direct. The commissary general and his assistants shall perform such duties in purchasing and issuing of rations to the army of the United States as the President may direct.

SEC. 7. *And be it further enacted,* That supplies for the army, unless in particular and urgent cases the Secretary of War should otherwise direct, shall be purchased by contract, to be made by the commissary general, on public notice, to be delivered, on inspection, in bulk, and at such places as shall be stipulated; which contract shall be made under such regulations as the Secretary of War may direct.

SEC. 8. *And be it further enacted,* That the President may make such alterations in the component parts of the ration as a due regard to the health and comfort of the army and economy may require.

SEC. 9. *And be it further enacted,* That the commissary general and his assistants shall not be concerned, directly or indirectly, in the purchase or sale, in trade or commerce, of any article entering into the composition of the ration allowed to the troops in the service of the United States, except on account of the United States; nor shall any officer take and apply to his own use any gain or emolument for negotiating or transacting any business connected with the duties of his office, other than what is or may be allowed by law; and the commissary general and his assistants shall be subject to martial law.

SEC. 10. *And be it further enacted,* That all letters to and from the commissary general, which may relate to his office duties, shall be free from postage: *Provided,* That the sixth, seventh, eighth, ninth, and tenth sections of this act shall continue in force for the term of five years from the passing of the same, and thence until the end of the next session of Congress, and no longer.

Approved April 14, 1818.

Chapter 13, page 15, Acts 2d Session 16th Congress.—AN ACT to reduce and fix the military peace establishment of the United States.

SEC. 8. *And be it further enacted,* That there shall be one commissary general of subsistence, and that there shall be as many assistant commissaries as the service may require, not exceeding fifty, who shall be taken from the subalterns of the line, and shall, in addition to their pay in the line, receive a sum not less than ten nor more than twenty dollars per month; and that the assistant quartermasters and assistant commissaries shall be subject to duties in both departments, under the orders of the Secretary of War.

Approved March 2, 1821.

Chapter 5, page 5, Acts 2d Session 17th Congress.—AN ACT to continue the present mode of supplying the army of the United States.

SEC. 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the seventh, eighth, ninth, and tenth sections of the act entitled "An act regulating the staff of the army of the United States," passed April fourteenth, eighteen hundred and eighteen, be, and the same are hereby, continued in force for the term of five years, and until the end of the next session of Congress thereafter.

Approved January 23, 1823.

Chapter 42, page 53, Acts 2d Session 20th Congress.—AN ACT to continue the present mode of supplying the army of the United States.

SEC. 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the sixth, seventh, eighth, ninth, and tenth sections of the act entitled "An act regulating the staff of the army of the United States," passed April fourteenth, eighteen hundred and eighteen, and the eighth section of the act entitled "An act to reduce and fix the military peace establishment of the United States," passed March the second, eighteen hundred and twenty-one, are hereby continued in force from the passing of this act, and thence to the end of the next session of Congress thereafter, and no longer.

SEC. 2. *And be it further enacted,* That the better to enable the commissary general of subsistence to carry into effect the provisions of the above specified acts, there be appointed two commissaries, to be taken from the line of the army, one of whom shall have the same rank, pay, and emoluments as quartermaster, and the other with the rank, pay, and emoluments of assistant quartermaster.

Approved March 2, 1829.

23D CONGRESS.]

No. 569.

[1ST SESSION.]

ON CLAIM FOR PAY FOR EXTRA SERVICES BY AN OFFICER OF THE ARMY IN INSPECTING ARMS MADE BY CONTRACT, WHILE SUPERINTENDENT OF THE ARMORY AT SPRINGFIELD, MASSACHUSETTS.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES MARCH 11, 1834.

Mr. THOMSON, from the Committee on Military Affairs, to whom was referred the petition of Colonel Roswell Lee, reported:

That the petitioner sets forth that in January, 1828, he being superintendent of the United States armory at Springfield, Massachusetts, was directed by Colonel Wadsworth to take the charge and responsibility of the inspection of arms made by contract for the United States, with an expectation that a reasonable compensation would be allowed for performing that extra service; that although the subject was frequently brought before the Department of War, it passed on without any decision; that at the close of the year 1830 different measures were taken for the performance of the above-mentioned duties, at the request of the petitioner; that since that time eighty cents per day has been, by a regulation of the War Department, allowed to the officer who performs that service.

The petitioner asserts that he performed the duties of inspector with fidelity for twelve years, making three thousand seven hundred and twenty working days, for which he asks fifty cents per day, making in all one thousand eight hundred and sixty dollars.

The petitioner states that the account having been presented to the present Secretary of War, he decided that the claim was of such long standing that he could not allow it, stating that the only relief was to apply to Congress, which the petitioner has done.

Your committee having bestowed all that attention to this case which in their judgment it required, beg leave to state, that they are of opinion the business of inspecting the arms made by contract was no part of the petitioner's duty as superintendent, and that it therefore must be an extra service, for which he ought to be allowed extra pay; and indeed, it is admitted at the department that it is an extra service, for which some extra allowance ought to be made; and it is also admitted that eighty cents per day is now allowed for performing the same duties, but the Secretary of War does not feel himself authorized to make any allowance at this late day without special direction from Congress.

It is in evidence before your committee, that the petitioner departed this life in the month of August last; that his estate is insolvent; that he has left a wife and a number of children to deplore the loss of a husband and father; that they are in a poor and destitute condition, and in pressing need of this little money for their subsistence.

Your committee are, therefore, of opinion, from the facts and circumstances of this case which have come to their knowledge, that the claim is a just one and ought to be allowed, and have thereupon reported a bill for the relief of the heirs of the late Colonel Roswell Lee.

[23D CONGRESS.]

No. 570.

[1ST SESSION.]

CONSIDERATIONS AND REASONS IN FAVOR OF ESTABLISHING AN ARMORY ON THE WESTERN WATERS.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES MARCH 18, 1834.

Mr. RICHARD M. JOHNSON, from the Committee on Military Affairs, in conformity with the resolution of the House of Representatives of the 18th of December, 1833, directing "that all the papers and documents now on the files of the House, in relation to the establishment of an armory on the western waters, be referred to the Committee on Military Affairs, and that they have leave to report by bill or otherwise," reported:

That the subject of a national armory upon the western waters was introduced into Congress about eighteen years ago, and has been presented frequently, perhaps, to each Congress since, for consideration, and although the greatest solicitude has been manifested by a large portion of the United States, particularly the whole West, and encouraged by the executive government in the reports made to Congress on the subject, yet nothing decisive has been done. The only measure ever taken upon this important subject was the authority given to the President to examine sites and make report to Congress, which was done, and there the measure has rested; and it seems a matter of difficulty to have the case decided and put to rest by a decision upon its merits. It is believed by the committee that, at all times, a majority of Congress for the last eighteen years have been in favor of the establishment. The great preventive cause to its adoption has arisen from our inability to reconcile contending interests as to its location.

There are many valuable sites from which a selection can be made, and this circumstance has increased the perplexity in making the selection from so many positions acknowledged to be good; the great number of valuable sites, therefore, rather than their scarcity, has mainly obstructed the progress, and, in fact, the consummation of the measure. Magnanimity, liberality, and patriotism, all combine to induce the members of this body to discard all local attachments and preferences for the purpose of securing for our country this important institution for our safety, upon the conviction that it would be as difficult to select an improper site as it would be to please all in the selection. The committee have, therefore, thought proper to make it the duty of the President to make further examination, and select the site, and commence the buildings.

The committee have attentively considered the subject of the resolution, and are of opinion that the great extent of seacoast and inland frontier necessary to be defended in time of war will render very large issues of small arms to the militia and other newly embodied troops indispensable; that from the past experience of the country, as well as from the limited term of service of such military bodies drawn from the militia, their unavoidable inexperience, and, in many cases, sudden and imperfect organization, it is reasonable to presume that a failure of our resources will be sooner felt in this respect than in regard to any other of our military supplies. And as such failure could not be remedied without serious inconvenience to the public service, nor until after much time had elapsed in building up and placing in full operation an establishment on a large scale for the manufacture of small arms, your committee are, in consequence, of opinion that the government should at all times be prepared with a supply of such munitions to an amount sufficient to meet the demands of the country in every emergency.

Your committee therefore deem it advisable to ascertain—

The number of small arms which should be annually manufactured, in order that, with those then in the arsenals, the whole may be adequate to every exigency of the land service of the United States.

The number of small arms which ought to be in readiness for issue from the United States depots, for example, for the year 1832, in which the last returns of militia have been received, should be, from the best information that can be obtained, at least equal to seven times the actual loss or consumption during a period of one year of the last war with Great Britain. And as the average yearly expenditure or consumption of small arms during that war amounted to 90,545 stands, this would make the required number for 1832 equal to 633,815 stands. This number for 1832 should be annually increased thereafter in some given proportion to the annual increase of the militia; and it seems obvious that if its proportion to the number of militia for the year 1832 be right and proper, that proportion should be preserved in all subsequent years, so that, notwithstanding the annual increase, the same proportion of the whole body of militia may at all times be armed from the arsenals of the United States.

The number of militia in 1810 was 694,755, and is found to have increased since that period up to the year 1832, inclusive, to the amount of 1,316,615, being equal to an increase of 89.51 per cent. in 22 years, or to 4.7 per cent. per annum of the number of militia in 1810; and, on the supposition that the increase will not materially vary for the next 22 years, the average yearly increase from 1832 to 1854 should be 4.7 per cent. per annum of the number of militia in 1832, which would indicate an average yearly increase of the militia of 53,586 for the next 22 years following 1832.

Now that the same proportion of the whole body of the militia may be armed at any time before 1854, which proportion has been deemed sufficient for 1832, it will be necessary to reduce the average yearly increase of 53,586, in the proportion of the number of militia for 1832, to the number of arms deemed sufficient to arm them, or in the proportion of 1,316,615 to 633,815. This reduction will give 25,796 stands of small arms, as a necessary annual increase to the stock, 633,815, which should be in the arsenals in 1832, in order that the same given proportion of the militia may at all times be armed before 1854. So much for the annual manufacture on account of the annual increase of the militia.

The total of the non-commissioned officers, musicians, artificers, and privates of the army of the United States, and of the corps of marines, according to the existing organization, should be 7,537; and as small arms in the hands of regular troops are found, from uniform experience in English armies, to become unserviceable after a period of about twelve years' constant service, and as this fact seems to agree very well with the experience in our own armies, it will enable us to determine the annual consumption of the small arms in the hands of the army and of the corps of marines to be 628 stands.

The army was supplied with new arms in 1832; this number, 628, should therefore be annually

manufactured after the year 1832, to replace the annual consumption on account of the army and of the corps of marines.

It is to be remarked that no provision of small arms is recommended to be made with a view to meet the exigencies consequent upon any sudden enlargement of the regular army; such a provision having been deemed unnecessary, for the reason that, whatsoever the amount of the enlargement, it can only be made by a corresponding diminution of the militia of the Union, for which the supply of small arms recommended is considered sufficient.

The number of small arms which is above estimated to be a proper and expedient supply for 1832, viz: 633,815, exceeds the actual supply now in the arsenals of the United States by 54,239, which last number should properly, therefore, be immediately manufactured, it being a part of the estimated supply of 1832. As this may, however, be deemed objectionable, the deficiency may be supplied by an annual manufacture during the next 22 years of 2,465 stands.

Thus, from the best information within the reach of your committee, it appears that the number of small arms which are required to be manufactured annually, in order that a due supply may be always in readiness during the next 22 years, for issue to the militia in the service of the United States, or to the regular armies of the United States, should be—

	Stands.
For the average annual increase of the militia between 1832 and 1854.....	25, 796
Estimated annual consumption of the army and of the corps of marines as at present organized.....	628
Annual supply, during the next 22 years, to make good the estimated deficiency of 1832.....	2, 465
	<hr/>
Total annual supply for troops liable to be called into the service of the United States for the next 22 years.....	28, 889

It next becomes necessary to determine the amount of the annual supply of small arms which is proper to be issued to the authorities of the individual States, supposing a proper and necessary extension of the present system of supply, as adopted under the law of 1808.

It has been before mentioned that small arms, in the hands of regular troops, will last in constant service with good care about twelve years, but as it is believed that, in almost all the States, and especially in the new States, the system of accountability for arms issued and of preservation for arms in store is very imperfect; and as they always sustain more injury from a bad system of preservation than from constant service in the hands of regular troops, it is considered, therefore, that ten years is a fair estimate of the durability for service of arms issued to the States. Doubtless, in some of the States where the system of preservation and accountability is good, they will last much longer; but it is equally certain that, in some of the others, they will be much sooner lost or destroyed.

From the annual appropriation of \$200,000 for supplying the militia with arms, through the authorities of the States, the sum of \$5,000 is annually deducted for the expenses of inspection, package, and transportation to the States, and the balance, \$195,000, is sufficient to arm complete 12,300 men as infantry. But as a variable proportion of field artillery and accoutrements are annually issued to the States, 12,300 stands of small arms are not, therefore, the regular annual issue; this last being greater or less, according to circumstances, than that number, which is considered a fair average of the annual issues of small arms to the States. On the supposition, therefore, that 12,300 stands are issued annually to the States, and that they last ten years, there must always be on hand, after the first ten annual issues, in the arsenals of the States, 110,700 stands. This is apparent, for the 12,300 arms issued to the States in the beginning of the first year are consumed at the beginning of the tenth year after issue, thus leaving nine years' supply in the arsenals at the beginning of the tenth year of issue; and as the subsequent annual supply and the subsequent annual consumption will be always equal, there will consequently be always a supply of nine years of issue, each of 12,300 stands. Hence, as the issues to the States under the law of 1808 have been regular since 1823, there are at this time, and should always be, in the hands of the States after January, 1833, nine times 12,300, or 110,700 stands.

Assuming 110,700 men as capable of being armed by the individual States in 1832, from the proceeds of the law of 1808, as a basis on which to found the issues to the States for the next 22 years following 1832, it would seem proper that the proportion of the supply of 1832, viz: 110,700 stands; to the militia of 1832, viz: 1,316,615 men should be preserved throughout the next 22 years, or that 1,316,615 should be to 110,700 as the average or mean number of the militia for the next 22 years is to the corresponding constant supply during that period. Now, the estimated increase of the militia on that of 1832, for the next 22 years, is 89 $\frac{2}{3}$ per cent., and the mean increase (44 $\frac{2}{3}$ per cent.) on that of 1832, would give the mean number of militia, equal to 1,905,800 men, which, being diminished in the proportion of 1,316,615 to 110,700, would give 160,238 stands for the constant supply for the next 22 years. And as the arms are estimated to last ten years, this number, 160,238 stands, on the principle before referred to, would be equal to a supply of nine annual issues, and would, therefore, in order to preserve it the same for the next 22 years, require an annual issue or manufacture of one-ninth its total amount, or 17,804 stands.

Thus, then, the annual manufacture required for all purposes of the land service of the United States and of individual States is as follows, viz:

	Stands.
For the average annual increase of the militia between 1832 and 1854.....	25, 796
For the estimated annual consumption of the army and marine corps, as at present organized..	628
For the annual supply during the next 22 years, to make good the estimated deficiency of 1832.	2,465
For the annual manufacture of the next 22 years to preserve a constant supply of 160,238 stands in the arsenals of the individual States.....	17, 804
	<hr/>
	46, 693

Your committee deem it desirable to determine next the excess of what they have deemed the necessary annual supply over and above the actual supply furnished by the national armories, as derived from existing appropriations. And to do this they would remark:

1st. That the number of small arms now manufactured annually at the national armories and by contract, is.....	38, 000
2d. Annual deficiency in the number manufactured is.....	8, 693

3d. Of this number (38,000) now annually manufactured, there are now made by contract..... 11, 000
 4th. Estimated annual deficiency, together with the number of small arms now annually made
 by contract, is 19, 693

It would appear proper, in the next place, for your committee to state whether this excess, over and above what is now furnished by the national armories is sufficient to justify the erection of another national armory; and what is the comparative cost of manufacturing small arms at the national and private armories.

On this subject it would appear that if all the small arms required annually for the public (land) service of the United States, and of individual States, were to be made at national armories, there would be required one additional national armory with powers of manufacture equivalent to an annual production of 19,693 stands of arms; and which would therefore require to be about one-fourth more extensive than the national armory at Springfield, Massachusetts, which is now capable of an annual production of 16,000 stands.

That the average cost of muskets made at the national and private armories, for the service of the United States, for the last ten years ending with 1832, is as in the statement following:

Years.	National armories.	Private armories-
1823.....	\$12 23	\$14 00
1824.....	12 23	12 25
1825.....	12 23	12 25
1826.....	12 23	12 25
1827.....	12 23	12 25
1828.....	12 23	12 25
1829.....	12 23	12 25
1830.....	11 12	12 25
1831.....	11 26	12 25
1832.....	11 64	12 25

The mean cost of a musket at the national armories for the above period (10 years) is therefore \$11 96; that of the private armories, \$12 42.

That the cost here alluded to is that which has accrued immediately after the musket is turned out from the last shop, finished complete, without including any charge for preservation, package, or transportation.

The necessity for one additional national armory upon a scale at least one-fourth more extensive than those now in operation, has been thus made obvious to your committee, and no less obvious that it should be located in the western States. In examining the map of the United States we see, on the one hand, the States of the east obstructed in their intercourse with those of the west by the great natural barrier of the Alleghany mountains, presenting physical obstructions which interfere with and impede transportation, rendering it at best always expensive, and in some period of the winter almost impracticable. On the other hand, we see the States of the west bound together by every facility of transportation which can be afforded by numerous navigable rivers traversing their whole length, and all tending in the same direction to the valley of the Mississippi. Speaking generally, therefore, and with a view to the topographical features of the Union, we see incalculable expense and delay in transportation as the result of limiting our armories to the east alone, and cheapness and rapidity of transportation as the consequence of locating one in the west.

As to the number and probable increase of the militia of the east and of the west, comparatively considered, during a period of twenty-two years preceding and following 1832, your committee have to remark that the annexed table of the militia of the western States shows this number and increase preceding 1832; and that it is deemed proper to include the State of Alabama in the table, as being, in the opinion of your committee, more easily armed from a point in the west, by the Mississippi and Lake Pontchartrain, than from the position of the armories in the east, from which, towards the south, the line of transportation would be either 900 or 1,000 miles by land, traversing the navigable rivers which tend generally to the southeast, or coastwise, and subjected to the hazards of the Atlantic navigation and of the West India archipelago.

Statement of militia in the western States.

	In 1810.	In 1832.
Ohio.....	31, 633	132, 161
Indiana.....	4, 000	53, 913
Illinois.....	.....	27, 386
Missouri.....	2, 000	5, 326
Kentucky.....	42, 581	65, 852
Tennessee.....	27, 122	72, 991
Arkansas Territory.....	.....	2, 028
Mississippi.....	4, 035	13, 724
Louisiana.....	3, 000	14, 808
One-third of Pennsylvania.....	31, 353	60, 761
Alabama.....	.....	22, 446
	145, 734	471, 396
Total amount of militia of the United States in 1832.....	.....	1, 316, 615
Difference.....	.....	845, 219

It is perceived that the militia of those States in 1832 was more than one-third of the whole militia of the Union in that year. And hence, also, at least one-third of the estimated annual manufacture of small arms, above referred to, viz: 46,693 stands should have been made in the west in 1832.

But it is also observable that the militia of those States have increased during the twenty-two years

preceding 1832, to the astonishing amount of 223 per cent. of the militia in 1810. And if this be regarded as a rule of increase of militia for those States for the twenty-two years following 1832, the average or mean increase for that period will be equal to 111½ per cent. of the militia of 1832, and the average number in those States above mentioned, for the next twenty-two years, will thus amount to 997,000 men.

The average number of the whole militia of the Union for the next twenty-two years being, as before estimated, 1,905,800 men, it thus appears that in 1843 the militia in the States above mentioned will exceed that of the remaining States in the ratio of 997,000 to 908,798, or be more than one-half of the whole militia of the Union. Hence there should then be annually manufactured in the west at least one-half of the estimated total annual manufacture above referred to, or 23,346 stands.

The militia of the western States thus appearing to have been more than one-third of the whole militia of the United States in 1832, and to be accumulating by so great a ratio of increase as to make them, in 1843, exceed those of the Atlantic States, there appears in the minds of your committee no doubt, as regards the number of militia in the west, that the proposed armory should be immediately commenced and pursued with vigor.

As regards the expense of transporting arms from the armories in the east for the armament of the militia of the west, it forms an additional and powerful reason for erecting this armory in the west without delay.

If the militia or population of the west were of uniform density, their centre of population would be the same as the topographical centre of those States, which is found to be on the Mississippi river, near the boundary between the States of Tennessee and Kentucky. A uniform population, therefore, and an armory established near that point of the Mississippi, would occasion the least possible expense of transportation in the distribution of arms to the militia of the west; for in that case the centre of least transportation would be the centre of population as well as the topographical centre of the States.

But as the militia or population is not uniform, these centres must be at different points of the western States, and the true centre of population will be found much further to the northeast than the topographical centre on the Mississippi, before referred to; it is, in fact, found to be on the Ohio, between Louisville and the mouth of the Scioto.

To the centre of least transportation of greatest population the cost of transporting the arms from the armories in the eastern States may be estimated. According to the best information, the present least cost of transportation of one musket is—

From the national armory, Harper's Ferry, to Cincinnati or Louisville.....	\$0 41
From the national armory, Springfield, to Cincinnati or Louisville.....	61
From private armories to Cincinnati or Louisville.....	54½

And supposing one-third of the estimated annual number, viz: 23,346 stands, necessary for the west during the next twenty-two years, to be transported from each of the above armories across the mountains to the mouth of those points, it would produce an annual expenditure for transportation equal to \$12,178.

The amount of transportation of small arms to the west during and since the war with Great Britain cannot be ascertained with any degree of exactness. It is found, however, that the cost of transportation to the west, supposed from the national armories to Cincinnati, of each musket during that period must have been about one dollar per stand, and that for some years after the war it was reduced to seventy-five cents per stand.

But to form some adequate idea of the expenses of transportation to the west, it may be proper to state that the number of small arms transported to the western States before mentioned, under the law of 1808, is about..... 77,000 stands.

And that the number now within those States, in the United States arsenals, at the military posts, or in the hands of the army, is about..... 97,000 “

Making a total transported across the mountains of..... 174,000 “

As all these arms were manufactured at the public or private armories before mentioned, and were principally transported when the transportation was at about seventy-five cents or one dollar per stand to Cincinnati, seventy cents per stand is hence considered a small estimate of their cost of transportation to the United States. The total of which, for a part only of the arms which have been forwarded to those States, must, therefore, have been at least \$121,800, being equal to more than one-third of the estimated cost of a large national armory in that country.

It may be necessary to state generally—

What will be the comparative cost of manufacturing small arms in the Atlantic and in the western States.

The cost of manufacturing arms in the west will certainly not be more than that of the arms now made at the national armories. It is, indeed, probably less; for the iron from the same works which supply the armory at Harper's Ferry can be delivered at any point on the Ohio for the same prices which are paid at Harper's Ferry; and iron of a quality equally good can also be obtained from Tennessee and other western States at points nearer Louisville and Cincinnati. Pit coal, charcoal, and gunstocks can be procured in the west on much better terms than at either of the present armories. Some of the smaller imported articles would probably cost more in the west than in the Atlantic States; but certainly this excess of cost must be so small as to be scarce worth consideration, since they can be imported as cheaply by the Mississippi as into New York, and since the transportation from New Orleans to Louisville cannot much exceed, if any, that from New York to Harper's Ferry.

The wages of workmen, which form about two-thirds of the cost of the arms, it may be stated, will be less in the west than on the seaboard, for it may be fairly presumed that labor will eventually be cheapest where subsistence is most abundant and cheapest.

In the absence of full and complete information on the subject of several proposed sites for the armory, your committee do not consider it expedient to propose any particular spot to the adoption of Congress; but, instead thereof, they deem it expedient to recommend that the duty of selecting the site be assigned to the President of the United States, with authority to proceed in such manner that the initiatory operations for erecting the armory may be commenced at as early a day as practicable.

What should be the extent of the armory, its probable cost, the time necessary to erect it, and the amount of appropriation required for the first year.

Nineteen thousand six hundred and ninety-three, or, in round numbers, twenty thousand stands of

muskets have been ascertained to be the necessary annual production of the proposed armory, for the reason, (as stated in this report,) that on the expiration of the existing contracts that number will require to be annually made to furnish the necessary public supply.

Twenty thousand should be the minimum number, since (as before stated) at least 23,346 stands of the annual supply for the west during the next 22 years should, in strict justice, be annually manufactured there, and because (on the supposition that the site is adopted during the ensuing spring) the armory cannot be in full operation before 1839, from which time, even though it produce 20,000 stands annually, there would yet be a deficiency in the public supplies of 60,851 stands.

It is estimated (on the basis furnished by the commissioners) that the proposed armory for the annual production of 20,000 arms will cost about \$525,000. This may be more or less than what may appear in the actual result; but from the authority of the facts on which this estimate is founded, it cannot deviate materially from that result. On the supposition that the whole of the ensuing spring will have expired before the operations on the site shall be commenced, it is estimated that \$65,000 will be required for the first year's appropriation, including the cost of examination of sites, and that in four years thereafter the armory may be completed. Your committee have, in consequence, considered it expedient to report a bill in conformity with these views, all of which are respectfully submitted.

Among other important duties of a wise and just government, none is more imposing and obligatory than the equal distribution of the expenditures in different and various parts of the community as far as it may be practicable. No portion of our confederacy has stronger claims upon Congress than the western country, which has, from necessity, been deprived of this benefit and blessing: a fair opportunity now presents itself, connected with an institution which is necessary for the safety and strength and defence of the country.

And finally, another advantage, though last not least. This national institution will tend to strengthen and consolidate our happy union, which is above all price, as it perpetuates liberty, freedom, and happiness to ourselves and to our posterity in all time to come.

ORDNANCE OFFICE, *Washington, December 28, 1833.*

SIR: The letter of Hon. R. M. Johnson, chairman of the Military Committee of the House of Representatives, referred by you on the 23d instant to this office for a report, has received attentive consideration; and, in answer thereto, I have the honor to transmit the following report:

Five times the consumption, in a year of war, has been assumed in Great Britain for the number of small arms deemed necessary at all times to meet the exigencies of their public service. But as the manufactories for small arms in Great Britain are of much greater extent than is necessary for the supply of their own troops, in consequence of the practice of furnishing many of the continental powers, they have thus the means of increasing their manufactures in a short time to any extent required by their public service; and as the armories of the United States cannot compete with English manufactories of small arms in foreign markets, it hence follows that our armories will never, so long as the price of labor is so different in the two countries, be more extensive than is necessary for the public service of the United States; for these reasons, seven times the expenditure in a year of war is considered a better measure of the public wants in this country than five times such expenditure.

The maximum number, therefore, of small arms which ought to be in readiness for issue from the United States depots, for example, for the year 1832, (that in which the last returns of militia have been received,) should be—

At least equal to seven times the actual loss or consumption during a period of one year of the last war with Great Britain; and as the average yearly expenditure or consumption of small arms during that war amounted to 90,545 stands, this would give the required maximum number for 1832 equal to 633,815 stands.

This maximum number for 1832 should be annually increased thereafter in some given proportion to the annual increase of the militia; and it seems obvious that if its proportion to the number of militia for the year 1832 be right and proper, that proportion should be preserved in all subsequent years; so that, notwithstanding the annual increase, the same proportion of the whole body of militia may at all times be armed from the arsenals of the United States.

The number of the militia in 1810 was 694,735, and is found to have increased since that period up to the year 1832, inclusive, to the amount of 1,316,615, being equal to an increase of $89\frac{2}{3}\%$ per cent. in 22 years, or to $4\frac{1}{3}\%$ per cent. per annum of the number of militia in 1810; and on the supposition that the increase will not materially vary for the next 22 years, the average yearly increase from 1832 to 1854 should be $4\frac{1}{3}\%$ per cent. per annum of the number of the militia in the year 1832, which would indicate an average yearly increase of the militia of 53,586 for the next twenty-two years following 1832.

Now, that the same proportion of the whole body of the militia may be armed at any time before 1854, which (as above remarked) has been deemed sufficient for 1832, it will be necessary to reduce the average yearly increase of 53,586 in the proportion of the number of militia for 1832 to the number of arms deemed sufficient to arm them, or in the proportion of 1,316,615 to 633,815.

This reduction will give 25,796 stands of small arms as a necessary annual increase to the stock (633,815) which should be in the arsenals in 1832 in order that the same given proportion of the militia may at all times be armed before 1854.

The total of the non-commissioned officers, musicians, artificers, and privates of the army of the United States and of the corps of marines, according to the existing organization, should be 7,537; and as small arms in the hands of regular troops are found, from uniform experience in English armies, to become unserviceable after a period of about twelve years' constant service, and as this fact seems to agree very well with the experience in our own armies, it will enable us to determine the annual consumption of the small arms in the hands of the army and of the corps of marines to be 628 stands.

The army was supplied with new arms in 1832; this number (628) should, therefore, be annually manufactured, after the year 1832, to replace the annual consumption on account of the army and of the corps of marines.

It is here to be remarked that no provision of small arms is recommended to be made with a view to meet the exigencies consequent upon any sudden enlargement of the regular army; such a provision

having been deemed unnecessary, for the reason that, whatsoever the amount of the enlargement, it can only be made by a corresponding diminution of the militia of the Union, for which the supply of small arms recommended is considered sufficient

The number of small arms which is above estimated to be a proper and expedient supply for 1832, viz: 633,815, exceeds the actual supply now in the arsenals of the United States by 54,239; which last number should properly, therefore, be immediately manufactured, it being a part of the estimated supply of 1832. As this may, however, be deemed objectionable, the deficiency may be supplied by an annual manufacture, during the next 22 years, of 2,465 stands.

Thus, from the best information in the possession of this department, it appears that the number of small arms which are required to be manufactured annually, in order that a due supply may be always in readiness, during the next 22 years, for issue to the militia in the service of the United States, or to the regular armies of the United States, should be—

For the average annual increase of the militia between 1832 and 1854.....	25, 796 stands.
For the estimated annual consumption of the army and of the corps of marines, as at present organized.....	628 “
For the annual supply, during the next 22 years, to make good the estimated deficiency of 1832.....	2, 465 “
Total supply for troops liable to be called into the service of the United States for the next 22 years.....	28, 889 “

It next becomes necessary to determine the amount of the annual supply of small arms which is proper to be issued to the authorities of the individual States, supposing an extension of the present system of supply as adopted under the law of 1808.

It has been before mentioned that small arms, in the hands of regular troops, will last, in constant service, with good care, about twelve years; but, as it is believed that in almost all the States, and especially in the new States, the system of accountability for arms issued and of preservation for arms in store is very imperfect, and as they always sustain more injury from a bad system of preservation than from constant service in the hands of regular troops, it is considered, therefore, that ten years is a fair estimate of the durability (for service) of arms issued to the States. Doubtless, in some of the old States, where the system of preservation and accountability is good, they will last much longer; but it is equally certain that, in many of the other States, they will be much sooner lost or destroyed.

From the annual appropriation of \$200,000 for supplying the militia with arms through the authorities of the States the sum of \$5,000 is annually deducted for the expenses of inspection, package, and transportation to the States, and the balance, \$195,000, is sufficient to arm complete 12,300 men as infantry. But, as a variable proportion of field artillery and accoutrements are annually issued to the States, 12,300 stands of small arms is not, therefore, the regular annual issue—this last being greater or less (according to circumstances) than that number, which is considered a fair average of the annual issues of small arms to the States. On the supposition, therefore, that 12,300 stands are issued annually to the States, and that they last ten years, there must always be on hand (after the first ten annual issues) in the arsenals of the States, and derived from the law of 1808, small arms to the amount of 110,700 stands. This is apparent, for the 12,300 arms issued to the States in the beginning of the first year are consumed at the beginning of the tenth year of issue, thus leaving nine years' supply in the arsenals at the beginning of the tenth year of issue; and, as the subsequent annual supply and the subsequent annual consumption will be always equal, there will consequently be always a supply of nine years of issue, each of 12,300 stands. Hence, as the issues to the States under the law of 1808 have been regular since 1823, there are at this time, and should always be, in the hands of the States, after January, 1833, nine times 12,300, or 110,700 stands.

Assuming 110,700 men as capable of being armed by the individual States in 1832 from the proceeds of the law of 1808, as a basis on which to found the issues to the States for the next 22 years following 1832, it would seem proper that the proportion of the supply of 1832 (viz: 110,700 stands) to the militia of 1832 (viz: 1,316,615 men) should be preserved throughout the next 22 years; or that 1,316,615 should be to 110,700 as the average or mean number of militia, for the next 22 years, is to the corresponding constant supply during that period. Now, the estimated increase of the militia on that of 1832, for the next 22 years, is 89 $\frac{5}{7}$ per cent., and the mean increase (44 $\frac{2}{5}$ per cent.) on that of 1832 would give the mean number of militia equal to 1,905,800 men, which, being diminished in the proportion of 1,316,615 to 110,700, would give 160,233 stands for the constant supply for the next 22 years; and, as the arms are estimated to last ten years, this number, (160,233 stands,) on the principle before referred to, would be equal to a supply of nine annual issues, and would, therefore, in order to preserve it the same for the next 22 years, require an annual issue or manufacture of one-ninth its total amount, or 17,804 stands.

Thus, then, the annual manufacture required for all purposes of the land service of the United States, and of individual States, is as follows, viz:

For the average annual increase of the militia between 1832 and 1854.....	25, 796 stands.
For the estimated annual consumption of the army and of the corps of marines, as at present organized.....	628 “
For the annual supply, during the next 22 years, to make good the estimated deficiency of 1832.....	2, 465 “
For the annual manufacture of the next 22 years, to preserve a constant supply of 160,233 stands in the arsenals of the individual States.....	17, 804 “
Total annual manufacture for the next 22 years for all purposes.....	46, 693 “
Total number of small arms now manufactured annually at the national armories and by contract.....	38, 000 “
Annual deficiency in the number manufactured.....	8, 693 “
Of this number (38,000) now annually manufactured, there are now made by contract..	11, 000 “
Estimated annual deficiency, together with the number of small arms now annually made by contract.....	19, 693 “

Thus it would appear that if all the small arms required annually for the public land service of the United States and of individual States were to be made at national armories, there would be required one additional national armory, with powers of manufacture equivalent to an annual production of 19,693 stands of arms, and which would therefore require to be one-fourth more extensive than the national armory at Springfield, Massachusetts, which is now capable of an annual production of 16,000 stands.

With regard to the location of such an armory, this should be evidently fixed at some convenient point (having, of course, the peculiar natural advantages) within the area of those States which are not already provided with a similar national establishment, with some view to the present number, probable increase, and points of greatest density of the militia in those States, and their facilities of transportation among themselves, contrasted with the difficulties in the way of communication with other sections of the country in which national armories are already established.

Now, by examining attentively the map of the United States, with reference to these principles, it is soon perceived that the militia of the following named States can be most conveniently and economically armed from some point within their area upon some one of their great rivers, or the tributaries thereof. The number of militia appertaining to the States named, in 1810 and 1832, is annexed thereto.

	In 1810.	In 1832.
Ohio	31, 638	132, 161
Indiana	4, 000	53, 913
Illinois .....	.....	27, 386
Missouri	2, 000	5, 326
Kentucky	42, 581	65, 852
Tennessee	27, 122	72, 991
Arkansas Territory .....	.....	2, 028
Mississippi	4, 035	13, 724
Louisiana	3, 000	14, 808
One-third of Pennsylvania	31, 358	60, 761
Alabama .....	.....	22, 446
	145, 734	471, 396
Total amount of militia of the United States in 1832.....		1, 316, 615
Difference		845, 219

Hence it is perceived that the militia of those States in 1832 was more than one-third of the whole militia of the Union in that year. And hence, also, at least one-third of the estimated annual manufacture of small arms above referred to, viz: 46,693 stands, should have been made in the west in 1832.

But it is also observable that the militia of those States have increased during the twenty-two years preceding 1832 to the astonishing amount of 223 per cent. of the militia of 1810. And if this be regarded as a rule of increase of militia for those States for the twenty-two years following 1832, the average or mean increase for that period will be equal to $111\frac{1}{2}$ per cent. of the militia of 1832, and the average number in those States above mentioned, for the next twenty-two years, will thus amount to 997,000 men.

The average number of the whole militia of the Union for the next twenty-two years being, as before estimated, 1,905,800 men, it thus appears that, in 1843, the militia in the States above mentioned will exceed that of the remaining States in the ratio of 997,000 to 908,798, or be more than one-half of the whole militia of the Union. Hence there should then be annually manufactured in the west at least one-half of the estimated total annual manufacture above referred to, or 23,346 stands.

According to the best information the present cost of transportation of one musket from the national armory, Harper's Ferry, to Cincinnati is 36 cents; from the national armory, Springfield, to Cincinnati is 56 cents; from private armories to Cincinnati is $49\frac{1}{2}$ cents. And supposing one-third of the estimated annual number, viz: 23,346, necessary for the west during the next twenty-two years, to be transported from each of the above armories across the mountains to Cincinnati, it would produce an annual expenditure for transportation equal to \$11,011 53.

On the same supposition for the estimated annual number, 7,782 stands, necessary for the west in 1832, there would be an annual expenditure of transportation equal to \$3,670 51.

The amount of transportation of small arms to the west during and since the war with Great Britain cannot be ascertained with any degree of exactness. It is found, however, that the cost of transportation to the west, supposed from the national armories to Cincinnati, of each musket during that period must have been about one dollar per stand, and that for some years after the war it was reduced to seventy-five cents per stand.

But to form some more correct idea of the expenses of transportation to the west, it may be proper to remark that the number of small arms transported to the western States before mentioned, under the law of 1808, is about 77, 000 stands. And that the number within those States in the United States arsenals, at the military posts, or in the hands of the army, is about 97, 000 "

Making a total transported across the mountains of 174, 000 "

As all these arms were manufactured at the public or private armories before mentioned, and were principally transported when the transportation, as before mentioned, was at about seventy-five cents or one dollar per stand to Cincinnati, seventy cents per stand is hence considered a small estimate of their cost of transportation to the United States, the total of which, for a part only of the arms which have been forwarded to those States, must therefore have been at least \$121,800, being equal to more than one-third of the estimated cost of a large national armory in that country.

The average cost of muskets made at the national and private armories for the service of the United States for the last ten years, ending with 1832, is as in the statement following:

Years.	National armories	Private armories.
1823.....	\$12 23.....	\$14 00
1824.....	12 23.....	12 25
1825.....	12 23.....	12 25
1826.....	12 23.....	12 25
1827.....	12 23.....	12 25
1828.....	12 23.....	12 25
1829.....	12 23.....	12 25
1830.....	11 12.....	12 25
1831.....	11 26.....	12 25
1832.....	11 64.....	12 25
Mean cost for the above ten years.....	11 96	12 42

The cost here alluded to is that which has accrued immediately after the musket is turned out from the last shop, finished complete, without including any charge for preservation, package, or transportation.

The above, it is believed, contains all the information in possession of this department on the subjects referred to by the honorable chairman of the Military Committee of the House of Representatives.

I have the honor to be, sir, your most obedient servant,
 GEORGE BOMFORD, *Colonel of Ordnance.*
 Hon. LEWIS CASS, *Secretary of War.*

23D CONGRESS.]

No. 571.

[1ST SESSION.]

ARMY REGISTER FOR THE YEAR 1834.

COMMUNICATED TO THE SENATE MARCH 20, 1834.

WAR DEPARTMENT, *March 19, 1834.*

SIR: I have the honor to transmit fifty copies of the Army Register for the year 1834 for the use of the members of the Senate of the United States.

Very respectfully, your most obedient servant,
 LEWIS CASS.
 Hon. M. VAN BUREN, *Vice-President of the United States.*

Register of the army of the United States for the year 1834.

GENERAL AND STAFF OFFICERS.

Names and rank.	Date of commission.	Brevet and staff appointments.	Remarks.
Alexander Macomb, maj. gen.	May 24, 1828..		
Edmund P. Gaines, brig. general	March 9, 1814..	Maj. gen. bvt., Aug. 15, 1814..	
Winfield Scott.....do.....	.....do.....	Maj. gen. bvt., July 25, 1814..	
ADJUTANT GENERAL'S DEPARTMENT.			
Roger Jones, colonel.....	March 7, 1825..	Adjutant general.....	
INSPECTOR GENERAL'S DEPARTMENT.			
John E. Wool, colonel.....	April 29, 1816..	Inspector general; brig. general bvt., April 29, 1826.	
George Croghan...do.....	Dec. 21, 1825..	Inspector general.....	
QUARTERMASTER GENERAL'S DEPARTMENT.			
Thomas S. Jesup, brig. general.	May 8, 1818..	Quartermaster general; major gen. bvt., May 8, 1828.	
William Linnard, major.....	May 12, 1813..	Quartermaster; lieut. col. bvt., June 15, 1825.	
Henry Stanton...do.....	May 13, 1820..	Quartermaster.....	
Trueman Cross...do.....	May 22, 1826..	.....do.....	
Joshua B. Brant...do.....	Dec. 28, 1832..	.....do.....	

(20 assistant quartermasters taken from the line.)

GENERAL AND STAFF OFFICERS—Continued.

Names and rank.	Date of commission.	Brevet and staff appointments.	Remarks.
SUBSISTENCE DEPARTMENT.			
George Gibson, colonel.....	April 18, 1818..	Com'ry general of subsistence ; brig. gen. bvt , Apr. 29. 1826.	
James H. Hook, commissary --	March 10, 1829..	Quartermaster -----	
Joseph P Taylor ....do.....	-----do-----	Assistant quartermaster -----	
(50 assistant commissaries taken from the subalterns of the line.)			

ENGINEER DEPARTMENT.

Charles Gratiot, commandant of the corps of engineers, brevet brigadier general, chief engineer.
John J. Abert, topographical engineer, brevet lieutenant colonel in charge of the topographical bureau.

PAY AND MEDICAL DEPARTMENTS.

No.	Names.	Rank.	Date of commission.	Former commission.	Remarks.
PAY DEPARTMENT.					
1	Nathan Towson	Paymaster general..	May 8, 1822	Lt. col. bvt., July 5, 1814..	Washington.
1	Thomas Wright	Paymaster	June 22, 1815	Captain, Sept. 25, 1817....	St. Louis, Mo.
2	Asher Phillips	do	Aug. 26, 1815	First Lieut., May 17, 1816..	Jefferson Barracks.
3	Benjamin F. Larned	do	Nov. 24, 1815	Capt. bvt., Aug. 15, 1814....	Detroit, Mich. Territory.
4	David S. Townsend	do	April 29, 1816	Maj. bvt., July 27, 1814....	Boston, Massachusetts.
5	Daniel Randall	do	July 21, 1818	-----	New Orleans.
6	Charles H. Smith	do	Nov. 24, 1819	-----	Norfolk, Va.
7	A. A. Massias	do	Dec. 12, 1820	Captain, July 1, 1809....	Charleston, S. C.
8	T. P. Andrews	do	May 22, 1822	-----	Washington.
9	Edmund Kirby	do	Aug. 5, 1824	Captain, May 1, 1824....	Brownsville, N. Y.
10	L. G. De Russey	do	Sept. 21, 1826	Captain, Dec. 11, 1825....	Natchitoches, La.
11	William Piatt	do	May 20, 1830	Lt. col. bvt., Dec. 23, 1814..	Philadelphia.
12	Robert A. Forsyth	do	Sept. 10, 1831	-----	Detroit.
13	Adam D. Stewart	do	Jan. 14, 1833	-----	Charleston, S. C.
14	William S. Harney	do	May 1, 1833	Captain, May 14, 1825....	Memphis.
MEDICAL DEPARTMENT.					
1	Joseph Lovell	Surgeon general	April 18, 1818	-----	Washington.
1	Thomas Lawson	Surgeon	May 21, 1813	-----	New Orleans.
2	Thomas G. Mower	do	June 30, 1814	-----	New York.
3	B. F. Harney	do	Aug. 17, 1814	-----	Baton Rouge.
4	W. V. Wheaton	do	Sept. 4, 1816	-----	West Point.
5	J. P. C. Macmahon	do	Aug. 5, 1828	-----	New Orleans.
6	William Beaumont	do	Nov. 26, 1827	-----	-----
7	Lyman Foot	do	March 5, 1831	-----	-----
8	Clement A. Finlay	do	July 13, 1832	-----	Dragoons.
9	Prestley H. Craig	do	-----	-----	Fort Jesup.
10	Richard S. Satterlee	do	-----	-----	Fort Howard.
11	Zina Pitcher	do	July 15, 1832	-----	Fort Gibson.
12	Samuel G. I. De Camp	do	Dec. 1, 1833	-----	Jefferson Barracks.
1	James H. Sargent	Assistant surgeon..	June 1, 1821	P. S., April 24, 1816....	Fort Constitution.
2	William Turner	do	do	do	Fort Wolcott.
3	Foster Swift	do	do	do	-----
4	T. I. C. Monroe	do	do	P. S., April 29, 1816....	Fort Johnson.
5	Samuel B. Smith	do	do	P. S., November 12, 1816..	Fort Severn.
6	Sylvester Day	do	do	P. S., April 18, 1818....	Fort Preble.
7	Joseph Eaton	do	do	do	Fort Trumbull.
8	Joseph P. Russell	do	do	P. S., August 10, 1818....	Fort Columbus.
9	Richard Weightman	do	do	P. S., August 21, 1818....	Fort Marion.
10	Robert French	do	do	P. S., April 12, 1820....	Fort McHenry.
11	Benjamin King	do	do	S. M., October 14, 1818....	Washington, D. C.
12	John A. Brereton	do	July 1, 1821	-----	Fort Independence.
13	Edward Macomb	do	Jan. 20, 1824	-----	Fort Wood, N. Y.
14	Hamilton S. Hawkins	do	Nov. 22, 1824	-----	Fort Moultrie.
15	Alfred W. Elwes	do	May 9, 1825	-----	Fort Hamilton.
16	Robert C. Wood	do	May 28, 1825	-----	Fort Crawford.
17	Lawrence Sprague	do	June 22, 1825	-----	Fort Sullivan.
18	Joel Martin	do	Aug. 15, 1825	-----	Arsenal, Augusta, Ga.
19	Thomas S. Bryant	do	Oct. 5, 1825	-----	Fort Washington.
20	Philip Minis	do	April 12, 1826	-----	Fort McHenry.
21	Henry A. Stinnecke	do	May 8, 1826	-----	Fort Gratiot.
22	Robert Archer	do	Aug. 5, 1826	-----	Fort Monroe.
23	Lucius Abbott	do	Jan. 15, 1828	-----	Detroit.
24	William L. Wharton	do	Sept. 1, 1828	-----	Fort Mitchell.
25	James B. Sullivan	do	May 5, 1829	-----	Fort Jesup.
26	Ephraim M. Blane	do	Nov. 17, 1829	-----	-----
27	Charles S. Tripler	do	Oct. 30, 1830	-----	-----
28	William A. Berry	do	April 25, 1831	-----	Beaufort, N. C.
29	Edward Worrell	do	Feb. 24, 1832	-----	Fort Howard.
30	Philip Maxwell	do	July 13, 1832	-----	Fort Dearborn.
31	Henry L. Heiskell	do	do	-----	-----

MEDICAL DEPARTMENT—Continued.

No.	Names.	Rank.	Date of commission.	Former commission.	Remarks.
MEDICAL DEP'T—Continued.					
32	James W. Roper.....	Assistant surgeon..	July 13, 1832	-----	Fort King.
33	Richard Wayne.....	do.....	do.....	-----	Fort Oglethorpe.
34	Benjamin R. Hogan.....	do.....	do.....	-----	Fort Pike.
35	Charles McDougall.....	do.....	do.....	-----	Fort Winnebago.
36	Lucius O'Brien.....	do.....	do.....	-----	Fort Towson.
37	S. Eiting Myers.....	do.....	do.....	-----	Key West.
38	Burton Randall.....	do.....	Oct 21, 1832	-----	Fort Jackson.
39	Nathan S. Jarvis.....	do.....	March 2, 1833	-----	Fort Snelling.
40	Richard Clark.....	do.....	do.....	-----	Fort Brady.
41	Adam N. McLaren.....	do.....	do.....	-----	Fort Crawford.
42	Benjamin F. Fellowes.....	do.....	do.....	-----	Fort Leavenworth.
43	Charles W. Handy.....	do.....	May 11, 1833	-----	Jefferson Barracks.
44	Samuel W. Hales.....	do.....	July 23, 1833	-----	Dragoons.
45	George F. Turner.....	do.....	do.....	-----	Fort Mackinac.
46	John M. Gardner.....	do.....	Aug. 9, 1833	-----	Fort Wood.
47	M. C. Leavenworth.....	do.....	Sept. 1, 1833	-----	Fort Towson.
48	J. J. B. Wright.....	do.....	Oct. 25, 1833	-----	Fort Gibson.
49	Willison Hughey.....	do.....	do.....	-----	Jefferson Barracks.
50	James M. Thomas.....	do.....	Dec. 1, 1833	-----	
51	John B. Porter.....	do.....	do.....	-----	Dragoons.
52	Charles B. Welsh.....	do.....	do.....	-----	Fort Smith.
53	John Emerson.....	do.....	do.....	-----	Fort Armstrong.
54	Henry Holt.....	do.....	Dec. 31, 1831	-----	Fort Gibson.
55	Thomas Henderson.....	do.....	do.....	-----	West Point.
PURCHASING DEPARTMENT.					
1	Callender Irvine.....	Commissary general of purchases.	Aug. 8, 1812	-----	Philadelphia.
1	Edward S. Fayssoux.....	Storekeeper.....	Aug. 24, 1833	-----	Philadelphia.
2	Charles L. Litle.....	do.....	Nov. 1, 1833	-----	

CORPS OF ENGINEERS.

No.	Names and rank.	Date of commission.	Brevets and former commissions.
COLONEL.			
1	Charles Gratiot.....	May 24, 1828	Brig. gen. bvt., May 24, 1828.
LIEUTENANT COLONEL.			
1	Joseph G. Totten.....	May 24, 1828	Col. brevet, September 11, 1824.
MAJORS.			
1	Sylvanus Thayer.....	May 24, 1828	Lieut. col. bvt., March 3, 1823.
2	R. E. De Russey.....	December 22, 1830	Brevet September 11, 1824, Supt. Mil. Academy.
CAPTAINS.			
1	John L. Smith.....	August 29, 1820	
2	George Blaney.....	July 1, 1824	
3	William H. Chase.....	January 1, 1825	
4	Richard Delafield.....	May 24, 1828	
5	Andrew Talcott.....	December 22, 1830	
6	William A. Eliason.....	March 5, 1832	
FIRST LIEUTENANTS.			
1	Thomas J. Leslie.....	March 31, 1819	Paymaster, Military Academy.
2	Cornelius A. Ogden.....	July 1, 1824	
3	Henry Brewerton.....	January 1, 1825	
4	Stephen Tuttle.....	May 24, 1828	
5	George Dutton.....	December 22, 1830	
6	Joseph Mansfield.....	March 5, 1832	
SECOND LIEUTENANTS.			
1	Alexander H. Bowman.....	July 1, 1825	
2	Thompson S. Brown.....	do.....	
3	William H. C. Bartlett.....	July 1, 1826	
4	Robert E. Lee.....	July 1, 1829	
5	Alexander J. Swift.....	July 1, 1830	
6	Roswell Park.....	July 1, 1831	
BREVET SECOND LIEUTENANTS.			
1	Fred. A. Smith.....	July 1, 1833	Military Academy.
2	Jon. G. Barnard.....	do.....	
3	Geo. W. Cullum.....	do.....	
4	Rufus King.....	do.....	

TOPOGRAPHICAL ENGINEERS.

MAJORS, BREVET.			
1	John Anderson	April 12, 1813.....	Lieutenant colonel brevet, April 12, 1823.
2	John J. Abert.....	November 22, 1814 ..	Lieutenant colonel brevet, November 22, 1824.
3	James Kearney.....	April 29, 1816.....	Lieutenant colonel brevet, April 29, 1826.
4	Stephen H. Long.....	.....do.....	Lieutenant colonel brevet, April 29, 1826.
5	P. H. Perrault.....	February 17, 1817....	Lieutenant colonel brevet, February 17, 1827.
6	Hartman Bache.....	August 1, 1832.....	Brevet, July 24, 1828.
<i>Assistant Topographical Engineers.</i>			
CAPTAINS, BREVET.			
1	Wm. G. McNeill	January 27, 1823	
2	James D. Graham.....	January 15, 1829	
3	Wm. Turnbull.....	August 20, 1831	
4	William H. Swift.....	August 1, 1832.....	

ORDNANCE DEPARTMENT.

COLONEL.			
1	George Bomford	May 30, 1832.....	Brevet, February 9, 1825.
LIEUTENANT COLONEL.			
1	George Talcott .....	.....do.....	Inspector of arsenals and armies.
MAJORS.			
1	Henry K. Craig .....	.....do.....	Brevet, Dec. 23, 1823, inspector of small arms.
2	William J. Worth.....	.....do.....	Lieut. col. bvt., July 25, 1824, inspector of cannon and founderies.
CAPTAINS.			
1	Rufus L. Baker .....	.....do.....	Major brevet, May 21, 1827.
2	James W. Ripley .....	.....do.....	Captain, August 1, 1825.
3	Richard Bache .....	.....do.....	
4	John Symington.....	.....do.....	
5	William H. Bell .....	.....do.....	
6	Edward Harding .....	.....do.....	
7	Alfred Mordecai .....	.....do.....	
8	Benjamin Huger .....	.....do.....	
9	James A. J. Bradford.....	.....do.....	
10	John Hills	July 13, 1832.....	

REGIMENT OF DRAGOONS.

No.	Names and rank.	Date of commission.	Brevets and former commissions.	No.	Names and rank.	Date of commission.	Brevets and former commissions.
COLONEL.				6	Lan. P. Lupton	March 4, 1833	
1	Henry Dodge	March 4, 1833		7	Thomas Swords.....	.....do.....	
LIEUTENANT COLONEL.				8	T. B. Wheelock	Sept. 19, 1833	
1	S. W. Kearney.....	.....do.....		9	J. W. Hamilton .....	.....do.....	
MAJOR.				10	Benj. D. Moore.....	.....do.....	
1	Richard B. Mason .....	.....do.....		11	C. F. M. Noland.....	.....do.....	
CAPTAINS				SECOND LIEUTENANTS			
1	Clifton Wharton.....	.....do.....	Capt., April 22, 1830.	1	James Allen	March 4, 1833	2d Lieut., July 1, 1829.
2	Edw. V. Sumner.....	.....do.....		2	T. H. Holmes .....	.....do.....	2d Lieut., July 1, 1829.
3	Eustace Trenor.....	.....do.....		3	J. H. K. Burgwin .....	.....do.....	2d Lieut., July 1, 1830.
4	David Hunter.....	.....do.....		4	J. S. Van Derveer.....	.....do.....	2d Lieut., July 1, 1830.
5	Lemuel Ford.....	Aug. 15, 1833		5	J. W. Shaumburg.....	Sept. 19, 1833	
7	Nathan Boone .....	.....do.....		6	Enoch Steen.....	.....do.....	
7	Jesse B. Browne.....	.....do.....		7	James Clyman .....	.....do.....	
8	Jesse Bean.....	.....do.....		8	Wm. Bradford .....	.....do.....	
9	Matthew Duncan.....	.....do.....		9	J. L. Watson .....	.....do.....	
10	David Perkins	Nov. 4, 1833		10	B. A. Terrett.....	Nov. 7, 1833	
FIRST LIEUTENANTS.				BREVET SECOND LIEUTENANTS.			
1	P. St. G. Cooke	March 4, 1833		1	Wm. Eustis.....	July 1, 1830	
2	S. W. Moore .....	.....do.....		2	Geo. W. McClure.....	.....do.....	
3	Ab. Van Buren .....	.....do.....	Aid to Maj. Gen. Macomb.	3	L. B. Northrop.....	July 1, 1831	
4	James F. Izard.....	.....do.....	Adjutant.	4	G. P. Kingsbury	July 1, 1832	
5	Jefferson Davis.....	.....do.....		5	James M. Bowman.....	.....do.....	
				6	Asbury Ury.....	.....do.....	
				7	A. G. Edwards .....	.....do.....	

FIRST REGIMENT OF ARTILLERY.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
	COLONEL.			8	George D. Ramsay	Mar. 1, 1826	Adjutant.
1	James House	May 8, 1822		9	Chas. Dimmock	Feb. 20, 1828	A. Q. M.
	LIEUTENANT COLONEL.			10	L. B. Webster	May 30, 1832	Mil. Academy.
1	J. B. Walbach	May 30, 1832	Col. bvt., May 1, 1825.	11	George Nauman	do	Ordnance.
	MAJOR.			12	John Farley	Aug. 1, 1832	
1	Wm. Gates	do	Brevet, March 3, 1823.	13	Francis Taylor	Jan. 31, 1833	
	CAPTAINS.			14	A. D. Mackay	Feb. 4, 1833	
1	S. Churchill	Aug. 15, 1813	Maj. bvt., Aug. 15, 1823.	15	James R. Irwin	May 31, 1833	
2	Milo Mason	May 17, 1816	Maj. bvt., May 17, 1826.	16	John McClellan	Sept. 30, 1833	
3	Hy. Whiting	March 3, 1817	Maj. bvt., March 17, 1824. A.Q.M.	17	John Williamson	do	
4	F. Whiting	Sept. 10, 1819		18	John H. Winder	Nov. 30, 1833	
5	H. Saunders	Nov. 4, 1823			SECOND LIEUTENANTS.		
6	R. M. Kirby	Aug. 5, 1824	Maj. bvt., Sept. 17, 1824.	1	Eben. S. Sibley	July 1, 1827	Engineer duty.
7	H. W. Griswold	April 26, 1832	Brevet, Dec. 12, 1828.	2	William Maynadier	do	Ordnance.
8	M. A. Patrick	Feb. 4, 1833		3	Rich'd C. Tilghman	July 1, 1828	Engineer duty.
9	Giles Porter	Sept. 30, 1833		4	Edmund French	do	
	FIRST LIEUTENANTS.			5	William Palmer	do	Ordnance.
1	Timothy Green	April 20, 1818	Capt. bvt., Ap'l 20, 1828. A.C.S.	6	Miner Knowlton	July 1, 1829	Mil. Academy.
2	J. Howard	Nov. 1, 1823	Ordnance.	7	John F. Kennedy	do	Engineer duty.
3	D. Van Ness	Nov. 4, 1823	A. C. S.	8	John W. Barry	July 1, 1830	
4	Justin Dimick	May 1, 1824	Ordnance.	9	James H. Prentiss	do	Adj. Gen. office.
5	Daniel Tyler	May 6, 1824		10	J. B. Magruder	do	
6	Lemuel Gates	Feb. 11, 1825		11	Geo. W. Turner	July 1, 1831	
7	D. D. Tompkins	Mar. 1, 1825		12	Jacob Ammen	do	
				13	J. W. Bailey	July 1, 1832	Mil. Academy.
				14	Henry G. Sill	do	Top. duty.
				15	Geo. Watson	May 31, 1833	Bvt., July 1, 1832.
				16	Wm. H. Pettes	Sept. 30, 1833	Bvt., July 1, 1832.
				17	L. Sitgreaves	do	Bvt., July 1, 1832.
				18	F. H. Smith	Nov. 30, 1833	Bvt., July 1, 1833.
					BREVET SECOND LIEUTENANTS.		
				1	David B. Harris	July 1, 1833	Mil. Academy.
				2	E. A. Capron	do	
				3	David E. Hale	do	

SECOND REGIMENT OF ARTILLERY.

	COLONEL.			7	H. S. Mallory	May 31, 1819	Ordnance.
1	Wm. Lindsay	April 26, 1832	Bvt., March 12, 1823.	8	W. Wells	Aug. 28, 1819	
	LIEUTENANT COLONEL.			9	S. McKenzie	Feb. 20, 1825	A. C. S.
1	Ichabod B. Crane	Nov. 3, 1832	Bvt., Nov. 13, 1823.	10	James Green	May 31, 1826	
	MAJOR.			11	Abm. C. Fowler	Feb. 20, 1827	
1	Roger Jones	Feb. 17, 1827	Col. bvt., Sept. 17, 1824. Adj. General.	12	Wm. C. DeHart	Oct. 10, 1831	Aide-de-camp to Bvt. Major General Scott.
	CAPTAINS.			13	J. A. Chambers	Jan. 28, 1832	A. C. S.
1	J. F. Heileman	May 5, 1813	Maj. bvt., May 5, 1823.	14	J. A. d'Lagnel	May 30, 1832	
2	Frs. S. Belton	July 31, 1817		15	C. F. Smith	do	Mil. Academy
3	R. A. Zantzinger	Dec. 12, 1818	Maj. bvt., Aug. 15, 1824.	16	Const. Smith	do	
4	J. Mountfort	Aug. 11, 1819	Maj. bvt., Sept. 11, 1824.	17	Fr. L. Dancy	Nov. 3, 1832	A. C. S.
5	Thos. C. Legate	May 13, 1820		18	M. M. Clark	Dec. 31, 1833	A. Q. M.
6	N. Baden	April 1, 1824	Brevet, Aug. 6, 1823.		SECOND LIEUTENANTS.		
7	Jo P. Taylor	July 6, 1825	Commissary.	1	John B. Grayson	July 1, 1826	
8	Gus. S. Drane	May 30, 1832	Bvt., Nov. 15, 1827.	2	Hugh W. Mercer	July 1, 1828	
9	G. W. Gardiner	Nov. 3, 1832	Bvt April 20, 1828.	3	Joseph L. Locke	do	A. C. S.
	FIRST LIEUTENANTS.			4	Thomas B. Adams	do	Ordnance.
1	C. S. Merchant	April 20, 1818	Capt. bvt., April 20, 1828.	5	John Mackay	July 1, 1829	
2	Charles Mellon	do	Capt. bvt., April 20, 1828.	6	John C. Casey	do	
3	Allen Lowd	do	Capt. bvt., April 20, 1828.	7	Wm. E. Basinger	July 1, 1830	
4	H. W. Fitzhugh	do	Capt. bvt., April 20, '28. A.Q.M.	8	W. S. Chandler	do	
5	James S. Abeel	do	Capt. bvt., April 20, 1828.	9	Thos. B. Linnard	do	
6	R. L. Armstrong	July 2, 1818	Capt. bvt., July 2, 1828.	10	R. H. K. Whitley	do	Ordnance.
				11	James Allen	July 1, 1831	
				12	H. E. Prentiss	do	
				13	B. H. Peyton	do	Mil. Academy.
				14	A. A. Humphreys	do	
				15	George W. Ward	July 1, 1832	Top. duty.
				16	Robert P. Smith	do	
				17	P. St. G. Cooke	do	Adjutant.
				18	Joseph C. Vance	Dec. 31, 1833	Bvt., July 1, 1832, Engineer duty.
					BREVET SECOND LIEUTENANTS.		
				1	W. B. Burnett	July 1, 1832	Mil. Academy.
				2	T. F. J. Wilkinson	do	
				3	Edm. Schriver	July 1, 1833	Mil. Academy.

THIRD REGIMENT OF ARTILLERY.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
	COLONEL.			11	Martin Burk	May 1, 1828	Ordnance.
1	W. K. Armistead	Nov. 12, 1818	Brig. gen. bvt., Nov. 12, 1828.	12	R. D. A. Wade	Sept. 10, 1828	A. C. S.
	LIEUTENANT COLONEL.			13	Cam. Graham	Sept. 11, 1828	
1	James Bankhead	April 26, 1832	Bvt., Aug. 15, 1823.	14	W. S. Maitland	Dec. 31, 1828	
	MAJOR.			15	Geo. S. Greene	May 31, 1829	A. C. S.
1	Alex. S. Brooks	April 26, 1832	Lieut. col. bvt., Sept. 11, 1824.	16	R. P. Parrott	Aug. 27, 1831	Ordnance office.
	CAPTAINS.			17	J. W. Harris	June 30, 1833	
1	M. P. Lomax	Nov. 17, 1814	Maj. bvt., Nov. 17, 1824.	18	Robert Anderson	do	
2	Felix Ansart	Nov. 28, 1819			SECOND LIEUTENANTS.		
3	Æneas Mackay	Dec. 31, 1822	A. Q. M.	1	William Bryant	July 1, 1826	
4	W. L. McClintock	Aug. 11, 1823		2	Edw. B. White	do	Top. duty.
5	Thomas Childs	Oct. 1, 1826		3	Dan. S. Herring	do	Ordnance.
6	C. M. Thruston	Feb. 17, 1827		4	Theop. B. Brown	do	
7	Elijah Lyon	Feb. 20, 1827	Bvt., Jan. 1, 1827.	5	John Child	July 1, 1827	
8	Upton S. Fraser	May 1, 1828		6	N. B. Buford	do	M. Academy.
9	T. W. Lendrum	Dec. 31, 1828		7	George Fetterman	do	
	FIRST LIEUTENANTS.			8	Albert E. Church	July 1, 1828	M. Academy.
1	J. R. Vinton	Sept. 30, 1819	A. C. S.	9	Robert E. Temple	do	Office Eng. Dep.
2	R. B. Lee	Oct. 31, 1819		10	Joseph A. Smith	July 1, 1829	Mil. Academy.
3	Samuel Ringgold	May 8, 1822		11	William R. McKee	do	Eng. duty.
4	W. S. Newton	Dec. 31, 1822	Ordnance.	12	Frs. Vinton	July 1, 1830	
5	W. B. Davidson	Jan. 1, 1825		13	Benj. Poole	do	Top. duty.
6	D. H. Vinton	April 7, 1825		14	Edwin Rose	do	
7	Z. I. D. Kinsley	Aug. 30, 1825	M. Academy.	15	Geo. H. Talcott	June 30, 1833	Bvt., July 1, 1831.
8	John L'Engle	Dec. 11, 1825	A. Q. M.	16	Eras. D. Keyes	Aug. 31, 1833	Bvt., July 1, 1832, Office Eng. Dep.
9	H. Garner	Feb. 26, 1827	Adjutant.	17	William Wall	Sept. 30, 1833	Bvt., July 1, 1832.
10	F. N. Barbarin	Feb. 28, 1827	Ordnance.	18	James H. Simpson	Nov. 30, 1833	Bvt., July 1, 1832.
					BREVET 2D LIEUTS.		
				1	R. W. Lee	July 1, 1833	
				2	Robert E. Mudge	do	
				3	John A. Thomas	do	
				4	John H. Allen	do	

FOURTH REGIMENT OF ARTILLERY.

	COLONEL.			11	John Pickell	May 28, 1831	Engineer duty.
1	J. R. Fenwick	May 8, 1822	Brig. gen. bvt., Mar. 18, 1823.	12	A. Beckley	July 31, 1831	
	LIEUTENANT COLONEL.			13	F. Searle	Aug. 20, 1831	
1	Abraham Eustis	do	Col. bvt., Sept. 10, 1823.	14	F. L. Jones	Jan. 31, 1832	
	MAJOR.			15	G. W. Long	Feb. 2, 1832	
1	A. C. W. Fanning	Nov. 3, 1832	Lt. col. bvt., Aug. 15, 1824.	16	W. P. Bainbridge	May 30, 1832	
	CAPTAINS.			17	H. A. Wilson	do	Engineer duty.
1	B. K. Pierce	Oct. 1, 1813	Maj. bvt., Oct. 1, 1823.	18	R. C. Smead	Sept. 30, 1832	
2	M. M. Payne	March 2, 1814	Maj. bvt., Mar. 2, 1824.		SECOND LIEUTENANTS.		
3	John Erving	April 25, 1818	Maj. bvt., April 25, 1828.	1	W. F. Hopkins	July 1, 1825	M. Academy.
4	L. Whiting	May 21, 1822		2	W. A. Thornton	do	Ordnance.
5	J. L. Gardner	Nov. 1, 1823		3	Thomas J. Cram	July 1, 1826	M. Academy.
6	John Munroe	March 2, 1825		4	M. C. Ewing	do	
7	Jac. Schmuck	April 11, 1825		5	D. H. Tufts	do	Ordnance.
8	Patrick H. Galt	May 15, 1829		6	Charles O. Collins	July 1, 1828	
9	J. M. Washington	May 30, 1832	Bvt., Sept 26, '28.	7	John F. Lane	do	A. Q. M.
	FIRST LIEUTENANTS.			8	James Barnes	July 1, 1829	M. Academy.
1	Harvey Brown	Aug. 23, 1821	A. C. S.	9	J. E. Johnston	do	
2	Samuel Cooper	July 6, 1821	Aid to Maj. Gen. Macomb.	10	Charles Pettigru	do	Ordnance.
3	Charles Ward	July 20, 1822	Ordnance.	11	Franklin E. Hunt	do	
4	H. A. Thompson	Dec. 31, 1822	Adjutant.	12	Thos. J. Lee	July 1, 1830	
5	W. W. Morris	Aug. 11, 1823		13	Simon H. Drum	do	
6	S. B. Dusenbury	March 1, 1825	A. Q. M.	14	S. C. Ridgely	July 1, 1831	M. Academy.
7	Edw. C. Ross	Nov. 27, 1826		15	Wm. H. Emory	do	
8	John B. Scott	July 31, 1827	A. C. S.	16	Benj. S. Ewell	July 1, 1832	M. Academy.
9	Honace Bliss	Dec. 31, 1827	Engineer duty.	17	John N. Macomb	Sept. 30, 1833	Bvt., July 1, 1832.
10	Aug. Canfield	Mar. 1, 1830	Top. duty.	18	Edward Deas	Oct. 31, 1833	Bvt., July 1, 1832.
					BREVET SECOND LIEUTENANTS.		
				1	Alfred Brush	July 1, 1832	
				2	John H. Miller	July 1, 1833	
				3	James L. Davis	do	
				4	Alex. E. Shiras	do	
				5	Henry DuPont	do	
				6	Robert H. Archer	July 1, 1832	

FIRST REGIMENT OF INFANTRY.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
	COLONEL.			4	J. W. Kingsbury	Aug. 1, 1830	A. C. S.
1	Z. Taylor	April 4, 1832		5	W. L. Harris	Dec. 31, 1830	A. C. S.
	LIEUTENANT COLONEL.			6	E. Backus	July 28, 1831	
1	Wm. Davenport	April 4, 1832		7	O. Cross	Dec. 31, 1831	A. C. S.
	MAJOR.			8	Geo. W. Garey	Oct. 26, 1832	
1	John Bliss	July 15, 1831	Brevet, May 13, 1823.	9	T. B. W. Stockton	Mar. 4, 1833	A. Q. M.
	CAPTAINS.			10	Joseph H. Lamotte	July 11, 1833	
1	G. Loomis	April 7, 1819		SECOND LIEUTENANTS.			
2	T. F. Smith	April 25, 1819		1	Jonas K. Greenough	July 1, 1827	A. C. S.
3	E. A. Hitchcock	Dec. 31, 1824		2	Eros G. Mitchell	July 1, 1828	
4	W. R. Jouett	May 1, 1829		3	J. R. B. Gardinier	do	
5	Thos. Barker	May 31, 1829		4	Sid. Burbank	July 1, 1829	
6	S. Shannon	July 28, 1831	A. Q. M.	5	Seth Eastman	do	M. Academy.
7	Sam. McRee	Dec. 31, 1831		6	E. R. Williams	do	
8	Wm. Day	Oct. 26, 1832		7	Lloyd J. Beall	July 1, 1830	Adjutant.
9	Thos. P. Gwynne	Mar. 4, 1833		8	George Wilson	do	
10	Jefferson Vail	July 11, 1833		9	E. A. Ogden	July 1, 1831	
	FIRST LIEUTENANTS.			10	Ingham Wood	Sept. 30, 1833	Bvt., July 1, 1831.
1	W. M. Boyce	June 30, 1825		BREVET SECOND LIEUTENANTS.			
2	J. J. Abercrombie	Sept. 26, 1828		1	Tho. M. Hill	July 1, 1832	
3	A. S. Miller	May 31, 1829		2	Wm. H. Storer	do	
				3	John Beach	do	
				4	George D. Dimon	July 1, 1833	
				5	Geo. H. Pegram	do	
				6	James McClure	do	

SECOND REGIMENT OF INFANTRY.

	COLONEL.			5	T. Morris	May 26, 1830	
1	Hugh Brady	July 6, 1812	Brig. gen. bvt., July 6, 1822.	6	J. J. B. Kingsbury	Sept. 13, 1831	A. C. S.
	LIEUTENANT COLONEL.			7	J. R. Smith	Mar. 22, 1832	A. C. S.
1	Alexander Cummings	Aug. 20, 1828		8	H. Day	April 4, 1832	
	MAJOR.			9	W. Bloodgood	Dec. 28, 1832	
1	William Whistler	April 28, 1826	Bvt., Dec. 31, 1822.	10	S. P. Heintzelman	Mar. 4, 1833	Top. duty.
	CAPTAINS.			SECOND LIEUTENANTS.			
1	N. S. Clark	Oct. 1, 1814	Maj. bvt., July 25, 1824.	1	Amos B. Eaton	July 1, 1826	A. C. S.
2	W. V. Cobbs	Mar. 31, 1819		2	Silas Casey	do	
3	W. Hoffman	May 1, 1819		3	Abner R. Hetzel	July 1, 1827	
4	G. Dearborn	Sept. 30, 1819		4	Isaac P. Simonton	do	
5	T. Staniford	Mar. 1, 1820		5	James W. Penrose	July 1, 1828	
6	B. A. Boynton	Jan. 8, 1823		6	Edwin R. Long	July 1, 1829	
7	Owen Ransom	Jan. 25, 1823		7	James M. Hill	July 1, 1830	
8	Seth Johnson	Sept. 13, 1831		8	J. H. Leavenworth	do	
9	John Clitz	April 4, 1832		9	Geo. W. Patten	do	
10	E. K. Barnum	Dec. 28, 1832		10	J. M. Clendenin	Mar. 4, 1833	Bvt., July 1, 1830.
	FIRST LIEUTENANTS.			BREVET SECOND LIEUTENANTS.			
1	John Bradley	Oct. 2, 1822		1	E. G. Eastman	July 1, 1831	
2	Samuel L. Russell	Dec. 31, 1827	A. C. S.	2	Jacob Brown	July 1, 1832	
3	Carlos A. Waite	May 1, 1828	A. Q. M.	3	James V. Bomford	do	
4	J. S. Gallagher	Feb. 2, 1830	Adjutant.	4	I. R. D. Burnett	July 1, 1833	
				5	H. W. Wessells	do	
				6	J. W. Anderson	do	
				7	Thos. H. Johns	do	

THIRD REGIMENT OF INFANTRY.

	COLONEL.			2	J. S. Nelson	Aug. 13, 1819	Brevet, April 30, 1813.
1	H. Leavenworth	Dec. 16, 1825	B. G. bvt., July 25, 1824.	3	W. G. Belknap	Feb. 1, 1822	
	LIEUTENANT COLONEL.			4	John B. Clark	Mar. 18, 1826	
1	Josiah H. Vose	April 23, 1830		5	Andrew Lewis	June 6, 1827	
	MAJOR.			6	T. J. Harrison	Sept. 23, 1827	
1	John Fowle	Mar. 4, 1833	Brevet, June 10, 1824. M. Acad.	7	James Dean	Oct. 4, 1827	
	CAPTAINS.			8	Hy. H. Loring	July 15, 1831	
1	J. Garland	May 7, 1817	Maj. bvt., May 7, 1827, War Office.	9	Benj. Walker	Aug. 31, 1833	
				10	L. N. Morris	Oct. 31, 1833	
				FIRST LIEUTENANTS.			
				1	Otis Wheeler	April 28, 1826	
				2	Hy. Bainbridge	June 6, 1827	
				3	George Wright	Sept. 23, 1827	Adjutant.

THIRD REGIMENT OF INFANTRY—Continued.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
FIRST LIEUTS.—Con'd.				3	Nath. C. Macrae.....	July 1, 1826	
4	J. W. Cotton.....	Oct. 4, 1827	A. Q. M.	4	Alex. G. Baldwin.....	do	
5	E. B. Alexander.....	Dec. 29, 1827		5	Jefferson Van Horne.....	July 1, 1827	
6	E. B. Birdsall.....	Feb. 17, 1829		6	Thomas Cutts.....	July 1, 1828	
7	Nat S. Harris.....	Sept 11, 1829		7	Samuel K. Cobb.....	do	
8	Joseph Bonnell.....	July 15, 1831		8	A. G. Blanchard.....	Aug. 31, 1833	Bvt., July 1, 1829.
9	W. R. Montgomery.....	Aug. 31, 1833		9	James H. Taylor.....	Oct. 31, 1833	Bvt., July 1, 1830.
10	John Archer.....	Oct. 31, 1833		10	Step. B. Legate.....	do	Bvt., July 1, 1830.
SECOND LIEUTENANTS.				BREVET SECOND LIEUTENANTS.			
1	Edw. B. Babbitt.....	July 1, 1826	A. C. S.	1	Wm. O. Kello.....	July 1, 1832	
2	Richard W. Colcock.....	do	Military Acad.	2	Henry Swartwout.....	do	

FOURTH REGIMENT OF INFANTRY.

COLONEL.				3	P. Morrison.....	Aug. 26, 1826	A. C. S.
1	D. L. Clinch.....	April 20, 1819		4	Geo. A. McCall.....	Jan. 25, 1829	Aid to Bvt. Maj. Gen. Gaines.
LIEUTENANT COLONEL.				5	L. Thomas.....	Mar. 17, 1829	Adj. Gen.'s office.
1	D. E. Twiggs.....	July 15, 1831		6	R. D. C. Collins.....	Nov. 3, 1829	A. Q. M.
MAJOR.				7	Elias Phillips.....	Mar. 30, 1831	
1	William S. Foster ..	July 7, 1826	Lieut. col. bvt., Aug. 15, 1824.	8	Gov. Morris.....	April 30, 1831	A. C. S.
CAPTAINS.				9	F. D. Newcomb.....	July 6, 1832	A. Q. M.
1	J. S. McIntosh.....	Mar. 8, 1817	Maj. bvt., Mar. 8, 1827.	10	Timothy Paige.....	Oct. 17, 1833	
2	J. M. Glassell.....	Feb. 10, 1818	Maj. bvt., Feb. 10, 1828.	SECOND LIEUTENANTS			
3	Francis L. Dade.....	Feb. 24, 1818	Maj. bvt., Feb. 24, 1828.	1	Samuel R. Alston.....	July 1, 1825	
4	Philip Wager.....	May 8, 1818	Maj. bvt., May 8, 1828.	2	Washington Hood.....	July 1, 1827	Top. duty.
5	Henry Wilson.....	April 20, 1819		3	Chileab S. Howe.....	July 1, 1829	Adjutant.
6	R. M. Sands.....	April 30, 1819		4	Rd. B. Screven.....	do	
7	Wm. W. Lear.....	May 1, 1824		5	Joseph Ritner.....	July 1, 1830	
8	G. W. Allen.....	Jan. 25, 1829	Bvt., Jan. 1, 1829.	6	Rob. C. Buchanan.....	do	
9	J. Page.....	April 30, 1831	Bvt., Jan. 1, 1829.	7	D. A. Manning.....	do	
10	Wm. M. Graham.....	July 6, 1832		8	Chas. H. Larned.....	July 1, 1831	
FIRST LIEUTENANTS.				9	Thos. I. McKean.....	Sept. 15, 1833	Bvt., July 1, 1831.
1	A. W. Thornton.....	April 25, 1823	A. C. S.	10	Bradford R. Alden.....	Oct. 17, 1833	Bvt., July 1, 1831. M. Academy.
2	Wm. Martin.....	Mar. 25, 1826		BREVET SECOND LIEUTENANTS.			
				1	Fred. Wilkinson.....	July 1, 1831	
				2	Wm. W. S. Bliss.....	July 1, 1833	
				3	Benjamin Alvord.....	do	
				5	John L. Hooper.....	do	
				4	J. W. McCrabb.....	do	
				6	Abram. C. Myers.....	do	
				7	Henry L. Scott.....	do	

FIFTH REGIMENT OF INFANTRY.

COLONEL.				4	Alex. Johnston.....	Aug. 22, 1828	
1	Geo. M. Brooke.....	July 15, 1831	Brig. gen. bvt., Sept. 17, 1824.	5	L. T. Jamison.....	April 23, 1830	A. C. S.
LIEUTENANT COLONEL.				6	James Engle.....	Oct. 14, 1830	
1	Enos Cutler.....	April 28, 1826		7	John M. Berrien.....	Dec. 31, 1830	A. C. S.
MAJOR.				8	Moses E. Merrill.....	March 4, 1833	
1	John Green.....	Oct. 31, 1833	Brevet, Sept. 25, 1824.	9	Eph. K. Smith.....	do	
CAPTAINS.				10	Alexander S. Hooe.....	Oct. 1, 1833	
1	T. F. Hunt.....	May 20, 1820	A. Q. M.	SECOND LIEUTENANTS.			
2	J. Plympton.....	June 1, 1821		1	Alexander J. Center.....	July 1, 1827	Top. duty.
3	D. Wilcox.....	April 1, 1822		2	Edgar M. Lacy.....	do	A. C. S.
4	Nathan Clarke.....	June 29, 1824		3	Isaac Lynde.....	do	
5	Thos. Hunt.....	Sept. 27, 1824	Office of C. G. S.	4	Robert E. Clary.....	July 1, 1828	
6	M. Scott.....	Aug. 16, 1828		5	James L. Thompson.....	do	
7	G. Lowe.....	Aug. 20, 1828		6	Caleb Sibley.....	July 1, 1829	
8	J. B. F. Russell.....	April 23, 1830		7	J. T. Collinsworth.....	July 1, 1830	
9	Jos. M. Baxley.....	March 4, 1833		8	C. C. Daveiss.....	do	
10	W. E. Cruger.....	Oct. 1, 1833		9	W. Chapman.....	Mar. 4, 1833	Bvt., July 1, 1831. Adjutant.
FIRST LIEUTENANTS.				10	Moses Scott.....	Oct. 1, 1833	Bvt., July 1, 1831.
1	W. Alexander.....	Oct. 31, 1825		BREVET SECOND LIEUTENANTS.			
2	St. Clair Denny.....	Nov. 30, 1827		1	H. P. Vancleve.....	July 1, 1831	
3	Anthony Drane.....	Aug. 20, 1828	A. Q. M.	2	Thos. Stockton.....	do	
				3	R. B. Marcy.....	July 1, 1832	
				4	Daniel Ruggles.....	July 1, 1833	
				5	J. C. Reid.....	do	

SIXTH REGIMENT OF INFANTRY.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
	COLONEL.			4	Asa Richardson	May 1, 1827	
1	Henry Atkinson	April 15, 1814	Brig gen. bvt., May 13, 1820.	5	John Nichols	Oct. 31, 1827	A. Q. M.
	LIEUTENANT COLONEL.			6	G. H. Crossman	Aug 30, 1828	
1	Daniel Baker	May 1, 1829	Brevet, Aug. 9, 1822.	7	J. Van Swearingen	May 12, 1829	
	MAJOR			8	Joseph S. Worth	April 22, 1830	
1	A. R. Thompson	April 4, 1832	Brevet, May 1, 1824.	9	H. St. J. Linden	Mar. 4, 1833	
	CAPTAINS.			10	Gustavus Dorr	do	
1	Bennet Riley	Aug. 6, 1818	Maj. bvt., Aug. 6, 1828.		SECOND LIEUTENANTS		
2	I. Clark, jr.	Aug. 27, 1822	A. Q. M.	1	Albt. S Johnston	July 1, 1826	
3	Jacob Brown	April 7, 1825		2	Jos. D. Searight	do	Adjutant.
4	Z. C. Palmer	Feb. 15, 1826		3	F. J. Brooke	do	A. C. S.
5	W. N. Wickliffe	do		4	Nathaniel J. Eaton	July 1, 1827	A. C. S.
6	Henry Smith	July 7, 1826	Engineer duty.	5	Robert Sevier	July 1, 1828	Top. duty.
7	Thos. Noel	May 1, 1827		6	Thomas F. Drayton	do	
8	Jas. Rogers	Aug. 30, 1828		7	William Hoffman	July 1, 1829	
9	Geo C. Hutter	May 12, 1829		8	Alber'e Cady	do	
10	G. W. Waters	March 4, 1833		9	Jona. Freeman	do	
	FIRST LIEUTENANTS.			10	T. L. Alexander	July 1, 1830	
1	Levi M. Nute	July 7, 1826			BREVET SECOND LIEUTENANTS.		
2	M. W. Batman	Dec. 20, 1826		1	J. S Williams	July 1, 1831	
3	Geo. Andrews	Feb. 11, 1827		2	John Conrad	do	
				3	Geo. H. Griffin	July 1, 1832	
				4	Jacob E. Blake	July 1, 1833	
				5	John P. Center	do	
				6	G. H. Ringgold	do	
				7	Jos. P. Harrison	do	

SEVENTH REGIMENT OF INFANTRY.

	COLONEL.			2	J. R. Stephenson	Oct. 4, 1825	
1	M. Arbuckle	Mar. 16, 1820		3	Thomas Johnson	Dec. 16, 1825	M. Academy.
	LIEUTENANT COLONEL.			4	Jos. A. Phillips	June 30, 1828	
1	J. B Many	June 1, 1821		5	J. E. Newell	Nov. 10, 1829	M. Academy.
	MAJOR.			6	N. Tillinghast	June 30, 1830	
1	Sullivan Burbank	Aug. 20, 1828	Lieut. col. bvt., July 25, 1824.	7	W. G. Williams	April 30, 1833	Adjutant.
	CAPTAINS.			8	D. S. Miles	do	
1	George Birch	Aug. 31, 1816	Maj. bvt., Aug. 31, 1826.	9	W. Seawell	July 12, 1833	A. C. S.
2	R. B. Hyde	Oct. 31, 1818	Maj. bvt., Oct. 31, 1828.	10	L. F. Carter	Dec. 15, 1833	
3	Nath. Young	Jan. 1, 1819	Maj. bvt., Jan. 1, 1829.		SECOND LIEUTENANTS.		
4	Trueman Cross	Sept. 27, 1819	Q. M.	1	Gabriel J. Rains	July 1, 1827	
5	N. G. Wilkinson	July 31, 1824		2	William W. Mather	July 1, 1828	Military Acad.
6	B. L. E. Bonneville	Oct. 4, 1825		3	John P. Davis	July 1, 1829	A. C. S.
7	John Stuart	June 30, 1828		4	James West	July 1, 1830	
8	E. S. Hawkins	Nov. 10, 1829		5	Samuel Kinney	do	
9	Charles Thomas	April 30, 1833	A. Q. M.	6	Richard H. Ross	do	
10	James L. Dawson	do		7	Albert M. Lea	Mar. 4, 1833	Bvt., July 1, 1831.
	FIRST LIEUTENANTS.			8	Geo. W. Cass	do	Bvt., July 1, 1832.
1	Francis Lee	Sept. 24, 1824	A. Q. M.	9	Daniel P. Whiting	July 12, 1833	Do.
				10	Roger S. Dix	Dec. 15, 1833	Do.
					BREVET SECOND LIEUTENANTS.		
				1	Richard C. Gatlin	July 1, 1832	
				2	A. F. Seaton	July 1, 1833	

NOTE.—This mark * affixed to any officer's name denotes a voluntary transfer, which is the cause of his anomalous regimental position.

LINEAL RANK OF ARTILLERY OFFICERS.

No.	Names and rank.	Date of commission.	Regiment.	Remarks.
	COLONELS.			
1	W. K. Armistead	Nov. 12, 1818	3d artillery	
2	John R. Fenwick	May 8, 1822	4th artillery	
3	James House	do	1st artillery	
4	William Lindsay	April 26, 1832	2d artillery	

LINEAL RANK OF ARTILLERY OFFICERS—Continued.

No.	Names and rank.	Date of commission.	Regiment.	Remarks.
LIEUTENANT COLONELS.				
1	Abraham Eustis.....	May 8, 1822	4th artillery	
2	James Bankhead.....	April 26, 1832	3d artillery	
3	John B. Walbach.....	May 30, 1832	1st artillery	
4	Ichabod B. Crane.....	Nov. 3, 1832	2d artillery	
MAJORS.				
1	Roger Jones.....	Feb. 17, 1827	2d artillery	Adjutant General.
2	Alex. S. Brooks.....	April 26, 1832	3d artillery	
3	William Gates.....	May 30, 1832	1st artillery	
4	A. C. W. Fanning.....	Nov. 3, 1832	4th artillery	
CAPTAINS.				
1	J. F. Heileman.....	May 5, 1813	2d artillery	
2	Sylvester Churchill.....	Aug. 15, 1813	1st artillery	
3	B. K. Pierce.....	Oct. 1, 1813	4th artillery	
4	M. M. Payne.....	Mar. 2, 1814	4th artillery	
5	M. P. Lomax.....	Nov. 17, 1814	3d artillery	
6	Milo Mason.....	May 17, 1816	1st artillery	
7	Henry Whiting.....	Mar. 3, 1817	1st artillery	Assistant quartermaster.
8	Francis S. Belton.....	July 31, 1817	2d artillery	
9	J. Erving.....	April 25, 1818	4th artillery	
10	R. A. Zantzinger.....	Dec. 12, 1818	2d artillery	
11	John Mountfort.....	Aug. 11, 1819	2d artillery	
12	F. Whiting.....	Sept. 10, 1819	1st artillery	
13	Felix Ansart.....	Nov. 28, 1819	3d artillery	
14	Thomas C. Legate.....	May 13, 1820	2d artillery	
15	L. Whiting.....	May 21, 1822	4th artillery	
16	Aeneas Mackay.....	Dec. 31, 1822	3d artillery	Assistant quartermaster.
17	W. L. McClintock.....	Aug. 11, 1823	3d artillery	
18	J. L. Gardner.....	Nov. 1, 1823	4th artillery	
19	H. Saunders.....	Nov. 4, 1823	1st artillery	
20	N. Baden.....	April 1, 1824	2d artillery	
21	R. M. Kirby.....	Aug. 5, 1824	1st artillery	
22	John Munroe.....	Mar. 2, 1825	4th artillery	
23	Jac. Schmuck.....	April 11, 1825	4th artillery	
24	Jos. P. Taylor.....	July 6, 1825	2d artillery	Commissary.
25	Thomas Childs.....	Oct. 1, 1826	3d artillery	
26	Charles M. Thruston.....	Feb. 17, 1827	3d artillery	
27	Elijah Lyon.....	Feb. 20, 1827	3d artillery	
28	U. S. Fraser.....	May 1, 1828	3d artillery	
29	Thomas W. Lendrum.....	Dec. 31, 1828	3d artillery	
30	Patrick H. Galt.....	May 15, 1829	4th artillery	
31	Henry W. Griswold.....	April 26, 1832	1st artillery	
32	Gustavus S. Drane.....	May 30, 1832	2d artillery	
33	Geo. W. Gardiner.....	Nov. 3, 1832	2d artillery	
34	John M. Washington.....	May 30, 1832	4th artillery	
35	Matthew A. Patrick.....	Feb. 4, 1833	1st artillery	
36	Giles Porter.....	Sept. 30, 1833	1st artillery	

LINEAL RANK OF INFANTRY OFFICERS

No.	Names and rank.	Date of commission.	Regiment.	Remarks.
COLONELS.				
1	Hugh Brady.....	July 6, 1812	2d infantry	
2	Henry Atkinson.....	April 15, 1814	6th infantry	
3	Duncan L. Clinch.....	April 20, 1819	4th infantry	
4	Matthew Arbuckle.....	Mar. 16, 1820	7th infantry	
5	Henry Leavenworth.....	Dec. 16, 1825	3d infantry	
6	George M. Brooke.....	July 15, 1831	5th infantry	
7	Zachariah Taylor.....	April 4, 1832	1st infantry	
LIEUTENANT COLONELS.				
1	James B. Many.....	June 1, 1821	7th infantry	
2	Enos Cutler.....	April 28, 1826	5th infantry	
3	Alexander Cummings.....	Aug. 20, 1828	2d infantry	
4	Daniel Baker.....	May 1, 1829	6th infantry	
5	Josiah H. Vose.....	April 23, 1830	3d infantry	
6	David E. Twigg.....	July 15, 1831	4th infantry	
7	William Davenport.....	April 4, 1832	1st infantry	
MAJORS.				
1	William Whistler.....	April 28, 1826	2d infantry	
2	William S. Foster.....	July 7, 1826	4th infantry	
3	Sullivan Burbank.....	Aug. 20, 1828	7th infantry	
4	John Bliss.....	July 15, 1831	1st infantry	
5	Alex. R. Thompson.....	April 4, 1832	6th infantry	
6	John Fowle.....	March 4, 1833	3d infantry	M. Academy.
7	John Green.....	Oct. 31, 1833	5th infantry	

LINEAL BANK OF INFANTRY OFFICERS—Continued.

No.	Names and rank.	Date of commission.	Regiment.	Remarks.
CAPTAINS.				
1	Newman S. Clark	Oct. 1, 1814	2d infantry	
2	George Birch	Aug. 31, 1816	7th infantry	
3	J. S. McIntosh	Mar. 8, 1817	4th infantry	
4	John Garland	May 7, 1817	3d infantry	
5	James M. Glassell	Feb. 10, 1818	4th infantry	
6	F. L. Dade	Feb. 24, 1818	4th infantry	
7	Philip Wager	May 8, 1818	4th infantry	
8	Bennet Riley	Aug. 6, 1818	6th infantry	
9	R. B. Hyde	Oct. 31, 1818	7th infantry	
10	Nathaniel Young	Jan. 1, 1819	7th infantry	
11	W. V. Cobbs	Mar. 31, 1819	2d infantry	
12	Gustavus Loomis	April 7, 1819	1st infantry	
13	Henry Wilson	April 20, 1819	4th infantry	
14	Thomas F. Smith	April 25, 1819	1st infantry	
15	Richard M. Sands	April 30, 1819	4th infantry	
16	William Hoffman	May 1, 1819	2d infantry	
17	Joseph S. Nelson	Aug. 13, 1819	3d infantry	
18	Trueman Cross	Sept. 27, 1819	7th infantry	Quartermaster.
19	Greenleaf Dearborn	Sept. 30, 1819	2d infantry	
20	Thomas Staniford	Mar. 1, 1820	2d infantry	
21	Thomas F. Hunt	May 20, 1820	5th infantry	A. Q. M.
22	J. Plympton	June 1, 1821	5th infantry	
23	W. G. Belknap	Feb. 1, 1822	3d infantry	
24	Delafayette Wilcox	April 1, 1822	5th infantry	
25	I. Clark	Aug. 27, 1822	6th infantry	A. Q. M.
26	B. A. Boynton	Jan. 8, 1823	2d infantry	
27	Owen Ransom	Jan. 25, 1823	2d infantry	
28	William W. Lear	May 1, 1824	4th infantry	
29	Nathan Clark	June 29, 1824	5th infantry	
30	N. G. Wilkinson	July 31, 1824	7th infantry	
31	Thomas Hunt	Sept. 27, 1824	5th infantry	Office Com. Gen. of Sub.
32	Ethan A. Hitchcock	Dec. 31, 1824	1st infantry	
33	Jacob Brown	April 7, 1825	6th infantry	
34	B. L. E. Bonneville	Oct. 4, 1825	7th infantry	
35	Zalmon C. Palmer	Feb. 15, 1826	6th infantry	
36	William N. Wickliffe	do	6th infantry	
37	John B. Clark	Mar. 18, 1826	3d infantry	
38	Henry Smith	May 7, 1826	6th infantry	
39	Thomas Noel	May 1, 1827	6th infantry	
40	Andrew Lewis	June 6, 1827	3d infantry	
41	Thomas J. Harrison	Sept. 23, 1827	3d infantry	
42	James Dean	Oct. 4, 1827	3d infantry	
43	John Stuart	June 30, 1828	7th infantry	
44	Martin Scott	Aug. 16, 1828	5th infantry	
45	Gideon Lowe	Aug. 20, 1828	5th infantry	
46	Jason Rogers	Aug. 30, 1828	6th infantry	
47	George W. Allen	Jan. 25, 1829	4th infantry	
48	William B. Jouett	May 1, 1829	1st infantry	
49	George C. Hutter	May 12, 1829	6th infantry	
50	Thomas Barker	May 31, 1829	1st infantry	
51	Edgar S. Hawkins	Nov. 10, 1829	7th infantry	
52	J. B. F. Russell	April 23, 1830	5th infantry	
53	John Page	April 30, 1831	4th infantry	
54	Henry H. Loring	July 15, 1831	3d infantry	
55	Samuel Shannon	July 28, 1831	1st infantry	A. Q. M.
56	Seth Johnson	Sept. 13, 1831	2d infantry	
57	Samuel McRee	Dec. 31, 1831	1st infantry	
58	John Glitz	April 4, 1832	2d infantry	
59	William M. Graham	July 6, 1832	4th infantry	
60	William Day	Oct. 26, 1832	1st infantry	
61	Ephraim K. Barnum	Dec. 28, 1832	2d infantry	
62	Joseph M. Baxley	Mar. 4, 1833	5th infantry	
63	Thomas P. Gwynne	do	1st infantry	
64	George W. Waters	do	6th infantry	
65	Charles Thomas	April 30, 1833	7th infantry	A. Q. M.
66	James L. Dawson	do	7th infantry	
67	Jefferson Vail	July 11, 1833	1st infantry	
68	Benjamin Walker	Aug. 31, 1833	3d infantry	
69	William E. Cruger	Oct. 1, 1833	5th infantry	
70	Lewis N. Morris	Oct. 31, 1833	3d infantry	

RELATIVE RANK

Of the field officers and captains of the dragoons, artillery and infantry.

No.	Names, rank, and date of commission.	Regiment and corps.	Brevets.	Remarks.
COLONELS.				
1	Hugh Brady, July 6, 1812-----	2d infantry --	Brig. gen. bvt., July 6, 1822 ----	
2	Henry Atkinson, April 15, 1814-----	6th infantry --	Brig. gen. bvt., May 13, 1820 ----	
3	W. K. Armistead, November 12, 1818-----	3d artillery --	Brig. gen. bvt., November 12, 1828	
4	Duncan L. Clinch, April 20, 1819-----	4th infantry --	-----	
5	Matthew Arbuckle, March 16, 1820-----	7th infantry --	-----	
6	John R. Fenwick, May 8, 1822-----	4th artillery --	Brig. gen. bvt., March 18, 1823----	
7	James House, May 8, 1822-----	1st artillery --	-----	
8	Henry Leavenworth, December 16, 1825-----	3d infantry --	Brig. gen. bvt., July 25, 1824 ----	
9	George M. Brooke, July 15, 1831-----	5th infantry --	Brig. gen. bvt., September 17, 1824	
10	Zach. Taylor, April 4, 1832-----	1st infantry --	-----	
11	William Lindsay, April 26, 1832-----	2d artillery --	Brevet, March 12, 1823-----	
12	Henry Dodge, March 4, 1833-----	Dragoons -----	-----	
LIEUTENANT COLONELS.				
1	James B. Many, June 1, 1821-----	7th infantry --	-----	
2	Abraham Eustis, May 8, 1822-----	4th artillery --	Col. bvt., September 10, 1823----	
3	Enos Cutler, April 28, 1826-----	5th infantry --	-----	
4	Alexander Cummings, August 20, 1828-----	2d infantry --	-----	
5	Daniel Baker, May 1, 1829-----	6th infantry --	Brevet, August 9, 1822-----	
6	Josiah H. Vose, April 23, 1830-----	3d infantry --	-----	
7	David E. Twigg, July 15, 1831-----	4th infantry --	-----	
8	William Davenport, April 4, 1832-----	1st infantry --	-----	
9	James Bankhead, April 26, 1832-----	3d artillery --	Brevet, August 15, 1823----	
10	John B. Walbach, May 30, 1832-----	1st artillery --	Col. bvt., May 1, 1825-----	
11	Ichabod B. Crane, November 3, 1832-----	2d artillery --	Brevet, Nov. 13, 1823-----	
12	Stephen W. Kearney, March 4, 1833-----	Dragoons -----	-----	
MAJORS.				
1	William Whistler, April 28, 1826-----	2d infantry --	Brevet, December 31, 1822-----	
2	W. S. Foster, July 7, 1826-----	4th infantry --	Lieut. col. bvt., Aug. 15, 1824----	
3	Roger Jones, February 17, 1827-----	2d artillery --	Col. bvt., September 17, 1824----	
4	Sullivan Burbank, August 20, 1828-----	7th infantry --	Lieut. col. bvt., July 25, 1824----	
5	John Bliss, July 15, 1831-----	1st infantry --	Brevet, May 13, 1823-----	
6	Alex. R. Thompson, April 4, 1832-----	6th infantry --	Brevet, May 1, 1824-----	
7	Alexander S. Brooks, April 26, 1832-----	3d artillery --	Lieut. col. bvt., Sept. 11, 1824----	
8	William Gates, May 30, 1832-----	1st artillery --	Brevet, March 3, 1823-----	
9	A. C. W. Fanning, November 3, 1832-----	4th artillery --	Lieut. col. bvt., Aug. 15, 1824----	
10	John Fowle, March 4, 1833-----	3d infantry --	Brevet, June 10, 1824-----	
11	Richard B. Mason, March 4, 1833-----	Dragoons -----	-----	
12	John Green, October 31, 1833-----	5th infantry --	Brevet, September 25, 1824----	
CAPTAINS.				
1	J. F. Heileman, May 5, 1813-----	2d artillery --	Maj. bvt., May 5, 1823-----	
2	Sylvester Churchill, August 15, 1813-----	1st artillery --	Maj. bvt., August 15, 1823----	
3	Benjamin K. Pierce, October 1, 1813-----	4th artillery --	Maj. bvt., October 1, 1823----	
4	M. M. Payne, March 2, 1814-----	4th artillery --	Maj. bvt., March 2, 1824-----	
5	Newman S. Clarke, October 1, 1814-----	2d infantry --	Maj. bvt., July 25, 1824-----	
6	M. P. Lomax, November 17, 1814-----	3d artillery --	Maj. bvt., November 17, 1824----	
7	Milo Mason, May 17, 1816-----	1st artillery --	Maj. bvt., May 17, 1826-----	
8	George Birch, August 31, 1816-----	7th infantry --	Maj. bvt., August 31, 1826----	
9	Henry Whiting, March 3, 1817-----	1st artillery --	Maj. bvt., March 17, 1824----	
10	J. S. McIntosh, March 8, 1817-----	4th infantry --	Maj. bvt., March 8, 1827-----	
11	John Garland, May 7, 1817-----	3d infantry --	Maj. bvt., May 7, 1827-----	
12	Francis S. Belton, July 31, 1817-----	2d artillery --	-----	
13	James M. Glassell, February 10, 1818-----	4th infantry --	Maj. bvt., February 10, 1828----	
14	Francis L. Dade, February 24, 1818-----	4th infantry --	Maj. bvt., February 24, 1828----	
15	J. Erving, April 25, 1818-----	4th artillery --	Maj. bvt., April 25, 1828----	
16	Philip Wager, May 8, 1818-----	4th infantry --	Maj. bvt., May 8, 1828-----	
17	Bennet Riley, August 6, 1818-----	6th infantry --	Maj. bvt., August 6, 1828-----	
18	R. B. Hyde, October 31, 1818-----	7th infantry --	Maj. bvt., October 31, 1828----	
19	R. A. Zantzing, December 12, 1818-----	2d artillery --	Maj. bvt., August 15, 1824----	
20	Nathaniel Young, January 1, 1819-----	7th infantry --	Maj. bvt., January 1, 1829----	
21	W. V. Cobbs, March 31, 1819-----	2d infantry --	-----	
22	Gustavus Loomis, April 7, 1819-----	1st infantry --	-----	
23	Henry Wilson, April 20, 1819-----	4th infantry --	-----	
24	Thomas F. Smith, April 25, 1819-----	1st infantry --	-----	
25	Richard M. Sands, April 30, 1819-----	4th infantry --	-----	
26	William Hoffman, May 1, 1819-----	2d infantry --	-----	
27	John Mountfort, August 11, 1819-----	2d artillery --	Maj. bvt., September 11, 1824----	
28	J. S. Nelson, August 13, 1819-----	3d infantry --	Brevet, April 30, 1813-----	
29	F. Whiting, September 10, 1819-----	1st artillery --	-----	
30	Trueman Cross, September 27, 1819-----	7th infantry --	-----	
31	Greenleaf Dearborn, September 30, 1819-----	2d infantry --	-----	
32	Felix Ansart, November 28, 1819-----	3d artillery --	-----	
33	Thomas Staniford, March 1, 1820-----	2d infantry --	-----	
34	Thomas C. Legate, May 13, 1820-----	2d artillery --	-----	
35	Thomas F. Hunt, May 20, 1820-----	5th infantry --	-----	
36	J. Plympton, June 1, 1821-----	5th infantry --	-----	
37	W. G. Belknap, February 1, 1822-----	3d infantry --	-----	
38	D. Wilcox, April 1, 1822-----	5th infantry --	-----	
39	Levi Whiting, May 21, 1822-----	4th artillery --	-----	
40	I. Clark, jr., August 27, 1822-----	6th infantry --	-----	

RELATIVE RANK—Continued.

No.	Names, rank, and date of commission.	Regiment and corps.	Brevets	Remarks.
CAPTAINS—Continued.				
41	Zenas Mackay, December 31, 1822	3d artillery		
42	Benjamin A. Boynton, January 8, 1823	2d infantry		
43	Owen Ransom, January 25, 1823	2d infantry		
44	W. L. McClintock, August 11, 1823	3d artillery		
45	J. L. Gardner, November 1, 1823	4th artillery		
46	Henry Saunders, November 4, 1823	1st artillery		
47	N. Baden, April 1, 1824	2d artillery	Brevet, August 6, 1823	
48	W. W. Lear, May 1, 1824	4th infantry		
49	Nath. Clark, June 29, 1824	5th infantry		
50	N. G. Wilkinson, July 31, 1824	7th infantry		
51	R. M. Kirby, August 5, 1824	1st artillery	Maj. bvt., Sept. 17, 1824	
52	Thomas Hunt, September 27, 1824	5th infantry		
53	Ethan A. Hitchcock, December 31, 1824	1st infantry		
54	John Munroe, March 2, 1825	4th artillery		
55	Jacob Brown, April 7, 1825	6th infantry		
56	J. Schmuck, April 11, 1825	4th artillery		
57	Joseph P. Taylor, July 6, 1825	2d artillery		
58	B. L. E. Bonneville, October 4, 1825	7th infantry		
59	Z. C. Palmer, February 14, 1826	6th infantry		
60	W. N. Wickliffe, February 15, 1826	6th infantry		
61	John B. Clark, March 18, 1826	3d infantry		
62	Henry Smith, July 7, 1826	6th infantry		
63	Thomas Childs, October 1, 1826	3d artillery		
64	Charles M. Thruston, February 17, 1827	3d artillery		
65	Elijah Lyon, February 20, 1827	3d artillery	Brevet, January 1, 1827	
66	Thomas Noel, May 1, 1827	6th infantry		
67	Andrew Lewis, June 6, 1827	3d infantry		
68	Thomas J. Harrison, September 23, 1827	3d infantry		
69	James Dean, October 4, 1827	3d infantry		
70	U. S. Fraser, May 1, 1828	3d artillery		
71	John Stuart, June 30, 1828	7th infantry		
72	Martin Scott, August 16, 1828	5th infantry		
73	Gideon Lowe, August 20, 1828	5th infantry		
74	Jason Rogers, August 30, 1828	6th infantry		
75	Thomas W. Lendrum, December 31, 1828	3d artillery		
76	George W. Allen, January 25, 1829	4th infantry	Brevet, January 1, 1829	
77	William R. Jouett, May 1, 1829	1st infantry		
78	George C. Hutter, May 12, 1829	6th infantry		
79	Patrick H. Galt, May 15, 1829	4th artillery	Brevet, September 26, 1828	
80	Thomas Barker, May 31, 1829	1st infantry		
81	Edgar S. Hawkins, November 10, 1829	7th infantry		
82	J. B. F. Russell, April 23, 1830	5th infantry		
83	John Page, April 30, 1831	4th infantry	Brevet, January 1, 1829	
84	Henry H. Loring, July 15, 1831	3d infantry		
85	Samuel Shannon, July 28, 1831	1st infantry		
86	Seth Johnson, September 13, 1831	2d infantry		
87	Sam. McRee, December 31, 1831	1st infantry		
88	John Clitz, April 4, 1832	2d infantry		
89	Henry W. Griswold, April 26, 1832	1st artillery	Brevet, December 12, 1828	
90	Gustavus S. Drane, May 30, 1832	2d artillery	Brevet, November 15, 1827	
91	John M. Washington, May 30, 1832	4th artillery		
92	W. M. Graham, July 6, 1832	4th infantry		
93	Wm. Day, October 26, 1832	1st infantry		
94	George W. Gardiner, November 3, 1832	2d artillery	Brevet, April 20, 1828	
95	Ephraim K. Barnum, December 28, 1832	2d infantry		
96	Matthew A. Patrick, February 4, 1833	1st artillery		
97	Clifton Wharton, March 4, 1833	Dragoons	Captain, April 22, 1830	
98	E. V. Sumner, March 4, 1833	Dragoons		
99	Joseph M. Baxley, March 4, 1833	5th infantry		
100	Thomas P. Gwynne, March 4, 1833	1st infantry		
101	George W. Waters, March 4, 1833	6th infantry		
102	Eustace Trenor, March 4, 1833	Dragoons		
103	David Hunter, March 4, 1833	Dragoons		
104	Charles Thomas, April 30, 1833	7th infantry		
105	James L. Dawson, April 30, 1833	7th infantry		
106	Jefferson Vail, July 11, 1833	1st infantry		
107	Lemuel Ford, August 15, 1833	Dragoons		
108	Nathan Boone, August 15, 1833	Dragoons		
109	Jesse B. Browne, August 15, 1833	Dragoons		
110	Jesse Bean, August 15, 1833	Dragoons		
111	Mathew Duncan, August 15, 1833	Dragoons		
112	Benjamin Walker, August 31, 1833	3d infantry		
113	Giles Porter, September 30, 1833	1st artillery		
114	William E. Cruger, October 1, 1833	5th infantry		
115	Lewis N. Morris, October 31, 1833	3d infantry		
116	David Perkins, November 4, 1833	Dragoons		

LIST OF GRADUATES

Of the Military Academy attached to the army as supernumerary brevet second lieutenants.

No.	Names.	Regiment.	No.	Names.	Regiment
	1830			1833.	
1	William Eustis	Dragoons---	28	Frederick A. Smith	Corps of eng -
2	George W. McClure	Dragoons---	29	Jonathan G. Barnard	Corps of eng -
	1831.		30	George W. Cullum	Corps of eng -
			31	Rufus King	Corps of eng -
3	Elbert G. Eastman	2d infantry --	32	David B. Harris	1st artillery..
4	Lucius B. Northrop	Dragoons---	33	Roswell W. Lee	3d artillery..
5	Horatio P. Vancleve	5th infantry -	34	William W. S. Bliss	4th infantry -
6	Thomas Stockton	5th infantry -	35	Erastus A. Capron	1st artillery..
7	James S. Williams	6th infantry -	36	John H. Miller	4th artillery..
8	Frederick Wilkinson	4th infantry -	37	David E. Hale	1st artillery..
9	John Conrad	6th infantry -	38	Robert R. Mudge	3d artillery..
	1832.		39	John A. Thomas	3d artillery..
10	Ward B. Burnett	2d artillery..	40	James L. Davis	4th artillery..
11	Alfred Brush	4th artillery..	41	Edmund Schriver	2d artillery..
12	T. F. J. Wilkinson	2d artillery..	42	John H. Allen	3d artillery..
13	Jacob Brown	2d infantry..	43	Alexander E. Shiras	4th artillery..
14	Randolph B. Marcy	5th infantry -	44	Henry Du Pont	4th artillery..
15	Thomas M. Hill	1st infantry..	45	Benjamin Alvord	4th infantry -
16	Robert H. Archer	4th artillery..	46	George D. Dimon	1st infantry..
17	James V. Bomford	2d infantry..	47	Isaac R. D. Burnett	2d infantry..
18	Richard C. Gatlin	7th infantry -	48	Jacob E. Blake	6th infantry..
19	Wm. H. Storer	1st infantry..	49	John L. Hooper	4th infantry -
20	George H. Griffin	6th infantry..	50	John W. McCrabb	4th infantry..
21	John Beach	1st infantry..	51	Henry W. Wessells	2d infantry..
22	William O. Kello	3d infantry..	52	John P. Center	6th infantry..
23	Henry Swartwout	3d infantry..	53	George H. Pegram	1st infantry..
24	Gaines P. Kingsbury	Dragoons---	54	Abraham C. Myers	4th infantry..
25	James M. Bowman	Dragoons---	55	George H. Ringgold	6th infantry..
26	Asbury Ury	Dragoons---	56	Daniel Ruggles	5th infantry..
27	Albert G. Edwards	Dragoons---	57	James W. Anderson	2d infantry..
			58	James McClure	1st infantry..
			59	J. Chester Reid	5th infantry..
			60	Thomas H. Johns	2d infantry..
			61	Joseph P. Harrison	6th infantry..
			62	Henry L. Scott	4th infantry..
			63	Augustus F. Seaton	7th infantry..

MILITARY ACADEMY, WEST POINT, NEW YORK.

INSPECTOR.

Brevet Brigadier General Charles Gratiot, chief engineer, (*ex officio*), inspector of the Military Academy.

ACADEMIC STAFF.

SUPERINTENDENT AND COMMANDANT.

Major R. E. De Russey, corps of engineers.

PROFESSOR OF MATHEMATICS.

Charles Davies, A. M.

ASSISTANT PROFESSORS.

Second Lieutenant Albert E. Church, third artillery.
Second Lieutenant Richard H. Peyton, second artillery.
Second Lieutenant Samuel C. Ridgeley, fourth artillery.
Second Lieutenant Benjamin S. Ewell, fourth artillery.

CHAPLAIN AND PROFESSOR OF ETHICS.

Rev. Thomas Warner.

ASSISTANT PROFESSORS.

First Lieutenant Nicholas Tillinghast, seventh infantry.
Second Lieutenant J. Allen Smith, third artillery.

PROFESSOR OF NATURAL PHILOSOPHY.

Edward H. Courttnay.

ASSISTANT PROFESSORS.

Second Lieutenant T. Jefferson Cram, fourth artillery.
Second Lieutenant N. B. Buford, third artillery.

PROFESSOR OF ENGINEERING.

Dennis H. Mahan.

ASSISTANT PROFESSORS.

Brevet Second Lieutenant Frederick A. Smith, corps of eng.
Brevet Second Lieutenant D. B. Harris, first artillery.

TEACHERS OF THE FRENCH LANGUAGE.

Claudius Berard.
Julian Mollinard.

ASSISTANTS.

Second Lieutenant Minor Knowlton, first artillery.
Second Lieutenant Bradford R. Alden, fourth infantry.

TEACHER OF DRAWING.

Charles R. Leslie, R. A.

ASSISTANT.

Second Lieutenant Seth Eastman, first infantry.

INSTRUCTOR OF TACTICS, AND COMMANDANT OF CADETS.

Major John Fowle, third infantry.

ASSISTANT INSTRUCTORS.

First Lieutenant J. A. Philips, seventh infantry.
Second Lieutenant James Barnes, 4th artillery.
Brevet Second Lieutenant Ward B. Burnett, second artillery.
Brevet Second Lieutenant E. Schriver, second artillery.

INSTRUCTOR OF ARTILLERY.

First Lieutenant Zebina J. D. Kinsley, third artillery.

ACTING PROFESSOR OF CHEMISTRY AND MINERALOGY.

Second Lieutenant W. Fenn Hopkins, fourth artillery, A. M.

ASSISTANT PROFESSORS.

Second Lieutenant William W. Mather, seventh infantry
Second Lieutenant J. W. Bailey, first artillery.

SWORD MASTER.

Albert Jumel.

ADJUTANT.

First Lieutenant Charles F. Smith, second artillery.

QUARTERMASTER.

First Lieutenant Lucien B. Webster, first artillery.

PAYMASTER AND TREASURER.

First Lieutenant Thomas J. Leslie, corps of engineers.

MEDICAL STAFF.

SURGEON.

Walter V. Wheaton.

ASSISTANT SURGEON.

Thomas Henderson.

Officers of the army attached to the Military Academy and post of West Point.

Engineers	3
Artillery	17
Infantry	6
Medical staff	2
Total	28

Resignations, &c., since the publication of the last Register

RESIGNATIONS.

MAJOR

George Bender, fifth infantry, October 31, 1833.

CAPTAINS.

Walter Smith, 1st artillery, September 30, 1833.
 William S. Harney, 1st infantry, July 11, 1833.
 Joshua B. Brant, 2d infantry, December 28, 1832.
 Stephen H. Webb, 3d infantry, August 31, 1833.
 Robert A. McCabe, 5th infantry, October 1, 1833.
 Daniel E. Burch, 7th infantry, April 30, 1833.
 Henry Berryman, 7th infantry, April 30, 1833.

FIRST LIEUTENANTS

Jonathan Prescott, 1st artillery, September 30, 1833.
 Washington Wheelright, 1st artillery, May 31, 1833.
 James H. Cooke, 1st artillery, January 31, 1833.
 George W. Whistler, 2d artillery, December 31, 1833.
 George W. Corprew, 3d artillery, June 30, 1833.
 Austin Brockenbrough, 3d artillery, June 30, 1833.
 Alexander H. Morton, 7th infantry, July 12, 1833.

SECOND LIEUTENANTS

Stephen V. R. Ryan, 1st artillery, March 31, 1833.
 George E. Chase, 3d artillery, August 31, 1833.
 Charles W. Hackley, 3d artillery, September 30, 1833.
 Samuel H. Miller, 3d artillery, November 30, 1833.
 William N. Pundleton, 4th artillery, October 31, 1833.
 William A. Norton, 4th artillery, September 30, 1833.
 Erasmus F. Covington, 1st infantry, September 30, 1833.
 William S. Stillwell, 3d infantry, March 31, 1833.
 William H. Harford, 4th infantry, September 15, 1833.
 Robert W. Burnet, 4th infantry, March 31, 1833.
 Gustavus S. Rosseau, 6th infantry, April 30, 1833.

BREVET SECOND LIEUTENANTS.

William H. Sidell, 1st artillery, October 1, 1833.
 John E. Brackett, 2d artillery, August 31, 1833.
 Henry Waller, 2d artillery, October 9, 1833.
 Isaiah Garrett, 2d artillery, November 15, 1833.
 Henderson K. Yoakum, 3d artillery, March 31, 1833.
 Tench Tilghman, 4th artillery, November 30, 1833.
 Joel Riggs, 1st infantry, October 9, 1833.
 John G. Harvey, 2d infantry, February 15, 1833.
 George E. Crittenden, 4th infantry, April 30, 1833.
 Merewether L. Clark, 6th infantry, May 31, 1833.
 Lewis Howell, 7th infantry, October 31, 1833.
 Nathaniel W. Hunter, 7th infantry, October 1, 1833.

STAFF.

Alphonso Wetmore, paymaster, May 1, 1833.
 Robert McMillan, surgeon, December 1, 1833.
 Henry Stephenson, assistant surgeon, August 31, 1833.
 Edwin James, assistant surgeon, December 31, 1833.
 John Thurston, assistant surgeon, May 1, 1833.
 Robert E. Kerr, assistant surgeon, August 31, 1833.
 Samuel W. Dalton, assistant surgeon, December 31, 1833.

DEATHS.

Captain Nathaniel G. Dana, 1st artillery, February 4, 1833.
 Captain Reuben Holmes, dragoons, November 4, 1833.
 1st Lieutenant Jasper Macomb, 7th infantry, December 15, 1833.
 2d Lieutenant Charles L. C. Minor, 3d infantry, October 31, 1833.
 Assistant Surgeon Joseph D. Harris, September 26, 1833.

DROPPED.

1st Lieut. James Simonson, 1st artillery, November 30, 1833.
 Bvt. 2d Lieut. Benj. E. Dubois, 3d infantry, October 1, 1833.
 Assistant Surgeon John W. Baylor, May 20, 1833.

The following list of cadets is attached to the Army Register conformably to a regulation for the government of the Military Academy requiring the names of the most distinguished cadets, not exceeding five in each class, to be reported for this purpose at each annual examination.

REPORTED AT THE EXAMINATION IN JUNE, 1833.

Names.	Studies in which each cadet particularly excels.
FIRST CLASS	
Frederick A. Smith -----	Mathematics, natural and experimental philosophy, chemistry and mineralogy, engineering, French language, drawing, rhetoric and moral and political science, artillery, and tactics.
Jonathan G. Barnard -----	Mathematics, natural and experimental philosophy, chemistry and mineralogy, engineering, drawing, rhetoric and moral and political science, artillery, and tactics.
George W. Cullum -----	Mathematics, natural and experimental philosophy, chemistry and mineralogy, engineering, rhetoric and moral and political science, artillery, and tactics.
Rufus King -----	Mathematics, natural and experimental philosophy, chemistry and mineralogy, engineering, French language, drawing, rhetoric and moral and political science, artillery, and tactics.
Francis H. Smith -----	Mathematics, natural and experimental philosophy, chemistry and mineralogy, engineering, French language, rhetoric and moral and political science, artillery, and tactics.
SECOND CLASS.	
William Smith -----	Natural and experimental philosophy, chemistry, and drawing.
John Sanders -----	Natural and experimental philosophy and chemistry.
Robert Allen -----	
Harrison Loughborough -----	Natural and experimental philosophy, chemistry, and drawing.
William T. Stockton -----	
THIRD CLASS.	
Charles H. Bigelow -----	Mathematics and French.
Charles J. Whiting -----	Mathematics and drawing.
George M. Legate -----	Mathematics and French.
John H. Martindale -----	Mathematics and drawing.
Thomas T. Gantt -----	Mathematics and French.
FOURTH CLASS.	
James L. Mason -----	Mathematics and French.
Danville Leadbetter -----	
Alexander Hamilton -----	
Barnabas Conkling -----	
Joseph B. Anderson -----	

Organization of the army of the United States.

	Major general.	Brigadier generals.	Adjutant general.	Inspector general.	Quartermaster general.	Quartermasters.	Commissary general of subsistence.	Commissaries.	Surgeon general.	Surgeons.	Assistant surgeons.	Paymaster general.	Paymasters.	Commissary general of purchases.	Military storekeepers.	Colonels.	Lieutenant colonels.	Majors.	Captains.	First lieutenants.	Second lieutenants.	Sergeant majors.	Quartermaster sergeants.	Sergeants.	Corporals.	Principal musicians.	Chief bugler.	Buglers.	Musicians.	Farrriers and blacksmiths.	Artificers.	Enlisted men for ordnance.	Privates.	Total commissioned.	Total non-commissioned officers, musicians, artificers, and privates.	Aggregate.
General staff.....	1	2	1	2	1	4	1	2	1	12	55	1	14																				14	14	14	
Medical department.....										1	12	55																					68	68	68	
Pay department.....												1	14																				15	15	15	
Purchasing department.....														1	2																		3	3	3	
Corps of engineers.....																1	1	2	6	6	6												22	22	22	
Topographical engineers.....																		6	4														10	10	10	
Ordnance department.....																1	1	2	10					44							250	14	294	308		
Regiment of dragoons.....																1	1	1	10	11	10	1	1	40	40	1	2	20				600	34	715	740	
Four regiments of artillery.....																4	4	4	38	72	72	4	4	144	144				10			2,940	34	3,598	3,829	
Seven regiments of infantry.....																7	7	7	70	70	70	7	7	210	280	14					1,512	192	1,988	2,180		
Grand aggregate.....	1	2	1	2	1	4	1	2	1	12	55	1	14	1	2	14	14	22	136	159	158	12	12	438	464	15	2	20	212	10	108	250	5,052	603	6,595	7,198

Component parts of regiments and companies.

	Colonel.	Lieutenant colonel.	Major.	Adjutant.	Captains.	1st lieutenants.	2d lieutenants.	Sergeant major.	Quartermaster sergeant.	Sergeants.	Corporals.	Principal musicians.	Chief buglers.	Buglers.	Musicians.	Farrriers and blacksmiths.	Artificers.	Privates.	Total commissioned.	Total non-commissioned officers, musicians, and privates.	Aggregate.
A regiment of dragoons.....	1	1	1	1	10	11	10	1	1	40	40	1	2	20		10		600	34	715	740
A company of dragoons.....					1	1	1			4	4			2		1		60	3	71	74
A regiment of artillery.....	1	1	1	1	9	18	18	1	1	36	36				18		27	378	48	497	545
A company of artillery.....					1	2	2			4	4				2		3	42	5	55	60
A regiment of infantry.....	1	1	1	1	10	10	10	1	1	30	40	2			20			420	33	514	547
A company of infantry.....					1	1	1			3	4				2			42	3	51	54

The adjutants, being taken from subalterns of the line, are not included in the aggregate of the respective regiments.

A list of the military posts and arsenals.

No.	Posts.	State or Territory.	Post office.	Permanent commanders.	Regiment.
EASTERN DEPARTMENT.					
1	Fort Winnebago	Michigan Territory.	Fort Winnebago	Lieut. Col. Cutler	5th infantry.
2	Fort Brady	do	Sault Ste Marie	Captain Cobbs	2d infantry.
3	Fort Mackinac	do	Michilimackinac	Major Whistler	2d infantry.
4	Fort Howard	do	Green Bay	Bvt. Brig. Gen. Brooke	5th infantry.
5	Fort Dearborn	Illinois.	Chicago	Major Green	5th infantry.
6	Fort Gratiot.	Michigan Territory.	Fort Gratiot	Brevet Major Payne	4th artillery.
7	Fort Niagara	New York	Youngstown	Lieut. Col. Cummings	2d infantry.
8	Hancock Barracks	Maine	Houlton	Brevet Major Clark	2d infantry.
9	Fort Sullivan	do	Eastport	Captain Childs	3d artillery.
10	Fort Preble	do	Portland	Captain McClintock	3d artillery.
11	Fort Constitution	New Hampshire	Portsmouth	Captain Ansart	3d artillery.
12	Fort Independence	Massachusetts	Boston		
13	Fort Wolcott	Rhode Island	Newport	Brevet Major Lomax	3d artillery.
14	Fort Trumbull	Connecticut	New London	Captain Saunders	1st artillery.
15	West Point	New York	West Point	Major De Russey	Engineers.
16	Fort Columbus	do	New York	Bvt. Lieut. Col. Fanning	4th artillery.
17	Fort Hamilton	do	do	Brevet Major Pierce	4th artillery.
18	Fort McHenry	Maryland.	Baltimore.	Bvt. Col. Wallbach	1st artillery.
19	Fort Severn	do	Annapolis	Brevet Major Erving	4th artillery.
20	Fort Washington	do	Fort Washington	Brevet Major Mason	1st artillery.
21	Fort Monroe	Virginia	Old Point Comfort	Brevet Colonel Eustis	4th artillery.
22	Fort Johnston	North Carolina	Smithville	Brevet Major Churchill	1st artillery.
23	Beaufort	do	Beaufort	Brevet Major Kirby	1st artillery.
24	Fort Moultrie	Cha'ston harbor, S C.	Charleston	Major Gates	1st artillery.
25	Castle Pinckney				
26	Augusta Arsenal	Georgia	Augusta	Captain Baden	2d artillery.
27	Oglethorpe Barracks	do	Savannah	Brevet Captain Merchant	2d artillery.
28	Fort Marion	Florida	St. Augustine	Captain Drane	2d artillery.
WESTERN DEPARTMENT.					
1	Fort Snelling	Upper Mississippi	Fort Snelling	Major Bliss	1st infantry.
2	Fort Crawford	Michigan	Prairie du Chien	Col. Z. Taylor	1st infantry.
3	Fort Armstrong	Illinois.	Rhode Island	Lieut. Col. Davenport	1st infantry.
4	Fort Leavenworth	Right bank of the Missouri, near the Little Platte.	Fort Leavenworth	Bvt. Major Riley	6th infantry.
5	Jefferson Barracks	Missouri	Jefferson Barracks	Bvt. Brig. Gen. Atkinson	6th infantry.
6	Fort Gibson	Arkansas	Fort Gibson	Colonel Arbuckle	7th infantry.
7	Fort Jesup	Louisiana.	Fort Jesup	Lieutenant Colonel Vose	3d infantry.
8	Fort Towson	Arkansas	Little River Lick	Captain Nelson	3d infantry.
9	Baton Rouge	Louisiana.	Baton Rouge	Bvt. Major Glassell	4th infantry.
10	New Orleans	do	New Orleans	Lieut. Col. Twiggs	4th infantry.
11	Fort Jackson	do	Fort Jackson	Captain Gardiner	2d artillery.
12	Fort Wood	do	New Orleans	Bvt. Maj. Zantzing	2d artillery.
13	Fort Pike	do	Petite Coquille	Bvt. Maj. Mountfort	2d artillery.
14	Fort Morgan	Alabama	Mobile	Captain Belton	2d artillery.
15	Fort Pickens	Florida	Pensacola	Brevet Captain Lowd	2d artillery.
16	Fort King	do	Seminole Agency	Captain Graham	4th infantry.
17	Key West	do	Key West	Brevet Major Dade	4th infantry.
18	Fort Mitchell	Alabama	Creek Agency		
	Arsenal, Kennebec	Maine	Augusta	Captain Ripley	Ordnance.
	Arsenal, Watertown	Massachusetts	Watertown	Major Craig	Ordnance.
	Arsenal, Champlain	Vermont	Vergennes	Lieutenant Ward	4th artillery.
	Arsenal, Watervliet.	New York	Watervliet	Lieut. Col. Talcott	Ordnance.
	Arsenal, Rome.	do	Rome	Lieutenant Mallory	2d artillery.
	Arsenal, Allegheny	Pennsylvania.	Pittsburg	Bvt. Major Baker	Ordnance.
	Arsenal, Frankford	do	Frankfort	Bvt. Lieut. Col. Worth	Ordnance.
	Arsenal, Pikesville	Maryland	Pikesville	Lieutenant Maynadier	1st artillery.
	Arsenal, Washington	District of Columbia	Washington	Captain Bache	Ordnance.
	Arsenal, Belona	Virginia	Belona		
	Arsenal, St. Louis	Missouri	St. Louis	Captain Symington	Ordnance.
	Arsenal, Mount Vernon	Alabama	Mount Vernon	Captain Harding	Ordnance.
	Arsenal, Baton Rouge	Louisiana.	Baton Rouge	Lieutenant Newton	3d artillery.

The western department comprises all west of a line drawn from the southernmost point of East Florida to the northwest extremity of Lake Superior, taking in the whole of Tennessee and Kentucky; and the eastern department all east of such line, including Fort Winnebago.

The headquarters of the general-in-chief are in the District of Columbia.

The headquarters of the western department are at Memphis, Tennessee.

The headquarters of the eastern department are in the city of New York.

Those officers whose stations are changed by transfers and promotions will report for duty accordingly.

By order:

R. JONES, *Adjutant General.*

23D CONGRESS.]

No 572.

[1ST SESSION.]

ON CLAIM OF A SURGEON OF THE ARMY TO BE ALLOWED RENT OF PRIVATE QUARTERS,
THERE BEING NO ROOM FOR HIM IN FORT JOHNSTON, NORTH CAROLINA.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES MARCH 25, 1834.

Mr. THOMSON, from the Committee on Military Affairs, to whom was referred the petition of Caroline E. Clitherall, reported:

That the petitioner in this case sets forth that she is the widow of Doctor George C. Clitherall, deceased, late a surgeon in the army of the United States; that in the year 1814, in the month of May, he was ordered to Fort Johnston, in the State of North Carolina; that he remained there in service until the 9th day of November, 1829, the time of his decease.

That during all that time no suitable quarters were furnished him in the garrison, and that he was obliged to provide quarters for himself outside of the fort; that for the private dwelling which he occupied he had to pay a rent of one hundred and fifty dollars per annum from his own private funds.

The petitioner states that mistaken delicacy prevented the doctor from making this claim during his lifetime; that the destitute and helpless condition in which herself and children have been left, and now are, compels her to make it, and throw herself and children on the mercy and justice of the government, in the hope of obtaining that relief which they so much need and so much desire; and, lastly, that she has no means of supporting herself and children but by teaching a small school, which is very uncertain and fluctuating in its pecuniary results.

Your committee will state that there are sundry statements and certificates of officers of the army accompanying the petition, which go strongly to corroborate the foregoing statement of the petitioner, and which led the committee to the proper department to ascertain the reason why this claim has not been allowed and paid, and were informed that it was of such long standing that they did not feel themselves authorized to allow it, but had recommended the petitioner to Congress as the only source from which relief can come at this late day.

Your committee have therefore reported a bill; but they have not, in that bill, given all that is claimed by the petitioner, which is \$150 per annum for fifteen years and a half, but have only allowed the sum of \$120 per annum, which is the amount allowed by the proper department to officers of the same rank when private quarters have been rented for them by the government.

ENGINEER DEPARTMENT, *Washington, January 29, 1834.*

SIR: I have had the honor to receive your communication of the 22d instant in reference to the claim of Mrs. Clitherall for rent of quarters, due the estate of her late husband, while stationed at Fort Johnston, North Carolina.

The facts of the case are stated at length in the accompanying* papers, and to which I beg to refer, as furnishing all the information it is in my power to give you on the subject. From them you will perceive that the claim is fully substantiated, and ought, in equity, to be allowed.

I am, with respect, sir, your most obedient servant,

C. GRATIOT.

Hon. WM. B. SHEPARD, *of the House of Representatives.*

GENEVA, *June 7, 1833.*

I certify that the quarters at the post of Fort Johnston, North Carolina, were constructed under my orders in the years 1810 and 1811; and that there were no appropriations, and consequently no construction of a hospital or surgeon's quarters, and that the post so continued for many years, as I believe, to the year 1825 or later; and I also certify that it is the usual practice at that, as at other posts, for the surgeon to be furnished with private quarters.

J. G. SWIFT, *Major of Engineers in the years 1810 and 1811.*

BELONA ARSENAL, *June 19, 1833.*

I certify that the late assistant surgeon, George C. Clitherall, did not occupy public quarters at Fort Johnston, North Carolina, from the 17th of October, 1827, to the 30th of April, 1828, during which period, with the exception of a few weeks of detached service, I was in the command of that station; and I further certify that during the time specified there were no public quarters at the post suitable for the occupancy of Dr. Clitherall and his family.

F. WHITING, *Captain 1st Artillery, Commanding.*

* Letters from Mrs. Clitherall, dated April 16 and August 11, 1833; private note from General Swift, 20th May, 1833; General Swift's certificate, 7th June, 1833.

FORT JOHNSTON, *North Carolina, February 2, 1830.*

In November, 1828, I assumed command of Fort Johnston, in Smithville, North Carolina. I found two lieutenants, unmarried, and Dr. Clitherall, married, on duty at the post. I had assigned to me, as my quarters, the lower part or first floor of the centre or main building, consisting of three rooms, with fire-places, and a kitchen in one of the wings. These rooms, I was informed, had been occupied by the commanding officers, my predecessors, for many years before; and the rooms were so connected or arranged that it was necessary to pass through the principal room or parlor to and from all the others, or through a back door by the private building and yard. Consequently, only one officer could be accommodated by these rooms. The second floor contained two rooms with and one without fire-places, and, like the lower part, the passing to and from the small rooms is through the principal one, with an outside door. These rooms I found occupied by the two subalterns, who used the main or entrance room jointly. No other officer could be accommodated, except in *common* with these two or myself. In one wing the assistant commissary of subsistence and acting quartermaster occupied a room as an office, and in the other wing Dr. Clitherall, assistant surgeon, occupied one as a dispensary, or for medicines and stores. These are all the rooms at the post suitable for officers; and at no time from my arrival at the post till the decease of Dr. Clitherall, in November, 1829, would it have been possible to furnish him with public quarters in the garrison without depriving the company officers of theirs, or the commissary of his office. Neither did the centre building, in my opinion, offer more than *one* choice on a floor; and, accordingly, I considered Dr. Clitherall, who resided out of the garrison, entitled to rent of quarters, and I advised him to apply for it. And from what I have been told respecting the number of officers quartered at the post, he is equally entitled to rent for several previous years.

SYL. CHURCHILL, *Brevet Major, Commanding.*

FORT JOHNSTON, *North Carolina, May 2, 1833.*

MADAM: Your letter of the 27th April, in which you request my opinion respecting a claim for rent of quarters occupied by your late husband, Doctor G. C. Clitherall, at this post, was received a few days since. In reply, I have to state that I was assigned to the command of the post in 1828. On my arrival here I found Dr. Clitherall residing, with permission of the commanding officer, in a private dwelling outside of the fort, and he continued therein till his death, in November, 1829. The quarters in the fort during this time were sufficient only for the company officers, and occupied exclusively by the lieutenants and myself. The building for officers' quarters is so constructed that all the rooms on the lower floor are required for the quarters of the commanding officers, for offices, dispensary, &c., and the second story will not accommodate more than one officer with a family or two single gentlemen; and as, I presume, there were generally a captain and several lieutenants in the garrison, the same reasons operated to exclude the surgeon from the public quarters before as after my arrival at the post. And it is my opinion that formerly, as now, the surgeon could not, except during the casual and temporary absence of the company officers, have been accommodated with suitable quarters in the fort, and that consequently Dr. Clitherall ought to have been furnished with quarters at public expense in the village, as has been the practice with the surgeons since 1829. No allowance was made to Dr. Clitherall for quarters after I came here, and I have been credibly informed that none had been made previously.

SYL. CHURCHILL, *Brevet Major, 1st Artillery.*

Mrs. E. C. CLITHERALL, *Newbern, North Carolina.*

23D CONGRESS.]

No. 573.

[1ST SESSION.]

PLANS AND ESTIMATES FOR THE RECONSTRUCTION OF FORT INDEPENDENCE, ON CASTLE ISLAND, BOSTON HARBOR, MASSACHUSETTS, AND THE CONSTRUCTION OF FORT SCHUYLER, THROG'S POINT, EAST RIVER, NEW YORK.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES MARCH 25, 1834.

DEPARTMENT OF WAR, *March 24, 1834.*

SIR: In compliance with the resolution of the House of Representatives of the 19th instant, I have the honor to transmit herewith a report from the chief engineer, which furnishes the information required in reference to the "fortifications proposed to be built on Castle island, in the harbor of Boston, and on Throg's Point, East river, New York."

I am, with great respect, sir, your most obedient servant,

LEWIS CASS.

HON. ANDREW STEVENSON, *Speaker of the House of Representatives.*

ENGINEER DEPARTMENT, *Washington, March 24, 1834.*

SIR: In compliance with the resolution of the House of Representatives of the 19th instant, directing the Secretary of War to submit any information concerning the fortifications proposed to be built on Castle island, in the harbor of Boston, and on Throg's Point, New York, which may have been recently received at the department, I have the honor to lay before you, herewith, two reports, with estimates from

the board of engineers, received on the 17th instant. One of these reports relates to Fort Independence, on Castle island; the other, to Fort Schuyler, to be built on Throg's Point. The drawings which accompanied these reports, exhibiting much information of a confidential character, are not submitted; but should it be deemed important to the object of the resolution an officer will attend with them for the purpose of affording such explanation as may be required.

These reports and estimates contain all the recent information on the subject that can be with propriety furnished. Yet it may be proper to state that Fort Independence is an important part of the defensive system adopted by the board of engineers for the protection of Boston harbor. The work is old and in a dilapidated condition. To repair it properly would amount almost to a reconstruction, as all its masonry requires to be rebuilt; its parapets, ramps, and slopes re-formed; and its gateways, posterns, and traverses renewed. The island on which it is situated is much exposed to the easterly storms which prevail on that section of the coast, and is liable to great injury from the encroachments of the water upon it. It is covered on the southeast by a stone wall, and was formerly protected on the northeast by a wharfing of timber; the latter, however, having decayed, that part of the island is again exposed, and it is proposed to cover it by the construction of a permanent wall. An estimate of the repairs required upon the island was made by a board of officers in 1831; but owing to the impossibility of commanding the services of an officer of engineers to execute them until within the last year, this estimate was found to be insufficient, owing, principally, to the rise in the prices of the materials to be used. Another estimate was made within the last year, based upon what was supposed would be the average prices during the continuance of the work, and on the supposition, as in the former estimate, that the present plan of the work, in all its parts, would be retained. The first was \$36,173 06, and the latter \$56,094 80. It having been determined to convene the board of engineers last fall for the revision of several new works, it was deemed advisable to bring before it the condition of Fort Independence; and the report on that work, herewith submitted, is the result of their deliberations on the subject. It will be perceived that the board recommend certain additions and improvements to the work as originally designed. These additions, the position of the fort, in reference to the other points to be occupied for the defence of the harbor and city of Boston, renders necessary; especially as it must be occupied in time of war, not only for the purposes of general defence, but also as a general depot for stores and recruits, and for the establishment of military hospitals.

Fort Schuyler is a new work. It was projected several years since, as one of the most important of the works required for the defence of New York. The original project has just been revised by the board of engineers, and the estimate herewith submitted is for the revised project. It exceeds the former estimate, but the difference is owing rather to the increased prices of materials than to any expensive additions to the work itself.

Respectfully submitted,

Hon. LEWIS CASS, *Secretary of War.*

C. GRATIOT.

NEWPORT, *March 13, 1834.*

SIR: In compliance with your instructions, the board of engineers have prepared the project herewith submitted for the repair and improvement of Fort Independence, on Castle island, in the harbor of Boston.

The large amount of appropriations which will be requisite to complete the work renders it incumbent on the board to state their views of the importance of the position and of the necessity of the changes indicated in the project.

The advantages of Castle island as the site of a work for the defence of Boston against an attack by water were discovered at a very early period of our history, it having been constantly occupied for that purpose since (about) 1630. It is, in fact, favorably situated in every respect for the defence of the main channel, and possesses the further advantage of commanding the "President's Roads." The necessity of an efficient marine battery on this position will neither be obviated nor in any degree diminished by the construction of the works projected for the defence of the outer harbor, while to the latter the fort on Castle island will serve as a second line of defence; it affords the only security against the smaller class of vessels which, as is known, may enter the harbor through Broad sound. The board are therefore of opinion that the work ought to be maintained and so improved as to be secure from a *coup de main*.

For the detail of this project the board respectfully refer to the drawings (plan, elevations, and sections) which accompany this report. The principal constructions which an accurate survey of the fort and a close examination of its present condition have shown to be necessary, in order to its being suitably adapted to its object, may be briefly stated, as follows:

1st. *Scarp wall*.—A new face of granite to replace the old face of bricks, now in a state of entire decay, giving to the new face a batter of $\frac{1}{8}$ instead of $\frac{1}{3}$, which is that of the original face. This scarp, which varies from 11' to 13' around the greater portion of the work, to be carried up 12' higher on an average, so that the new cordon and coping will be nowhere less than 22' 4", or greater than 30', and averaging 26' 6" in height.

2d. *Casemates*, bomb-proof, to be substituted for the present quarters and barracks, which, from decay, would otherwise require to be rebuilt. In these casemates embrasures are provided for fourteen additional pieces of heavy cannon, bearing in the most favorable directions for the defence of the main channel.

3d. Other bomb-proofs for magazines and storerooms. It is proper here to remark that the present magazine is in so ruinous a condition, owing to defects of construction and long neglect, as not to be susceptible of reparation.

4th. A casemate for carronades in each flank, without which the foot of the scarp along the whole extent of every curtain, together with a considerable triangular space in front, not being seen from the covering line, would be left undefended.

We have the honor to be, very respectfully, your obedient servants,

JOS. G. TOTTEN, *Lieut. Col. Engineers, Bvt. Col.*
S. THAYER, *Major of Engineers, Bvt. Lt. Col.*

Brigadier General CHARLES GRATIOT, *Chief Engineer.*

Estimate of the materials and workmanship, and of the funds required for the repair and improvement of Fort Independence, in Boston harbor, Massachusetts.

MASONRY.

	Hammered stone.	Rubble stone.	Brick
	<i>Feet.</i>	<i>Feet.</i>	
Chemise on scarp wall, along the casemates between cordon and foundation of piers, length 729 feet, height 20, width 5 feet 2½ inches.....	38,273	41,621	-----
Face of scarp below chemise, between foundations of piers and new surface of ground, length 729 feet, height 5 feet 6 inches, width 3 feet 6 inches.....	10,026	4,011	-----
Face of scarp between old foundation and new surface, along northeast curtain and adjacent casemates, length 216 feet 7 inches, height 5 feet, width 3 feet.....		3,250	-----
New face of old scarp sustaining earth, length 1,412, height 14 feet 6 inches, width 3 feet.....	51,185	10,237	-----
New wall built on old, length 1,412, height 11 feet, width 6 feet.....	42,360	59,304	-----
Seventy-eight counterforts, length 4 feet 6 inches, height 11 feet, width 4 feet 6 inches.....		16,484	-----
Stone parapet, length 880 feet, height 5 feet 6 inches, width 5 feet.....	24,420		-----
Course of cordon under stone parapet, length 880 feet, height 1 foot, width 6 feet 6 inches.....	2,640	3,080	-----
Cordon course along earth parapet, length 1,261, height 1 foot, width 6 feet.....	3,783	3,783	-----
Interior revetment of parapet, length 1,261 feet, height 4 feet 6 inches, width 2 feet 6 inches.....		14,186	-----
Foundations of revetment, length 1,261 feet, height 2 feet 6 inches, width 3 feet 6 inches.....		11,033	-----
Casemates on northeast and southeast curtains, number of casemates 14 feet span 13 feet, total length of arches 650 feet, thickness 2 feet, height from floor to crown of intrados 14 feet, thickness of piers 5 feet.....		64,066	32,072
Eight casemates on the south curtain for officers' quarters, alternately 21 feet and 16 feet span, total length of arches 280 feet, thickness of 21 feet, span 2 feet 4 inches, of 16 feet span 2 feet, height from floor to crown of intrados 14 feet, thickness of piers 5 feet.....		24,322	15,680
Gateway, width 8 feet, height 8 feet, span of arch 12 feet 6 inches, length 43 feet, thickness of arch 1 foot 8 inches, thickness of piers, 5 feet.....	383	4,742	811
Two flank casemates 27 feet span, thickness of arch 2 feet 8 inches, height to crown of intrados 14 feet, mean thickness of pier 6 feet, thickness of rear walls 3 feet 4 inches, mean length of arches 23 feet.....		17,097	4,097
Eight flank casemates 20 feet span, thickness of arches 2 feet 4 inches, height to crown of intrados 12 feet 2 inches, mean length 21 feet, thickness of rear walls 3 feet, piers 5½ feet.....		32,864	10,134
Principal magazine, length 46 feet, length of arch, 40 feet, span 15 feet, thickness of arch 3 feet, height to intrados 10 feet 10 inches, thickness of piers 6 feet.....		14,090	2,460
Two magazines in bastion A, length of No. 1, 42 feet; of No. 2, 38 feet in the clear; span 13 feet 6 inches, thickness of arch 2 feet 8 inches, height to intrados 12 feet 9 inches, thickness of piers 5 feet.....		15,487	-----
Magazines and store rooms in bastion E: No. 1, mean length of arch 25 feet, span 12 feet, thickness of arch 2 feet 8 inches; No. 2, mean length 18 feet, mean span 13 feet 3 inches, thickness of arch 2 feet 4 inches.....		9,987	2,713
Two privies in bastion E, length of each 14 feet, span 12 feet.....		3,864	1,428
Supporting walls over the ends of casemates along scarp and parade wall.....		20,210	-----
Parade wall along casemates, length 577 feet 6 inches, height 20 feet 3 inches, width 1 foot, deducting openings for doors and windows, = 1,078 feet.....	10,721	4,765	-----
Parade wall, backed by galleries, length 303 feet 11 inches, height 20 feet 3 inches, mean width 4 feet, deducting openings, and adding foundations, gallery 6 feet wide, back wall 3 feet wide, height 7 feet 6 inches to crown of arch.....	9,232	34,235	2,236
Parade wall without galleries, length 30 feet 8 inches, height 20 feet 3 inches, mean width 6 feet; ramp walls without galleries, length 171 feet, mean height 10 feet, mean width 3 feet 7 inches, adding foundations.....	3,805	9,875	-----
Coping of parade wall, including ramps, length 1,083 feet, width 2 feet, thickness 9 inches.....	1,626		-----
Galleries of communications to flank casemates, &c., total length 471 feet, span of arch 6 feet, thickness of arch 1 foot, height to crown of arch 7 feet 6 inches, thickness of abutment wall 2 feet 6 inches, adding foundations.....		12,816	3,110
Steps, landings, platforms, &c.....	5,400		-----
Fourteen gun embrasures, 22 carronade embrasures, dead arches over 36 embrasures, flues and arches over and under 44 fire-places, 4 ovens, 4 cisterns, evacuators of smoke to casemates, &c.....		10,000	-----
Drain or sewer. Cylindrical drain under rampart 75 feet long, 3 feet diameter, 760 cubic feet; elliptical draw 6 by 3 feet, and 240 feet long, = 3,600 feet.....		4,350	-----

PLASTERING.

Casemates for officers' quarters	16,466 feet.
Casemates for soldiers' barracks.....	23,172 "
Casemates for principal magazines.....	1,588 "
Casemates for other magazines and privies	6,716 "
Ceiling of gateway.....	634 "
Total	48,576 sq. ft. = 5,397 yds.

Cornices for officers' quarters = 780 running feet.

Sheet lead for covering roofs of casemates and for pipes to carry off the water.

	Feet.
For 18 casemates on northeast and southeast curtains.....	21, 600
21' and 16' casemates on south front = superficial feet.....	12, 674
27' flank casemates.....	2, 300
20' flank casemates.....	8, 208
Magazines, storerooms, and privies, and for galleries of communication.....	10, 994
Equal superficial feet.....	<u>55, 776</u>

Weighing $2\frac{1}{2}$ pounds per superficial foot, equal to 139,400 pounds.

RECAPITULATION OF MASONRY, &c.

1, 392 cubic yards of hammered stone for face of parade wall, cordon, coping, steps, platforms, &c., at \$6 75 per cubic yard.....	\$9, 396 00
6, 158 cubic yards of hammered stone for face of scarp, stone parapet, and other purposes, at \$4 per cubic yard.....	24, 632 00
15, 756 cubic yards of rubble stone, at \$2 per cubic yard.....	31, 512 00
Laying 23, 306 cubic yards of stone, at \$3 50 per cubic yard, including lime, cement, sand, labor of making mortar, and attendance.....	81, 571 00

Stone cutting.

69, 455 superficial feet, for scarp and stone parapet, including coins and arch stones and expense of repairing tools, at 20 cents per foot.....	13, 891 00
20, 198 superficial feet, for face of parade wall, arch stones, window and door sills, &c., at 25 cents.....	5, 049 50
2, 141 running feet of cordon, at \$1 10.....	2, 355 10
1, 083 running feet, for coping of parade wall, at 85 cents.....	920 50
6, 864 superficial feet, for stairs, platforms, &c., at 25 cents.....	1, 716 00

Bricks.

89, 603 cubic feet, of 26 bricks per cubic foot = 2,330,000, at \$14 per thousand, including lime, cement, sand, labor of making mortar, and attendance.....	32, 620 00
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Plastering.

5, 397 superficial yards, at 60 cents, including furrings and lathing.....	3, 238 20
730 running feet of cornices for officers' quarters, at 15 cents.....	117 00

Sheet lead.

139, 400 pounds, at 4 cents per pound, including laying and solder, (the pigs being furnished by government).....	5, 576 00
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Carpenters', joiners', and glaziers' materials, &c.

Floors in officers' casemates.....	5, 540 feet.
Floors in soldiers' casemates.....	7, 461 "
Casemates of northeast curtain.....	2, 160 "
Magazines, &c.....	2, 502 "

Total superficial feet..... 17, 663 "

At 10 cents per superficial foot.....	1, 766 30
Scantlings for floors, 3,863 cubic feet, at 30 cents per cubic foot.....	1, 158 90
Centres for arches of casemates.....	200 00
730 running feet of plinths and base mouldings for officers' casemates, at 20 cents per running foot.....	156 00
1, 664 plain base boards for soldiers' casemates, and other furnished rooms, at 8 cents.....	133 12
Gate to postern.....	150 00
8 doors to magazines, locks, &c., complete, at \$30.....	240 00
18 doors to galleries, &c., at \$20.....	360 00
4 outside doors to officers' casemates, at \$30.....	120 00
24 inside doors to officers' casemates, including architraves, bolts, locks, &c., at \$20.....	480 00
14 outside doors to soldiers' casemates, including same as above, at \$20.....	280 00
10 inside doors to privies, at \$10.....	100 00
40 windows to officers' casemates, 22 windows to soldiers' casemates, &c., and 20 other windows, containing altogether 1,852 superficial feet, at \$1 per superficial foot, including glass, sashes, backs, elbows, architraves, shutters, and all other appurtenances..	1, 852 00
Marble chimney pieces to officers' quarters, soapstone for fireplaces, and other fixtures....	1, 000 00
Smithery, including materials.....	2, 500 00
Excavation and embankment, 37,000 cubic yards, at 25 cents.....	9, 250 00

Expenses of superintendence and disbursement, and incidentals, 10 per cent.....	23, 234 06
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255, 574 66

Respectfully submitted.

S. THAYER, Major Engineers, Lieut. Col.

*Report of the board of engineers on the revised project for Throg's Point, New York.*NEWPORT, *March 11, 1834.*

Sir: On receiving the intimation of the engineer department that the project for Throg's Point was to be revised the board of engineers recalled to mind that the survey on which that project was founded was necessarily rather preliminary than complete; and that a further and in some respects a much more minute survey must be made before the exact position of the work could be fixed, or its elevation be so adjusted as to remove all uncertainty in relation to the equilibrium of excavation and embankment, and, indeed, before it could be ascertained that the development of the battery ports fulfilled all necessary conditions. It was well known that the channel was properly commanded by these batteries, but the extent of deep water to the west of the channel was unknown, and it was therefore possible that these batteries would be found to have too great or too little development. These remarks in relation to the first survey must not be interpreted as imputing any neglect or inaccuracy to the officer who was entrusted therewith; that officer executed, in the most prompt, full, and perfect manner, the instructions given him; and if there was any fault in not foreseeing all the hidden circumstances of an unknown locality, the fault was confined to the member of the board by whom the instructions for the survey were dictated.

The new survey which the board solicited, and for which they prepared instructions, has been ably executed under the direction of Captain McNiell, of the topographical engineers. The drawings thereof laid before the board, and now communicated to the department with this report, accord with the first survey in all things wherein the drawings are comparable, and supply all the additional information needed.

A great part of the labor of the new survey was applied to minute levelling over the whole surface of ground embraced by the site of the work and the land approaches; in other words, over all the land belonging to the United States. The exact form of the ground is thus obtained, while previously there was known only the altitudes of a few of the most prominent points.

The materials being thus provided, the board have been enabled to give to the relief of the work the best relations to the surrounding eminences, and, at the same time, to apply rigid calculation to the important subject of excavation and embankment. The change in the relief, which the board are thereby called upon to recommend, is, however, much less than might have been looked for. As to the body of the fort, it is, indeed, very slight; the floor of the casemates was at first 23 feet above low water, it is now fixed at 21½ feet; and the crest of this work, which was at first 60 feet, is now placed at 61½ feet above the same level. And while the results of this minute levelling, and the relations established with the higher grounds on both sides of the river, have induced the board to increase the relief of the crest of the cover-face 7 feet, and of the crest of the covertway 4 feet 6 inches, they have also warranted them in the entire suppression of the ditch, 15 feet deep, which enclosed the water fronts. It is believed that while these changes, called for by a more exact adaptation of the work to the ground, give greater efficiency, strength, and simplicity, they will also lessen the expense.

It will be seen, in turning to the "map of Throg's Point, with its environs, 1833," (herewith,) that a line drawn from the fort to the point of City island is almost exactly a tangent to the line of 18 feet water on the west side of the channel; no vessel of force can, therefore, pass westward of that line.

By examining, next, the first "survey of the position of Throg's and Wilkins's Points," (herewith,) it will be perceived that the position of City island and the breadth of the channel are not given. With the first survey only before them, the board could not, therefore, act safely on any other supposition than that the deep water extended westward nearly as far as Pennyfield Point. A different supposition might have left a large undefended space, from which an enemy's squadron could bring the fort to terms. The safer supposition involved contraction and irregularity of figure, an imperfect adjustment of parts, and not a little complexity of details; but it was, notwithstanding, imperative on the board, under the circumstances, to give such a direction to the north front of the fort as to command all that space.

Several advantages result from knowing the true form and direction of the channel. The angles of the polygon may be made more obtuse, whereby the fire of adjacent fronts may be made to cross upon the capitals; this excludes all spaces imperfectly commanded, without requiring the maximum traverse of the guns.

This opening of the angles brings all the fire of the north front, which, from its commanding the approach of vessels, is made superior to the northeast and southeast fronts, to act for a longer time on vessels in the channel; it allows suitable proportions of fire to be directed on the channel abreast of the work, without involving irregularity of figure; and it opens the gorge, thereby giving more room therein for quarters, barracks, storerooms, magazines, &c., &c.; and, also, thereby giving this gorge more complete control of the cover-face, and enabling it more perfectly to serve the latter as a parador. These advantages, with several others relating to symmetry and greater simplicity of figure, are obtained, moreover, by an actual reduction of outline and of cost.

The suppression, before mentioned, of the ditch of the water fronts, and, consequently, of the casemated caponiers, expensive works, from the amount of excavation, of revetments, &c., calls for the substitution of the tower bastions, shown on the revised project (A) herewith. This arrangement, while it greatly lessens the cost, will, under the new disposition of the water fronts, be equally efficacious in protecting the work from escalade.

Referring to the plan of the original project, (herewith,) it will be seen that the form of the site was not then known with the degree of accuracy necessary to fix definitively the form and extent of the glacis; this has now been done with precision, and it has been found necessary, in order to command the approaches along the water's edge as well as those on the higher grounds, to make portions of the glacis with steep slopes. It has, moreover, been found impossible to flank the profile of the south steep branch of the glacis from any part of the work itself, without running into the extravagance of giving this profile a direction that would carry it into deep water; hence has resulted the contrivance of detached casemates for two carronades near the water's edge of the south front. Their positions, dimensions, and objects will be seen on consulting the plan of the revised project, (A.) What has now been said of the glacis is in no respect consequent upon the modification of trace before mentioned. The glacis of the original project would have required the same arrangement.

The board has now adverted to all the alterations which a more perfect knowledge of the locality has called upon them to recommend, at least so far as relates to modifications which touch fundamental principles of trace and relief; as to trace, these changes are confined to the body of the work; and as to

relief, though affecting the cover-face and covertway also, they are slight; such minor alterations as necessarily follow from an adjustment of details will appear in the more particular description below of the work with the accompanying drawings.

In applying themselves to this new study of the position of Throg's Point, the board have kept constantly in mind the importance of the objects to be protected; the immediate bearing of the position upon the northern avenues of approach to those objects; its indirect bearing upon the defence of those objects against attacks from the south; its remoteness, its nearly isolated situation, its easy accessibility to an enemy, and the exceedingly strong position (see "sketch of a military reconnoitring between Kingsbridge and Throg's Point," herewith,) which an enemy, designing to reduce this obstacle, would take while engaged in the operation. Keeping these interesting and weighty considerations in view, the board are fully satisfied that any change tending to a diminution of strength or efficiency would be wholly inadmissible.

The body of the work is now symmetrical. The north and south fronts are each 281 feet long; the north-east and southeast fronts each 205.33 feet, and the west front 437.62 feet long. At each of the northeast, east, and southeast angles, is a tower bastion with flanks 38 feet and faces about 21 feet long; the width in the clear of these bastions being 22 feet 4 inches. To the west front are given two very short flanks, sufficient, however, for one carronade in each of the casemated tiers. The water fronts present three tiers of guns, and the land (west) front one tier of carronades and loop-holes, commanding the bottom of the interior ditch; one tier of carronades and loop-holes scouring the terreplein of the cover-face, and a third tier of guns and musketry commanding the terreplein of the cover-face, and looking into the country.

The water fronts are appropriated exclusively to the armament; the other front contains quarters, barracks, storerooms, and magazines. The outline of this work, including the tower bastions, is 477 yards; of the first project, the outline, exclusive of the caponiers, was 490 yards.

As to the land front of the cover-face it retains the original trace; the water faces of the bastions, making each an angle of $60^{\circ} 52' 44''$ with the land faces, are 238.21 feet long; the eastern extremities of these faces are arranged as flanks to the adjacent water fronts, and are 43.93 feet long. The whole outline of the scarp of the cover-face is now 452 yards; upon the original project it was 483 yards. The rear of the cover-face, being the counterscarp of the interior ditch, has been so disposed as to be everywhere well flanked. All those parts of the cover-face which look upon the water have had their terrepleins arranged for seacoast carriages, and afford to the defence of the channel the fire of 28 guns.

The exterior ditch has the original breadth.

The covertway is provided with the requisite traverses, and has received barbettes at the extremities of the branches, in order to an effectual command of the steep slopes and of the profiles of the gentle slopes of the glacis; the left barrette has been so arranged as to give also a fire upon the channel. The place of arms has been made spacious, and its left parapet prepared for a battery of nine seacoast guns.

In giving form to the glacis due attention has been paid to that important principle which requires all masonry to be covered from the effective fire of land batteries; the drawings will show that no masonry is exposed to batteries less distant than 1,200 yards.

The magazines will contain about 1,600 barrels of powder. Ample room will be found under casemates for other stores. The casemates of the gorge or west front will afford good accommodations for 720 men and officers, while the other casemates will give abundant and convenient shelter for twice that number.

To man all the flanks will require.....	110 men.
Each bastion and its covertway 100, two bastions.....	200 "
In reserve in the cover-face.....	140 "
On terreplein of main work	50 "
Total.....	500 "

on duty every third day; making a total to sustain a siege of 1,500 effective men. This number will also allow five men to every gun and three men to every carronade, and leave a reserve of 280 men.

In case of a joint water and land attack:

To man the flanks	110 men.
In each bastion 50 men, two bastions.....	100 "
To man 201 guns, five men at each gun.....	1,005 "
In reserve.....	285 "
Total.....	1,500 "

When a siege is not apprehended, the garrison, in time of war, should be as follows:

To man the flanks.....	110 "
To man two-thirds of the whole number of guns, viz: 134 guns, with five men at each gun.....	670 "
Total.....	780 "
Or, to man the flanks.....	110 "
To man one-half of the whole number of guns, viz: 101 guns, with five men at each gun.....	505 "
In reserve.....	165 "
Total.....	780 "

Or, to man the flanks.....	110 "
To man all the guns, with three men at each gun, 201×3	603 "
In reserve.....	67 "
Total.....	780 "

In time of peace a garrison of one company will be sufficient.

Table showing the armament, garrison, and expense of the revised project.

ARMAMENT.	
Fort Schuyler.—Number of guns.....	201
Number of carronades.....	72
Number of mortars.....	10
GARRISON.	
To sustain a siege.....	1,500 men
In time of war.....	780 "
In time of peace.....	50 "
Expense.....	\$577,000

The shores of Throg's Point are exposed on all sides to the wash of waves and are washing away. This makes the provision of a strong sea-wall, extending all around the point, indispensable. Though equally indispensable to any project, this sea-wall was omitted in the original estimate. The prices ascertained by experience at Fort Adams have generally been assumed in the following estimate:

The board recommend that on the approach of war a field-work be thrown up in advance of the fort. The position is marked A on the "map of Throg's Point, with its environs, 1833," (herewith.)

The following drawings relating to the first project for Throg's Point, sent by the Engineer department to the board, are herewith returned, viz:

1. "Fort projected for Throg's Point, East river."
2. "Sketch of a military reconnoitring between Kingsbridge and Throg's Point, 1819."
3. "Survey of the positions of Throg's and Wilkins's Points and of the adjacent country."
4. "Details of caponiers, casemates of reversed fire, carronade embrasures, &c., Throg's Point."
5. "Details of embrasures, Throg's Point."
6. "Details of embrasures."

The following new drawings are also sent with this report, viz:

1. "Throg's Point, scale 200 yards to 12 inches, horizontal curves for every foot of altitude, measured from low-water mark, 1833;" in its proper place thereon is (A) "Revised project for a fort for Throg's Point, New York, 1834."
2. "Map of Throg's Point, with its environs, 1833," (B.)
3. "Sections and elevations of the revised project for Throg's Point, New York, 1834."

Two or three sheets of drawings of details of the revised project will also be forwarded as soon as finished.

As connected with the subject, the board return, in addition, the drawings of the Wilkins's Point project, viz:

1. "Fort projected for Wilkins's Point, opposite Throg's Point."
2. "Details of embrasures, Wilkins's Point."
3. "Details of embrasures, Wilkins's Point."

The above report and the following estimate are respectfully submitted.

JOSEPH G. TOTTEN, *Lieutenant Colonel Engineers and Brevet Colonel.*

S. THAYER, *Major Engineers and Brevet Lieutenant Colonel.*

J. L. SMITH, *Captain Engineers, Resident Engineer, and ex-officio member of Board of Engineers.*

Brigadier General CHARLES GRATIOT,
Colonel Commandant United States Engineers, Washington.

Estimate of the expense of the revised project for a fort for Throg's Point, New York.

	Excavation.	Embankment.	Amount.
EARTH WORK.			
	<i>Cubic yards.</i>	<i>Cubic yards.</i>	
Glacis of land front, down to the level of 12 feet above low water, including place of arms, covertway, and exterior ditch.....	37,568	98,280	
Cover-face and interior ditch.....	19,734	50,847	
Water glacis.....	47,323	12,487	
Main work.....	55,392	7,796	
Total cubic yards of earth.....	160,017	169,410	
169,410 cubic yards of earth removed at \$0.391.....			\$66,239 31
MASONRY.			
	<i>Cubic yards.</i>	<i>Cubic yards.</i>	
For 3 tower bastions.....	4,542.00	488.66	
For 24 gun casemates, including the exterior and interior walls, the piers, arches, &c.....	12,411.81	2,700.39	
For 15 barrack casemates, including their walls, piers, arches, &c.....	10,239.30	1,672.05	
Cover-face scarp, interior revetment, flank casemates, parapets, &c.....	18,379.11	746.55	
Caponier, counterscarp, covertway, place of arms, glacis, &c.....	3,504.73		
Walls closing interior and exterior ditches, and supporting left glacis.....	2,779.57		
Detached casemates.....	958.42	51.28	
Gutters, cesspools, drains, &c.....	1,304.44		
Total cubic yards of masonry.....	54,119.38	5,658.93	
54,119.38 cubic yards of stone masonry, labor and materials included, at \$6 per cubic yard.....		\$324,716 28	
6,512.88 cubic yards of stone masonry in sea wall, labor and materials included, at \$4.60 per cubic yard.....		29,959 25	
5,658.93 cubic yards of brick arches, labor and materials included, at \$9.60 per cubic yard.....		54,325 73	
80 chimneys and ventilators, at \$25 each.....		2,000 00	
172 embrasures, at \$75 each.....		12,900 00	
152 loop holes, at \$10 each.....		1,520 00	
932 yards of cordon, at \$15.50 per yard.....		5,115 00	
730 yards of tablet and counterscarp coping, at \$5 per yard.....		3,650 00	
410 yards of coping on stone parapet, at \$9 per yard.....		3,690 00	
291 stone steps, at \$5 each.....		1,455 00	
102 stone steps, at \$8 each.....		816 00	
3,748 feet of circles for gun and carronade traverses, at \$1.....		3,748 00	
PLUMBERS' WORK.			
	<i>Pounds.</i>		
Lead for roofs for tower bastions.....	9,375		
Lead for roofs for gun casemates.....	34,320		
Lead for roofs for barracks, &c.....	68,250		
Lead for walls.....	15,057		
	127,002		
127,002 pounds of lead, at \$0.037 per pound, materials and labor.....		4,699 07	
PLASTERERS' WORK.			
5,845 square yards of plastering, including cost of partitions, furring, &c., and materials and labor, at \$0.90 per yard.....		5,260 50	
Total cost of masonry, plumbers', and plasterers' work.....			453,854 83
CARPENTRY.			
10,663 running yards of joist of floors and platforms, at \$1.409.....		15,024 17	
6,137 square yards of floor for casemates, quarters, &c., at \$2.293.....		14,072 14	
300 running yards of girders of casemates, at \$38.454.....		2,536 20	
126 doors in quarters, barracks, &c., at \$5 each.....		630 00	
121 windows in quarters, barracks, &c., at \$5 each.....		605 00	
7 gates, at \$100.....		700 00	
756 square yards of ceiling of magazines, at 80 cents per yard.....		604 80	
60 steps of wood stairs in quarters, at \$5 each.....		300 00	
193 square yards of glazing, at \$4.05 per yard.....		781 65	
Total cost of carpentry.....			35,253 96
Smithery by approximation.....			6,000 00
Unforeseen expenses.....			15,651 90
Total cost of the work.....			577,000 00

NOTE.—The area of Fort Schuyler, within the crest of the glacis, is 8.08 acres. The area of Fort Adams to that of Fort Schuyler is almost as three to one.

23^d CONGRESS]

No 574.

[1ST SESSION.]

APPLICATION FOR COMPENSATION OR REIMBURSEMENT FOR EQUIPPING AND ORGANIZING A COMPANY OF FRENCH VOLUNTEERS FOR THE DEFENCE OF NEW ORLEANS, IN 1814-'15.

COMMUNICATED TO THE SENATE MARCH 29, 1834.

To Messrs. the President and members of the Senate and House of Representatives of the United States of America:

GENTLEMEN: Your petitioner, John Hudry, exposes to you respectfully that, in November, 1814, he organized sixty French veterans and brave Louisianees under the denomination of the Company of the Franks. But few among them could provide their uniform, accoutrement, arms, and ammunition, the executive power of Louisiana having refused us every part of those indispensable articles, although daily advices assured us that the enemy, who was then plundering and laying waste the cities on the Chesapeake bay, had in contemplation an immediate attack upon New Orleans.

I therefore contracted for the uniforms, the cartridge-boxes, and six thousand cartridges. As no arms could be procured in town I got from Baratavia eighty blades of swords, which I caused to be completely mounted in New Orleans, with their furnitures. I gathered with much difficulty, in New Orleans and neighborhood, old muskets, some without rods, bayonets, or locks, all of which I had refitted at any price, and I supported, cheerfully, my comrades from the beginning of November to the end of February.

We were ready in one month to receive our general, Jackson. He led us to that memorable affair of the 23^d of December, when he routed five thousand British veterans with fourteen hundred men on the left bank of the Mississippi.

The general took afterwards his position, and in the evening of the 27th he ordered the 24-pounder to be brought to the right of his line, which arrived after eight o'clock, amidst rain, frost, and a perfect obscurity; cannon and materials were unloaded in the mud, but no gunner could be found to put it in battery. The aide-de-camp, A. Davezac, came to me late in the night. He told me that the general was certain to be attacked next morning. Then I roused seventeen of my companions, the most of them professed gunners, and before daylight the battery was ready.

Next morning, the 28th, eight thousand red-coats appeared before us. They opened a brisk fire from a strong battery which they had established during the same night, with a shower of rockets, but our 24-pounder destroyed their redoubt, and they retreated.

Our general ordered a 12-pounder to be placed at the left of his line, but all the gunners were with Commodore Patterson on board the ship Louisiana. Therefore I sent to the piece my lieutenant with nine able artillerymen. They established the battery, and on the morning of the 1st of January nine thousand British came again to storm our poor mud line, but the Franks levelled their second battery, and they withdrew.

On the 8th of January the enemy attacked everywhere; eleven hundred red-coats advanced along the woods in close columns, but the Franks discovered the general staff on horseback; they pointed a canister, and the whole bunch came to the ground.

That army remained without a general, and, after some sharp struggles without command, they retreated, leaving the field covered with dead and wounded.

Had not that extraordinary event happened New Orleans would have been a Moscow before noon.

Gentlemen, I declare that I did no more than my duty as a professed champion of man's rights and of liberty from my early youth.

Eighteen or nineteen years have elapsed since those events, but I have taken good care never to mention my services nor my sacrifices for the defence of the country. I was a patriot, but not a mercenary. However, at last, misfortune, bad health, and age have overtaken me. Therefore I present myself with confidence before the honorable senators of the United States of America to ask them relief.

I am, gentlemen, the devoted patriot, and your faithful servant,

JOHN HUDRY.

Account of John Hudry, presented to the Committee on Military Affairs of the honorable Senate of the United States.

60 uniforms, comprising guêtres, pantaloons, waistcoats, coats, and hats, with ornaments and trimmings, at \$40.....	\$2, 400
60 cartridge-boxes, with furnitures, at \$10.....	600
60 blades of swords, mounted in New Orleans, with furnitures, at \$15.....	900
60 muskets, bought anywhere they could be found, some without bayonet, rod, or lock, and refitted at any price, at \$20.....	1, 200
3 hats for the officers, with decorations.....	150
3 swords for the officers, with furnitures in silver.....	75
2 drums, (one in copper,) uniforms, and pay of the drummers.....	150
My own uniform.....	60
6, 000 cartridges.....	230
For supporting my companions from the beginning of November to the end of February, about \$30 per day.....	3, 600
3 epaulettes and 3 dragonnes.....	100
One cart and one man to convey provisions and straw, &c.....	120
The rent of a house for our rendezvous.....	120
And a great many other expenses.....	.....
	9, 705

Gentlemen, this money was a large portion of the proceeds of my patrimony. I hope that your patriotism and love for your country will put me in possession of the same, to be able to renew a little business.

I am your devoted servant, and friend of this republic,

JOHN HUDRY.

WASHINGTON, *April 1, 1834.*

I know the petitioner, John Hudry, and have known him since 1812. I know that in the fall of 1814, when the country was threatened with invasion, he raised and equipped a volunteer company for its defence; that he applied to the governor of the State for the necessary arms and equipments; that he was refused, as there were none to give him; that he did clothe, arm, and equip them at his own expense; that, on the arrival of the commander-in-chief, they were received into the service of the United States, and did, during the campaign of 1814-15, render the most important and signal service in defence of the country.

The petitioner was then a man of fortune, but has since become poor and in ill health. I know that all articles of equipment were at that period extremely scarce and bore a most extravagant price.

JNO. R. GRYMES.

NEW ORLEANS, *March 21, 1815.*

I hereby certify that Captain John Hudry, born in Savoy, did, at the eve of invasion, raise in New Orleans a company of volunteers, called the *Compagnie Franche*, and has been with his company in all the engagements fought with the English near this place previous to their flight, and is entitled to the esteem of all the good citizens of the United States.

ANDREW JACKSON, *Major General commanding 7th Military District.*

NEW ORLEANS, *October 3, 1821.*

DEAR SIR: The Company of Franks, whom you have commanded since their first organization in a manner so highly honorable to you and so satisfactory to them, have seen with the deepest regret that you had determined to become a citizen of another State, and that, in consequence of this your determination, you could no longer retain among them a situation to which their free will and suffrages had called you. No other alternative was left to them but to accept of the resignation which you tendered, and your resignation was accepted; but a solemn obligation is imposed upon them by everything that is sacred between man and man. They owe it to you, they owe it to themselves, they owe it to the State of Louisiana, to offer you an unequivocal testimony of their respect; and it is with a view to pay this debt of gratitude that we, the undersigned, have been appointed a committee, with instructions to draft and forward to you a letter expressive of the sentiments of the corps.

This duty we now come prepared to discharge, and we are happy to have it in our power to declare that you possess, in the most eminent degree, the patriotism and virtues of the republican, the amiable qualities and accomplishments of the gentleman, and the firmness and courage of the soldier; that to you alone is the corps indebted for that subordination and discipline which distinguish it; and that you were the man who, at the hour of danger, when our independence and the integrity of our territory were threatened by an invading foe, pointed out to us the post of honor and led us to victory. Need we add that the recollection of your examples and lessons will always be cherished by the company, and will hereafter, we hope, contribute in a great measure to the preservation of that spirit of emulation and good order with which you first inspired them.

Accept, dear sir, in behalf of our comrades, and in our own individual names, of the assurances of an unbounded affection.

We have the honor to be, with the highest consideration, your obedient servants and devoted friends,

B. C. DUNCAN.
 CHERATON, *Sergeant Major.*
 BERTEL, *Captain.*
 J. HACKER.
 J. TOURNÉ.
 HAILLEY, *Second Lieutenant.*
 MARTIN OHLER.
 BOMREMZE, *Sergeant.*
 ANT. BOUTIN.

JEAN HUDRY, *Esq., Late Captain of the Company of Franks.*

NOUVELLE ORLEANS, *Mai 22, 1821.*

MONSIEUR: J'ai l'honneur de vous accuser réception de votre lettre, par laquelle vous m'informez qu'ayant fixé votre résidence dans l'Etat du Mississippi, vous me priez de raconter votre démission de capitaine de la *Compagnie des Franks*.

C'est avec regret, monsieur, que j'accepte la résignation d'un citoyen aussi estimable que vous, je me rappelle avec un sentiment d'estime et de respect tous les services que vous avez rendus à notre pays

pendant la campagne de 1814 et 1815; je suis moralement persuadé, connaissant votre patriotisme et votre dévouement pour le bien public, que si l'Etat était encore menacé d'un danger éminent, l'on vous serait accourir à sa défense et vous joindre à vos anciens des frères d'armes.

Je suis, avec estime, votre ami,

J. B. PLANCHÉ, *Brigadier Général.*

JEAN HUDRY, *Capitaine de la Compagnie des Francs.*

STATE OF MISSISSIPPI, *Wilkinson County, January 22, 1833.*

To all who may see these presents :

I do certify that I have known Captain Jean Hudry for more than eleven years, and been intimately acquainted with him during the principal part of that period; that ever since my knowledge of him he has supported the character of an honest, upright, temperate, enterprising, benevolent, patriotic, and high-minded gentleman, and that I do believe him such in every respect; that he located himself on Percy's creek, in this county, about the year 1820, as a merchant, with a large stock of goods, but from the want of a knowledge of the people amongst whom he settled, and the laws of the country, and confiding too much in unworthy persons, he has been unjustly deprived of his property.

Given under my hand the day and year above written.

GERARD C. BRANDON.

Personally appeared before the committee on propositions and grievances of the house of representatives of the State of Louisiana, Jacob Tourné, of the city of New Orleans, who on oath says that, in the years 1814 and 1815, during the invasion of Louisiana by the British troops, and for two or three months previous thereto, he was a sergeant in the company of Franks, of which John Hudry was captain; that nearly all the members of that company were poor men who were unable to uniform, arm, and equip themselves; that they received neither arms nor accoutrements from the State; that it is within his personal knowledge Captain Hudry furnished clothing for most, if not all his men, and sent to Baratavia and procured eighty sabre blades, and had them mounted in this city for the use of his company; that he furnished caps and cartridge-boxes and about sixty muskets for his men; that, according to the prices at that time, the sabre blades were worth from six to eight dollars each, and that it was worth from four to six dollars to mount them; that the cartridge-boxes were worth four or five dollars each.

He further says that, for a month before the actual invasion, Captain Hudry's house was the headquarters of his company; that while at the lines Captain Hudry sent his cart almost daily and brought to camp for his men supplies of vegetables and provisions at his own expense; that he must have expended between ten and thirteen thousand dollars upon his company during the invasion; that he was a most vigilant and valuable officer; that he was then rich, but is now poor, old and infirm, about sixty years old.

J. TOURNÉ.

Sworn to and subscribed this 18th of February, 1833, before me.

CHAS. A. BULLARD, *Chairman.*

23d CONGRESS.]

No. 575.

[1st SESSION.]

ON CLAIM FOR PAY AND EXPENSES INCURRED IN SECRET SERVICE FOR THE ARMY
DURING THE WAR OF 1812-'15.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES APRIL 4, 1834.

Mr. E. WHITTLESEY, from the Committee on Claims, to whom was referred the petition of Gates Hoit, reported:

That the petitioner states he was employed in the confidential service of the United States during the late war for about five months, and furnished himself with horses and expenses, and sometimes furnished others; that he travelled between two and three thousand miles, and for his services and expenses, after a period of twelve years' application to Congress, he obtained no more than three hundred dollars, by an act passed in July, 1832. He wishes the case reviewed, and an allowance made which shall compensate him in full for what is due to him as well for the interest on the money paid as for his services rendered. An act passed for the petitioner's relief on the 14th of July, 1832, appropriating three hundred dollars in full of all claims on the United States for secret services rendered by him during the late war. A report was made on this claim by the Committee on Military Affairs, on the 27th of December, 1831, to which this committee refer and make the same a part of this report. That committee were undetermined what ought to be allowed, if anything, and recommended that the subject should be referred to the Third Auditor, to receive testimony and report it to the House. This committee have not traced the further proceedings on this claim through all their stages, nor do they consider such examination to be necessary. Considering that a fund was at the disposal of the commanding general to defray the expenses of secret services, in the disbursement of which he took no vouchers nor made any report whereby

it can be ascertained whether these services were paid for or not, it is a question of doubtful policy whether relief ought to be granted in any application to Congress for like services unless the evidence is clear that the services have not been paid for. The strong presumption is that they were paid for at the time they were performed. This arises from the nature of the service, the kind of persons employed to perform it, and the fund set apart. The committee have not sent to the Third Auditor to obtain the papers, because they are not disposed to open the case, from its peculiar character and the great uncertainty that exists whether the petitioner was entitled to any special relief before. The following resolution is submitted:

Resolved, That the prayer of the petitioner ought not to be granted.

23D CONGRESS.]

No. 576.

[1ST SESSION.]

APPLICATION OF OHIO THAT THE MILITARY ACADEMY AT WEST POINT BE ABOLISHED.

COMMUNICATED TO THE SENATE APRIL 7, 1834.

RESOLUTIONS relating to West Point.

Resolved by the general assembly of the State of Ohio, That the Military Academy heretofore established at West Point, in the State of New York, and supported exclusively by the funds of the general government, is partial in its operations and wholly inconsistent with the spirit and genius of our liberal institutions.

Resolved, therefore, That said military establishment ought to be abolished, and that our senators in Congress be instructed and our representatives requested to oppose any further appropriations for the support of the said academy; provided that no representative shall be considered as being requested to vote against the known wishes of his immediate constituents.

Resolved, That the governor of this State transmit to each of said senators and representatives an authenticated copy of the foregoing resolutions.

JOHN H. KEITH, *Speaker of the House of Representatives.*

DAVID T. DISNEY, *Speaker of the Senate.*

MARCH 3, 1834.

23D CONGRESS.]

No. 577.

[1ST SESSION.]

APPLICATION OF FLORIDA FOR REBUILDING THE SEA-WALL IN FRONT OF ST. AUGUSTINE, AND FOR THE REPAIR OF FORT ST. MARK'S.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES APRIL 7, 1834.

EXECUTIVE OFFICE, *January 13, 1834.*

SIR: I regret that in my message to the legislative council at the opening of the session a notice of the improvements at St. Augustine, so essential to the prosperity of that city and authorized by an act of Congress, was inadvertently omitted. They are of so much importance that I have thought it advisable to bring the subject specially before you to-day. An appropriation of \$20,000 was made by the general government for the purpose of rebuilding the sea-wall in front of the city of St. Augustine, and for repairing Fort St. Mark's, of the same place. These works are under the superintendence of Lieutenant Tuttle, of the engineer corps, an officer of reputation and talent, and preparations for their prosecution are in a state of great forwardness, but an additional appropriation is deemed indispensable for their completion, which I recommend to the legislature to urge upon the attention of Congress. St. Augustine is liable, in case of severe storms from the sea, to great injury and destruction. It has already swept over part of the buildings in that city, and its encroachments, in consequence of the dilapidated and insufficient state of the old sea-wall, have within a few years past been alarming. The increased value which will be imparted to the public lands in East Florida, and especially the public property in St. Augustine, by the contemplated improvement, offers considerations which will, no doubt, influence the national legislature to make further appropriations necessary to complete it. The city of St. Augustine is believed to be the first town established within the present limits of the United States after the discovery of America by Columbus. Its ancient and venerable walls, its Gothic architecture, its vine-mantled battlements and stone structures, present themselves to the eye of the traveller in beautiful contrast with the recently reared villages and cities in other sections of our Territory. The preservation of this city is highly important to other portions of the United States, as a desirable point for a public seminary; and from the salubrity of the atmosphere, and healthiness of situation, and the facilities of access to it from the north

and south, it must eventually be appreciated as it justly deserves. St. Augustine will be looked to by the invalid, and those who seek to escape from the destructive diseases of a northern winter, as an abode delightful for the beauty of its scenery and mild sweetness of its climate.

I am, respectfully, your obedient servant,

WILLIAM P. DUVAL.

The PRESIDENT of the *Legislative Council*.

Whereas the repair and preservation of Fort St. Mark's, valuable as that work must ever be to the defences of East Florida in the event of war, and interesting as a specimen of military fortification, in its style and architecture more perfect than any other in the United States, should, as it has been, be deemed of national importance; and whereas, also, the reconstruction and extension of the *sea-wall* in front of the city of St. Augustine, from Fort St. Mark's to St. Francis barracks, are indispensable to the safety and protection of the city from severe storms, to which it is sometimes exposed, and from the constant inroads of the sea;

And whereas the appropriation already made by Congress to effect these objects will prove, it is believed, insufficient for the purpose;

Therefore be it resolved by this legislative council, That our delegate in Congress be requested to use his best exertions to obtain additional and sufficient appropriations for the entire accomplishment of the above works.

Resolved, further, That the foregoing preamble and these resolutions, together with the special message of the governor of this Territory relating to the same subjects, be duly certified by the president and clerk of this house and forwarded to the said delegate.

JOHN WARREN, *President Legislative Council*

Passed January 22, 1834.

JOS. B. LANCASTER, *Clerk*.

EXECUTIVE OFFICE, *St. Augustine, February 5, 1834.*

GENTLEMEN: In conformity with a resolution passed by your honorable body on the 30th ultimo, the clerk of the council has this morning handed me a copy of the report of the committee appointed to inquire, &c.

I am compelled to believe that the committee greatly misapprehend the intention and design of construction of the sea-wall in their examination, and that they assumed, from report, as facts things which could only be known to myself, not yet having communicated the mode of construction to any person. I reply:

1st. A portion of the stone taken from the old foundations were, and are, equally sound and uninjured with those just received from the quarries, and some of them are of a better quality, in consequence of a general property possessed by this stone of improving by age.

2d. A portion of the stone specified in paragraph 1 is large and equally suitable (perhaps more so) with the stone taken immediately from the quarries, for the foundations.

No other than such selected stone has been used in the portion of foundations alluded to in the report of the committee, and so soon as they were exhausted, the foundations have been continued with the large stone from the quarries. The portion of the foundations (which were laid very compactly) of the selected portions of the old stone, has been bound with large firm stone, six feet in length, instead of four, which would have been the thickness of the second course if the foundations had consisted only of headers in that part of the wall; thus in fact making the wall much stronger than it would have been if differently constructed.

3d. The foundations are sunken as each stone is laid, and no trench can be opened, for the reason that if more space than may be sufficient to bed a single stone, or a single yard in length, be opened at a time, it immediately refills, thereby causing not only great inconvenience, but much extra expense. It is believed that the foundations are generally sunken to nearly or quite the level of low water, but at any rate they are much deeper than the foundations of the old wall, which has not undermined, as may be seen by inspection.

4th. In former times it was customary to give to all walls of forts, sea-walls, &c., a slope or batter on their exterior. This custom has long since been exploded by all modern writers and engineers, with the single exception of massive scarp walls of forts, in which case it is still retained at a maximum batter of one inch to each foot in height of the wall. In other cases it is deemed injurious. The sea-walls in Boston harbor, for the preservation of the islands, constructed under the direction of Colonel Totten, (one of the best practical engineers, perhaps, in this or any other country,) are constructed precisely upon the plan which I am adopting in the present instance; nor do his foundations sink deeper than I am having the present foundations placed. It must be obvious that the islands in Boston bay are much more exposed, both from the waves and from the ice, than the harbor of this place.

5th. An examination of any part of the wall laid will show the stone cut to a joint as close as is possible, and that there are infinitely less openings between them than can be found in any similar walls in any other portion of the United States, owing to the facility of working this particular species of stone.

6th. The Engineer department has banished the use of mortar generally from works of this description, as being not only injudicious, but a useless expenditure, if not injurious. For proof of this, see the sea-wall in Boston harbor, and one constructed by me on the Delaware.

7th. The committee labor under a misapprehension in their quotation, "that the wishes of the citizens were to be complied with" by orders from the Engineer department. The order was, that I would select such foundations as in my judgment might be most suitable. It was my desire, however, to comply with the wishes of the citizens in the location of the wall, and am much disappointed that such is not the fact. From my consultations with the late mayor upon the subject, I conceived that I had adopted precisely the views of most, if not all, of the inhabitants of St. Augustine. The plan was to run the wall in a straight

line from the commencement to the termination of that part of the old foundations, which it would be both injurious and unnecessarily expensive to remove entirely.

The line of location is not on the old foundations from its commencement to the uninjured part of the foundations, but it is in a straight line, and embraces a very considerable space between it and the old wall. The object is conceived to be the gaining of a street, or rather widening the present one. This object will be effected to that part of the wall where the old remains are yet standing, and from thence to the pillars it is sufficiently wide. The law does not contemplate tearing down that portion which is good; but in case of a future appropriation there will be no such restriction, and it will be advisable to extend the wall from the pillars in a line with the outermost wall, thereby adding eight or ten feet to the breadth of the street from thence southerly.

I cannot but regret that my plans should in any respect have differed from the views of any portion of the inhabitants of this city, but have the fullest confidence that a careful examination of the subject in all its bearings will restore to all the fullest confidence in the propriety and economy of the course commenced.

I shall be pleased at all times to discuss any part of the proceedings with any member or committee of your honorable body.

I have the honor to be, very respectfully, your most obedient servant,

S. TUTTLE, *Lieutenant United States Corps of Engineers.*

The MAYOR AND CITY COUNCIL of *St. Augustine.*

St. AUGUSTINE, *February 25, 1834.*

SIR: Since our last letter to you, inclosing sundry documents in relation to the sea-wall, Lieutenant Tuttle has transmitted to the city council a communication in reply to the report of the committee appointed on that subject, a copy of which we take the liberty to forward to you.

We make no comment on this communication, but merely state that the committee are not inclined to alter the opinion contained in the report. We did not wish to interfere with Lieutenant Tuttle, but it was a duty which the public good did not permit us to overlook.

We also enclose to you a petition of the city council for permission to widen the street leading westward across St. Sebastian bridge, and have to request you to use your influence and exertion in its favor.

We have the honor to be, sir, your obedient servants,

ANTONIO ALVAREZ, *Mayor.*
 GAB. W. PERPALL, }
 ANDW. ANDERSON, } *Aldermen.*
 JAMES M. GOULD, }

Hon. JOSEPH M. WHITE, *Delegate in Congress, Washington City.*

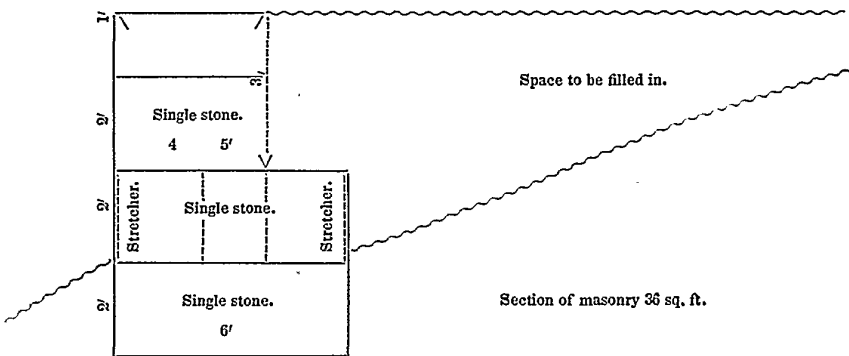
Estimate of funds requisite for the continuation of the sea-wall for the protection of the city of St. Augustine, and for additional repairs of Fort Marion, accompanied by a plan of the city.

1. The distance from the termination of the present sea-wall to the wharf at St. Francis barracks is as follows, viz:

	Chains.	Links.
1. To Drysdale's corner	32	64
2. To offset	2	75
3. To barrack wharf	4	56
Total	39	95

Or, in round numbers, 40 chains, or 2,640 feet.

2. If the wall be supported in rear by a parapet of earth twenty feet in thickness the following may be deemed a sufficiently accurate profile of the average masonry and earth required to be constructed:



Having no levelling instrument the levels above are only averaged by approximation from the tides.

3. The cost of the masonry will comprise five different items, viz:

1. Quarrying.
2. Hauling to the landing.
3. Transporting to the work.
4. Dressing.
5. Laying.

Quarrying—Of the description of stone proposed, *i. e.*, of the dimensions proposed, three good laborers can quarry and raise, and place on rollers in readiness for hauling, at the rate of one square of one hundred cubic feet per day. The number of working days, exclusive of Sundays and other days lost, may be estimated at twenty-two per month.

Three laborers cost \$12 per month.....	\$36 00
Provisions for three laborers, 30 days each, at 23 cents.....	20 70
Cost per month.....	<u>56 70</u>
Cost per square.....	2.5773
Medical attendance.....	.1210
Use of tools, implements, and machinery, rollers, plank, &c., say 3 per cent.....	.8096
Total cost of quarrying and placing upon rollers.....	<u>3.5079</u>

Hauling to the landing.—Four mules with cart and machinery can haul to the landing $1\frac{1}{2}$ squares of stone per day. The cost per day may be estimated at \$5; or, per square, \$3.3333.

Transporting to the work across the river.—Twelve men, with one scow, can load and transport to the wall six squares of stone. Cost of this labor, \$1 per day; or, per square, \$2.

Cutting and dressing.—Fifteen men can cut and face seven squares of this stone per day. Cost of this labor, \$1½ per day; or, per seven squares, \$20; or, per square, \$2.8571.

Laying the wall.—Fifteen men can perform the same quantity of work as in the preceding article and at the same cost, \$2.8571

Cost of stone, delivered as above.....	\$8.8312
Add for wastage 10 per cent.....	.8831
Cost of cutting and laying in the wall.....	<u>\$9.7143</u>
Cost of masonry per square.....	<u>5.7142</u>
	<u>15.4285</u>

Or, in round numbers, it may be estimated at \$15 50 per square.

From the foregoing data may be made the following estimate:

1. Sea-wall from the termination of the old wall to the barrack wharf, 950.4 squares, at \$15 50.....	\$14, 731 20
2. Two breakwaters, or jetties, projecting into the river, 330 feet in length, each 20 feet wide. Average section of masonry 200 feet, or 100 feet on each side = 1,320 squares, at \$15 50.....	20, 460 00
3. Embankment of earth, (brought from Anastasia island,) 3,600 feet in length. Average sections, 100 feet = 17,037 cubic yards, at 50 cents per cubic yard.....	8, 518 50
4. Filling jetties with earth, 4,400 cubic yards.....	2, 200 00
To the foregoing append: Additional repairs of Fort Marion, as follows:	
1. Of 100 running feet of wall in front of the fort, 40 squares.....	620 00
*2. New gate and bridges.....	800 00
*3. New flooring, doors, and windows to eight arches.....	2, 000 00
Total amount of estimate.....	<u>49, 329 70</u>
Add for unforeseen expenses.....	670 30
Aggregate of estimate, including unforeseen expenses.....	<u>50, 000 00</u>

JANUARY 21, 1834.

S. TUTTLE, *Lieutenant United States Corps of Engineers.*

Dr. W. H. SIMMONS, *in behalf of the citizens of St. Augustine.*

St. AUGUSTINE, January 21, 1834.

SIR: At your request, in behalf of the citizens of St. Augustine, I present you with the foregoing estimate and accompanying plan of the city of St. Augustine.

Having carefully examined all the details of the encroachments of the sea, and of the destruction of property (I think public as well as private) by the violence of the waves, I see no other permanent mode by which your city can be protected from a continuation of those disasters than the one pointed out in the plan and estimate herewith.

The repairs estimated for Fort Marion will undoubtedly be useful and important, (although, I think, not included in the late law of Congress,) if not indispensable, on account of store rooms, prison rooms, (for which purpose a portion is now used,) and, perhaps, for other county as well as military purposes.

I have the honor be, very respectfully, your most obedient servant,

S. TUTTLE, *Lieutenant United States Corps of Engineers.*

Dr. W. H. SIMMONS, *in behalf of the citizens of St. Augustine, present.*

* These items cannot be estimated in detail in consequence of the uncertainty of the cost of the materials, workmanship, &c., requisite therefor, or of the place from whence they must be procured. It is hoped, however, that these amounts will prove sufficient.

23D CONGRESS.]

No. 578.

[1ST SESSION.]

ANNUAL STATEMENT OF THE ARMS MADE AND EXPENSES INCURRED AT THE NATIONAL ARMORIES IN 1833.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES APRIL 12, 1834.

WAR DEPARTMENT, April 10, 1834.

SIR: I have the honor to transmit a statement of the expenditures incurred and the arms manufactured at the national armories in the year 1833, prepared in conformity with the provisions of the act of April 2, 1794.

Very respectfully, your most obedient servant,

LEW. CASS.

Hon. ANDREW STEVENSON, *Speaker of the House of Representatives.*

ORDNANCE OFFICE, Washington, April 9, 1834.

SIR: In pursuance of an act concerning arsenals and armories, passed April 2, 1794, (5th section,) I have the honor to transmit herewith statements of the expenditures at the national armories, and of the arms, &c., manufactured therein during the year 1833.

I have the honor to be, sir, respectfully, your obedient servant,

GEO. BOMFORD, *Colonel of Ordnance.*

Hon. LEWIS CASS, *Secretary of War.*

Statement of the expenditures made at the national armories, and of the arms, &c., manufactured therein during the year 1833.

	Expenditures.					Arms, &c., manufactured.									
	For buildings, canals, and other permanent improvements.	For the manufacture of arms.	For the manufacture of Hall's rifles.	For miscellaneous expenses, not embraced in the foregoing.	Total amount expended.	Muskets.	Rifles, (Hall's.)	Screw-drivers.	Wipers.	Flint caps.	Ball-screws.	Spring-vises.	Arm-chests.	Bullet-moulds—rifle.	Ammunition flasks—rifle.
Springfield, Mass....	\$5,659 72	\$172,938 92	.....	\$319 54	\$178,918 18	12,400	.....	11,600	17,400	12,400	1,240	1,240	110	.....	20
Harper's Ferry, Va..	36,022 91	133,436 85	\$38,348 55	1,192 08	209,000 39	12,000	3,670	3,682	19,100	17,084	.....	367	102	387	....
	41,682 63	306,375 77	38,348 55	1,511 62	387,918 57	24,400	3,670	15,282	36,500	29,484	1,240	1,607	212	367	20

DR.

Statement in detail of the operations of the armory at Springfield.

CR.

To value of component parts of arms on hand January 1, 1833, per last annual report.....	\$90,447 05	By amount expended for permanent improvements, per foregoing statement....	\$5,659 72
From which deduct this sum, being the amount (as subsequently reported) in the aggregate more than was actually on hand.....	22,371 00	Arms and equipments made, viz:	
	\$68,076 05	12,400 muskets, average cost of each \$12 70 ^{3/4}	157,627 22
To value of unwrought materials on hand January 1, 1833, per last annual report.....	48,831 35	11,600 screw-drivers, average cost of each 8 cents.....	928 00
From which deduct this sum, being the amount (as subsequently reported) in the aggregate more than was actually on hand.....	2,451 32	17,400 wipers, average cost of each 12 ^{1/2} cents.....	2,175 00
	46,380 03	1,240 ball-screws, average cost of each 15 cents.....	186 00
To this amount expended during the year, comprising all the payments made by the paymaster.....	182,736 73	1,240 spring-vises, average cost of each 30 cents.....	372 00
From which deduct the amount of rents of houses received from workmen, \$879 26, and for sales of refuse articles sold at auction in October, 1833, \$2,939 29.....	3,818 55	12,400 lead flint caps, average cost of each 1 cent.....	124 00
	178,918 18	110 arm-chests, average cost of each \$2 16 ^{3/4}	238 00
To value of 2,442 pounds of powder received from the storekeeper for proving musket-barrels, at 20 cents.....	488 40	By amount expended in preserving arms, and for miscellaneous purposes, not incidental to the manufacture of arms..	319 54
To value of 6,959 pounds lead for proving musket-barrels, at 4 cents.....	278 36	By value of supplies furnished the Frankford and Fort Monroe arsenals.....	510 20
	294,141 02	By value of component parts of arms on hand December 31, 1833.....	84,112 22
		By value of unwrought materials on hand December 31, 1833.....	41,889 12
			294,141 02

Dr.	<i>Statement in detail of the operations of the armory at Harper's Ferry, Virginia.</i>		Cr.
To value of component parts of arms on hand January 1, 1833	\$55,386 39	By amount expended in permanent improvements, per foregoing statement.....	\$36,022 91
To value of unwrought materials on hand January 1, 1833	62,335 07	Arms and equipments made, viz:	
To this amount expended during the year, comprising all the payments made by the paymaster	\$209,000 39	12,000 muskets, average cost of each \$11 80 ⁷³ / ₁₀₀	141,672 15
From which deduct the amount of rents of houses received from the workmen	2,176 12	15,440 wipers, average cost of each 12 ¹ / ₂ cents ..	1,930 00
	206,824 27	12 screw-drivers, average cost of each 7 cents ..	84
To value of supplies received from the Washington and Pikesville arsenal, viz:		17,084 flint caps, average cost of each 1 cent ..	170 84
5,000 pounds pig lead, at 4 cents ..	\$200 00	102 arm-chests, average cost of each \$2 10 ¹² / ₁₀₀ ..	214 49
1,945 pounds of powder, at 20 cents	389 00	By amount expended in preserving arms, and for miscellaneous purposes, not incidental to the manufacture of arms	1,192 08
1,000 rough musket-stocks, at 25 cents	250 00	By amount expended in the manufacture of Hall's rifles	38,348 55
	839 00	By value of component parts of arms on hand December 31, 1833	51,406 06
	325,384 73	By value of unwrought materials on hand December 31, 1833	54,392 81
		By value of supplies furnished the Alleghany arsenal	34 00
			325,384 73

Dr.	<i>Statement in detail of the expenditures on Hall's rifles.</i>		Cr.
To value of component parts of arms on hand January 1, 1833	\$64,425 62	By amount expended in permanent improvements	\$2,852 22
To value of unwrought materials on hand January 1, 1833	14,266 12	Arms and equipments made, viz:	
To amount expended during the year, comprising the total amount of payments made by the paymaster on account of Hall's rifles, viz:		3,670 rifles, at \$14 45 ⁵⁶ / ₁₀₀ each	53,033 04
For materials	\$10,437 23	3,670 screw-drivers, at 7 ¹ / ₂ cents each	266 07
For pay of workmen	27,911 32	3,670 wipers, at 19 cents each	697 30
	38,348 55	367 bullet-moulds, at 40 cents each	146 80
To value of supplies received from the Washington arsenal, viz:		367 spring-vises, at 25 ¹ / ₂ cents each	92 67
200 pounds powder, at 20 cents ..	\$40 00	20 ammunition flasks, at \$1 25 each	25 00
5,000 flints, at \$2 50 per thousand ..	12 50	By amount of component parts of arms on hand December 31, 1833	44,637 35
	52 50	By amount of unwrought materials on hand December 31, 1833	15,342 34
	117,092 79		117,092 79

ORDNANCE OFFICE, Washington, April 9, 1834.

GEO. BOMFORD, Colonel of Ordnance.

23D CONGRESS.]

No. 579.

[1ST SESSION.]

REPORT OF LIEUTENANT ALLEN, OF THE ARMY, OF H. B. SCHOOLCRAFT'S EXPLORATION OF THE COUNTRY AT AND BEYOND THE SOURCES OF THE MISSISSIPPI, ON A VISIT TO THE NORTHWESTERN INDIANS IN 1832.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES APRIL 12, 1834.

WAR DEPARTMENT, April 11, 1834.

SIR: In obedience to a resolution of the House of Representatives of the 28th of March, 1834, I have the honor to transmit a copy of the map and report furnished this department by Lieutenant Allen, who accompanied H. B. Schoolcraft, esq., to and beyond the sources of the Mississippi river, on a visit to the Northwestern Indians, in the year 1832.

Very respectfully, your most obedient servant,

LEW. CASS.

Hon. A. STEVENSON, *Speaker of the House of Representatives.*

HEADQUARTERS OF THE ARMY, Washington, May 9, 1832.

SIR: I have been informed that Mr. Schoolcraft intends making an expedition into the Indian country, under the authority of the War Department.

You will detail an officer and ten or twelve men to make a part of that expedition. The officer will be directed to keep a journal of the expedition; to describe the country through which it may pass; to

delineate, topographically, the route and several points of importance; to ascertain the manners and characters of the various Indian tribes, their numbers, strength in warriors, condition, mode of living, of obtaining subsistence, whether at peace with their neighbors or not, their places of resort for foreign supplies, how supplied, and by whom. He will also be directed to note the nature of the soil, the geology, mineralogy, and natural history; he will remark upon the game and fishes, as to quantity, quality, and facilities of procuring them.

The officer will transmit his report to headquarters, for the information of the general-in-chief, and to be laid before the Secretary of War. He will be considered as on topographical duty during the time he may be absent from his post and engaged in the expedition. The men will have the extra allowances accorded to soldiers on fatigue duty. The officer will report to Mr. Schoolcraft, and take his directions.

I am, sir, with respect, your obedient servant,

A. MACOMB, *Major General, Commanding the Army.*

Captain WILCOX, *or officer Commanding Fort Brady.*

Copy from the records of Fort Brady.

J. ALLEN, *Lieutenant and Post Adjutant.*

SPECIAL ORDER—No. 2.

HEADQUARTERS, *Fort Brady, June 6, 1832.*

In obedience to general order, dated May 9, 1832, Lieutenant Allen, Corporal Wibru, of K; Privates Briscoe, Beemis, Burke, Dutton, Ingram, and Riley, of B; Privates Copp, Lentz, and Wade, of K companies, are detailed to accompany Mr. Schoolcraft on his expedition into the Indian country. Lieutenant Allen will be furnished with a copy of the order, by which he will be governed.

The acting assistant quartermaster will furnish a boat to transport the party.

D. WILCOX, *Captain 5th Regiment, Commanding.*

Copy from the records of Fort Brady.

J. ALLEN, *Lieutenant and Post Adjutant.*

FORT DEARBORN, *November 25, 1833.*

SIR: In obedience to the foregoing orders and instructions, I have prepared the accompanying map and journal, which are now most respectfully submitted as embracing my *report* on the several subjects to which you have directed my attention.

I have been induced to report in this form because, from the circumstances of my position on the expedition, I was not able to collect sufficient facts on which to base a full and separate report under each of the various heads mentioned in your instructions; and I have thought this the best method of *combining* the observations which I was enabled to make, so as best to comply with your views, and to acquit myself of a responsible duty; and because in this way I could present all my remarks in the most concise shape.

The route of the expedition was up Lake Superior to Fond du Lac; thence up the Fond du Lac river ninety-one miles, to the mouth of the East Savannah river, and across by the latter river, the Savannah portage, and the West Savannah river, to Sandy lake and the Mississippi; thence up the Mississippi, through Lake Winnipeg, Upper Red Cedar or Cass lake, and Lac Traverse, to *Lac La Biche, or Elk lake, the source of the river*; thence, returning, back to Cass lake, and across the country by small lakes and portages, to Leech lake; and thence across again, by little lakes and portages, to the source of Crow Wing river, and down this to the Mississippi again; down the Mississippi fifty-nine miles below the Falls of St. Anthony, to the St. Croix river, up the latter to its source, in Upper Lake St. Croix; and thence down the Bois Brulé river to Lake Superior; again, twenty miles from Fond du Lac river, by which we had left the lake on our way up, and thence back to the Saut de Ste. Marie, the point from which we started.

We were absent eighty days, between the 6th of June and 26th of August, and travelled in that time two thousand eight hundred miles.

The facts and observations collected on this route, and herewith presented, are all that my time and means would allow me to collect; and I have endeavored, in the following pages, to lay them before you as they were brought under my notice by the journey and operations of each day; and wherever they are not as full and satisfactory as your instructions would seem to require, the reasons for the deficiency are to be found in the limitation as to time and means, which necessarily and unavoidably applied from my subordinate situation to the principal and conductor of the expedition, and my duty as commander of the detachment of troops constituting the escort.

The primary objects of the expedition, and consequently of Mr. Schoolcraft, being to vaccinate the Chippewa Indians, our movements between points for this purpose were generally rapid, scarcely allowing a mere passenger to make many useful observations on subjects of science connected with the country; and when, in connexion with this, it is considered that I had solely the charge and care of the transportation and subsistence of a detachment of soldiers, under circumstances of great difficulty, it will probably not be expected of my observations on several subjects made at the same time, that they could be very minute and complete. Hence the subject of botany, and one or two others, could receive but little attention, and are not much noticed beyond such remarks as would occur to a hasty observer. To the former subject Doctor Houghton, the surgeon, devoted much attention, and will probably give the result to the public.

On the subjects of geology and mineralogy I have been enabled to collect many useful facts, which are communicated principally in my description of the route up Lake Superior, and contained in my journal

between the 7th and 25th of June. My observations on this part of the route are more full and in detail than on any other, as I was enabled to make them from travelling it twice, going and returning. We saw but little rock formation elsewhere.

From the source of the Mississippi to the rapids below Crow Wing river, rock in place is seen but once: at the Falls of Pacagama, one hundred and fifty miles above Sandy lake, where the river runs through a formation of granular quartz. All the formations that did occur, however, are properly noticed in their appropriate place. The poor pine hills about the source of the Mississippi are broken down, primitive rock, showing numerous fragments and pebbles of the quartz gems, and of hornblende, feldspar, mica, &c.

On the subject of Indians, I have endeavored to comply strictly with your instructions, and have given information derived from the most authentic sources, much of it from the Indians themselves, but mostly from their particular traders; in obtaining which, particularly the census of the several bands and villages, I was much assisted by the politeness of Mr. Schoolcraft and Doctor Houghton.

The value of the trade in furs and facts relating to it were mostly furnished by Messrs. Holiday, Warren, Oakes, and Aitkin, of the American Fur Company, who enjoy most of the trade of the country.

It will be perceived that the condition of the Chippewa Indians is rapidly approaching a crisis, when their increased population and decreased resources must bring upon them great calamities, unless a considerable change is previously effected in their means of subsistence and mode of life. Since the humane measures of the government for the stoppage of whiskey in the Indian trade, they have increased and are increasing rapidly; but the furred and large animals of the country, upon which is their great dependence for their very existence, have diminished in a converse ratio, and are every day becoming more scarce. And yet these Indians, with a characteristic improvidence and blind fatuity, have not made, nor are making, any other provision for their future wants and contingencies, but, on the contrary, manifest, by a continued adherence to their established and peculiar habits of living, an apathy and indifference to their approaching condition of want and misery altogether inexplicable and astonishing.

Their vast country, though generally poor, has land enough of the richest quality to afford a subsistence by cultivation for ten times their present population. But they have not anywhere sought a living from agriculture; and in parts where the soil is richest and the Indians most in need, they have been the least attentive to this means of supplying their wants, although some of them, as those about Fond du Lac and along the shores of Lake Superior, have already experienced, during two or three severe winters, much suffering from starvation, and many of them must have perished but for a scanty relief furnished by their traders.

All the Chippewas north and west of Lake Superior entertain unfriendly feelings to the government of the United States, and would undoubtedly embrace another occasion, similar to that of the last war with Great Britain, to join and assist an English or other powerful enemy; but their hostility amounts to nothing, for they are too poor and weak to attempt to war themselves, and are restrained by motives of fear and interest from depredating much upon their traders. Those at Leech lake and about the sources of the Mississippi are the least friendly, as my account of them represents.

About the time of the removal of the British traders from this country it had commenced the decline in Indian resources, which has gone on steadily ever since, until the country is now poor, compared with what it was in the time of the Northwest Company and British trade; and the Indians, contrasting their present condition with their former, and without the judgment to know and assign the true cause of the difference, attribute their present comparative distress and want to the change of government and traders effected at the time referred to. And this will account for much of their present hostile feeling to the American government and traders.

All the Chippewa Indians have a most inveterate and irreconcilable hatred for their border tribe and natural enemies, the Sioux, which, being duly reciprocated by the latter, keeps them both, near their borders, in a state of constant insecurity and warfare, and leads to endless aggressions on the part of each. The Chippewas, however, from their poverty and weakness, suffer most from this state of things, and are seldom able to pursue an offensive war, or to carry their operations much beyond their own country. Whereas their enemies, from their superior numerical strength and abundant resources in means of subsistence, are enabled to push their excursions into the Chippewa territory until they are resisted by the inaccessible nature of the country.

The Chippewas remote from their lines, as those along Lake Superior, at Fond du Lac, &c., are seldom engaged in these wars, or much affected by them; but their border brethren at Leech lake, Red lake, and along the Mississippi, are never at peace. The Leech Lake band particularly, being the largest single band of the tribe, and occupying a place near the lines, and made secure by the fastnesses of their lake, are in a state of constant excitement, either from the depredations of their enemies, or their own upon them; and they suffer and resent more than any other band. They also possess more of the qualities of savage warriors than any other Indians whom we visited. For a particular account of them see journal, July 16.

Our route, excepting a small portion of it on the Mississippi above and below Fort Snelling, in the Sioux lands, was entirely in the country of the Chippewas, and we saw no other Indians excepting a few of the Sioux at Fort Snelling and on the river below.

The accompanying *map* is a "delineation of the route and several points of importance," and is as correct a representation of the country as my means of observation would allow me to make it. The collection of materials for this object received as great care and attention as was necessary to supply a deficiency of proper means for this purpose.

I was not furnished with, nor could I procure at Fort Brady, any instruments by which to fix, from astronomical observations, the true geographical positions of points necessary to be known for the construction of an accurate map; and, to obviate this inconvenience, I had recourse to a method of tracing the whole route between the few points fixed and given by the observations of former travellers. For this purpose a compass, the only instrument I had, was placed in my canoe, where it was constantly under my eye, and, as the canoe proceeded in the line of a river, I carried my observations from the compass to a field-book at every bend or change of direction, thus delineating, on a large scale, in my field-book, all the bends of the river precisely as they occurred; and, by establishing a scale of proportion in the lengths of the reaches, I was also in this way enabled to lay down and preserve the general course of a river with surprising accuracy, as was tested afterwards in constructing on my map the routes of rivers between known points. The distances were estimated with great pains and care from the combined judgments of all the gentlemen of the party on our rate of travelling, which was very well deter-

mined from our travelling much on known distances. Moreover, many of the distances, as the lengths of rivers and diameters of lakes, were long determined by traders and voyageurs, who could judge of them very well from having travelled them much. The portages were well enough measured by pacing them, and their direction was defined in the same way as that of the rivers.

On the portion of the Mississippi above Cass lake, which was the least known of any part of the river and route, I bestowed on the tracing and computing of distances the most unremitted attention; and, as I had by this time acquired a great facility in my method, I feel a confidence that the character, course, and length, as represented, of this interesting part, approaches a great degree of accuracy; and the place which I have thus given to Lac La Biche, the source of the great river, may be regarded as being very near its *true position*. This is on the supposition that Cass lake, to which Lac La Biche is thus relatively fixed, has its true geographical position from the observations of the astronomer, Thompson.

My observations on this part of the route, given on the map and in my journal between the 11th and 16th of July, may be viewed as settling definitively the question of the true source of the Mississippi, which has excited some interest and curiosity, and upon which map-makers have heretofore been seemingly uninformed, as, on all the published maps that I have seen, the river above Cass lake is incorrectly laid down, and Lac La Biche is placed *north* of Cass lake instead of *south* of it, as it should be.

I have placed Lac La Biche about in latitude $47^{\circ} 10'$, and longitude west of Greenwich $95^{\circ} 54'$. It is 165 miles above Cass lake, and 1,029 above the Falls of St. Anthony.

Our route from Leech lake down the Crow Wing river has also developed new facts in the topography of the country, in the source, length, and character of that river, which claims an interest from its being the largest branch of the Mississippi above the Falls of St. Anthony.

The description of the St. Croix and Bois Brulé rivers, of our route returning from the Mississippi to Lake Superior, is also new.

The country embraced by the map, and which did not come under my immediate observation, is described from Indian maps, drawn by Indians well acquainted with it, and from the maps and descriptions of traders. The number of the rivers and their length and direction is not far from the truth.

The southern shore of Lake Superior, a part of our route, is omitted in the map, but its topographical features are described in the journal.

In my letter to you of September 13, 1832, I had occasion to mention the separation of Mr. Schoolcraft from the detachment on the St. Croix river. The circumstances of that separation are reported in my journal of the St. Croix, July 29.

I have the honor to be, with the greatest respect, sir, your most obedient servant,

J. ALLEN, *Lieutenant Fifth Infantry.*

Major General MACOMB, *General-in-chief.*

Journal of an "expedition into the Indian country," to the source of the Mississippi, made under the authority of the War Department in 1832.

June 7.—The party organized for this expedition consisted of Mr. Schoolcraft, who had the principal conduct of it; Doctor Houghton, the surgeon, to vaccinate the Indians; Mr. George Johnston, interpreter; Mr. Boutwell, a Presbyterian missionary, and twenty engagés or Canadian voyageurs, in the employment of Mr. Schoolcraft; and the military part, consisting of myself and ten soldiers from the companies at Fort Brady, making an aggregate, of the whole party, of thirty-five souls.

This party may be considered as divided into two parts: that organized by Mr. Schoolcraft, and under his immediate direction and subsistence, and the escort or military part, under my command. I shall therefore designate the former, throughout this journal, as Mr. Schoolcraft's party, or Mr. S. and party, which will be understood to embrace all excepting the escort, the latter being transported and subsisted under my direction.

All our preparations having been completed, we embarked from Saut de Ste. Marie about five o'clock in the afternoon of the 7th of June—Mr. Schoolcraft and party, with their baggage, in one large Mackinac boat and two bark canoes, and the soldiers and myself, with our arms, ammunition, and provisions to last us to Fort Snelling, in a small Mackinac boat. The boats are intended for our journey along Lake Superior, and will be abandoned at Fond du Lac, where, for river navigation, we shall be compelled to use the Indian bark canoes. Our object being, for this day, merely to make a start, we went but six miles, to Point aux Pins, on the Canada side of the St. Mary's river, where we encamped for the night. This is a point of very general encampment for the traders, and is always considered by them, departing from Mackinac or the Saut de Ste. Marie, as their first point in the Indian country. Here the prices of their goods change, and any article sold at this point, or beyond it, to any of their hands or engagés, is charged at what they denominate the "interior price," which is the same as that placed on their goods at their several trading posts in the Indian country. The St. Mary's river expands greatly above and below this place, and all of it above might be regarded as a bay of Lake Superior were it not that there is a perceptible current almost to the lake. Point aux Pins is a low, sandy barren, with a few detached pines growing on it. A small stream enters the St. Mary's a few hundred yards below the extreme point, called Carp river, very remarkable for the great quantities of carp fish it contains at some seasons of the year. Two hundred yards from its mouth the stream is eight feet wide and four or five deep, and in the spring of the year is literally filled with these fish. I had visited it on a former occasion and found them so abundant that with ten strokes of a spear I killed nine fish, most of them about a foot long, and when the water was so muddy from their moving in shoals that I could not see any of them, but judged of their situation only by the motion of the water, occasioned by their moving in such great numbers.

June 8.—Made an early start and soon passed into Lake Superior between Gros Cap and Point Iroquois, the two points which mark the exit of the lake by the St. Mary's river, which, at this place, is nine miles broad, and seems, from the similarity in appearance of the two capes, at a very remote period to have forced its way through a continuous mountain that once united them. It has been supposed that an analogy existed between the rock formation of these points; but on a former occasion, about a year before our present visit, Doctor Houghton and myself made a careful examination of Point Iroquois, of the American side, and could discover no rock whatever; its character, therefore, in this respect, is still conjectural. The name "Iroquois" is given this point and a small island of the lake near it from a massacre at this place of Iroquois Indians, by the Chippewas, a long time ago. Gros Cap, immediatly

opposite, on the Canada side, is a large granitic bluff, rising at first perpendicularly to a height of 150 feet, and afterwards more gradually to a whole height of near 500 feet. It is a remarkable point in the great chain of granite mountains that confine Lake Superior to the north.

Turning Point Iroquois the lake extends westwardly, forming a great bay between this and Whitefish Point, the distance across being 24 miles, and the depth of the bay, from a line joining the two points, 20 miles. This bay receives the Tequamenon and Shelldrake rivers. I made its direct traverse in a direction northwest, by which I reached Whitefish Point before the canoes and the other boat, which coasted the bay, but all turned the point near a mile, and encamped together at sunset on a sandy beach.

Whitefish Point is a low, long, narrow tongue of land, running, in an easterly direction, very far into the lake, and dips so gradually under the water as to form a shoal far beyond its extremity. About a mile and a half of the end of the point is composed of shifting sand and gravel, but a few feet elevated above the surface of the lake, and is perfectly barren of vegetation; the part back of this is low and very sandy, but a stunted growth of white and pitch pine, and a few small birch and white cedars, with some shrubs, have rendered the soil more fixed.

On the north side of the point the sand is very fine, (siliceous,) and about a hundred yards from the shore is blown into numerous insulated hillocks or steep mounds, from 20 to 50 feet high, partially covered with a small vegetation, which prevents their being destroyed by the same cause that formed them. The extreme point is made entirely of small pebbles of granite, quartz, hornblende, &c., very round and smooth.

This point is remarkable and important as a fishery of whitefish—as affording more and a better quality of that excellent fish than any other fishery of the southern shore of the lake yet explored. It has been long known as a point where this fish could be taken in gill-nets at certain seasons of the year; but no use was made of it more than is at present of several other fisheries of the lake, where a few Indians, or an individual trader, procure only what is necessary for their immediate subsistence. But within the last two years the enterprise of two gentlemen, Mr. Ashman and Mr. Roussin, who had retired from the fur trade of the American Fur Company, has developed many facts in relation to this fishery tending to show its importance as a source of business and profitable trade.

These gentlemen commenced the business of fishing at this place two years ago, without any particular knowledge or experience with regard to the seasons, localities, or the best means of taking the fish, and notwithstanding these disadvantages have made it a source of considerable profit, and are encouraged to continue it more extensively.

The fishery, as at present developed, commences at Shelldrake river, nine miles from the end of the point on its eastern shore, and extends round the point and along the southern shore of the lake, as far as the Grand Marais, or the commencement of the Grand Sable, a distance of fifty-four miles. The bottom along this part of the coast is sandy, and falls off gradually into deep water, and the shore is a sandy beach—circumstances favorable to the safety and easy working of the nets. The fish occur in equal numbers in every part of its whole extent, but the point is the most desirable locality, from its generally affording, on one or the other side, a lee and smooth water, where the nets may be used during winds. The fish are taken by means of the gill-net alone, the meshes of which are of a size adapted to the fish's head, so as to fasten in the gills when the fish attempts to withdraw its head after having inserted it in an attempt to force its way in the direction of its movement. The nets are generally eighty fathoms long and from five to ten feet broad, according to the depth of the water, and are set in a vertical position by leads or sinkers that rest on the bottom and floats of sufficient buoyancy to support the weight of the net and hold it up. They are tended by fishermen employed for the purpose, two of whom can tend and manage, in fair weather, ten nets, which will yield every morning from one to six barrels of fish. The management of nets consists in merely raising them, relieving them of their fish, and dropping in the same place once each day, which is done by running a canoe along their course and raising and dropping as the canoe progresses. These nets cost about six dollars each.

The fishing season commences here in the spring, (when the largest and best fish are taken,) about the last of April, and ends about the last of June; and in the fall occurs in October and part of November; making the whole season a little more than three months. The rest of the year the whitefish remain in the deep water of the lake. It is remarkable that at no other known fishery of the lake can the whitefish be taken in quantities in the spring; and equally so, that those of this fishery are larger and better than at any of the others. It is also a peculiarity of this fish that they are fatter and better in proportion as they are larger. Some taken here weigh fourteen or fifteen pounds, but the average weight is, in the spring, twenty-five to thirty fish to the barrel of 200 pounds, and in the fall, thirty to forty. The superior quality of the Lake Superior and Saut de Ste. Marie whitefish causes them to bring, in Detroit, from one to two dollars a barrel more than any other whitefish of that market. Much of the resources of this fishery, as also the best means of working it, remain to be discovered, and consequently no estimate can be formed of its future value to trade. Messrs. Ashman and Roussin have put up at Whitefish Point, within the last two years, 559 barrels; others, in the same time, and at the same place, have put up 313 barrels; making the whole proceeds for the above time 872 barrels, worth in Detroit six dollars per barrel, or \$5,234.

It is probable that there are many other rich whitefish fisheries along the southern shore of the lake, but they are, as yet, unexplored. The northern or Canada shore is said to afford many, as also superior advantages for fishing, from the coast being more serrated by bays, and protected by numerous islands from the effects of winds and seas, that greatly annoy the fishermen on the southern shore.

June 9.—Mr. Schoolcraft's boat, managed by Frenchmen, and carrying most of his provisions and baggage, did not reach our encampment until late last night; this circumstance determined him to strengthen the crew of the boat by that of Mr. Johnston's canoe, which was accordingly abandoned, and Mr. Johnston placed in charge of the boat, with Mr. Boutwell as passenger, Mr. Schoolcraft and Doctor Houghton occupying the light canoe as before; which, being manned with a full crew, was able to travel at a much speedier rate than either of the boats. We left our encampment after breakfast, at six o'clock, and, following the coast, took a direction nearly due west, which changed in the forenoon to 10° south of west, and in the afternoon to S. 30° W. I got to the Grand Marais at 10 p. m., where Mr. S. and party were already encamped, his boat being now able to precede mine, from the superiority of the boat and crew. The whole of the coast passed to-day presented a very plain bank of fine sand from twenty to a hundred feet high, and a continued forest of pine, generally small, but sometimes large and beautiful. A picturesque grove of white pine (*pinus strobus*) of more than a mile extent along the lake occurs about ten miles from our encampment. The growth is all large and unmixed with any other trees, the pines straight, tall, without limb, and thickly set together on level ground as far back as we could see.

We passed Twin river, twenty-four miles from Whitefish Point. It is a small stream, and its mouth is so much filled with sand that it can only be entered by very light craft, and in smooth water. We have travelled to-day forty-five miles.

June 10, (*Sunday*.)—This being the Sabbath, by a rule of Mr. Schoolcraft's, we do not travel, though the weather is fine. The rule, however, is convenient in observance, as it gives the men time to wash, bake, &c., which they have but little time to do when travelling. We are lying in a beautiful little bay, called the Grand Marais, from its having once been a marsh, which, within the recollection of some old voyageurs now present, has been washed away to its present state. It is a safe harbor for boats, and is important from its being the only one between Shell-drake river and Grand island, a distance of near one hundred miles. It is half a mile in depth, opens to the west, and is difficult to enter with a strong west wind and heavy sea, which drive right into it. Traders have met with serious accidents in attempting to run into it under such circumstances. The country about here has nothing peculiar in its appearance; hills are seen to the S.S.W. covered with thick forests of birch and pine.

The Grand Sable, or Great Sand, commences from the west of the entrance to this harbor.

June 11.—Left our encampment at Grand Marais at two o'clock in the morning, and passed the Grand Sable before daylight. This is a great deposit of loose, fine, siliceous sand, which forms a plain coast for about nine miles, rising abruptly from the lake at an angle of near 45°, and to a height of about three hundred feet. It is sustained at so great an angle by its moisture, for it is otherwise uncemented, and gives way under the feet, making its ascent almost impracticable. It is deposited in three layers or beds, which are distinguishable by a slight difference of color, and rests on a flat rock of variegated sandstone, which is seen a few feet under the surface of the water, near the shore. The summit is in a plain of the same loose drifting sand, which extends back for some miles, and is perfectly barren, containing imbedded trunks of trees. In this plain, about a mile and a half back, there is a small lake of more than a mile and a half in circumference, of clear, transparent water, and of apparently great depth, enclosed by a beautiful low bank of clear sand, and a beach of small pebbles. This lake is the source of a branch of the Tequamenon river, that empties into Tequamenon bay between Point Iroquois and Whitefish Point, and is remarkable from its occurring in the middle of a sandy plain.

As we progressed the Grand Sable gradually fell off into a low sandy bank, thirty or forty feet high, covered with a small growth of pine, birch, sugar-maple, and beech, (*fagus ferruginea*), which continues for about twelve miles, and terminates in the grand sandstone formation called the "Pictured Rocks," which constitutes twelve miles more of the coast to Grand island. This is the most beautiful and picturesque part of the whole southern coast of Lake Superior.

The formation is the "red sandstone," which rises gradually to the height of three hundred feet, in strata nearly horizontal, and from one to eight feet thickness, forming a perpendicular and projecting wall, with but one or two interruptions, from the point where it is first seen to the entrance of the harbor of Grand island, where it leaves the lake, and, turning to the south, disappears in wooded hills. This wall rises perpendicularly out of the water, which is apparently of great depth immediately at the base; and in places where the falling down of upper portions of the rock has been recent it is perfectly vertical, with the regularity of masonry from the base to the summit. But generally the rock is projecting, the undermining operations of the water and frost at the base not having progressed far enough to allow the whole entablature above to split and tumble over from its own weight.

The effect of the long action of the lake on this rock is here curiously exemplified, and can be distinctly observed to a height of more than one hundred and fifty feet above the present level of the water, proving conclusively that at some remote period the water of the lake stood at nearly that height above where it now is. The surface of the rock is not regular, presenting many angular and rounded points and notches, or little coves and bays; and where parts were softer than the general rock, and where water oozed from between the strata near the base the action of the frost internally, and of the waves externally, has worn out caverns, domes, and arched ways of great extent and singularity. In some places water containing vegetable and mineral matter has run from the strata near the top and striped the surface down to the bottom in all varieties of colors. The general surface is almost continuous for about twelve miles, in a direction a little south of west. It is only broken in one or two places by small streams and their little valleys, the largest of which is Miner's river. This stream, which was too small to admit our boat, has its mouth in a little sandy bay, to the east of which the bluff terminates in a remarkable feature, called the "Dorick Rock." This is a large slab or tabular rock of about fifty feet in diameter and eight feet thickness, supported on the side next to the bay by four columns, the largest of which is about seven feet through, and the smallest about three feet; the other side being supported by the main rock, of which it is a part. The whole structure presents four regular and distinct arches, two of which, being perpendicular to the shore, may be seen from the lake; the other two are radiant to the great arch, and nearly parallel to the shore. The large arch has a span of about thirty-five feet, and a rise of one-fourth the span. Its floor is inclined to the lake, making the height of the soffit at the entrance forty feet, and at the egress eighteen feet, the soffit or interior surface of the arch being horizontal. The lesser arches have a span of from five to eight feet in the same plane with that of the large arch, but their floors are higher. The columns are round, and have almost the regularity of masonry.

This structure is elevated at its base forty feet, and at its summit one hundred feet above the lake, and is the extreme point of the bluff, which it terminates perpendicularly. The top of the rock is covered with a vegetable soil and a growth of timber, among which are three pines of from two to three feet diameter.

The Dorick Rock is but one of the features of this part of the coast; there are many others equally curious and beautiful, and the whole presents a scenery of grandeur and beauty not surpassed, perhaps, by any other scenery of our country.

From the Pictured Rocks we entered the eastern channel to the harbors of Grand island, and, passing round the island, encamped on the southern shore of the western channel at a trading house. Grand island is a large and elevated island of about twenty miles circumference, and stands very little out into the lake beyond the line of the coast, with a broad channel running round it. Back of the island the channel expands into large deep bays that run into it and the main land, forming commodious and safe harbors for vessels. Next to the lake it presents high sandstone bluffs, but its other side falls off into a low shore. On a low sandy point of the south side of the island there is an Indian village with a present population of fifty-nine souls: thirty-five males and twenty-four females: warriors, twelve.

These Indians are well clothed, and look healthy. They derive their subsistence from the fish of the bays of Grand island—herring, trout, and small whitefish—which they take with the spear and in gill-nets,

and from some game, principally the common red deer, which they kill between this and Lake Michigan; and from their trader, who supplies a part of their provisions in winter. The present trader is Mr. Nolan, a clerk to Mr. Holiday, of Keewaywenon Bay. He made last year three packs, worth \$900, principally beaver, martens, and muskrats.

Twenty of the Indians now of this village belong rather to Presque Isle, forty miles above, where they live and hunt most of the year. We have travelled to-day forty-three miles. The soil about the trading house is rich and heavily timbered, mostly sugar-maple and birch, and the land is said to be of good quality from here south to Lake Michigan.

June 12.—We were detained at our encampment by a head wind until 10 o'clock a. m., when the wind falling, we got out of the western channel and attempted to make the traverse of a deep bay, twelve miles across in a due west course, but the old sea ran so high that most of my men became sea-sick, and Mr. Schoolcraft, unable to proceed in his canoe, ran into the bay and made a harbor in the mouth of a small river, where we encamped, having come but about eight miles. This little river has its channel at the mouth through a flat sandstone rock, and is hence called "La Rivière au Galet." It is small, barely admitting our boats. The land here is sandy and poor. Two miles further, in the bottom of the bay, is the river Aux Trains, and near it an island of the same name.

June 13.—On leaving this bay we passed a low, rocky shore, four or five miles, and taking a direction due west, which left the shore some distance to our left, we reached Presque Isle at two o'clock p. m., a distance of thirty-two miles. I could only see the shore sufficiently to notice its indentations by little bays, and that the land was low, with a sandy beach all the way. Nine miles from the river Aux Trains we passed Laughingfish river; fifteen miles further, Chocolate river; and six miles further, Dead river, in Presque Isle bay—all small.

Presque Isle is geologically interesting. It is a mass of serpentine rock, about two miles in circumference, rising gradually on all sides to a height of two hundred feet. The peninsula extends far into the lake, and is connected with the main land by a low, narrow, sandy isthmus, fifty to one hundred yards broad, covered with pine. The rock is the common serpentine, but does not exactly answer to any description of that rock that I have seen, and in some of its characters it resembles chlorite. Its texture is compact, and its grain fine; it is harder than the usual varieties of serpentine, is difficult to cut with a chisel, or to scrape with a knife; its fracture is earthy and uneven, and has a dark dull color, with very small whitish veins, traversing it in different directions; when polished it exhibits a beautiful, clear, smooth surface, very prettily variegated with different shades of dark green. The mass of the rock is traversed with numerous veins of the precious serpentine, running apparently through it in different directions and with different inclinations. These veins may be distinctly traced on the surface, exhibiting the precious serpentine in many varieties of color. They vary from one-fourth to three or four inches in breadth, and each vein is composed throughout of the same variety. Some exhibit it compact, opaque, and almost white, with a light tinge of yellow and green; in others it is seen of a dark, clear, leek green, beautifully translucent. But the finest variety occurs in the broader veins, and in the asbestos form, of a beautiful deep green color, transparent, and polishes well. Its fracture, in the direction of its fibre, exhibits the structure of compact asbestos, and is lustrous, but occasionally shows very small fibres of asbestos; a fracture perpendicular to the fibres shows a very close, compact texture. Another very curious variety was discovered in a small vein; it was of a light green color, opaque, and veined in the manner of the agate.

The great mass of the rock rises gradually from the lake, and on the north side; it was not too steep for us to land on it and walk up its surface, which is generally smooth and regular, and of a very dark, glossy appearance, somewhat resembling hornblende rock. It presents large fissures or openings, however, in one of which I ran my boat three or four times its length, into a little cove with a gravel beach and perpendicular walls all round it, where pyrites of iron were found among the pebbles. On the top and north side the rock is covered with a small growth of trees and bushes; on the east side, for perhaps one hundred feet at the base, it is overlaid with rotten red sandstone, which being broken off perpendicularly toward the lake, shows the line of coincidence of the two rocks as it emerges from the water.

Having procured some specimens of the rock and veins, and made this imperfect examination, which is all that my time would allow, we passed a bay of five miles traverse, in a northwest course, and touched Granite Point, a high bluff peninsula, very like in appearance to Presque Isle, and connected with the shore in a similar manner. The rock, however, is granite, heaved up in a very irregular and confused mass, presenting numerous irregular fissures, and overlaid with red sandstone for ten or fifteen feet above the surface of the lake, in the same manner as the serpentine rock of Presque Isle. Seven miles further, in the same direction, brought us across another bay, and to a very rough shore of granite bluffs, where we ran into a small stream which came apparently through a fissure of the rock, and encamped, placing our tents on the rock, sixty feet above our boats, but not more than ten feet from them horizontally.

We have come to-day forty-four miles, and have had high peaked, granitic looking mountains on our left nearly all day. The rock about our encampment shows many large veins of greenstone. Mr. Schoolcraft and Dr. Houghton, with the canoe, have their encampment ahead.

June 14.—Leaving our rough harbor, we passed a low sandstone shore of seven or eight miles. A high range of hills was seen off to the south, running northwest and southeast, probably a part of the chain observed yesterday back of Presque Isle. About ten miles from our encampment, the shore shows a very irregular black rock for two or three miles, which on examination proved to be hornblende rock and hornblende slate. This rock projects into the lake in many points, which present, for some distance from the water, a bare, black, glossy surface. Leaving this, the red sandstone shows itself again in high, prominent bluff points, embracing deep regular bays, nearly all of which have low sandy shores and beaches in the bottom of their circuit. Six of these bluff points occur nearly in the same northwest line, in a distance of twenty miles, before we reach Keewaywenon bay—some of them seventy feet high, and all presenting mural precipices to the lake. This sandstone, of which we have seen so much, has a dull, dark red color, occurs in thin strata, and has a very rough, ugly appearance. It contains no organic remains, and is in no way interesting; a thin sandy soil rests upon it, and supports a growth of cedar and pine.

Back of this formation, the chains of granite mountains rise to great heights, and occasionally display the base surfaces of their rugged peaks. They come down to within a mile of the lake, at the entrance to the Keewaywenon bay, where another chain further back runs off to the south, in the direction of the length of the bay.

From the last of the high sandstone bluff points described above, the two boats commence the traverse

of the great bay Keewaywenon, steering north 60 degrees west, to a cluster of little rocky islands which are situated in the bay, about eight miles from the shore, and off the mouth of Huron river, called the "Huron islands." These islands, four or five in number, are great masses of granite, grouped near together, of very rugged aspect and irregular shape. The largest is about a mile in length, one hundred and fifty feet high, and has some little bushes and trees growing in its fissures. The others are bare rock, and served thousands of gulls for nesting places. Some fissures of the large island on which we landed are remarkable. One running entirely through the island in a narrow part of it, allows the water to flow through, though at the top, forty or fifty feet above the water, a person may leap over it. South of the Huron islands is the mouth of Huron river, and six miles west of the latter is a long, narrow point, called Point Abbaye, which is the western cape of Huron bay, and divides it from Keewaywenon bay. Huron bay opens into Keewaywenon bay between Huron river and Point Abbaye, and runs back to the south and southwest, to a distance of more than twenty miles, almost as far as the great bay of which it is a subordinate branch. It is deep water throughout, but becomes very narrow towards the end, and is used as a fishery by the Indians, affording trout, herring, and whitefish.

Keewaywenon bay is the largest and most remarkable of the whole lake. It is thirty-two miles deep from Point Abbaye, in a southwest direction, and its whole depth, from the extreme point of the peninsula of Keewaywenon, is about seventy miles. This peninsula runs far into the lake in a northeasterly direction, and seems to approach Granite Point in such a manner as to make the great bay of Keewaywenon to commence properly between Granite Point and the east end of the peninsula. The distance between these two points is between forty and fifty miles. The voyageurs, however, going up the lake, do not consider themselves in Keewaywenon bay until they get within six or seven miles of Huron river, or the Huron islands. The breadth of the bay from Huron river is thirty miles, and from the islands to the nearest point of the peninsula is twenty-two miles; this is the usual boat traverse in fair weather, and was ours on the present occasion. We left the islands at 3 o'clock p. m., and crossed the bay in a direction little N. of NW. in five hours and a half, encamping at half-past eight behind a sandstone bluff point, in a little sandy bay opening to the northeast. All the traders and voyageurs consider this a dangerous traverse, and boats are frequently detained for several days on one or the other sides of the bay, waiting for favorable weather to cross. We were fortunate in having a perfect calm all the way, and crossed without difficulty or apprehension. The view from the middle of the bay is one of the most beautiful and picturesque of the lake. A high mountain chain that runs along the middle of the peninsula Keewaywenon is seen in front, running far out into the lake till its tops seem just emerging above the surface. Behind, to the S. and SE., the granite mountains that come down to the lake at Huron river show their base surfaces and tops; and the more distant chain, which runs off to the south, gives in the blue distance a distinct outline of innumerable high peaks, connected by curves made regular and well defined by the distance. To the right and left, in the direction of the length of the bay, nothing is to be seen but the beautiful expanse of clear water.

Mr. Schoolcraft, in his canoe, left the boats near the Huron islands, and took the usual canoe route down the bay, intending to visit Mr. Holiday's trading house and an Indian village near the bottom of the bay, and then make the traverse to Portage river in a narrow part, and cross the great peninsula by a portage to the lake on the other side, where he was to remain encamped till the boats made the tour around. The usual route for canoes that make the portage is from Point Abbaye, down the southeastern shore about nine miles, and thence across, in an oblique direction, about twelve miles, to the mouth of Portage river; up this river six miles, to a lake twelve miles long and two or three broad, and through this lake to a little river at its head, which is ascended six miles to its source in a wet savanna; from which, by a portage of one mile, they reach the lake on the north side of the peninsula, which here, and by this route, is twenty-five miles broad.

A distance of ninety miles round the Point Keewaywenon is saved by this route across by the portage. Boats, however, must always coast round the point, and, from the great prevalence of winds and seas so far out in the lake, this part of the route is frequently tedious, difficult, and dangerous.

The number of Indians about Huron and Keewaywenon bays is one hundred and thirty, about half of them males, and about twenty-five of these warriors. They subsist in summer principally on fish, which they take in sufficient quantities in the bays by gill-nets and the spear. Whitefish, herring, and trout are abundant in these bays. In winter they hunt the marten, otter, muskrat, and beaver, and during their hunts are mainly subsisted by their trader, with provisions taken from Mackinac. In this season they depend much on him for their subsistence, and it is questionable if they could now, in the present state of their country, live without the partial supply that he annually distributes to them. Their country is exhausted of the game, deer, bears, &c., that once furnished them food; their fisheries are impracticable at times from the rigors of winter, and many of them would undoubtedly suffer from starvation were it not for the relief alluded to, which is given them for their furs. They get provisions and goods from their trader when he first returns from Mackinac in the fall, and disperse to their several hunting grounds for the winter; from which the men frequently return to bring in their furs and get fresh supplies. The present trader at this post is Mr. Holiday, of the American Fur Company, who makes this his headquarters for two other posts, at which he has subordinate traders or clerks, one at Grand island, and one at the mouth of the Ontonagon river. This gentleman has lived and traded at this post for about twenty-four years, only coming out every summer to Mackinac to sell his furs and get new goods. The Indians of his district now depend on him for their annual supply of clothing, ammunition, &c., for which he usually gets all their furs; but the exhausted condition of their country requiring, in addition to the usual wants of Indians, a great quantity of provisions, the trade of late years has not been profitable, and his whole returns in furs in the spring seldom exceed by more than one thousand dollars the expenses of his three posts. More than half of his annual stock in trade is provisions. He makes usually at Grand island three packs; at his own post, on the bay, ten packs; and at the Ontonagon river, two packs—in all, fifteen packs, worth \$300 a pack, or \$4,500. The furs are principally beaver, martens, rats, otters, and a few bears.

Mr. Holiday is frequently opposed at his several posts by other traders, not of the American Fur Company, but generally with loss to those opposing, for his superior influence over the Indians, acquired from a long residence among them, secures for him all the furs.

June 15.—Started at half-past 3 a. m., and commenced the coasting of the peninsula, along its southern shore, in a general direction a little east of northeast; eight miles took us across a sandy bay of no great depth, and to the mouth of a small river, supposed to be "Tobacco river." It runs out in a mouth about ten yards broad, and eighteen inches deep, with a strong current over a flat sandstone rock, and

has three perpendicular falls over the same rock, all of which can be seen at one view from its mouth. The first, fifty yards from the mouth, is five feet; the second, twenty yards further, seven feet, and the third, ten yards further, eight or nine feet. It is remarkable that so large a river should flow from the peninsula, which is in no part more than thirty or forty miles broad, and has a chain of mountains dividing it in the centre.

A few miles from Tobacco river we met Mr. Oakes, a trader of the American Fur Company, from Lac du Flambeau, his post. He was on his way to Mackinac, with two Mackinac boats, carrying out the furs of his trade the previous winter. Mr. Oakes is the principal trader for the district or department of Lac du Flambeau, between Lake Superior and Green Bay and the Wisconsin river. He has four posts under his charge: Lac du Flambeau, his headquarters; Lac Sable; Chippewa river, and Wisconsin river, which yield, severally, about the same quantity of furs, but varying in different years between 1,500 and \$2000 for each post, and making his whole trade worth between \$6,000 and \$8,000 a year. The Indians of his department get nearly all their goods and necessaries from him, and subsist on the resources of the country, game and fish. In the fall and winter they kill great numbers of the common red deer, which are very plenty about Chippewa river. In the spring and summer, their subsistence is principally fish and berries, and a few furred animals. They sometimes make excursions against the Sioux, but they are not at present at war with any other tribe. They are represented as entertaining, generally, a very unfriendly feeling towards the government of the United States, and are only restrained by fear from depredations on their traders.

Leaving Mr. Oakes, we crossed a large, deep bay that ran eight or ten miles inland, with a sandy bank and beach for about half its circuit, where the mountains came abruptly down, and form the northern shore of rugged massive rock. From this bay the shore inclines a little more to the east, and presents numerous rocky points, with little coves and sandy bays between. Near the end of the peninsula the shore becomes more rocky, rough, and abrupt, and the course is east of northeast till we reach the most easterly point, where it suddenly changes to almost due north, varying but two or three degrees west, for a distance of four miles, when it again suddenly changes to nearly due west, along the north side of the peninsula. That part of the shore that runs north and south is the end of the peninsula Keewaywenon, and the most easterly point of it is called "Point Keewaywenon." There is no projecting or attenuated point, but the peninsula is here abruptly truncated in a north and south direction, presenting a rough rocky end of near four miles in this course, with a small island, called "Beaver island," about five miles directly off it in the lake.

This is a dangerous part of the coast for boat navigation. The peninsula offers no safe harbor for boats on its extremity, or near it on the south side, and we were anxious to get into a harbor on the north side before dark. My boat, however, was several miles behind Mr. Johnston's, and darkness, a strong head wind, and a thick fog overtook me soon after I turned the eastern point. I was then obliged to grope my way for several miles along a high rocky shore, of most forbidding aspect, against which I was in continual danger of being dashed to pieces, but which I could not leave further than the length of the oars, lest I should lose sight of it, and get lost and be blown off into the lake. In this situation I continued to hug the shore, and contend with the wind and sea, though not without great apprehension, until half-past nine at night, when I ran the boat into a dark opening in the rock, which proved to be a little cove about fifteen feet broad, formed between the main rock and a projecting crag about thirty feet high, and of sufficient length to conceal the boat and protect it from the wind then blowing. The bottom of the cove had been filled in with pebbles for a distance of twenty feet, and on this I encamped, securing the boat by means of cold chisels driven into the rock to make fast to. My experience to-night proves the necessity, in coasting this lake, of always having a guide in the boat well acquainted with the coast and the situation of its harbors. The severe winds and sudden storms on Lake Superior are proverbial, and it is never considered safe to encamp over night out of a harbor.

This peninsula is the most marked topographical feature of the southern shore of the lake, and is one of the most interesting in its geology and mineralogy. Estimating its length from the bottom of Keewaywenon bay, it is about eighty miles long. It is four miles long at its extremity, twenty-five or thirty miles in its middle part, twenty miles at the portage, and between thirty and forty at the base, across from the bottom of the bay. A chain of round-topped rocky mountains, from 500 to 800 feet high, rise near the end of the point, and extend back along its centre to a distance of near forty miles, occupying for this distance nearly the whole breadth of the peninsula, and sometimes coming down at the bottoms of bays till their bases are washed by the lake. Wherever these mountains have been examined they are trap rock, and this is undoubtedly the formation of all of them. Several varieties of trap are seen along the shore, and, in fact, constitute all the rock of the shore from Tobacco river. Basalt, amygdaloid, hornblende, greenstone, and rubblestone are among the varieties. The rock of the extreme point and of the shore for seven or eight miles beyond is a coarse crag. It is composed of pebbles of a dark brown color, showing the same color in their fracture, varying in size from the smallest to more than one foot in diameter, and united by a calcareous cement, which exhibits calcareous spar, in crystals and little veins, in many parts. It does not seem to extend far from the shore towards the mountains, for in many places where it is worn out to form little coves the shore at the bottom of the cove shows only sand and pebbles that have been worn from the main rock. From its exposed situation so far out in the lake, this rock is much subjected to abrasion from ice, &c., and presents to the lake an irregular, ugly, dark-colored surface, generally vertical, and from eight to thirty feet high. Many large portions are detached, and stand out one or two hundred yards in the lake in huge, shapeless masses.

Travelled this day forty-five miles.

June 16.—Left my rough encampment between the crags at half-past four in the morning, in a dense fog, and, coasting along the rock in a direction about west, a mile and a half brought us to the "Little Marais" harbor, where Mr. Johnston had preceded us with his boat and encamped the previous evening, and was now waiting for us to come up with him, under some apprehension that we had met with accident during the night. This harbor is much used by the voyageurs of Lake Superior, and is the first secure one that occurs after leaving Tobacco river. It is a little basin one hundred and fifty yards across, nearly circular, with a low sandy beach all round, excepting on the side next to the lake, where it is separated by the crag rock spoken of, which forms the shore. The entrance is a narrow gap in the rock, and this again is locked and protected from the lake by a long mass of the same, fifteen feet high and twenty or thirty broad, placed directly before the entrance, and extending thirty or forty yards on each side of it, parallel to the main rock, leaving a channel open at both ends, and just broad enough to admit boats without oars. The banks of this harbor are much lower than the rocks in front, and there is a

small marsh a short distance back, hence the name of "Marais" for the harbor. Two miles further brought us to the "Green Rock," a detached block of the crag rock, eight or nine feet high and as many through the base, to which the voyageurs have given this name, from the color it has acquired from copper-green disseminated through it. It is intersected by a vein of calcareous spar, that is also impregnated with the ore, and lies in the water but a few feet from the main rock of the shore, which also presents traces of copper-green and copper-black.*

From the Green rock the shore has a general direction southwest, and the same rock continues five or six miles, intersected by numerous veins of calcareous spar, all running perpendicular to the shore. Some of them were two feet broad, and could be traced up the rock and into the lake as far as we could see. Numerous rocky islands occur along this part a short distance from the main land, some of them bare, and others covered with vegetation. We landed again twelve miles from the Green rock, at some *copper veins*, discovered by Mr. George Johnston last year. The crag rock had disappeared some miles back, and we now struck upon the amygdaloid, which formed the whole shore and the base of mountains that rose gradually back. These veins of copper are four or five in number, very near together, and all run perpendicular to the shore. They can be traced by their color many yards into the water, but they soon disappear on the shore, running under the rock. The largest of the veins is about three inches broad at the surface, but it has been excavated for specimens about two feet in depth, where it is near six inches broad. All the veins are composed alike of the green carbonate of copper and metallic copper mixed. In excavating for specimens in the largest vein I took out pieces of metallic copper of several ounces weight, and the men picked several pieces from the smaller veins that occupied their whole breadth, and projected above the general surface of the rock. It would require much time and labor to make such an examination of these veins as would definitely develop their extent and resources, but the inducements their present appearance offers to such an investigation are certainly very strong and flattering.

The rock here is the amygdaloid variety of trap, and presents all over its surface innumerable little geodes of quartz gems, agate, cornelian, chalcedony, &c. I knocked many from it, and picked up others that were loose on the shore. And near the *veins* I discovered a large agatized cornelian of more than ten pounds weight, embedded in the rock about a foot under the water, but its surface, having been long exposed to the action of the frost and waves, was very much fractured, and in splitting the rock to obtain it it was broken into many pieces, most of which rolled into the deep water and were lost. I, however, brought away large geological specimens of the rock, to which much of it is still attached.

After passing four miles more of the same rock I crossed a beautifully curved bay, about nine miles across and six deep, with a sandy beach, and sand-banks sometimes fifty feet high. Leaving the bay, the shore continued regular and less rocky, presenting alternately dark sandy beaches and rocky points, and some little bays, with a beach of white sand and banks of the same. In one of the latter I encamped at sunset, having travelled this day thirty-two miles.

One of the men caught a trout to-day of more than forty pounds weight with a trolling line. These fish may be caught in this way along almost any part of the lake when the boat is sailing.

June 17, (*Sunday*).—The last rocky point of this part of the coast was near our encampment, and on examination proved to be amygdaloid, very compact and hard, resembling massive basalt. It showed on its surface many large crystals of amethystine spar, but with their crystals much injured by attrition, the rock being low, and subject to be washed by the waves. From the same rock I got a few specimens of the smoky quartz crystals, a very rare mineral. From this point our course was across a bay of fifteen miles traverse, with high banks of light yellow sand and a gravel beach, the shore gently curved, and of no great depth from the line of traverse, which was in direction S. 35° W. When we had made about twelve miles across the bay we discovered on the shore the tents of Mr. Schoolcraft and party, denoting the end of the portage where Mr. S. had promised to wait for us on parting three days before in Keewaywenon. This being Sunday, we stopped here for the rest of the day. Mr. S. had come over the portage from Mr. Holiday's house the previous afternoon, and Mr. Johnston, who had left me at the copper veins, had arrived at ten o'clock last night.

We have now made the circuit of this great peninsula of the lake, which is generally the most difficult part of the whole coast. Running out, as it does, to near the middle of the lake, at this part it is greatly exposed to winds and rough seas, inasmuch that boats are frequently detained seven or eight days at the end of the point before they can get a calm and smooth water long enough to get round it.

I have been particular in describing this part of our route, because it is the least known of any part of the lake. Its rocks and minerals are nowhere accurately described, and its topography is falsely represented on all the maps of it that I have seen. The most common error in respect to the latter is the running of the peninsula out too much to the north, and not enough to the east. The true direction of its length is a little (say 4°) east of northeast; and this, as well as I could determine, is also the direction of the chain of hills or mountains that run along its middle. Another error is, the making of two prominent points at the end of the peninsula, and calling one the "East Point" and the other "West Point." These points are not prominent, the shore between them has scarcely any indentation, and, as the line joining them is nearly due north and south, it were fitter to call one end of it North point and the other South point. Such a distinction, however, is not necessary, for the north point is rounded and indeterminate, and the south point is sufficiently protuberant to retain the name of Point Keewaywenon, which is now given to it by the voyageurs and traders, and which is often applied to the whole peninsula.

The mountains run back from the point near thirty miles, but not so far as the portage, which is over level ground, and dry three-fourths of a mile from the swamp to the north end of it, where we are encamped. These mountains show in a few places a bare surface of rock near their summit, but are mostly covered with vegetation, which looks from the lake green, and in some parts tall and heavy; it is principally aspen poplar, (*populus tremuloides*), birch, (*betula papyracea*), cedar, and pine. The forest on the portage and about our encampment is very heavy and strong, birch, sugar-maple, large pine, and hemlock, (*pinus canadensis*.) The vegetable soil, however, is but two or three inches thick, and rests on white sand, nearly pure, which forbids the idea of profitable cultivation.

* On my return Dr. Houghton and myself put a blast in the main rock at this place, which raised off about two feet thickness of it, and developed a vein of pure copper-black, from which we obtained many specimens of the richest quality, containing no impurity whatever. The vein was about six inches broad, and ran vertically into the rock, increasing in breadth as it descended. It is probable that the vein descends into the trap rock, to which it belongs, and that the crag rock has been formed round it, by the deposition and cementation of its pebbles. The copper-black is one of the richest ores of copper, and this locality of it is worthy of further investigation, which our time would not permit us to make.

The bank of the lake, at our encampment, is sixty feet high, with a beach of pebbles drifted half way up it. There is no harbor here against northern winds, and our boats were unloaded and drawn out on the beach.

June 18.—A strong northwest wind, which made the lake very rough, forbade the embarkation of Mr. S.'s canoe, and under the prospect of the canoes being detained a considerable time, Doctor Houghton and myself determined to embark in my boat, and run on, with the wind then blowing, to the Ontonagon river, with a view, if the wind still continued, to make a trip to the "Copper Rock," on that river, before Mr. S. could come up, and without detaining the party for that purpose. I accordingly, about noon, loaded my boat and launched her from timbers into a heavy sea, without accident; but I had scarcely got out when the wind lulled to a calm; and Mr. Schoolcraft having embarked his boat and canoe, overtook us in a few hours, and we proceeded to La Rivière à Misère, and encamped 27 miles from the portage. In this distance we passed several bluff points of sandstone rock, from twenty to fifty feet high, with the shore gently curved between them into sandy bays, presenting high banks of fine yellow sand, and rich green forests back. We passed successively the mouths of Salmon Trout, Graverod's, and Elm rivers—distant from the portage nine, fifteen, and twenty-two miles—all small, and much filled with sand at the mouths. Our course was, at first, S. 60° W., but in the latter part curved in gently to S. 10° W., forming a gradual indentation, at the bottom of which is the little river of our encampment.

There is a range of hills a mile or two back, parallel to the shore of the lake, the sides of which show forests of pine, birch, and sugar maple; but the country is exceedingly poor in game, and the river has its name, La Rivière à Misère, or Misery river, from the circumstance of traders having greatly suffered here, in former times, from starvation. There has not been a trader here for many years.

The shore, about the mouth of the river, is pure marine sand, with little ridges of pure iron sand—the paper sand of commerce—running near and parallel to the edge of the water. When this sand is washed up by a gentle wave, it arranges itself in little rows or ridges, entirely separate and distinct from the siliceous sand which is held in suspension and brought up by the same wave. This is explained by the difference of specific gravities of the two sands, and the magnetic affinity of the particles of the iron sand. The process of the separation may be witnessed at most of the sandy beaches of Lake Superior, which afford this sand in great quantities. The best time for collecting it is immediately after the waves have subsided, when it may be taken in many places perfectly pure, before wind or other accident has mixed it again with the other sand.

This evening was chilly—42° in the air, and 52° in the water. Fahrenheit.

June 19.—Left the Rivière à Misère at three o'clock in the morning. The sandy shore continued for about twelve miles, and terminated in a perpendicular bank of sandstone, eight or ten feet high, which is the southwest point in the traverse of the great bend of the shore that we had just coasted. Turning this, our direction changed to S 35° W.; the shore was slightly curved, and presented the same bank and beach as the preceding bay, with the same green forest back. We reached the Ontonagon river at eleven o'clock a. m., distant from our encampment twenty-four miles. The bank, for some distance before we reached the river, was very low, and the beach showed more of the iron sand than we had seen at any other part of the lake. The water for the same distance was shoal and turbid and of a dark brown color, which became more deeply tinted as we approached the mouth of the river. The river is about seventy yards broad at its mouth, and nearly on a level with the low banks and plains of barren sand which extend in an area of fifteen or twenty acres on each side of the mouth. It is deep, and has a gentle current, excepting at the very mouth, where it is discharged into the lake, over a shoal sand-bar, in a strong current.

Of all the numerous little streams of the lake, which are not very properly dignified with the name of "rivers," this is the most considerable of the southern shore, to Fond du Lac river; and yet it is only navigable for canoes 38 miles, and in that distance has many difficult rapids. It has been noticed by all the travellers of the lake, from Baron La Hontan's to the present time, for the remarkable mass of native copper found lying on its shore about forty miles from its mouth, and for the supposed mines of copper which this mass seemed to indicate in its vicinity. This mass, or "copper rock," as it has been called, has been so often visited and described, that it has lost a great part of the interest and curiosity which it at first excited; and the many unsuccessful searches for copper mines, in its vicinity, have nearly exploded the theory of their existence, the mass referred to being the only trace of copper that has been discovered on the river. Doctor Houghton and myself were induced to abandon the project of an excursion to the "rock" at this time, as it would have had the effect of detaining the whole party at least two days.*

This river is also interesting, and has been frequently noticed for its sturgeon fishery. A band of Chippewa Indians have made it their principal dependence for subsistence as far back as the observations of travellers have extended, and probably for a much longer time. The Indians now here, and who still subsist principally on these fish, are about seventy-six in number. Their weir or sturgeon dam is in the same place that Henry found it, about seven miles from the mouth of the river, and is built with poles stuck in the mud of the bottom, so close together as to prevent the sturgeon's passing between them, inclined a little down stream, and kept in place at top by transverse poles, to which they are bound with bark, the transverse poles being supported by forked braces, placed below, and inclined up stream. The Indians stand upon supports attached to the weir, and catch the fish with hooks, fastened to long poles, which they move about in the water at the base of the weir till they feel the fish against them, when the fish is hooked up by a sudden jerk of the pole. The weir is placed at the foot of the first rapid, and when the fish are ascending, has an opening made in it to allow them to go up, but which is closed when the fish are descending, and it is at this season that most of them are taken. The water of the river is turbid and of a dark brown color, which prevents fishermen from seeing the fish, or being seen by them. The fish taken here are from two to four feet in length, and are as abundant now as they ever were; and the Indians rely so exclusively on this fishery that they hunt but little and make no effort to cultivate the soil beyond the raising of a few potatoes, which are consumed almost as soon as grown. The river presents narrow alluvial bottoms for some miles up, very rich and favorable for the growing of corn, but they are entirely neglected. When the Indians were asked why they did not raise corn, they replied that they had no seed; but this was only eluding the question, for if they had ever manifested a disposition to cultivate it their trader would soon have supplied the seed, as its successful cultivation there would save him the transportation of a quantity of it from Mackinac for their subsistence and his own.

These Indians looked strong and healthy, but they had a dirty, greasy appearance, and exhaled a fœtid odor, from the oil of the sturgeon. They had their village at the mouth of the river, where Mr.

* On our return, Doctor H. and myself made this trip; for an account of which see my journal from August 13 to August 16.

Schoolcraft held a council with them in his tent soon after our arrival; gave them some tobacco, and had them all vaccinated. He told them, if they would follow him to La Pointe, where he would open some goods, he would give them presents, but they objected to this mode of receiving them, and thought it more consonant with a proper pride and self-respect to have the presents distributed on their own grounds; seeing, however, their objections of no avail, they sacrificed their pride to their cupidity, and agreed to send a canoe with us for the promised articles. We also met a chief here from Lac de Flambeau, to whom Mr. Schoolcraft had given a medal last year, who made a speech to Mr. S. in council, and stated, among other things, that he was then on his way to the Saut de Ste. Marie, to deliver himself up to Mr. S. for a murder that had been committed by one of his band on a Frenchman, and to get advice in the matter from the agent; he expressed great regret that the murder had occurred, and represented the difficulty of governing and restraining his young men. He said the other chiefs would not assist him to take the murderer and bring him out, and he was unable to do it alone. Mr. S., in reply, represented that the President would be very angry when he should learn of this murder, and advised that every effort should be made to bring the murderer to the Saut, and give him up to the agent; and for the present his best course would be to return to his band and use his influence and power to secure this murderer and prevent further aggressions.

This chief also consented to follow us to La Pointe to get some presents, and promised to pursue the advice of Mr. Schoolcraft.

The Ontonagon band numbers *twenty warriors*; they are too remote from the frontiers of their tribe to engage in the border warfare of the Chippewas and Sioux, and may be considered as *at peace*. They are supplied by their trader, one of Mr. Holiday's clerks, with blankets, ammunition, &c., and provisions when they hunt. They never get many furs, but had taken more the previous winter than usual; principally otter, martens, muskrats, and beaver. Their principal chief had died a short time before, and was universally regretted. The trading-house stood on an eminence on the east side of the river; the trader had gone with his furs to Keewaywewon bay to Mr. Holiday.

From the Ontonagon, our course S. 70° W. traversed a deep indentation of the shore, and struck it again at a distance of 18 miles, after passing the mouth of Iron river, 15 miles from the former. We then coasted in the dark a low rocky shore of sand rock for 12 miles more, and reached the mouth of Carp river at 2 o'clock in the morning, where Mr. S., with his canoe, had preceded the boats in the evening and encamped. I could find no harbor in the dark shore, nor a place among the rocks where the boat would have been an instant secure if a wind should have arisen, and was forced to continue travelling till I reached the encampment of Mr. S. But this is not the first time during the voyage that I have felt the want of a guide in my boat whose knowledge of harbors and distances might save such unnecessary exposures.

Carp river is quite a small stream, barely admitting boats in its rocky mouth, and drains a part of the Porcupine mountains that rise a few miles back. We saw the tops of these mountains before we reached the Ontonagon at a distance of more than 40 miles, when they appeared like a long high point running far out into the lake. On approaching them, however, the appearance of a projecting point was found to be an illusion produced by the lowness of the land between us and them, which prevents its being seen at the same time; by their oblique direction to the shore and our course, and, perhaps, by those nearest the lake being higher than those back, which would have the effect at a distance of making the range seemingly more perpendicular to the shore than it really is. These mountains are near two thousand feet high, and are granite. The sandstone of the shore rises towards them more and more as we approach their bases, and is the same red sandstone that has been noticed on many parts of the coast that we have passed. They come down to the lake a few miles beyond Carp river, and form several miles of the coast, frequently showing a bare surface, but generally covered with a luxuriant, heavy forest, similar to that of the country about their base, which is maple, birch, pine, and aspen poplar. Notwithstanding a detention of three hours at the Ontonagon river we have travelled to-day a distance of 54 miles.

June 20.—Left Carp river at 6 a. m., and in direction of S. 30° W. crossed a little sandy bay, with high banks, to Presque Isle river, a distance of six miles. This is one of the largest rivers of the lake, and has its channel from its mouth in a deep ravine of the Porcupine mountains, which here rise immediately from the lake. I went up the river a mile to see two perpendicular falls that occur in this distance; the first, half a mile from the mouth, is 20 feet, and the other, about half a mile further, is 40 feet. The ravine is very deep and narrow, and the sides of it are so thickly covered with a vegetation of large and small trees and bushes that I could not without difficulty find a point on the acclivity below the greater fall from which I could get a distinct view of it; it is exceedingly picturesque; the stream above is much contracted between high ledges of rock and seems to issue out of the mountains; from which, after running a few feet, it is pitched from a shelving sandstone rock into a deep abyss; the water is there deep, and the current gentle for about one hundred yards below, when it is urged with great violence over successive broken ledges of the same rock, until it reaches the next fall of twenty feet; from which it continues in a rapid current over broken rocks almost to its mouth. The quantity of water discharged over these falls is as great as that of the Trenton Falls, in New York, and the scenery is equally beautiful and interesting. Between the two falls the river has another channel to the east, now dry, but which discharges a portion of its waters, in time of floods, by another mouth; and hence the name "Presque Isle river."

Six miles from this river is Black river, a small stream that drains the south side of the Porcupine mountains. We passed this river two or three miles to the left of our course, (S. 60° W.,) and struck the shore at a distance of ten or twelve miles from Presque Isle river, where the sandstone rock is again seen, seven or eight feet above the surface of the water, and inclined up towards the mountains at angles of 30 or 40 degrees; a bank of sand rests on it, and in a few miles the rock disappears entirely, and the sand bank, attaining an elevation of 80 or 90 feet, encloses the Montreal bay, at the bottom of which is Montreal river, twenty-one miles from Black river. We left the shore at the eastern cape of this bay, and made a traverse of twenty-one or twenty-two miles in a direction due west to the island of La Pointe; thus leaving Montreal river and Mauvaise river of the same bay very far to the left. Montreal river is one of the largest of the lake, but, from its numerous falls and rapids, its navigation is not practicable, excepting near its source; and the route of the traders of Lac du Flambeau, up this river, starts from its mouth; in a portage of near 50 miles, 120 pauses. Seven or eight hundred yards from its mouth it has a perpendicular fall of 14 feet, below which the Indians have a sturgeon weir, like that at the Ontonagon.

Twelve miles further round the bay is Mauvaise river, navigable for canoes 100 miles, which formed a part of Mr. Schoolcraft's route last year.

We reached La Pointe island at 10 o'clock at night, having travelled to-day a distance of 54 miles by the shore, but which was much shortened by our great traverse of Montreal bay.

June 21.—Mr. Schoolcraft having some business to transact with the Indians of this place, and those that followed us from the Ontonagon, we did not leave until the afternoon. The island of La Pointe, on which we encamped, is the first and largest of a group of about twenty others, which extend about thirty miles farther towards Fond du Lac, and nearly lock the coast for this distance, lying at distances between one and five miles from the main land. This island has some three or four names on the maps; as Montreal, St. Michael's, Middle island, &c., but is called the "Island of La Pointe" by all the traders and voyageurs, and any change from this name would only lead to confusion, and is improper; the name is taken from La Pointe Chegoimegon, a long point that runs out from the main land from the south to within about a mile of the island, the name of which is abbreviated, and called "La Pointe." Point Chegoimegon separates Chegoimegon bay from Montreal bay, which we crossed to reach the island; the former being a bay of 10 or 12 miles depth, and lying south of the island.

This island was in former times a place of rendezvous for the Chippewa tribe, where they held great councils on matters which concerned the whole nation. It was also the residence of a large and powerful band. But a change of national policy, by which the several bands act less in concert, and a general impoverishment of the country in their peculiar means of subsistence, has destroyed its importance as a place of general council, and reduced its particular band to about one hundred and eighty-four souls, who are dispersed about the bays and islands in the vicinity, and subsist almost entirely on fish, excepting at the time of their winter hunts, when their trader furnishes them with corn and flour. They take sturgeon from Montreal river, and small fish from this and Mauvaise river, and whitefish and trout from the lake, which latter they take in gill-nets. They have at present between thirty and forty warriors, and are *at peace*; the Sioux, their natural enemies, being too remote for their excursions. They are supplied with all the articles of Indian trade by American traders, who also get all their furs.

Their present trader is Mr. Warren, a gentleman of the American Fur Company, who makes this his residence, and the headquarters of an extensive department and district, embracing the extent of country southwest of La Pointe, between Snake and St. Croix rivers and Lac Courte Oseille and Chippewa river. The value of his trade annually is as follows: At the post of La Pointe, \$2,000, or 250 beaver skins, 500 martens, 50 bears, 1,000 to 1,500 rats, and 20 or 30 otters, all of excellent quality. At the posts on the St. Croix, \$4,000, principally rats, bears, and otters, with a few martens, raccoons, deer skins, foxes, fishers, and beaver. At Snake river post, \$1,000; same furs as at St. Croix river. At Lac Courte Oseille and Lac Chetac, \$1,500, principally bears, otter, martens, rats, fishers, and minks. At Chippewa river and Lac Vassale, \$2,500; same furs as the last, but more beaver. The furs of Chippewa river and Lac Courte Oseille are of a better quality than those further towards the Mississippi, as of the St. Croix and Snake rivers. The whole seven posts under Mr. Warren yield annually about eleven thousand dollars worth of furs; but each post requires a clerk and some men, and consequent expense, insomuch that the trade is by no means as profitable as it would at first seem to be.

The Indians of this department, excepting those about Lake Superior, subsist chiefly on wild rice and game, such as deer, bears, &c., and generally also supply their particular trader with these articles of provisions.

Mr. Warren has lived for a number of years at his present residence on the island of La Pointe, and has given to this little spot an appearance of civilization. He has built a large, comfortable dwelling, a storehouse, and eight or ten outhouses, which, with the houses of a Mr. Cadotte and family, and those of the sub-agent, formerly at La Pointe, make almost a village. All the buildings are handsomely situated on a rise of ground about two hundred yards from the lake, and immediately back of them are cultivated and enclosed fields, in which oats, peas, beans, potatoes, &c., were growing finely. Wheat would grow here, but the want of means to make it into flour prevents its cultivation. The season is too short and the soil too light to grow corn with any success. The soil of the island is nearly as good as any that I have seen on the lake, but it is light and sandy, and would be thought poor land in Ohio or Indiana. It, however, produces a good luxuriant grass, (genus *alopecurus*,) which, I observed, Mr. Warren had appropriated in the raising of horses and cows. The timber is sugar-maple, birch, and pine.

There was a mission established on the island last summer by the Presbyterian Board of Foreign Missions, and Mr. Hall, the minister then sent out, was here now with his lady. The plan and object of this mission is to convert the Indians to the doctrines of Christianity, by preaching; and to teach a school for their children, at which the latter are to be clothed and subsisted and educated at the expense of the Mission Board and other charities. It is purposed to teach them the rudiments of the English language, and to read and write in their own.

Mr. Hall's progress, however, in the accomplishment of these benevolent ends has not hitherto been very flattering. The Indians have manifested rather an aversion for his doctrines, and a disposition not to listen to his advice. All that lived on the island left it soon after he arrived, and they had learned his motives; and a fear for their own peculiar institutions, or some other cause, still keeps them in a great measure aloof from him. They refuse to come to church or to attend divine worship, and the only direct means now left him of operating on their minds to his purpose is to visit them at their villages and in their lodges, where, by making their hospitality subservient, he is kindly received, and listened to with seeming attention, but still with little or no apparent effect; none of the Indians having as yet shown any willingness to embrace his doctrines, excepting one Indian man, who has been for some time laboring under a severe disease of the lungs. Mr. Hall is not, however, discouraged, but hopes, by means of his school and other efforts, to effect many beneficial results. His school at present contains twelve scholars, all quite young and mostly half-breeds; the Indians having shown also an unwillingness to give him their children to instruct.

This mission at La Pointe, and Mr. Bingham's at Saut de Ste. Marie, are the only missions that I know of in the Chippewa country. The former has been established several years. The means and efforts at each have been similar, and alike unproductive. And until more successful methods can be adopted by both to accomplish the benevolent designs of those contributing to their support, the propriety of sustaining them at such great expense may well be questioned.

These northern Indians are generally wild, untamed, and unsubdued; they have none of the arts, institutions, or manners of the whites; and their prejudices in favor of their own peculiar habits and institutions, which have descended to them from their forefathers, are engrafted and rooted in their very nature, insomuch that their removal, by the ordinary means of teaching, preaching, and advice, is rather a speculative theory than a result that experience teaches us to expect. The good and humane motives

of the missionaries to these Indians cannot be doubted, but the propriety and efficacy of their *method* of proceeding in their work of conversion may be fairly judged of and estimated by the effects actually produced; and these, so far as my observation and experience extend, are by no means proportionate to the expense and labor employed.

The present condition of most of the Chippewa Indians is deplorable. They are mostly very poor. Their country is becoming every day more exhausted of the means of subsistence hitherto used, and they are making no preparations to provide any others. Something seems necessary to be done by humanity, to prepare them for the approaching condition of their country, and to protect them from its threatened calamities. The first thing that a view of their actual condition suggests is to teach them to *cultivate the soil*, and obtain in this way a *subsistence*, which their impoverished woods and forests must very soon refuse to their increased population. This would lead them gradually from their wild pursuits and precarious mode of living, and lay the foundation for the adoption of other customs of civilized life, and among them perhaps Christianity. The Indians cannot be induced to make a change in their habits and manners unless the advantage be immediate and tangible, and is made evident to their senses. Their prejudices in favor of their own way of thinking and acting are too strong to be easily eradicated; and to expect to effect an entire change of their opinions and habits by appeals to their understanding, in the manner of preaching Christianity, is to expect more than a knowledge of Indian character will justify. And as long as the missionaries pursue their present method with the Chippewa Indians, so long will their exertions be, in a measure, useless; and until an entirely new system is adopted and pursued no extensive or permanent change in this people need be expected.

Near the present mission on the island of La Pointe are the traces of an old missionary establishment, occupied by the Jesuit missionaries at a very early period of the settlement of Canada. Very few vestiges of the principles there taught, however, are now to be discovered in the manners or characters of the Indians at present in the vicinity.

Mr. Hall has not yet constructed any buildings for his establishment, but at present occupies houses of Mr. Warren for a school and dwelling. Notwithstanding their remote situation, he and Mrs. Hall seem contented, cheerful, and happy; although, with regard to Mrs. Hall, there is not a single white woman or female that speaks her language within hundreds of miles of her. Mr. Boutwell, the reverend gentleman who is travelling with us, is to stop and remain with this mission on our return.

We left the island at 6 o'clock p. m. The channel between the island and the main land to the west is from three to five miles broad. Our course through it was due north to a point of the main land ten miles ahead, where the shore begins to bend off to the northwest. But seeing that I could not reach the main land before dark, I turned a little to the east of the proper course, and encamped on a small island about eight miles from La Pointe. Mr. Schoolcraft, with the other boat, crossed the channel, and encamped on the main land. The island of my encampment is called Spirit island, and is held in sacred veneration by the Indians, insomuch that they never hunt or encamp on it. It is about two miles long; its banks rise steeply from the lake, and it is covered all over with a thick, heavy forest of yellow pine. Dr. Houghton, who had gone in the morning in Mr. Schoolcraft's canoe to vaccinate the Indians of a village at the bottom of Chegoimegon bay, overtook me about 11 o'clock at night, and went on to Mr. S.

June 22.—Left our encampment at 3 o'clock a. m., and in about six miles came up with Mr. Schoolcraft and party, encamped in a sandy bay that they had reached the night before. In a few miles more we passed all of the group of islands, called sometimes the Twelve Apostles. They are beautifully situated with respect to each other, are all high, and covered with a luxuriant growth of vegetation, and form the most interesting feature of this part of the lake. Twenty-five miles from La Pointe we passed a rocky bluff point of sandstone rock, called the Detour, from which the Great Fond du Lac bay may be considered as commencing. Our course here changed to south 80° west, and we could see distinctly the mountains on the opposite side of the bay and lake. Here we met a Mackinac boat, with Mr. Abbott, a trader from Leech lake, who said the returns from that quarter were principally bears this year; and that the Leech Lake Indians had lately gone on a war excursion against the Sioux. At 1 o'clock passed Birch Bark point, a flat, prominent point, that is midway between La Pointe and Fond du Lac river, and hence frequently called Middle point. It has steep, sandy banks, ten or fifteen feet high, resting on sand rock, and is covered with a small growth of birch, aspen, and some large dead timber. The whole shore to-day is much serrated, forming deep, sandy bays, with regularly curved shores and high banks of sand. The prominent points showed mostly an imperfect red sandstone, sometimes in perpendicular bluffs twenty or thirty feet high. High hills are seen to the left, but the forest does not present the rich verdure of the mountains round La Pointe, and of the lake generally. Our course from Birch Bark point was south 60° west, and we encamped at sunset, on a beach of dark sandstone gravel, having come to-day fifty-eight miles. Mr. Schoolcraft and party encamped ahead. We passed to-day Raspberry river, Cranberry creek, and Sandy river.

June 23.—Following a plain shore about three miles, I came to an Indian village at the mouth of Bois Brulé river, where Mr. Schoolcraft had encamped the previous evening. From this river the shore is sandy, very regular, and falls off to the south, but our course to Fond du Lac river was more to the west, and left the shore many miles. The beach and bank round the end of the bay are very low and flat, and the entrance to Fond du Lac river is not discernible a short distance from the shore. I was near missing the entrance by being in some degree guided by Farmer's map of Michigan, on which this bay and the entrance, like most of the coast, are very inaccurately delineated. I had approached very near and was sailing past it, when Mr. Schoolcraft, who was there waiting for me, attracted me to it by making signals with flags. We entered the river about 10 o'clock a. m., having come from our encampment of last night twenty-four miles; and, exposed as we have been on the lake for the last sixteen days, we were glad to leave it. My boat being slower than the other, and both slower than Mr. Schoolcraft's canoe, the whole party had seldom travelled together, and as in my boat I had no guide, or even a map of the coast that I could depend on, I was often, in the course of the trip, exposed to danger and inconvenience. The difficulties of travelling in the night, after I had once or twice experienced them, determined me to encamp alone rather than attempt to overtake Mr. Schoolcraft after dark; and I have accordingly been several nights separated from the rest of the party. There is very little danger in coasting the south of Lake Superior in boats if there is a person to guide who is well acquainted with the shore, and particularly the position and distances of the harbors. The harbors for boats are numerous and good, and notwithstanding the suddenness of the rising of storms on the lake, it is easy for a person acquainted with the coast to make a harbor before the lake gets too rough for a good boat. An accurate map or chart of the coast would also subserve an excellent purpose to avoid accidents and inconvenience, but none such has yet been made. The one I have with

me (Farmer's) is perhaps the most so of any yet published, but is far from being a proper guide, and it would be dangerous to depend on it for anything like an accurate delineation of the shore or the relative positions of the numerous bays, that must be known to enable one to travel in security and safety. The heavy fogs of the lake are great annoyances to the voyageur; they are frequently so thick and heavy as to obscure all objects at a distance of twenty or thirty yards, and in such cases compel the traveller to hug closely all the sinuosities of the shore, which are so numerous, deep, and irregular as to make the distance more than twice what it would be to cross from point to point. I have often, in a fog, run to all points of the compass in less than an hour, and have sometimes, on the clearing up, found myself so far in a deep bay, that I had twice as far to row to get out of it as the distance across it. The fogs, too, are often brought up by a wind so suddenly as to leave a boat in the traverse of a bay, far from land, and without any point to direct the steering. In such cases, if the boat has a compass, the proper direction may be preserved; but without one, there is danger of going out into the lake. The remedy, then, of the practised voyageur is to observe the direction of the wind that brings the fog with respect to the land, and to steer accordingly; and it is remarkable, that scarcely any of the traders' boats carry a compass, when the inconvenience and danger often resulting from such neglect must be experienced on every trip.

The mouth of the Fond du Lac river, or "The Entrance," as it is called by the traders and voyageurs, is about eighty feet broad, but is shallow, and would not admit a vessel of three or four feet draught. It expands immediately into two bays, to the right and left, separated from each other by a small island near and directly in front of the entrance. The mouth seems to be in the very end of the lake, and hence it is properly called *Fond du Lac* river. A river that enters the left Bay of The Entrance is also as aptly called "*La Rivière à Gauche*." The bays to the right and left lie in their length parallel to the shores of the lake, from which they are only separated by low sandy tongues of land, very much attenuated, and sustaining a few little scattering pines. The point to the right, entering, is near fifty yards broad near the end, but it afterwards narrows, and runs back for about two miles with a breadth of from twenty to forty yards. Our course was through the right hand bay, N. 60° W. for four miles, to a strait one hundred yards broad, by which, in a distance of two hundred yards, we entered another bay, long and narrow, and which contracted gradually to the very narrow, crooked channel of the river.

There was formerly a trading house near the entrance, but it has been abandoned and destroyed, and the present house for all the Fond du Lac country is twenty miles above.

The river for this distance is very crooked and winding, but its general course up is southwest; the channel is of variable breadth and generally deep; the shore is irregular, and presents alternately on either hand marshes, bluff sand banks, and hills, and is cut up by numerous channels or "pockets" from ten to one hundred yards broad, which run out straight and generally perpendicular to the river, frequently extending as far inland as we could see. These are separated by long tongues or promontories, of semi-cylindrical shape, rounded on either side up to the summit, fifty or sixty feet, and covered with a thick growth of small trees, aspen, birch, tamarack, (*pinus pendulus*), and other species of pine. Several of these singular promontories occur in many places in succession, parallel to each other, with channels between, and present a formation and appearance altogether peculiar.

We arrived at the trading house at 4 o'clock p. m. The river is here penetrating a chain of mountains, is more regular in its course, and has its channel more confined. The trading house is situated at the base of the mountain, on a narrow piece of bottom three or four hundred yards broad, which is rich, and excepting the gardens, where the trader raises abundance of potatoes, is covered with a very tall, green, luxuriant grass, principally *poa compressa*. We met here Mr. Aitkin, the chief of the department of the country beyond Fond du Lac, and all his clerks, to the number of fifteen or twenty, and their engagés, all just ready to start for Mackinac on their regular summer trip.

This is called the "Fond du Lac Post," and was formerly the headquarters of an extensive district, called "The Fond du Lac Department." The department is still the same, but Mr. Aitkin, of the American Fur Company, the principal of it, has removed his headquarters to the Mississippi, at Sandy lake, which is more central in respect to his several subordinate posts.—(See my map.) This is still, however, a place of rendezvous for all his clerks, preparatory to their embarking in boats with their annual stock of furs for Mackinac. Here, too, on their return in the fall, a partial distribution of the goods is made; the boats are left, and the navigation in all directions begins *in bark canoes*. The buildings here consist of a dwelling, three or four stores, a large house for the accommodation of the clerks, and some other buildings for the engagés or Frenchmen. They are handsomely situated on the bank of the river, and directly in front is an island, of about two miles circuit, of very rich soil, and a forest of large elms, and on which the Indians now assembled have their lodges.

Mr. Aitkin very politely gave me the following information in relation to his trade, the Indians, &c.

His department embraces an extent of country from Fond du Lac north to the boundary line, west to Red river, and south to near the Falls of St. Anthony, on the Mississippi, and contains nine permanent posts, from which returns are made every year, viz: Fond du Lac, Lake Superior, on the north side; at Grand Portage; Rainy lake; Vermilion lake, at the head of Fond du Lac river; Red lake; Pembina settlement, on Red river; Red Cedar lake; Leech lake, and Sandy lake, Mr. Aitkin's residence. For facilities of the trade there are several other smaller posts, as at Lake Winnipeg, Lake Travers, mouth of Crow-Wing river, and others; but these are subordinate, severally, to some one of the larger posts named, which is considered as making the whole "return" for its particular district.

Mr. Aitkin's returns of this year are less than usual, and are as follows: from Fond du Lac post, \$2,000; Grand Portage, \$1,000; Rainy lake, \$4,000; Vermilion lake, \$2,000; Red lake, \$2,000; Pembina, \$2,500; Red Cedar lake, \$1,500; Leech lake, \$5,000, and Sandy lake, \$5,000. The furs from all the posts are of nearly the same kind, and principally martens, muskrats, beaver, otter, foxes, and bears; the proportion of bear skins this year being very great at most of the posts west of Fond du Lac. The whole value of his furs is \$25,000, and his expenses in procuring them have been \$31,000, leaving a balance against the trade of \$6,000.

The trade of this department is perhaps more precarious than that of any other district of the American Fur Company to the north. Here the country, and, consequently, the "hunts," are most affected by dry and wet seasons, and here the British trader comes in direct competition with the American. All along the lines—at Grand Portage, Rainy lake, Lake of the Woods, and Pembina—the British traders get the greater part of the furs of the American Indians; and it is represented that even in the interior as far as Leech lake, Winnipeg lake, Red lake, and Vermilion lake, they secure a great part of the trade by inducing the Indians to carry their furs to them across the line. This is done by paying more for them than American traders can afford to pay; by a free use of whiskey, which is a most potent article in Indian

trade, and which is prohibited to American traders, except in small quantities at a few frontier posts; and by a skilful fostering and management of a strong feeling of attachment which all the Indians of this district are represented to entertain for the British government and the Hudson Bay Company.

The Indians at Fond du Lac, Grand Portage, Vermilion lake, and Sandy lake are chiefly subsisted by the traders. At the other posts of this department they have abundance of fish and large animals of the forest, and live comfortably. At Red lake they sell great quantities of corn to their trader, which is sent off to other posts.

The population of the Fond du Lac band is 193, of whom about 45 are warriors. They are, however, at peace, as they are too far from the Sioux to go against them. Their country is very poor in all animals for food, and their particular trader furnishes most of their living; the rest they get from the fish of the lake—whitefish and trout—which they take in gill nets, and from the few furred animals they kill. Since the strppage of whisky in the trade they are increasing very rapidly, there being more children born and fewer deaths among them from neglect of drunken mothers. They are miserably poor; and although their country is in a measure exhausted, and must soon refuse a supply to their increasing wants, they have not reflection, or foresight, or providence enough to save themselves from starvation by cultivating the soil, which in many parts is rich, and would, with little labor, afford them abundance.

There are about 150 Indians encamped on the island here at present; some of them belong to Sandy lake, and some came with us from Bois Brulé river. Among the latter is an Indian of some distinction, *Yellow Head*, from Red Cedar lake, who was on his way to visit the agent at Fort Brady, but is now returning with us.

The Indians of other posts of Mr. Aitkin's department through which we are to pass will be more particularly spoken of when we reach them. This being Sunday, Mr. Boutwell preached to the Indians through the interpreter.

June 25.—The Indians assembled early in the morning, and regaled us with their usual dance, after which Mr. Schoolcraft held a council and talk with them, and distributed a few presents. Mr. Aitkin embarked all his furs in seven large Mackinac boats, all well manned, and each under the command of a clerk, and started them down the lake. Many of his Frenchmen have Indian wives and families, who are left here till they return.

Mr. Schoolcraft made an arrangement with Mr. Aitkin for bark canoes for the transportation of our whole party above, which we will receive at the head of the Portage, and, as my men are entirely ignorant of their management, he has employed three Indians to go with me to Sandy lake. We embarked in our boats and ascended the river over several rapids two miles further to the foot of the grand portage of Fond du Lac river, the head of boat navigation. From here Mr. S. sent his boat back to the Saut by Canadians, whom he had brought along for the purpose, and I employed an Indian to take mine back to the mouth of the Bois Brulé river, where we purpose to strike the lake again returning. Here a new scene commenced. Our baggage and provisions for sixty days were to be transported by carrying over a rough portage of nine miles. This was a familiar business with Mr. Schoolcraft's Canadians, but entirely new to the soldiers, the manner of the carrying being altogether different from anything they had ever experienced. For this purpose the pork had previously been put up in kegs, containing about 75 pounds each, and the flour in bags of about 80 pounds. The mode of carrying is by a leather strap called a "portage collar," composed of a broad piece that is applied to the forehead and two long tags which attach to the piece to be carried. "A load" for a Frenchman consists of two "pieces," when the pieces are of convenient shape, as a keg of pork and a bag of flour, (from 160 to 200 pounds.) The first to which the portage-collar is fastened, is adjusted to rest on the lumbar vertebræ, or small of the back; and the second, when practicable, as in case of the bag, is placed longitudinally, one end resting on the keg and the other along the back of the head, so that when the body is stooped, in the manner of carrying, the weight of the bag is between the shoulders, near the back of the neck; the second piece is also frequently placed transversely on the shoulders, but always, if practicable, in such a manner as to rest its weight very far up towards the neck; when the load is not so adjusted as to sustain the head against the force of the portage-collar to draw it back, it is supported by the hands clasped behind it.

The experience of traders, and observation of the manner of the Indians, have proved this to be the most convenient way of carrying in this country. It is accordingly practiced by all; and everything to be transported over portages is put up with a view to this method of the portage collar. All the portage roads, too, are selected with the same view.

The portage was commenced by ascending a hill 100 feet high, with an acclivity of about 45°. No pains have ever been bestowed to make a road up it; and the ascent is by means of little imperfect steps, just large enough for the toes, that wind up the hill without any regularity as to direction or relative position. The Frenchmen commenced with full loads, but the soldiers, excepting one or two, were permitted to carry only half loads, or one piece, and even this was found to be more than some of them were equal to. One of them, a very strong man, fell on the hill with a keg of pork, and was disabled.*

The portage road, after the hill, was rough, narrow, and crooked—a mere uncut path through bad woods, but we got over three pauses, or a mile and a half of it, and encamped on the bank of the river, at a place called the "Roche Galet," from the flat sandstone rock over which the river here runs. A number of Indians followed us from Fond du Lac house, and encamped with us.

June 26.—We commenced carrying at four o'clock in the morning, and continued it until near sunset, or eight o'clock in the afternoon, and passed over twelve pauses, of near half a mile each. The portage road continued a little, narrow, crooked path, with bushes crowding it on either side, winding round trees, through marshes, over ridges, and across ravines, and presenting all the irregularities and inconveniences of a rude trail through difficult woods. There has been little or no cutting to clear it out, and all the bridging consists of a few small poles, laid in the length of the path, which serve rather to annoy than to assist the passenger. No idea can be formed of the difficulty of this portage without witnessing it. The men, with heavy loads, are sometimes forced to wade through a swamp of half a mile, full of roots and bushes, and over their knees in mire at every step. And where the road is dry, it is generally over a hill, or across a gully, the steep banks of which are worse to pass than the swamps.

When we stopped at night, my men, and even the Canadians, were literally fagged out. Two of the soldiers had snagged their feet, and were disabled, and all of them were galled in the back by the kegs in such a degree as to make their loads very painful; and yet they have carried only half loads all the

*This man, Beemis, was kept in hospital more than a year after his return, in consequence of this fall, and was subsequently discharged at Fort Dearborn on a surgeon's certificate of disability.

day; whereas the Frenchmen and some of the Indians have carried full loads each time. It requires an experience of years to habituate men to carrying in this way; and the life and habits of soldiers by no means fit them for such labor.

I had four or five Indian women and as many Indian men carrying for me, and without these I would not have made half the distance. The Indian women carry better than the men, being less indolent, and more accustomed to it. I saw a small young Indian woman, at the close of the day, carry a keg of one thousand musket ball-cartridges for a distance of one mile without resting, and most of the distance through swamp that was frequently over her knees; this, too, after having carried heavy loads all day, and when, with less exertion than she had made, my strongest men were exhausted.

We encamped on the portage near a creek, which enabled us to wash off a little of the mud of the swamps which we had carried with us all the day. Doctor Houghton had many cases of strains, bruises, and snagged feet this evening.

June 27.—Owing to the excessive fatigues of yesterday we did not recommence the carrying till six o'clock, though the sun rose at four. We had four regular pauses to make yet to the end of the portage, which, for greater ease, were divided into six; there was more mud and mire on the three first than on those of yesterday; the last only was dry and good. We accomplished the whole, and arrived at the end of the portage by twelve o'clock, where we encamped, and employed the rest of the day in getting out our canoes, and making arrangements to travel in them.

The general direction of this portage has been a little west of northwest; leaving the river in some parts four or five miles, and touching it but once, at La Roche Galet, from the commencement. It is on the north side of the river, and the land about it is rich, excepting the swamps. In some places we passed groves of sugar-maple, but the general growth is birch and pine; some of the latter being very large and beautiful, measuring eighteen feet in circumference at the base. The length of the portage is nine miles, which is divided into nineteen pauses; the term "pause" being applied to the distance between two resting-places, and hence the *pause* is the unit of measure for all portages. We have passed by in this distance many rapids and falls of the river, and a perpendicular fall, said to be thirty feet. The river is still rapid at the head of the portage, and shows in its banks and bed a coarse, hard, argillite rock, in place.

June 28.—The necessary arrangements for travelling in our *bark canoes* having been completed the previous evening, we embarked in them at seven in the morning. I have two canoes, in which I have distributed equally my men and their provisions and baggage, with two Indians in one, in the bow and stern, and one Indian in the other, in which I go myself.

The river for three miles, to Portage à Couteaux, is a series of difficult rapids; and my men, totally unaccustomed to canoes, had great difficulty in ascending them, being obliged for this purpose to wade in the rapids, and drag or push them along. The river, in this distance, runs over argillite rock, which rises on both sides of the channel, with strata nearly vertical, in high broken and precipitous banks, presenting a scenery altogether peculiar to this kind of rock. The Portage à Couteaux, or Knife Portage, commences on the west side of the river, at the foot of a rapid too strong to be ascended in canoes, and in which the channel of the river is divided by a small island of the argillite, rising abruptly to a height of about 100 feet from a base of but little greater diameter; which, piled up as it is in the utmost confusion and irregularity, with many small cedars and pines, that have taken feeble tenure between the vertical strata of the rock projecting from its rugged sides in all directions, is remarkable and picturesque.

The portage begins by a steep ascent of the argillite rock, which is seen bare along the greater part of the path, making it broken and difficult, but being dry nearly all the way it is much preferable to any part of the grand portage below. It is but three pauses, or a mile and a half, in length, and has been aptly called "Portage à Couteaux," from the knife-like effect of the slates on the shoes and moccasins of the voyageurs. It runs along a ridge, and the land on each side is low, swampy, and good for nothing.

The rapids were strong for two or three miles above the portage and filled with boulders of hornblende rock which made their ascent by the method of wading very difficult, the men frequently slipping from the rocks and plunging over their heads in the water, in great danger of drowning, but much to the amusement of my Indian guides. After the rapids was a broad, smooth river of gentle current and banks of the richest soil, supporting a fine growth of maple, elm, ash, poplar, &c., which denoted the rich character of the country. The Indians gave us to understand that this kind of land extended some distance back and was a bear hunting ground.

We encamped this night nine and a half miles from Portage à Couteaux at the foot of another series rapids, having travelled this day about thirteen miles.

June 29.—Started at half-past four in the morning and continued in rapids through argillite rock again for about four miles, which occupied us until eleven o'clock. Mr. Schoolcraft and party got ahead of me very fast, as they were always enabled to do in rapids, by the superior skill of their Canadian voyageurs, who could stand up in the canoes and pole them along, whereas I, for fear of upsetting, could not allow my men to attempt this method, but continued the comparatively slow and secure one that I at first adopted. My canoes, too, were frequently broken by the awkwardness of the men allowing them to drive against the rocks, and delay was thus occasioned in making repairs.

From the narrow rocky channel and steep broken banks of the rapids the river suddenly expanded to three or four hundred yards breadth, with a gentle current, the rocks entirely disappeared, the banks were twelve or fourteen feet high, and exhibited a character, as to soil and timber, similar to that of the smooth part of the river passed yesterday, and not unlike that of some of the western rivers with their extensive rich bottoms and heavy native forests. It is probable, however, that this land is swampy back, as indicated by the swarms of mosquitos that infested us.

Mr. Schoolcraft and party kept ahead and I encamped alone, having come about 35 miles.

June 30.—Passed several rapids and a country much the same as yesterday, (23 miles,) until we reached the mouth of East Savannah river, where our route left Fond du Lac river. Mr. Schoolcraft had encamped here the previous night, but had gone on without waiting for me.

The East Savannah river is a little, narrow, and very crooked stream, having its source in wet meadows and swamps about 30 miles from its mouth, and running in a general direction northeast, in a very direct line, from Fond du Lac river to Sandy lake, on the Mississippi, where we are going; we accordingly ascended it twenty-four miles to the Savannah Portage. The country at first was low and rich, afterwards more elevated and some pine ridges, and the last ten or twelve miles was through a wet savanna, from a half to two and three miles broad, bordered by tamarack and cedar swamps. The river was from ten to thirty feet broad and very crooked all the way, but particularly so through the savanna,

where canoes might be a mile or more apart in the actual length of the river, and only a few yards in a direct line. The channel was generally seven or eight feet deep, and part of the savanna was so much overflowed that canoes could pass over it through the grass. About a mile below the portage the river forks, and the channel, though still deep, is so very narrow and crooked that canoes can scarcely turn the shorter bends. The meadow here is dry, and is grown over with a most beautiful, luxuriant, and heavy growth of grass—a species of *Carex*, or sedge. I landed at the portage near the end of this meadow at 6 p. m., where I found, by a note left for me by Doctor Houghton, that Mr. Schoolcraft, having preceded me about six hours, had gone through four pauses of the portage to encamp. I got part of the baggage through the first pause, and encamped where we landed, in an atmosphere of mosquitos. Journey this day 47 miles.

July 1, (Sunday).—It rained constantly and in torrents, without a prospect of cessation, but the unpleasant situation of our encampment and my anxiety to overtake Mr. Schoolcraft, who I knew would not travel to-day, determined me to proceed. At the end of the first pause, which was a perfect mud hole throughout, the swamp had water enough to float our loaded canoes, and we accordingly embarked them in a little canal or channel which had been slightly worn through the swamp by the travelling of the traders, and in which the mud was thin enough to allow the canoes, loaded only with our baggage, to be dragged along without much difficulty, more than that of wading through the mire. But this was at every step over the knees, and in many places up to the waist. We worked our canoes and baggage in this way through two pauses, or about a mile, as far as we could, and carried the canoes and baggage one pause further, the greater part of which was a continuation of the swamp, to Mr. Schoolcraft's encampment, on a dry ridge. It rained on us all the way, and my men were much exhausted from the difficulty of transporting the baggage in the manner described.

July 2.—The ridge of high land on which we were encamped was but little elevated above the swamps, but was rich and dry, sustaining a heavy forest of sugar-maple, birch, and linn. It is the dividing ridge of the waters of Lake Superior and the Mississippi. We crossed it in a southwest direction, perpendicular to its general range, but it was not broad, and in less than half a mile from our encampment we met with deep, ugly swamps, almost as troublesome as that we had passed yesterday. We had four miles of the portage before us this morning, and Mr. Schoolcraft made great efforts to accomplish the whole of it this day; and my men, in emulation of his voyageurs to travel at the same rate, completely exhausted themselves long before night. The route was of the worst character, being mostly through swamp of tough, deep mud, which it was difficult to walk through unencumbered, and that could scarcely be deemed practicable with the loads that the men were obliged to carry. They frequently stuck fast in the mud until they abandoned their load, or were assisted out, and before night some of my best and strongest men fell down by the roadside unable to proceed further. I collected them and the baggage on a dry spot half a mile from the end of the portage, and encamped before sunset. Mr. Schoolcraft had his tents taken entirely through, and encamped on the bank of the West Savannah river; his men encamped back with mine. Our journey to-day was three and a half miles, and much the most fatiguing of all our journey since we left home.

July 3.—Although it was late in the morning when the men were required to resume the carrying, they still showed, by a tardy, sluggish manner, that they were poorly recovered from the great fatigues of yesterday. We, however, got through the remaining pause of this horrible portage by twelve o'clock, and embarked in the West Savannah river, near its source, where it was but a few feet broad, and with only water enough to float our canoes.

The Savannah portage that we had now crossed is six miles in length; the first two through a swamp such as I have described, and the remaining four over land more elevated, and some little hills and ridges, but with deep, ugly swamps intervening, making this much the most troublesome and difficult of any part of our route. The highest point crossed by the portage is about one hundred and fifty feet above the Savannah rivers.

From the place of our embarkation to Sandy lake was eighteen miles. The river in this distance has a devious course through narrow, low meadows, of a little valley between pine hills. Its direction is about 20° west of south, and about a mile from Sandy lake it receives a small river from the east, after which it is thirty yards broad. We passed through the length of Sandy lake, which is about five miles, and descended its outlet, or Sandy Lake river, a mile and a half, to its junction with the Mississippi, at Mr. Aitkin's trading post, where we arrived at 4 p. m. and encamped. The trading house is situated on a long, narrow tongue or point, which separates the two rivers just before their junction.

It was purposed to remain here a day or two to make some repairs and alterations in our canoes, to change our Indian guides, and make other necessary arrangements preparatory to our ascending the Mississippi. We found Mr. Boudoin, one of Mr. Aitkin's clerks, in charge, who received us with great kindness and hospitality, and proffered all the assistance and information in his power.

This situation has long been regarded as an important one for the Indian trade. It was occupied by the old Northwest Company, and subsequently by the American Fur Company to the present time. Mr. Aitkin, the present agent of the company, makes this his residence, and central depot for the great district over which he has charge, the posts and trade of which have been described in another part of this journal. His establishment at present consists of a large comfortable dwelling, several storehouses, and barns, stables, &c.; he raises corn and potatoes in fields near the house, and has a good stock of cattle. The soil about the lake and rivers is rich, but, with the exception of a small portion about the house, is subject to inundation during the early spring freshets, when Sandy lake overflows with the Mississippi, and the great flood covers the country for many miles around. The water was now, however, fifteen feet within the banks of the river and lake, the latter, in its confines, presenting the very irregular figure that I have drawn of it on the map. The lake is within less than half a mile of the Mississippi, and the length of its outlet, Sandy Lake river, is only a mile and a half. Just above the junction the latter is fifty yards broad, and the Mississippi seventy-five yards. Just below the Mississippi is one hundred and ten yards. Our journey to-day was twenty-five miles. The mosquitos at night were more numerous than I had ever seen them.

July 4.—We found but few Indians here, those belonging to the post being mostly at their hunting grounds and fisheries. Mr. Schoolcraft, however, held a council with those present, and distributed some goods, leaving word for the other Indians of the band to meet him at the mouth of Crow Wing river, three hundred miles below, where we expect to strike the Mississippi, after leaving Leech lake, on our return. I took the opportunity of Mr. Aitkin's workshop and workmen to have four oars put to each of my canoes, which, when the canoes and streams will admit of them, are much better than paddles, particularly for

soldiers, who can be much easier taught to use the former. In fact, my men continued very awkward in the use of the paddle, and had it not been for my Indian steersmen I could not have continued thus far with the expedition. I discharged here the three Indians who had come with me from Fond du Lac, and Mr. Schoolcraft procured me two others to go as far as Leech lake.

We embarked in the Mississippi at 6 p. m., and ascended it twenty miles, in which distance it winds deviously through a valley of low, rich, alluvial bottom, of the best quality of soil, and beautifully timbered, but all subject to inundation.

July 5.—The river this day was of the same character as the part ascended yesterday, crooking through a low, rich bottom, from one to two miles broad, bordered by pine hills and swamps, the shores covered with a rich vegetation of soft maple, elm, walnut, linn, ash, &c., and a luxuriant grass, which clothed the banks in rich verdure down to the water's edge. The river, though considered high, was generally eight or ten feet within its banks; the current was gentle, about two miles per hour, excepting round the points of bends, where it was frequently quite strong. We encamped on the east bank, above the mouth of Swan river. Journey fifty-six miles. General course a little east of north.

July 6.—The valley of the river was narrower than yesterday, but of the same character. In its turns the river frequently washed the bases of the pine hills, which there rose in high sand banks. The whole country back was pine, pitch, and yellow pine, but in many parts the growth had been killed and destroyed by fire, and scarcely any vegetation was to be seen. We encamped on a burnt pine plain, of apparently great extent, (on the east side,) and 100 feet above the river. Mr. Schoolcraft encamped ahead. Journey fifty-two miles.

July 7.—Started at half-past three a. m., and passing the mouths of Trout and Prairie rivers (see my map) reached the Falls of Pacagama at half-past 12 m., where we had to make a portage of 250 yards on the east side of the river. The Falls of Pacagama are the most considerable of the Mississippi, from the Falls of St. Anthony, 750 miles below. The whole fall is between twenty and thirty feet in a distance of a hundred yards, and is nowhere perpendicular, but the channel is much contracted, and in one place the whole water runs down the surface of a smooth, plain rock, for a distance of forty feet, with a pitch of about 12°. The river here breaks through a low ridge that traverses its course perpendicularly in a north-east and southwest direction; and the rock is granular quartz, and the first rock of any kind that we have seen in place on the river. About a mile above the falls Pacagama river, a small stream, comes in from the west, and from this commence the great swamps and savannas, or wet meadows, which border the Mississippi on one or both sides for a great distance above. We were winding through these until 10 o'clock at night, seeking vainly for a dry spot on which to encamp, when we overtook Mr. Schoolcraft and party, who had been separated from us all this day and yesterday, encamped on a little dry point of oak woods, a kind of island in the vast marshes that he had found before dark. We were detained to-day repairing canoes, but have travelled fifty miles.

July 8, (Sunday).—We remained encamped, washing, cooking, and repairing canoes.

July 9.—The whole party set off together as soon as it was light, and entered immediately a great grass savanna, of eight or ten miles breadth, such as I have represented on the map, through which the Mississippi wound, more crooked than any part we had passed.

Pointe au Chêne, a long, dry point of oak land, noted by traders and Indians as a place of encampment, runs prominently into the vast fields of grass, about two miles above our encampment. One Indian family were located on it, and subsisted on ducks, which are remarkably abundant along this part of the river. The channel of the river, through the savanna, was sometimes three hundred yards broad, and again branched into many smaller channels, which ran a short distance and expanded into little lakes, bordered only with grass growing in the water, and from which other little channels, through the tall grass, ran on to unite again with the main one. The whole country seemed covered with water from one to three feet deep, but the grass rose several feet above the surface in the deepest parts, growing very thick, and possessing a strength so great that in many places, as in short bends, the current washed against it with great velocity and force, it stood as erect, as green, and as healthy, as that remote from the river.

Having an Indian guide who knew the general course of the river, we were enabled to cut off many of its great bends, by running directly through the peninsulas of grass; but although the water was two or three times more than deep enough to float our canoes, such was the nature and growth of the grass that it required the united strength of the whole crew to force a canoe through it.

The grasses observed were several species of carex, or sedge, the bulrush, the joint rush, and the Indian reed, (*Cinna arundinacea*.) These occurred sometimes separately, in areas of great extent, and sometimes altogether. Where the Indian reed grew alone, it was so tall, and straight, and close, that, although in four feet water, we could not penetrate it with our canoes.

Its great deviation from straightness makes it very annoying to follow the course of the river through one of these savannas; for, after pulling near an hour against a strong current, and turning an abrupt point where it is stronger, the voyageur finds himself at once going directly back for the same length of time. After winding through the savanna in this way for several hours, we left the Mississippi on our left, to take a nearer route to Lake Winnipeg, known to our guide, which is laid down on the map, and runs through a long and narrow but very deep little lake, Lac La Cross, remarkable as affording large, fine whitefish in abundance. From this we ascended a very small river three or four miles, to another little lake, from which we made a portage of 800 yards, into Little Lake Winnipeg, through which the Mississippi runs. By this route we cut off a great bend of the river, where it receives Leech Lake river, and saved thirty or forty miles travelling. A few miles further brought us to Big Lake Winnipeg, and to the trading house, on the north side of it, where we encamped at 5 p. m., having come to-day fifty miles by our route, and by the Mississippi near ninety miles.

This trading house is occupied by a trader of Mr. Aitkin, Mr. Belanger, now present, who has lived here for several years, without once going below. His dwelling and store were situated four or five hundred yards from the lake, on a little rise of ground, where he had a fine large garden, in which were growing beautifully vines, potatoes, and other vegetables, and among them tobacco, which was particularly remarkable, this being the most northerly point of all the Mississippi. The plant was now small, but looked well, and Mr. Belanger said it grew large and fine before the time for cutting it. He had also a stock of cows, in the finest order, fattened on the grass which grew in luxuriant abundance all around him. The grass is of the genus *alopecurus*, which, the soil being very rich, grows tall and thick, affording, for the mere labor of cutting it, a plenty of the best of hay. Great herds of cattle might be raised about this lake on the grass alone. The forest here is light, and principally oak. A small river which runs

past the house and empties into the lake has its source in a little lake, not a mile above, in which an excellent quality of whitefish are taken. Lake Winnipeg also affords this fish, and a small fish resembling it, called *tullibee* by the French.

This post is of some importance to the Indian trade, eight packs having been made here last winter, but they were mostly bear skins, and on that account not so valuable as packs are generally. It is but a short portage from here to a river of Rainy lake, and this is the route of our traders to that place, which is distant five days' journey. We obtained from Mr. Belanger much valuable information of the country above, and of our proposed route through it. There were but few Indians here present, but about one hundred trade at this post.

July 10.—Started at 4 a. m., and crossing Lake Winnipeg in the direction of its length, which is about 15 miles, we again got into the Mississippi, from the southwest end of the lake. This lake is nearly round, is without islands, and is deep and clear, excepting near its shores, where, for a great part of its circumference, the grass is grown out one or two hundred yards into the water. Pine hills are seen all round the lake a short distance back.

From Lake Winnipeg to Cass lake, a distance of twenty miles, the Mississippi is very sensibly diminished in breadth and quantity of water, and runs all the way through a savanna of the same character as that described yesterday, but narrow, from one to three miles broad, and bounded on both sides by high pine ridges and plains, on which, in many places, the pine is large, forming thick heavy forests of yellow and pitch pine. At the entrance to Cass lake, by the site of an old village, we were met by a number of Indians, who fired their usual salute, and conducted us to their village, which is at present situated on the large island of the lake, Grand island, ten miles from the entrance. We encamped near the village, on a long, narrow point of the island, running out to the north, and elevated about 150 feet above the lake.

Grand island occupies a large part of the southwestern half of this lake; it is about eight miles in its greatest length, and has three long attenuated points, at nearly equal distances from each other, which give its contour a singular shape; that on which we encamped is the most elevated, and has the richest soil, and is, hence, appropriated for the village and gardens; the remainder of the island being mostly pine ridges and poor. The top of this point is three hundred yards broad, and is slightly undulated by little hills and valleys and sinkings, wherein, the soil being the richest, the gardens are planted. The whole quantity under cultivation is about eight acres, producing potatoes, corn, and vines, now growing beautifully; and the great extent and abundance of the crops, in proportion to the number of Indians, conveyed an idea of providence and comfort that had not been excited by like evidences of industry anywhere else among the Chippewas.

The prospect from this high point was beautiful. The lake is twenty miles in length and nearly round; and from our elevated situation, near the middle of it, we could see much the greater part of its circumference. The water was remarkably clear, deep, and beautiful; the shore was sandy and high, and showed thick heavy forests of pine on hills and plains, immediately back. The immediate shores of the island were boulders of primitive rock. Five or six miles southeast of this is a little high island called "Red Cedar island," from which the lake took its former name, "Red Cedar lake."

The Cass lake band of Indians numbers one hundred and forty-eight, of whom about twenty are warriors. Their country or hunting grounds is rich in large game, deer, and bears, which, with their garden vegetables and the fish of the lake, afford them a plentiful subsistence. Their trader is one of Mr. Aitkin's clerks, who was not now present, to whom they give annually a good quantity of furs, beaver, marten, otter, and bears; and he, in return, seems to supply them well with the usual Indian goods. They are not much at war in the field, but from their vicinity to their natural enemies, the Sioux, it can never be said of them that they are at peace. Some of the young men were now absent at Leech lake, where they had just returned from an excursion against the Sioux with the Leech lake Indians, under the Leech lake chiefs. Two or three that went from here had got home, bringing news of their success, and of the loss in battle of one of the Cass lake Indians, the only Chippewa killed in the excursion. They gave us also information of the whole proceeding of the war party, their battle, &c. The party was one hundred strong, consisting almost entirely of the Leech lake band, and was led by Flat Mouth, their principal chief, by whom it had been raised to chastise the Sioux for numerous aggressions on this band on their hunting grounds west of Crow Wing river. They met a war party of the Sioux of inferior strength on these grounds, near their western boundary, and defeated them, killing three and wounding two or three more, but lost one of their own men, as before stated. The Sioux fled and the Chippewas returned immediately, but so much elated with their success that one would have supposed, from their manner of relating the story, and the character of their rejoicing, that they had defeated the whole Sioux tribe and killed half of them. The party had been got up after the Indian manner, with so much pomp, preparation, and ceremony, that the whole country had been excited; and in their great anxiety and solicitude for the result of the campaign, a single victory and paltry success, as it was all they had done, was viewed as a monstrous achievement. The party had returned after the first little fight apparently satisfied, and without stopping to inquire what more they could do, or how much they had gained for all their trouble.

A portion of one of the Sioux scalps now taken had been brought to Cass lake, and the Indians here regaled us with a *scalp dance* soon after our arrival. They had two other scalps taken at former periods, and all were exhibited on this occasion, stretched by means of thongs in the centre of wooden hoops, a foot in diameter, profusely ornamented with feathers; staves or handles, four or five feet long, were attached to the hoops, and in the dance each was carried above her head by an Indian woman, who sang and danced incessantly. The other Indians around—men, women, and children—all engaged in the singing and kept time on the Indian drum, and by beating anything, but the dancing was done entirely by the women who carried the scalps. Two of them were young, but such was their excitement on this occasion, that they seemed to have forgotten the peculiar modesty of Indian women of their age; holding their heads erect, casting fierce and wild glances on all around, and showing an expression of countenance, at times, almost fiendish. A like enthusiasm seemed to animate the aged and the children; and an observer of these ceremonies, when he reflects on their frequent occurrence, will not be at a loss to account for the irreconcilable hatred which exists in the breasts of these Indians for their enemies. They had been dancing here for many days previous to our arrival, and they continued now, without the least cessation, until after twelve at night. They expect during this dance, when strangers are present, to receive presents for the benefit of the widows or families of their warriors who may have perished in battle, and our men and voyageurs were liberal in the observance of this custom.

We were busied, from our arrival till night, in making preparations to continue our journey to the

source of the Mississippi; and it was arranged to leave our large canoes and most of our men here, and proceed in small canoes borrowed from the Indians. Five of these were provided for the five gentlemen of our party, and the provisions and necessaries for the trip, each to carry a passenger, a share of baggage, and two voyageurs; this being a full load for canoes of their very diminutive size. But a *branch* of the river which we were to ascend was represented to be so very small as to be only navigated with canoes of this size. Yellow Head, an intelligent Indian, who belongs to this village, and who came with us from Lake Superior, continues as our guide.

July 11.—All proper arrangements for our further journey being completed the previous evening, we made an early start. I left my men and baggage in charge of my corporal, and took one of Mr. Schoolcraft's voyageurs and an Indian to conduct my canoe, as I could not intrust the management of so small and delicate a craft to any of my men. These very small canoes require a care and skill to conduct them safely only known to those long accustomed to the use of them. They are used by the Indians of this country because the streams are all small, and because, in many of their routes, there are numerous portages, where it is a great object to make the carrying as light as possible. These reasons have determined us to adopt them on this occasion; for we expect to ascend a small branch of the Mississippi, and to make a long portage from its head to the source of the larger branch.

We entered the Mississippi from a bay on the west side of Cass lake, and passed, in a short distance, through two small lakes and a savanna, above all which we still found a large river, forty or fifty yards broad, and from two to six feet deep, which wound its way through a narrow valley of low, alluvial bottom, confined by pine hills, up to Lac Travers, forty miles above Cass lake. In this distance there are many rapids running over boulders of primitive rock, but there is no fall, and no rock is seen in place.

Lac Travers may well be arranged among the sources of the Mississippi. It is a beautiful lake, about ten miles long from north to south, and about half as broad, surrounded by pine woods, which rise into high hills on the north and northwest, forming a part of the chain dividing the waters of the Mississippi from those of Red river. The western shore is much indented with bays, but the east and southeast is beautifully regular and plain, with a sandy bank, and beach of pure white sand. The river empties into the south end of the lake, and runs out at the east side, not far from its entrance, leaving the great body of the lake to the north of our passage through it. There is a trading house on the west bank, near the mouth of the river, which is occupied in winter by a clerk of Mr. Aitkin. From Lake Travers we passed by a broad channel, one hundred yards long, into another small lake, and half a mile above this came to the forks of the river. The branches are of nearly the same breadth, about forty feet, but the stronger current of the right hand branch denoted it much the larger. We ascended the left or east branch, as we had intended, which soon narrowed to twenty feet breadth, and, in a distance of ten or twelve miles, brought us to Lake Rahbakkanna, or Resting lake, a pretty little lake, four miles in diameter, and nearly round, with a low beach of smooth pebbles all round it. We encamped a few miles above this lake at 7 p. m., having come this day, by my estimate, fifty-five miles. Our course to Lac Travers was northwest; from the latter nearly south.

July 12.—This was a rainy, disagreeable day, and the mosquitos were numerous, hungry, and extremely annoying, but we travelled, notwithstanding, at our usual speedy rate. Our course has been south, and the valley of the river was savanna and tamarack and cedar swamp, but generally narrow, about half a mile broad, with low ridges and a miserable growth of pine bordering it on both sides. The river has become very small and somewhat rapid, and we have encamped after making a portage of two miles round a chain of rapids. One of our Indians killed a deer this morning, and we saw many more during the day. This country is so very remote and dreary that the Indians seldom visit it, and the deer are more abundant than about the river below; ducks are also very numerous in the savannas, where there is wild rice. Journey fifty-two miles.

July 13.—We ascended the river in our canoes ten miles further, to a little lake, (Usaw-way, or Perch lake,) about two miles long and half a mile broad; the river was very narrow and crooked, through a low, narrow meadow, and a little above this lake we left it, seeing that we had now traced this smaller branch of the Mississippi into the very swamps and meadows, from the drainage of which it takes its rise.

From here we set off, overland, in a southwest direction, to reach Lac La Biche, represented as the source of the larger branch. Our canoes and baggage being very light, all was transported at one load, one man carrying the canoe, and the other the baggage of each of the party. In this way we made a portage of six miles in four hours, and struck the lake, the object of our search, near the end of its south-eastern bay. The first mile of the portage was through a tamarack swamp, and the remainder, excepting a little lake of 300 yards diameter, was over pine ridges of the poorest character imaginable. The soil was almost pure sand, and the pine was stunted and mostly of the *scrub* species, (*Pinus banksianus*,) which, hung as it was with lichens, and no other growth, not even a bush or shrub mixed with it, presented a picture of landscape more dismal and gloomy than any other part of this miserably poor country that we had seen. Not a bird or animal, scarce even a fly, was to be seen in the whole distance of this portage, and it would seem that no kind of animal life was adapted to so gloomy a region.

From these hills, which were seldom more than two or three hundred feet high, we came suddenly down to the lake, and we embarked and passed nearly through it to an island, near its west end, where we remained one or two hours.

We were now sure that we had reached the *true source* of the great river, and a feeling of great satisfaction was manifested by all the party. Mr. Schoolcraft hoisted a flag on a high staff on the island, and left it flying.

Lac La Biche is about seven miles long and from one to three broad, but is of an irregular shape, conforming to the bases of pine hills, which, for a great part of its circumference, rise abruptly from its shore. It is deep, and very clear and cold, and seemed to be well stocked with fish. Its shores show some boulders of primitive rock, but no rock in place, and are generally skirted near the water with bushes. The island, the only one of the lake, and which I have called Schoolcraft island, is one hundred and fifty yards long, fifty yards broad, and twenty or thirty feet elevated in its highest part; a little rocky in boulders and grown over with pine, spruce, wild cherry, and elm.

There can be no doubt but that this is the *true source and fountain of the longest and largest branch of the Mississippi*. All our information that we had been able to collect on the way, from traders and Indians, pointed to it as such, and our principal Indian guide, Yellow Head, who has proved to us his close intelligence of the country, represents the same. He has formerly hunted all around it, and says there is a little creek, too small for even our little canoes to ascend, emptying into the south bay of the lake, and having its source at the base of a chain of high hills, which we could see, not two miles off, and

that this is the only stream of any description running into it. In fact, the whole country showed that there was no stream beyond, for the lake was shut in on all sides by pine hills, and the only opening through them was that by which it discharged itself. To the west we could see distinctly a range of almost mountains, covered with pine, which was undoubtedly the chain dividing us from the waters of Red river.

It will be seen from my map, that Lac La Biche is but little west of *south* from Cass lake, and almost due south from Lac Travers, which is a different position from that assigned to it on published maps, where it is invariably represented north of Cass lake. There is, however, a little stream, Turtle river, entering Cass lake from the north, in the route of traders to Turtle lake and Red lake, but it is a very small and insignificant stream, and is only forty-five miles in length.

We left Lac La Biche from its northern boundary, having coasted nearly its whole circumference, and found the Mississippi at its very egress from the lake a respectable stream; its channel being twenty feet broad and two feet deep, and current two miles per hour. Its course was northwest, and soon ran through a chain of high pine hills, where the channel contracted very much, and numerous rapids occurred of very great fall over boulders of primitive rock; the river running for the distance in a deep ravine. We descended twenty-five miles and encamped.

July 14.—The course of the river was nearly north all day, passing several miles of rapids in the morning, in one of which my canoe was upset, and I lost my compass, and, with everything else, my notes were wet and much injured. Mr. Schoolcraft, however, furnished me with another compass, and I proceeded, securing my notes as well as I could until night, when I would have an opportunity to dry them. After the rapids the river was of gentle current, and ran mostly through savannas of wild rice and tamarack and cedar swamps, but the valley of the swamps and savannas was generally narrow and bounded by hills of inferior pine, and sometimes a small thick growth of aspen poplar where the pine had been destroyed by fire.

We travelled very rapidly all day, and when we stopped at night had made seventy-five miles. After supper Mr. Schoolcraft and the other gentlemen continued on, being anxious to reach Cass lake; but I remained encamped till morning that I might in daylight continue the tracing of the river and my observations of the country.

The mosquitos were thick and very troublesome all day, as has invariably been the case in our route through swamps and savannas.

July 15, (Sunday.)—Left my lonely encampment as soon as I could see to trace the river, and ran down with a gentle current, most of the way through savannas and rice meadows, to Lac Travers, a distance of twenty miles. The junction with the branch we ascended is just above this lake, and the lake and river below are described in our route ascending, (July 11.) I travelled very rapidly in consequence of the numerous rapids below Lac Travers, and reached Cass lake and the encampment at 6 p. m., having travelled this day a distance of sixty-five miles. Mr. Schoolcraft and party had gone all night, and arrived at 9 a. m.

Thus the journey to the source of the Mississippi and back has been accomplished in five days, a distance of 290 miles, it being 125 miles to Lac La Biche by the route ascended, and 165 by that descended, or by the longer and larger branch which runs from Lac La Biche; this latter being the true length of the river above Cass lake. This makes the length of the Mississippi above the Falls of St. Anthony 1,029 miles, or 1,038 miles above the St. Peter's river and Fort Snelling. The true character of the river above Sandy lake is represented on my map, which is also in a measure descriptive of this part of the country.

My men, being left here during this trip, have had a very useful and necessary rest from the excessive fatigues of the former part of the journey, and, excepting the man who was hurt on the portage of Fond du Lac river, are well recovered. The Indians are represented to have danced the scalp dance every night of our absence, and they are still dancing.

July 16.—Mr. Schoolcraft held a council with the Indians of this band, and constituted the Indian Yellow Head a chief by presenting him with a large medal, the emblem of his authority. Yellow Head, who had travelled with us, and been our principal guide from Fond du Lac, had proved himself in the course of our journey to be industrious and intelligent; he had also character and influence with his band, and it is probable he will make a good chief. He seemed fully aware of the responsibility of the new relation in which this placed him to his band; and when he received the medal, and during the speech and advice of Mr. Schoolcraft to him, he manifested by his manner and countenance the strongest interest and concern.

The council and the distribution of the few presents Mr. Schoolcraft had to give, and the vaccination, kept us till 10 o'clock a. m., when we started for Leech lake, parting here with Mr. Dufour, the trader who had accompanied us from Fond du Lac, and who was going from here to Red lake, his post. Our direction to Leech lake was south, the route leading from a deep bay of the south of Cass lake over a short portage to a little lake, and thence over another portage of two miles on a pine plain to another little lake, from which by a very small river we entered a western bay of Leech lake, and got to the chief's village at 10 o'clock at night, having, notwithstanding the portages, travelled this day a distance of near forty miles.

July 17.—The village of our encampment was Flat Mouth's, (Aish-ka-bug-a-kosh,) who is the principal chief of his band, and perhaps one of the most powerful and influential men of his whole nation. He is also their principal orator, and on all occasions like the present, when councils are held on their general interests, he is looked up to with great confidence and respect, and depended upon to say and do whatever is necessary for the benefit of the whole. He had heard of our coming by a message sent from Lake Winnipeg on our way up, and seemed to have prepared himself for the occasion. I visited his house, which is built of squared timber, and like the trader's house, early in the morning, and found it in a neat condition, and the walls hung round with his flags, war clubs, spears, pipes, medals, and wampum; all arranged with a peculiar taste. His medals, wampum, and flags were spotted with red paint, a circumstance which he afterwards explained in his speech in council. He invited Mr. Schoolcraft and the interpreter to breakfast with him, his assumed dignity on this occasion, as we understood it, not allowing him to invite any but the principal of the party.

The Indians of this band, who were living at different parts of the lake in several villages, began to assemble at the chief's village as soon as they heard of our arrival, and Doctor Houghton commenced vaccinating immediately. Flat Mouth dined with Mr. Schoolcraft by invitation, and in the afternoon the council was held, at which most of the band were present. The few presents which Mr. S. had to give them were soon distributed by two or three of the subordinate chiefs; after which Mr. S. held a "talk," wherein he advised the chiefs and warriors to endeavor to put a stop to their feuds with the Sioux; to

cultivate peace, and to take care of their women and children; to hunt their rich forests for game, cultivate the soil, raise corn, and endeavor to procure and enjoy some of the comforts of the whites, and to learn to live like them. He told them they ought not to *make* war with their neighbors, but it was not expected of them to sit still and be "struck;" that they might properly carry on a defensive war, but they should not *go to war* without cause; that the great father, the President, loved them, and was ever watchful of all their actions, and it was his wish that the Sioux and Chippewas should live happily and at peace with each other.

Flat Mouth spoke in reply. That he considered Mr. Schoolcraft as appointed and sent to listen to the Indians, and he wished him to listen attentively to what he had to say. He intended to speak fearlessly; his young men and warriors expected him to do so, and would think lightly of him if he did not. He had long listened to the admonitions of his great father to maintain peace with the Sioux; but his great father had not fulfilled the promises of protection made to the Chippewas at the treaties of Prairie du Chien and Fond du Lac; and the unchecked aggressions of the Sioux had now become so intolerable that it was necessary for the Chippewas to punish the Sioux themselves, and it was their fixed determination to do so. That it had been promised them, at these treaties, that the "long arm" of the President should be constantly extended over them to protect them, and if the Sioux made further aggressions upon their territory the arm of the President would reach them and draw them back and chastise them. This had not been done. The Sioux had, since that time, made frequent inroads, and had killed great numbers of their young men, and among them his own son; but the long arm of the President had not yet reached the aggressors to inflict the promised punishment. He had, therefore, resolved to listen no longer to advice to keep peace, but to revenge his numerous injuries by fighting and killing his enemies; too many of their warriors and relatives had been murdered for his people to think of any other course. [Here he gave a bunch of short reeds, about fifty, to represent the number of his young men killed by the Sioux, since the treaty of Prairie du Chien.] The blood of so many had stained everything around him, and must, in some way, be washed away; it covered everything he had received from the government, his medals, his flags, the letters of advice which had been sent to him from the agent through the traders; the wampum sent him by the President, and the very ribbons that now suspended the medals and wampum from his hand; all were dyed deep with the blood of his murdered young men. He wished the government of the United States to wash it off, and make his medals as bright as when he received them; and until this would be done he could not consent to remain at peace. If Mr. Schoolcraft could do this, he wished him to do it now and at once, for he regarded it as a stain upon the government and his tribe; and he now threw down his medals before Mr. Schoolcraft that he might make them again bright, [throwing them down at Mr. Schoolcraft's feet.] His warriors had but now returned from an excursion against the Sioux, in which they had killed three of their enemies, but they were by no means satisfied; and he had sent messages to different bands inviting to another campaign, and expected before the snow fell to be again in the field. He deplored the poverty and weakness of his tribe; the very trees of the forest were dropping tears of pity over them, and he thought it a duty of the government of the United States now to give them assistance to chastise their enemies, as had been promised them. If it did not, he would go beyond the Americans to men wearing hats, (meaning British) to seek help. He wished to say a great deal to Mr. Schoolcraft, and if he would wait till the next day he would be prepared to make a better speech and to say many things more.

During this speech he was surrounded by most of the warriors of his band, who, by their ready and general response, seemed to be well pleased with it. His manner was bold and vehement, particularly when he spoke of the Sioux, and from the glow of excitement in the eyes and countenances of his warriors I could see that they fully entered into his feelings.

Mr. Schoolcraft said a few words in reply to parts of the speech, and the council broke up a little before sunset, when we immediately embarked and went about three miles down one of the bays of the lake to encamp.

This was altogether the most interesting band that we had met with among all the Chippewas whom we had visited. Their lake is the largest of all the lakes which contribute to the waters of the Mississippi, being more than one hundred miles in circumference, and most curiously formed of deep and narrow bays, which afford abundance of wild rice, while their immediate shores are of a character of soil very rich, and suitable for their gardens. The Leech lake band is too large to live comfortably in one or two villages, and is therefore dispersed in little villages all around the lake and on two of its islands. The number of the band is put down, from the most accurate information we could obtain, at eight hundred and thirty-six, eight hundred and six of whom live about Leech lake and thirty on Pacagama river.

Their country abounds in furred animals and game, and the lake affords abundance of fish: whitefish, herring and tullibee, which they take in gill-nets at all seasons. Deer and bears are the principal animals of the forest which are hunted for their meat; and beavers, otters, martens, and muskrats are the chief furred animals, which are taken in such great numbers as to make this one of the most valuable posts of the north for the American trade. About seven thousand dollars' worth of furs are annually sold to American traders, and great quantities are taken from here across the lines to the British trader at Rainy lake, and sold there for whiskey and some British goods. These Indians have a partiality for the British, which they take no pains to conceal, and, as far as is in their power, they obtain their supplies from the British traders. Mr. Aitkin is of opinion that four or five thousand dollars' worth of furs are annually traded by this band across the lines to the Hudson Bay Company. From their remoteness from white settlements they still retain much of their native character. They have not been debased or enfeebled with whiskey, from the difficulty of obtaining it in great quantities; and, unlike most of their tribe, they are strong, athletic, muscular men, of large stature, and fine appearance, looking proud, haughty, and unsubdued, and carrying an independence and fearlessness with their manner that indicates a full estimate of their own strength. They have sometimes robbed their traders of a part of their goods, and have hence acquired the name of "The Pillagers," or "The Robbers," but of late years they have been less troublesome to their traders, and are not much complained of except for their impudence, and a total disregard of and disrespect for the power and government of the United States. They are undoubtedly inimical to our government and friendly to the British, and such is their ignorance and arrogance that they have threatened to drive away the American trader and bring a British one, whom they would maintain and protect among them.

The strength of the band in warriors may be estimated at about two hundred, which is much greater than that of any other single band of the nation; the Chippewas being, in consequence of the great poverty of their country, divided into numerous bands and villages, and scattered over their vast territory.

The Leech lake band, being nearest to the Sioux, are in a state of continual war with them; and their hatred for this enemy of their tribe is perhaps the strongest feeling of their nature, which has grown and strengthened with them from their very infancy. As Flat Mouth remarked to us, "it was decreed by the Great Spirit that hatred and war should ever exist between the Sioux and themselves; that this decree could never be changed; and the Chippewas must ever act accordingly." In the wars of this band with the Sioux, however, they associate with other bands, as those of Lake Winnipeg, Cass lake, and Red lake, as they had done on their recent excursion when they had sent out a hundred warriors.

The nature of their country protects them from inroads of their enemies to their villages, and they feel inaccessible and secure from any power whatever, even that of the United States. The traders have, in vain, to threaten with the power of the government to check their excesses; their reply is that they have not yet seen that power, and that it cannot reach them.

It is probable, however, that our visiting them with such apparent ease may have the effect of lowering their ideas of their inaccessible position.

They have several war chiefs who are much superior in appearance to Flat Mouth, and who have a much better character for warlike qualities. But the latter is the great chief in council where his oratory sustains his authority; and he is acknowledged by all their principal chief.

The excitement of their recent success against their enemies was still prevailing to a great extent, and it was one object of our leaving their village to escape from the noise of their dancing.

Mr. S. had engaged for me two guides and steersmen in place of the two from Sandy lake, who now left me to return home; but we started so soon after the council that they were displeased, and did not join us at night at our encampment as they were requested.

July 18.—We waited for our guides to join us until six in the morning, but they did not come, and we embarked without them. Our route was now to the head of Crow Wing river, which we were to descend to the Mississippi, and our only guide was a map or sketch of it drawn by a Leech lake Indian. We ran several miles down a deep bay to the south of the lake, and, after much coasting and searching, found the portage leading from it, which we crossed in a direction a little west of south over a pine ridge to a small lake; and passing through this and four other small lakes with sandy shores and clear, beautiful water, filled with fish, and connected together by very short and narrow channels as described on the map, we came to another portage of 700 yards, to another lake, which, with three more little lakes and as many more portages, brought us to *Long lake, the source of Crow Wing river*. These portages were all short and over pine ridges with pine forests of yellow and pitch pine; and the lakes were deep, clear, and beautiful, with the pine hills coming down to the water. This whole country is pine, and is filled with hundreds of these little lakes, all of the same character, and without outlet or inlet; three or four may be seen from a single point on an elevated hill. It was night when we got through the last portage, and we encamped at the end of it on the shores of Long lake, which, though also small, has an outlet, which is Crow Wing river, or the great western branch of the Upper Mississippi.

Flat Mouth and another chief had overtaken us, but no guides had yet come, and I felt apprehensive of danger in descending the river without other steersmen than the soldiers, with whom I had not yet dared to trust the management of my canoes in rapids; and who, in fact, were unpracticed and unskilled as steersmen, my having had Indians in that capacity all the way till now. In consequence of the portages we made but thirty miles to-day.

July 19.—We took leave of the old chief Flat Mouth and his companion, Major Gaw-bo-way, and starting early passed through Long lake in its length, which was about four miles. This is the first of a singular chain of eleven pretty little lakes, from two to five miles in length and near together, from which Crow Wing takes its rise. The channel or river connecting them is at first very narrow, shallow, and crooked, but increases a little in size in passing through each, until where it leaves the last of the series it is thirty yards broad, from two to five feet deep, and running three miles per hour. We had no other guide through these lakes than our rude Indian map; and in one of the last of the chain, being then three or four miles ahead of the other canoes, I was misled in my search for the outlet, and ran several miles in a wrong direction into a bay of the lake, where I found a small river coming into it, and in the mean time Mr. Schoolcraft's canoes passed me unobserved. When I had found the right way I did not know if Mr. Schoolcraft were in front or rear, and waited some time for him to come up, and then proceeded, still ignorant of his situation until late in the afternoon, when a tremendous storm and rain drove me to encamp at half-past four o'clock on a pine plain.

The country passed to-day has no other novelty than that of its total destitution of Indian habitations; being too near the borders of their respective territories to be used by either the Sioux or Chippewas, excepting as a route for their war parties and as an occasional hunting ground for some of the daring young men of the Leech lake band, who are sometimes led hither to hunt by a scarcity in their immediate grounds and by the abundance of this, the game here being abundant from its not being *much* hunted.

It is here that the Chippewas, and particularly the band at Leech lake, have lost so many of their braves, who in these daring hunts have been cut off by lurking Sioux. Hence the bitter complaints of the Chippewas against the Sioux, this land being properly a part of the territory of the former, and valuable for game and furs. Journey to-day fifty miles.

July 20.—Started from my encampment as soon as I could see, and in a short time passed the last lake of the eleven sources of the river, and to which the river is merely tangent, running only one or two hundred yards through the wild rice and grass of one end of it.

Ten miles below this lake I passed the mouth of Leaf river, which comes in from the northwest, and is almost as large at its mouth as Crow Wing river, and is navigable for canoes fifty miles to its source in Leaf lake. Ten miles below this river I passed Mr. Schoolcraft's encampment of the previous night, thirty miles from mine. Supposing me to be ahead of him, he had gone on till late at night to overtake me, and had consequently got this distance ahead of me. As we were in the hourly expectation of meeting on this river a war party of Sioux coming out against the Chippewas, I felt anxious to be up with Mr. Schoolcraft, and continued with all possible speed, which was now near ten miles per hour, assisted as we were by a strong current. Passing a willow swamp through which the river ran for a distance of twelve or fourteen miles, we came suddenly to a most interminable chain of strong rapids, twenty-four of which occurred in a distance of thirty miles, and some of them a mile or more in length. From the ignorance of my men in steering canoes the passage of these rapids was dangerous, but by directing the first canoe myself, and requiring the other to follow her closely and in the same track, we got down the whole with but slight injury. It is the method of Canadians and Indians in descending rapids in canoes to allow them to float, and to check them continually by poles at the bow and stern to avoid the rocks;

but as my men had not the skill for this, I caused them to row with all their might, and steered the canoes with paddles by means of their headway over the current. By this means my speed was so much increased over that of Mr. Schoolcraft's that I overtook him in the afternoon about two o'clock. Below the rapids the river attained a breadth of more than one hundred yards, and twenty miles below Shell river comes in from the west through an immense willow marsh and discharges itself in a mouth forty yards broad. This is called a large river by the traders, and is navigable for large canoes sixty miles to its source in Shell lake.

Below this river the Crow Wing has much of the character of the Upper Mississippi—broad, shallow, muddy, and sandy bottom, with long sand bars running out from the points; it runs through several willow swamps, but is generally confined by high banks, falling from pine hills and plains. We encamped on an elevated pine plain after sunset, my distance travelled to-day being 120 miles, and Mr. Schoolcraft's 90, both greater than usual in consequence of the rapidity of the general current and my increased exertion in the forepart of the day to overtake Mr. Schoolcraft.

July 21.—The river continued to increase in breadth to its mouth, where it divides into two channels, but just above which it is between two and three hundred yards broad, but shallow—not more than five or six feet deep. About twenty miles from the mouth it receives Long Prairie river from the west—navigable for canoes thirty miles to a lake, which is its source. We reached the Mississippi, forty miles from our encampment, at 12 o'clock.

The Crow Wing river is discharged by two mouths, nearly equal and near a mile apart, separated by Crow island, in one side of which the Mississippi makes its curve. The island is about three miles in circumference, of rich, alluvial, vegetable soil, supporting a rich heavy forest of elm, ash, linn, walnut, soft maple, &c.; but, like all the little alluvial bottoms of the Crow Wing and Upper Mississippi rivers, it is inundated every spring. The river has its mouth three hundred miles above the Falls of St. Anthony, and three hundred below Sandy lake,* and is the largest river that empties into the Mississippi above the Falls of St. Anthony. It is two hundred and ten miles in length to its source in Long lake, from which its general course is nearly south to the Mississippi. It is navigable for canoes all the way, and for boats, in low stages of water, to the rapids—about 80 miles. In very high stages the rapids may be passed by Mackinac boats, which might then ascend nearly to its source. It is by far the nearest route, by water, from Fort Snelling to Leech lake, and presents no greater difficulties to navigation than the Mississippi does above the Falls of St. Anthony. It runs, all its length, through a country of pine plains and gentle hills, so regular, smooth, and free from undergrowth that, as I was informed, a cart might be driven, near its banks, almost to Leech lake. If troops were to be sent against the upper bands of Chippewa Indians at any future time, this would be a proper route for them to take, whether in boats or marching; and, from the tone and manner of the Leech lake Indians, observed during our visits, and the unfriendly character given of them by their traders, it is probable that such a measure may become necessary.

The Crow Wing river country, and that of all its tributaries—Prairie, Shell, and Leaf rivers, and two or three little streams coming in from the east—is rich in furs and game, such as beaver, marten, rats, bears, &c., and deer; but much of it is not hunted, because of its border character to the Sioux territory.

The east bank of the Mississippi, opposite Crow island, is near one hundred feet high, and the country back is an immense rolling prairie, which is here poor, the soil being dry and sandy. Here we found the whole of the Sandy lake band of Indians encamped, awaiting our arrival, Mr. Schoolcraft having given notice, as we passed Sandy lake on our way up, that we would meet them here on our return. This band consists of about 280 souls, of whom sixty are warriors. Their principal chief is Gros Gueule, or Big Mouth, who, in his youth, was a man of energy and influence; but he is now old and imbecile, and his authority has declined with his vigor, until his band are not much prone to take his advice. His policy has been peace; and it is many years since his band have fought the Sioux. But he remarked to Mr. S. that he was fearful this state of things would not continue, as the excitement of the recent successful war excursion of their brethren, the Leech lake Indians, had spread to his band, and he might not be able to restrain his young men from taking part in any other expedition against the Sioux that might be got up. This band, however, is poor, and their country exhausted; and these circumstances will, undoubtedly, restrain them more than the influence and advice of their declining chief.

Their hunting grounds are about Sandy lake and along both banks of the Mississippi as far as this place; but the game of the country, deer and bears, is scarce, and does not, with the fish they get from Sandy lake and some other small lakes, afford them a sufficient subsistence; and much of their food, in winter, is supplied by Mr. Aitkin, their trader at Sandy lake. Since the prohibition of whiskey in the Indian trade, these Indians, like those of Fond du Lac, have increased more rapidly than the poor state of the country will admit of; and it is now only their trade in furs that saves many of them from starvation. They were, however, pretty well clothed, and looked healthy and comfortable.

Mr. Schoolcraft held a council with them, in which Gros Gueule complained much of the treachery of the Sioux, who, he said, had often, under the appearance and assurance of friendship, invited some of the Chippewas to their lands and villages to share the abundance of their forests, and, when the latter had gone with this prospect and to escape the poverty of their own hunting grounds, their entertainers had suddenly risen upon them and murdered them all. He hoped the government would interpose to check the Sioux and protect the Chippewas from their aggressions, as was promised at the treaties of Prairie du Chien and Fond du Lac.

After vaccinating them and giving them some presents and advice, we embarked and proceeded ten miles below to Mr. Baker's trading house, where we encamped.

July 22, (Sunday).—We remained at the house of Mr. Baker, who politely gave us much valuable information respecting the country, above and below. I am indebted to him for the topography of the country east and west of the Mississippi, from Sandy lake to St. Peter's, which I have given on my map in the character, course, and length of the streams which enter the Crow Wing and Mississippi rivers. The following is also derived from him: The prairie where he lives, east of the Mississippi, extends from about one hundred miles below Sandy lake down below Prairie du Chien, and back from the river to the pine country intervening the waters of the Mississippi and Lake Superior. Its soil is generally poor, but affords abundance of grass; and in some places where the prairie is low and level, as near rivers, it is rich. Timber occurs over it in numerous little groves and clusters and isolated trees, but it is generally an inferior species of the oak. Pine grows on some of the highest parts, and near some of the rivers—

* According to the estimate of the traders, which is probably too great.

mostly white pine, (*pinus strobus*.) Mr. Baker has driven a cart from Fort Snelling to his house in summer, and he says the prairie is practicable for carts as far as Sandy lake, excepting a few obstructions of narrow rivers. Beaver, otter, and rats are taken about the rivers; and deer and bears are tolerably abundant about Mr. Baker's and below, but above and more remote from the Sioux and Chippewa boundary line they have been so much hunted by the Sandy Lake Indians that they are now scarce.

On the west side, opposite Mr. Baker's, is a thick green forest of oak, poplar, sugar-maple, and pine, which extends up to the pine plains about Crow Wing river, down about a hundred and fifty miles, to where it terminates in prairie, and back from the river to what is called "The Plains," a part of the great prairie of the Sioux, where they hunt the buffalo.

The buffalo are frequently driven by severe winters to take refuge in this forest, and they sometimes penetrate it to the Mississippi in search of water in winter; but in summer they roam continually over their boundless prairies; and are nowhere seen near the Mississippi, and east of it they are not now to be found anywhere at any season of the year. The western side of the river abounds in deer, elk, and bears, much more at this place than the eastern.

Mr. Baker's house is prettily situated on a point in a bend of the river, at the foot of a moderate rapid, just above which the river expands, and three small islands, heavily wooded, of about equal size, lie parallel to each other in its breadth, separated from themselves and the main land by four equal and parallel channels, and presenting from the house a very pretty view. This is the commencement of the thousands of islands of the Mississippi, which occur from here to its mouth. Mr. Baker is a trader of Mr. Aitkin—he has been here only one year, and has made but little improvement; but the land about him being rich, it is his intention to raise cattle and hogs, and to make this a permanent trading post. Being near their lines, he will trade with both Sioux and Chippewas, though there is no village of either near him at present.

July 23.—I abandoned one of my canoes, which was worn out, and borrowed one of Mr. Baker, to take me to Fort Snelling. He also gave me two of his Canadians, whom he was sending to the fort for supplies, to act as steersmen and pilots over the numerous rapids below. I had now four oars and two paddles in each of my canoes, which being also light of baggage and my men fresh after the rest of yesterday, we were enabled to course the rapid current with incredible speed. At a distance of ten miles we passed the "Little Falls"—a chute where the river is contracted from three hundred yards to fifty yards, and falls about ten feet in sixty, through a formation of talcous slate rock—the first rock we had seen in place since leaving the Falls of Pacagama. A little further down we passed Pike's rapids and the site of Pike's blockhouse, where Lieutenant Pike wintered his command in 1805-'6, and a little further a chain of rapids called the "Grand Rapids," where the river runs over an extensive rock formation of granular quartz.

We also passed during the day another rapid at the mouth of Elk river, and the "Big Falls," at the mouth of Sac river; and a short distance above the latter, the mouth of Little Sac or Wattah river, where the boundary line of the Sioux and Chippewas, established by the treaty of 1825, crosses the Mississippi; Wattah river making in its whole length a part of the line, and entering the Mississippi about one hundred and twenty miles above the Falls of St. Anthony. We encamped at night near the last of six other rapids called the "Six Prairie Rapids," which occur at nearly equal distances apart, in a distance of fifteen miles, having travelled, during fourteen hours, a distance of 160 miles.

The river was broad, (three or four hundred yards,) excepting at the rapids, and islands occurred at the point of every bend. The fall in the rapids was nowhere so great as in the chute passed in the morning. The banks were high, sometimes coming down in a gentle slope, which was covered with luxuriant grass (*poa compressa*) to the edge of the water, and sometimes abrupt sand to a height of one hundred feet. Before night the forest had disappeared on our right, and beautiful green prairies were seen on both sides.

July 24.—A short distance below our encampment we passed the mouth of St. Francis or Parallel river, a considerable stream, running parallel to the Mississippi, and navigable for canoes one hundred miles. And further down, on the same side, the mouth of Rum river, which is sixty yards broad at its mouth, and is navigable for canoes one hundred and fifty miles to Mil Lac, a lake almost as large as Cass lake, where the American Fur Company have a trading house, and where there is a village of one hundred and twenty Indians. Another branch of Rum river, called Kettle river, has its source near Fond du Lac river, one hundred miles north of Mil Lac.

Several smaller tributaries of the Mississippi are delineated in their appropriate place on the map of this day's journey.

We arrived at the Falls of St. Anthony at 1 p. m., and at Fort Snelling at 3 p. m., a distance of ninety miles* from our encampment. The river and country passed to-day have the same character as yesterday, the country being uneven prairie on both sides and the river filled with islands, but becoming wider continually, from its numerous tributaries, until it has a breadth of four hundred yards. The falls have been described by Mr. Schoolcraft and other former travellers, who had more time to observe them than was allotted to me. I have only to correct an error in the height of the perpendicular fall. It was estimated by Lieutenant Pike, sixteen feet, and by Mr. Schoolcraft, forty feet. I was told by an officer at Fort Snelling that by actual measurement it was eighteen feet precisely. Below the falls there is a considerable rapid, and the whole descent at this place, including also the rapid above, may be estimated at eighty feet. Between the falls and Fort Snelling, a distance of nine miles, the channel is contracted in a deep ravine, between bluff rocky banks of great height, and the river runs in a torrent all the way. The house and mill belonging to the United States at the falls seemed to be in a good state of preservation, though not used.

On my arrival at Fort Snelling I reported to the commanding officer, Captain Jouett, and made requisition for provisions to take my detachment home, the provisions I had started with from Fort Brady being now nearly exhausted. We expected to hear at the fort something definitely of the Sac war, but did not, no news having come from it of any consequence.

July 25.—Was occupied at Fort Snelling in preparing the provisions for transportation in canoes and over portages, and in making necessary repairs to my tents, canoes, &c., for the remainder of the journey. Captain Jouett gave me every assistance in his power, but the kegs for my pork could not be completed this day, and although Mr. Schoolcraft had completed his business with the Indians here in the

* This diminishes the distance from Crow Wing river to the falls fifty miles beneath the estimate of the traders, who make it 300 miles. My estimate is 250.

afternoon, we were obliged to remain over night. I purchased a canoe to replace the one abandoned at Mr. Baker's, the best I could get, but it was a very bad one. I got another man here also, one who had deserted from Lieutenant Clary the preceding summer at La Pointe, and was taken by Mr. Warren, the trader at La Pointe, to Fort Snelling, and delivered to the commanding officer. This increased my party to eleven men.

July 26.—I completed the packing of my provisions this morning—the pork in kegs and the flour in bags—and embarked from Fort Snelling at half-past eight a. m. Mr. Schoolcraft started earlier, but was detained at a Sioux village, Little Crow's, below, and I overtook him at breakfast; after which we all proceeded together until one of my canoes was broken on a snag, and I had to put ashore at a Sioux village to repair, which detained me half an hour, and in the meantime Mr. Schoolcraft's canoes got so far ahead that I could not overtake them. This occasioned me some trouble and perplexity, for our route was to leave the Mississippi at the St. Croix river, forty or fifty miles below Fort Snelling, and I had neither guide, map, nor directions to enable me to distinguish the mouth of the St. Croix from the hundreds of channels into which the Mississippi is divided by its numerous islands. I was misled by two or three of these channels, which came in with every appearance of separate rivers, and was, consequently, detained; but at five o'clock I got really into the St. Croix, which I soon recognized after I had entered it, by the long lake near its mouth. I proceeded up this lake fifteen miles, and encamped alone, Mr. Schoolcraft and party being somewhere ahead.

The country about the Mississippi below the falls is the same as that above, but the river itself is broader and its banks are higher, the country having preserved its general level, whilst the river has dropped eighty feet at the falls. The valley is from a half to two miles broad, of a low bottom land or vegetable deposit, and is cut up by channels into numerous little islands covered with fine rich land-timber, but all subject to inundation.

The St. Croix enters the Mississippi by a mouth seventy-five yards broad, opposite an island of the latter, and fifty miles below Fort Snelling. Its right bank, at the mouth, is a perpendicular rock eight or ten feet high, (calcareous sand rock,) and the left is a low, acute point. A few hundred yards from the mouth it opens into a long, narrow lake, Lake St. Croix, which seems to fill or lie in a valley, the hills rising to form its banks, on each side, in green, gentle slopes. Journey to-day sixty-five miles.

July 27.—The Lake St. Croix continued twenty-one miles beyond our encampment, making its whole length thirty-six miles in a north and south direction. It is clear and deep, and seldom more than three or four miles in breadth. The country on each side is the same prairie that borders the Mississippi. The lake gradually contracts at its upper end to the breadth of the river, and is filled at this part with low, little willow islands, above which the river has a uniform breadth of about seventy yards, and current of two miles per hour. The immediate shores of the river are skirted with a low, narrow, rich bottom, like the Mississippi, but the land about it is higher, poorer, and more hilly as we ascend. The canoe I got at Fort Snelling proved to be bad and troublesome, and has detained me much in repairing it; in consequence, I have made but forty miles. I have seen nothing of Mr. Schoolcraft, though his encampment of last night was but seven or eight miles above mine.

My encampment to-night is a few miles above a cedar bluff on the east side of the St. Croix, called by the Indians the Standing Cedars, where the Sioux and Chippewa boundary line crosses the river.

July 28.—At my encampment last night I met a trader, Mr. Brown, of the American Fur Company, who had been trading a year or two on the St. Croix, a few miles above, at a post which he had now abandoned to establish another at the mouth of the river. He represented the rapids above to be so numerous and so frightfully bad that I was almost determined to turn about and go home by the way of Prairie du Chien and Green Bay. But I learned that Mr. Schoolcraft was only seven or eight miles ahead, and I supposed he would wait at the rapids for me to come up, to render me whatever assistance circumstances might require; and after purchasing a canoe from Mr. Brown, the best he had of three, I abandoned the one I had got at Fort Snelling, now almost a wreck, and proceeded.

A few miles above where I encamped the river is traversed by a primitive rock, which, for a distance of one or two hundred yards, confines the channel within perpendicular walls fifty feet high, and rises in a high, abrupt little island in the middle of the stream, but occasions no rapid. Above this the banks are high and steep, but not rocky, till within a mile of the falls, when the channel becomes suddenly contracted to from fifteen to thirty yards, by rocks forming mural precipices on each side fifty and one hundred feet high, between which the river, though very deep, is urged with great velocity. This rock and the narrow channel continues, with a few interruptions of coves and fissures, one mile up, to the falls, where the river is but forty feet broad, and rushes with great force and violence down a fall of fifty feet in three hundred yards. The whole of this rock is greenstone trap, and its surface presented to the river in high cliffs is exceedingly rugged and broken, prismatic fragments being continually detached from it and tumbled down.

It had not been possible to teach my men the whole science of canoe management, and I had the greatest difficulty in getting through this rocky, rapid, and difficult pass to the foot of the falls and portage, my canoes being frequently in the most imminent peril of being driven on the rocks and dashed to pieces by the force of the current. These falls are twenty-four miles above Lake St. Croix. The portage round them is six hundred yards, which we made, and embarked from the head of it at 3 p. m., having been occupied from early morning till this time, steadily and laboriously, in getting eight miles from our encampment.

Above the falls the river is a continued rapid for five miles; running for this distance in a broad channel over an entire bed of boulders and fragments of rock. But being generally shallow, it was not so difficult or dangerous to ascend as the rapids below; and my men, by wading by the side of the canoes, could push them along, and in some measure protect them from the rocks. It, however, required five hours to get over this rapid, and we encamped at the head of it at 8 p. m., on the west bank of the river, near the site of Mr. Brown's late trading house, having, with the utmost exertion, made this day but thirteen miles. The land about our encampment is level and very rich, supporting a heavy luxuriant forest of ash, oak, walnut, sugar-maple, &c., but it is the first really good land that we have seen on the river, and does not appear to be extensive. Mr. Schoolcraft encamped last night at the foot of the falls, but did not wait for me this morning as I had expected he would, and I have not seen him since we left the Mississippi.

July 29, (Sunday).—Mr. Schoolcraft had made it a rule not to travel with his party on this expedition on Sunday, and supposing he would observe the same on this day, I confidently expected to overtake him before night. I was particularly anxious to do so, inasmuch as I had now no *gum** for the repair of

* A resinous exudation from pine, used in the construction and repair of bark canoes to close the seams and holes in the birch bark.

my canoes, and I knew he had an abundance; and I wished, moreover, to get, through his means, at the first Indian village, two Indians to steer my canoes; by which my men could be saved from much of the wading and consequent hardship and exposure of the method of ascending rapids that the want of competent steersmen had forced me to adopt, and by which they are now so much exhausted, and bruised in their feet and legs, as scarce to be equal to the exertions still necessary and required of them. I accordingly urged forward as much as possible, and got to the site of Mr. Schoolcraft's encampment in the afternoon, where I learned, by a note left for me by Dr. Houghton, that the whole party had left two and a half hours before, with an intention on the part of Mr. Schoolcraft, not to wait for me anywhere on the route, but to proceed home with all possible speed, giving as a reason for this measure, that the river was falling, and any delay but increased the difficulty of ascending it. I was dissatisfied with this proceeding of Mr. Schoolcraft, and deemed it unwarrantable by the official relations in which we stood to each other, inasmuch as I was thereby deprived of the services of the surgeon and interpreter, to which I considered myself rightfully entitled within the intention of the department, so far as such services might be necessary for the safety of the detachment, and to enable me to execute my instructions. These gentlemen had been employed for the purposes of the expedition, and as the execution of certain of those purposes had been separately assigned to me, I had a right to expect that the means provided for their execution should not be withheld from me by the power to whom they were intrusted by the department to control; but by this sudden and unadvised withdrawal of those means out of my reach, I was not only embarrassed in the performance of an appropriate duty, but placed in a situation of extreme inconvenience, and even danger, which could not have been anticipated or intended by the department in the project of the expedition. It is not to be supposed that the department would require soldiers to travel through such a country as this, and encounter the extraordinary exposure and danger incident to their transporting themselves without some provision of medical aid; and still less could it be deemed practicable for a detachment of troops to effect a journey through an unknown, wild, inhospitable Indian country, without guides of any kind to direct, or an interpreter, through whose means to obtain guides or necessary geographical information. But such was my situation now; I had this route to travel, of which I neither knew the length or direction, the quantity or character of its difficulties, or the time and means that would be required to overcome them. For supposing that I was to travel it with Mr. Schoolcraft, who had guides, I had not made any useful inquiries respecting it. In this embarrassment I would have turned back and sought another route home; but, from the number of rapids which I had already ascended, I supposed there could not be many more to the summit of the river; and that, consequently, it was as easy to go forward as back, and particularly as, with my present means, it was less difficult to ascend than descend rapids. Moreover, by the route of Prairie du Chien, I could not now hope to reach Fort Brady for a long time, in which apprehensions with the commanding officer there for my safety, as he could not hear of me after the return of Mr. Schoolcraft, might, I supposed, lead to measures which a more speedy return by this route might avert. And again, Dr. Houghton informed me in his note that he would wait for me at La Pointe, in Lake Superior, that we might pursue a previous arrangement, by which he was to travel home with me, that we might make some further examinations along the lake; and unless I called there for him he could not probably get home this fall. These considerations induced me to continue the route, bad as the prospect was of finding it.

But of Mr. Schoolcraft, it is a subject of just complaint that he has separated himself from me at a time when I most depended on him, and when knowing, as he did, the unfitness of my men for the sole management of canoes on this difficult route, he must have been fully aware of the great exposure and fatigue which I must encounter in the accomplishment of this journey without *his assistance*, which he had now withdrawn, but which it was in his power and was his duty to afford.

Had Mr. Schoolcraft told me at Fort Snelling that it would be for me to perform the remainder of the trip alone and on my own resources, I might there have secured sufficient resources, or, being relieved from the escort duty of protection to his party, I might have returned home by another and less difficult route, which I probably would have done. But by a strange interpretation or disregard of his official relation to the escort, he has led it, ignorant of such a contingency, into a situation of difficulty not compatible with its separate means of resistance, and there left it to encounter the difficulty as it best might.²²

I continued a few miles above Mr. Schoolcraft's encampment, and stopping for the night, having given up all hope and prospect of overtaking him. My men having been in the rapids most of this day also, were much worn out and discouraged, and my canoes leaked badly, and could not be repaired for want of gum.

The country passed to-day is hilly and poor, with a scattered growth of pine and scrub oak.

July 30.—The rapids to-day were numerous and bad, and, with the exhausted condition of my men, I made but little progress, not more than fourteen or fifteen miles, and stopped at night at an Indian village at the mouth of Snake river, thirty-seven miles above the falls.

About three miles below the village I met three Indians in a very small canoe, with a note for me from Mr. Schoolcraft, by which it appeared that they were sent to "guide and assist me up the rapids," for which service I was to pay them in provisions. They returned with me to this, their village, and signified that they would go no further, this being as far as their father (Mr. Schoolcraft) had asked or employed them to go. I gave them to understand, by signs or whatever means I could, that I wished two of them, at least, to guide me to the source of the river, and that I would reward them liberally with provisions for such service, but none of the village would consent to go, excepting one young Indian, the chief's son, who, taking a fancy for a calico shirt I was wearing, agreed to go two days' journey with me on condition of my adding to this my former liberal offer of provisions. But I could offer nothing to induce any of the others to accompany me, even for two days, because, perhaps, they were not in need of provisions, and I had little else to give them. Undoubtedly, if I had had some articles of Indian goods, I could have succeeded better.

This village is of the Snake river band, the chief of which is Pe-ghee-kee, who had been to Washington, as appeared by a paper he showed me, signed by Mr. Calhoun. There were sixty or seventy Indians present, ten or twelve of whom were men. Their trader is Mr. Warren, who sends goods to them every

*The uniform and obliging politeness which I experienced with Mr. Schoolcraft during the whole previous journey on this expedition makes me regret to have to record this exception.

It is also due to him to remark in this place, that he did send three Chippewa Indians from the mouth of Snake river "to guide and assist me up the rapids," but they met me only three miles below their village, and would not accompany me above it, giving me to understand that this was all Mr. Schoolcraft had required of them. They were consequently of no use to me. He also subsequently, when he had reached Lake Superior, sent me two Indians in a canoe, who met me on the Bois Brulé river, (which I was descending,) about forty-five miles from its mouth, and were of much service to me from there down to the lake.

winter from his establishment at La Pointe. Their country affords abundance of deer, bears, and fish, and they seemed to be comfortably clothed. They seldom war with the Sioux, being too near the post of Fort Snelling, and they look skulking and mean, and are thieving, as I experienced.

July 31.—It was 9 o'clock this morning when I had completed the repairing of my canoes. I purchased all the gum I could get of these Indians, for which I paid enormously, but could not procure near so much as I wanted, my canoes consuming much of it for the frequent repairs required on this river. We passed rapids again nearly all day, and made but seventeen or eighteen miles. The river, losing its tributaries as we ascend, is getting lower continually, making the rapids, where the water is shoal, more destructive to the canoes. The country to-day and yesterday is poor, and pine; none of it fit for cultivation. All the way from the falls the bed of the river is filled with boulders of primitive rock.

August 1.—The river was less rapid to-day, is filled in this part with sand-bars and skirted with low lands and swamps, with pine hills back. We reached the mouth of Yellow river at 4 p. m., a distance of thirty miles. Here is a large Indian village and a trading house, which Mr. Warren occupies in winter, by one of his clerks. Most of the Indians and their chief, however, were absent.

Yellow river comes into the St. Croix from the southeast, and is one of its principal tributaries; it is navigable for canoes sixty miles to its source, near Ottawa lake, and runs through several little rice lakes. My Indian guide from Snake river refused to go further, and I could not induce any of the Indians here to take his place, but I succeeded in making one of them understand that I wished him to sketch me a map of the river above, which he did, though very badly. We encamped a few miles above the village, where some of the Indians followed us unperceived, and with a most daring theft, stole the bread which was baking at the fire, before which the men were sleeping.

August 2.—Ten miles above Yellow river we passed the mouth of the Namakwagon river, another large branch of the St. Croix, coming in from the east, where we found an Indian encampment of two lodges, and I was again unsuccessful in an application, as well as I could make it, for a guide, but they sold me some gum and birch bark for provisions. The St. Croix above was very sensibly less, and its numerous rapids broke my canoes and detained me as usual; one of them was repaired in the bottom this afternoon with about six square feet of bark.

In the course of the day I met a hungry Indian and his wife descending the river in a good little canoe, which I purchased for an injured bag of flour of about eighty pounds weight. The canoe was worth about ten dollars, but the flour, according to traders' prices for it, was worth twenty dollars, and this would appear cheap to any one who should witness its transportation to this place. By means of this canoe I lightened the other two, and passed the rapids much easier. I met, also, the Indian chief of this country, Keppameppa, with a note from Mr. Johnston, the interpreter, enclosing a sketch of the Bois Brulé river, which I was to descend to Lake Superior. Journey to-day sixteen miles.

August 3.—The river has become so low that we have to wade over all the rapids, which seem to be *interminable*. Many of them to-day were over shelving sandstone rock; the fragments of which, broken and strewed in the channel, have cut up my men's feet and the bottoms of the canoes horribly. Made about the same distance as yesterday.

August 4.—Passed a long expansion of the river, grown over with wild rice, on the east side of which is an Indian village of seven or eight lodges, with gardens of potatoes, squashes, and corn adjacent. This is Keppameppa's permanent village, but all the Indians were now absent, hunting or fishing. Twelve or fifteen miles above this village we came to another expansion or narrow rice lake, five or six miles long, the upper end of which receives Ox river; the St. Croix coming in below Ox river on the west side. From my ignorance of the route I was near getting lost at this place by following up the wrong river. A broad, plain channel, with a current all the way, leads up through the rice to the mouth of Ox river; but the St. Croix, which is here the smaller of the two rivers, comes in, as it were, on one side of the rice pond, and has its mouth, in a measure, concealed by the grass growing in it. Each canoe passed in succession to the mouth of the former river without noticing the latter; but I had remarked as I passed, an opening in the woods, as though a stream came in; and after entering the mouth of the wrong river, I went back to be satisfied as to this appearance, and found the stream, but from its being smaller than the other, I was still in doubt which to take till I had followed it up a short distance to a rapid, where I observed on a rock in the bottom a little red spot, which, on examination, proved to be red lead paint rubbed from Mr. S.'s canoe, which had touched the rock. This little circumstance determined this to be the proper route and saved me from the error of taking the other, which, if I had done, might have led to further error and been attended with serious consequences, for, if I had been lost for many days in this poor country till my provisions were exhausted, starvation would have been almost inevitable.

From here the St. Croix, now very small, crooked a few miles through a tamarack and cedar swamp and brought us to its source, in a beautiful, deep, clear lake, (Upper Lake St. Croix,) twelve miles long, and from one to three wide, with a pretty little island near its-southern end, on which were two Indian lodges but no Indians.

We passed through the length of the lake which lies north and south, to the portage, leading from its northern extremity to the Bois Brulé river. It is surrounded by pine hills, at the base of which, on its western side, there is a little good land, where the Indians have gardens. The lake is forty-six miles above the Namakwagon river, and two hundred and one miles from the mouth of the St. Croix.

We have now been nearly ten days ascending this river, though, on leaving Fort Snelling we expected to reach Lake Superior in eight days; but this has been for me a most difficult route, and my progress has consequently been very slow.

Excepting twenty or thirty miles at its head, this river is filled with rapids from its source to the falls; and in a distance of one hundred and twenty miles its descent cannot be less than seven hundred feet. Our course up the river was, for the first sixty miles, north; afterwards northeast, to its source. Above Snake river the country is poor, showing cedar and pine hills next to the river, and pine hills back; mostly yellow and pitch pine.

The country bordering the St. Croix and its tributaries, is called the "Folle Avoine," or Wild Rice country, from its many rice ponds and lakes. I could not ascertain the number of Indians in this country, but they are not numerous. They subsist on wild rice, fish, and game, of which they have abundance, and to spare to their traders, who depend principally on these Indians for their meat. They furnish annually about five thousand dollars' worth of furs, composed of otter, martens, rats, bears, raccoons, and deer skins, with some beavers and foxes. They looked meaner and were more thieving than any of the Chippewas I had met with. They hate the Sioux, but seldom war with them.

The portage from St. Croix lake runs over a high pine ridge of six or seven hundred feet elevation

above the lake; from the summit of which, looking to the westward, across the valley of the Bois Brulé, high conical peaks and regular hills, closely covered with only pine, may be seen rising one above another as far as the eye can discern. The length of the portage is two miles.

About a mile from the head of the lake and west of the portage the Bois Brulé has its source in a large spring or little lake, twenty yards across, of clear cold water, from which the Bois Brulé runs on one side, and a small stream to the lake on the other: one to Lake Superior, and the other to the Mississippi. But in seasons of floods and high waters the Bois Brulé runs from the larger lake, and through the smaller. Where the portage struck the river the latter was very small, about eight feet broad, five or six inches deep, of very clear and cold water, running swiftly over a sandy bottom. I got part of the baggage through and encamped on the portage.

August 5.—The men's feet and legs were so very sore from the effects of their previous wading in the rapids of the St. Croix that the carrying on this portage distressed them much, and although the baggage was now comparatively light, it occupied them till twelve o'clock to get over what had been left the previous evening.

We embarked and descended the river eighteen miles to encamp. At first the stream was very narrow and shoal, barely floating the canoes without the men; but after winding through a wet meadow and a tamarack swamp, in which it received several little streams in a distance of ten or twelve miles, it had increased to a width of thirty feet and a depth of one or two feet, with a current of one mile per hour. Its shores were very much clustered with a species of alder, (*alnus serrulata*), which in narrow parts interlocked over the stream so thick and close that it was hard to force the canoes through it.

August 6.—Two or three miles from our encampment brought us to the "Little Falls," where the river, from being thirty yards broad above, is contracted to fifteen feet, and falls through a rocky channel fifteen feet in fifty yards. It may be passed in light canoes, skilfully managed, but I had mine carried over the portage one hundred and fifty yards, on the west side. Below the falls the river was mostly rapids, which were of so bad a character, from the shallowness of the water, the strength of the current, and the rocks with which they were filled, that, to pass them with any degree of safety, we were obliged again to wade by the side of the canoes and conduct them down, and even by this means we could not save the canoes from great injury. We had to stop frequently to repair, and before night had exhausted all our gum, after which it required one man to bail constantly in each canoe, to keep her free, and when we stopped at night they were all in a sinking condition. The muskets, boxes, all our baggage, excepting the flour, which was piled above everything else to save it, was wet thoroughly. But it is our greatest misfortune to be out of gum, for without it the canoes cannot be repaired, and without great repairs my canoes will not be in a condition to carry us much further. I have procured all the gum I could from all the Indians I have met with on the St. Croix, but my canoes have been so often broken as to have required it all. From the wreck of an old canoe found in the river this evening we have procured a little, with which we have repaired, as well as we could, for to-morrow.

We have come to-day twenty-two miles, in which distance the river is very crooked, winding through a low, narrow valley, which is bordered by cedar and pine hills of the most forbidding aspect.

I made an attempt to walk down the shore with three of the men; but from the numerous ridges, ravines, and swamps, we found it much easier to wade in the bed of the river.

The river is exceedingly cold and clear, and is filled with thousands of the real mountain brook trout.

August 7.—This has been a most disastrous day. For the whole distance that we have come, which is about twelve miles, there is scarcely a part of the river that is not rapid, and much of it is of the worst character that it is practicable to descend. On starting this morning, I required all the men, except one disabled, to wade, and lead the canoes with the utmost care; but the rapids were so strong and the rocks so slippery that it was not possible for them to keep their feet, or to save the canoes from striking often, and before 8 o'clock in the morning all my canoes were leaking badly; they had been so often repaired that their bottoms were nearly gummed over, and every touch on a stone knocked some of it off and opened a leak. At 8 o'clock, however, I met two Indians in a very little canoe, whom Mr. Schoolcraft had sent from the mouth of the river to bring me gum and to pilot me down. The gum was of great service in enabling me to proceed with my canoes; but their little canoe was too small to carry anything of consequence, and neither of the Indians would consent to leave it to take charge of mine; and their piloting was of no use, for my men had not the skill to follow them, or to steer a canoe as they did, by means of poles. In the afternoon, after I had used up all the gum again in repairs, my largest canoe had her bottom literally torn off in a rapid, and sunk, and her baggage had to be taken by the others, already loaded too much. A little after I met two canoes, with two Indian families, going up; and after failing in an endeavor to purchase one of them with anything I could offer, I hired the two men to leave their families here, and with one of their canoes to take a portion of my baggage down to the lake, for which I gave them two soldiers' blankets, provisions, and some other articles. But they refused, for additional compensation, to allow a soldier to take the place of either in their canoes, that the other might steer one of mine; fearful, no doubt, from observing the condition of my canoes, that the skill of a soldier was not a good guarantee for the safety of theirs. After this arrangement we reached the first portage below the falls, where the baggage was carried, over a very ugly road, one mile, and the canoes, lighted, passed by the river, and I encamped at the lower end of it. But when my canoes were taken out, one of them proved to be a wreck, and irreparable, which reduced me to one small Indian canoe of my own and the two still smaller ones of the Indians. These were insufficient to transport my baggage and men, and there was no resource left but to walk, which, from the nature of the country, seemed to be impracticable without a guide who could lead by some route over the hills, and far back from the river. One of the Indians whom I had hired above seemed to know the country, and by offer of liberal compensation I induced him, though not without difficulty, to consent to allow a soldier to take his place in the canoe, while he would guide us through the country to the lake—a distance, as I understood him, of one day's journey. I made my arrangements accordingly; seven of the men and myself were to walk with the guide, and the remainder, including him who was lame, to go with the canoes.

August 8.—When we rose this morning, my guide and his companion had disappeared. I and my men had slept soundly, from the fatigues of the previous day, and the rascals had stolen away with their canoe in the night, unperceived, taking with them the articles they had received for their hire, and a quantity of bread that had been left to bake at the fire. I was not in a situation to pursue them, and, as they could ascend the river much faster than me, pursuit was useless. I had now but two little canoes left for all my baggage. The soldier who was lame and a few articles of loading—all it would safely

carry—were embarked in the lesser one of the Indians, and the remainder in the other, giving it in charge to two of my best men, with instructions, as it was overloaded, to wade wherever they could, and lead it down slowly. The remaining seven of the men and myself set out to make our way overland, taking with us provisions for two days, a few blankets, a musket, and a fowling piece. All set off at 6 a. m. I attempted at first to follow the valley of the river; but it was so thickly grown over with brushwood and cedar, and presented so much swamp, as to be utterly impracticable, and I was forced to leave it and take to the hills, which presented difficulties but little less forbidding, their ascent being six or seven hundred feet, steep, and covered all the way up with a growth of tamarack, cedar, and thick undergrowth, which appeared to be impenetrable. Their summits were generally covered with pine, but were irregular, and made a very bad route, which was often, too, intersected by deep ravines, running to the river, and presenting sides as steep and as closely covered with cedar, &c., as the valley itself. Swamps also occurred in the depth of the ravines, and had to be crossed. By means of a compass, I kept, as well as I could judge of it, the general direction of the river, and during the day descended quite to the river several times, to be sure of not getting lost. The men followed me very badly, their feet and legs being bruised and cut, and much swollen, from the effects of the rapids. Most of them found it troublesome to walk at all, and one was so far overcome by sprained and bruised ankles as to ask to be left in the woods; but as I had only two days' provisions, and knew neither the distance nor difficulty between me and the lake, I felt a strong necessity to urge them on as fast as they could bear. Towards sunset, however, after we had come about thirty miles, we ascended a high peak of a pine hill, where one of the men ascended a tree and got a view of the lake before us; and descending then to the valley of the river, a few miles more brought us to its mouth, and an Indian village. We had walked about 35 miles over an inconceivably bad route, and were all much fatigued; the distance by the river to the point we left this morning is 40 miles, and our route over the hills has been almost as devious. The Indian canoe which had started in the morning arrived about an hour after us; but the other did not, being too much loaded to keep up with the Indians.

August 9.—My canoe had not arrived at eight this morning, and fearing some accident had befallen it, I borrowed a canoe from Mongarid, the chief of the village, and taking one of my men in the bow, and a supply of gum, I set off to meet it. I had applied myself much, necessarily, to the conduct of my canoes, and could now steer one as well as any of my men. We proceeded up the river 18 miles, over very many rapids, and found the canoe and baggage on the shore; the men in charge of it having come thus far with great trouble, when their gum was exhausted, and the canoe so much injured as to be unfit to proceed further without repairs. We had met one of the men a few miles below, on his way to the mouth of the river for gum.

I repaired the canoe with nearly all the gum I had, and, taking half the loading into mine, I embarked again, but had proceeded only a little way when the broken canoe required further repair. It had been so much thumped on the rocks that its bottom was almost destroyed, and was so loose now, on the distending bars, that every knock it got jarred the whole bottom and cracked off the gum from every part of it. But I could not dispense with this canoe as the other would not carry the baggage, and had recourse to another and novel method to keep it afloat. Finding a tough, marly, red clay in the bank of the river, I took the canoe out and had its bottom rubbed all over with it, until it was forced into the seams and leaks, so as to stop them completely. I then embarked the canoe and urged her on as fast as possible, until the clay dissolved out and the leaks again opened, when a similar process, hastily repeated, was alike effectual. In this way, applying the clay about every half hour, I reached the mouth of the river with both canoes and all the baggage about ten o'clock at night.

The journey down the *Bois Brulé* has thus required five days, and has been a scene of trouble, difficulty, and danger, nearly all the way. The river is ninety-four miles long, and from the Little Falls (twenty-two miles from its source) to its mouth, in a distance of about seventy miles, it has a descent of more than seven hundred feet, without a perpendicular fall of more than eighteen inches or two feet in the whole distance; hence some idea may be formed of the great quantity and strength of rapid which must necessarily occur in this short river.

From the falls the river winds through a deep ravine between high pine-topped hills, the sides of which, next to the river, were thickly grown over with cedar, pine, tamarack, and brushwood; near the mouth of the river the hills rose very steeply, and the growth was mostly cedar, (*cupressus thyoides*,) and in some places the whole forest had slid off, exposing a bare bank of red clay of considerable height. Where rock occurs in the bed of the river, *in place*, it is sandstone; but in most of the rapids the bottom is sandstone fragments and primitive boulders. The channel in some of the rapids is broad and shallow; in others narrow, with a very powerful current or chute. The source and mouth of the river are nearly on the same meridian, but in its course it curves considerably to the east.

My men have suffered more on this river than on any other part of the expedition. Their fatigues and exposures have been greater than men ought to be subjected to without strong necessity; but, under the circumstances, such fatigue and exposure could not be avoided. For, at Fort Snelling, I had only estimated for flour to take me to La Pointe, on Lake Superior, where I had a supply, estimating the probable time until I would reach the lake at seven or eight days; but I soon found that a much longer time would be required to accomplish the journey of the St. Croix and Bois Brulé rivers, and that, although I had an excess beyond what was necessary for the computed time, I was still in danger of not having enough; and particularly as much of the flour was unavoidably injured by the constant sinking of my canoes. The greatest exertions were therefore necessary to avoid the inconvenience of *falling short of provisions*, and the men were required to do all they could from the time of our leaving the Mississippi. But, with all the diligence we could use, this is made the fifteenth instead of the seventh or eighth day that we have been on the way, and one day more would have exhausted our flour. Mr. Schoolcraft, anticipating such a contingency, has left a bag of flour here for me, which will take me to La Pointe.

The distance from the Mississippi to Lake Superior, by the route we have come, is two hundred and ninety-five miles, and is very direct, but very bad for canoe navigation; both of the rivers being very rapid, and at low stages of water, like the present, almost impracticable. In accomplishing it now my men have been, some of them, badly injured, and all so much exhausted and overworn that they could not have continued much further in the same way.

I might, however, have avoided many of the difficulties of this route if I had previously known its character; for, with a small supply of Indian goods, I might have purchased several small Indian canoes on the St. Croix river, where the river became too small for my larger ones; and by this arrangement

alone most of the trouble might have been saved. Two men only can work in a canoe to advantage in ascending rapids, and, consequently, the smaller the canoe is the more *effectual* will be their exertions; and, in descending, the small canoe is easier turned from the rocks; and when it does strike, it is with less force than the larger one; and it is, consequently, less injured and easier repaired. Very small canoes, however, are objectionable with awkward men, as they are then more liable to be upset than the larger ones.

But the management of bark canoes, of *any* size, in rapid rivers, is an art which it takes years to acquire; and, in this country, it is only possessed by Canadians and Indians, whose habits of life have taught them but little else. The common soldiers of the army have no experience of this kind, and consequently are not generally competent to transport themselves in this way; and whenever it is required to transport troops by means of bark canoes, two Canadian voyageurs ought to be assigned to each canoe, one in the bow and another in the stern; it will then be the safest and most expeditious method that can be adopted in this country.

Mongarid, the chief of this village, has brought my boat here from Fond du Lac river, where I gave it to him in charge on my way up, and has kept it safely; he has also shown more willingness to oblige me on this occasion than any Indian I have met with, though he is aware that I have nothing wherewith to compensate him.

Mr. Schoolcraft had left the mouth of the Bois Brulé on the morning of the 6th; he was, therefore, four days ahead of me.

August 10 and 11.—Embarked again in my boat on the lake early on the morning of the 10th, and reached La Pointe in the afternoon of the second day. Here I found Dr. Houghton waiting for me, agreeably to promise, and our arrangement for a better examination of some parts of the lake shore; and Mr. Boutwell, the missionary gentleman, who had made the route of the expedition with us, and was now to remain with the mission here, to pursue his pious efforts for christianizing the Indians. The country along the lake is described in a former part of this journal, and need not be spoken of again.

August 12 and 13.—Leaving La Pointe on the 12th, with Dr. Houghton, we reached the mouth of Ontonagon river on the 13th at three p. m., where we were much disappointed in not finding Indians, expecting, as we did, to get some of them to conduct us to the "Copper Rock," on this river, which it was our purpose to visit. The village which we found here on our way up had been broken up, and the Indians dispersed to their gardens and hunting grounds in the country back. After some search, however, we found a little Indian canoe laid away in the bushes, and Dr. Houghton and myself, with two of my men, set off in it, after I had drawn out my boat and set the men to repairing her in my absence, the doctor, who had made a hasty visit to the Copper the previous summer, undertaking the office of guide.

August 14.—We reached the forks of the Ontonagon, 38 miles from the mouth, at 1 p. m. Here the river branches into two equal streams, both of which being too rapid to ascend further, we left our canoe and followed the ravine of the right branch two and a half miles, when we ascended a bare bank of red clay five hundred feet high, which, although very steep, was of easier ascent than any other part, from its being free of timber. From the summit of this our course was west, corresponding with that of the river, and led for seven or eight miles through a tall, heavy forest, and over the best land by far that I had anywhere seen on the lake or near it, it being elevated, rolling in parts, well watered with beautiful springs, and very rich in soil and timber—large sugar-maple, birch, hemlock, oak, &c.; and in several places I saw little patches of leatherwood, (*Dirca*), which grows only on the richest of land. On a little hill here we found trap rock in place, from which it may be inferred that this rock forms a part of the Porcupine mountains, which are seen from the lake between La Pointe and the Ontonagon, and which have heretofore been thought to be entirely granite. We finally (to-day) lost the proper route and got lost, and struck the river six or eight miles above the Copper, where it was broad and deep, with but little current, and abrupt high cedar hills rising immediately from the water on both sides, and, turning back from this point, we encamped on a high hill, in a forest of heavy pine timber.

August 15.—From the great elevation of our encampment, we followed down a deep ravine to the river, and, after a few hours of troublesome search, found the "Copper Rock," the object of this annoying and difficult journey. It lies in the edge of the river, resting on small boulders of primitive rock, and near the foot of a red clay bank twenty or thirty feet high. It is bright on the surface, from the washing and abrasion of sand during freshets, which makes it very conspicuous, and easily distinguished from the numerous boulders of primitive and sand rock which form the bed of the river in this part. But it is also much disfigured by the cutting with cold chisels by travellers, at different times, for specimens; and in one place is mixed with particles of serpentine rock, which seem to affect the solidity of the mass. The copper, however, is continuous throughout, and a specimen cut from any part of the mass will contain twice as much native copper as rock. The mass rings, when struck with a hammer, as though it were solid metal, and it is probable that the imperfection of solidity observed on its surface does not extend far into it.

Its early visitors (among whom is Henry) have estimated its weight at about *five tons*; subsequently, it has been stated at *one ton*. My estimate is: of its mass or solid content, *twenty cubic feet*; and of its weight, consequently, *between four and five tons*. It is probable there are four tons of pure metal in it, after deducting foreign matter, and this, I believe, makes it *the largest mass of native copper ever found*.

We made an attempt to cut through a part of it four inches thick, to get off a specimen of about thirty pounds weight; but when we had cut in about one inch and a half, further effort only broke our chisels, and we did not succeed. Large specimens might be taken from it by means of saws, but its edges and thinner parts, where chisels were effectual, have already been taken away. We, however, cut off about twelve pounds, in little pieces, from different parts of the mass, and left it at 2 p. m.

It was one of the objects of our visit to ascertain if there were any other native copper, or ores of copper, in the vicinity of this extraordinary mass, and, after careful search, we did not discover a particle or trace of either.

Returning, we followed down the bed of the river, which was filled with large and small boulders, and the water being low and rapid, we could wade it without difficulty. About two miles below the Copper, we came to the falls, where the river is contracted between mural precipices of sandstone rock from fifty to two hundred feet high, and falls about two hundred feet in two miles. The first and greatest perpendicular fall is fifteen feet, after which the river tumbles over successive strata of the rock, and has several perpendicular descents of from one to three or four feet. We could not pass this part without ascending to the top of the precipice, and the rock on top was covered with soil and a growth of timber.

The strata of the sandstone dip to the south, rising northerly towards the Porcupine mountains. It is six miles from the Copper to the forks of the river, and, excepting at the falls, we found the channel practicable for walking all the way, and much the best route in low stages of water, but not practicable when the river is high. We encamped fifteen miles below the forks.

August 16.—We reached the lake at 10 a. m., and continued our way home.

August 17.—Met Mr. Aitkin, Mr. Warren, and Mr. Oakes, all with their clerks, voyageurs, boats, and goods, on their way back from Mackinac to their several trading posts.

August 18 to 25.—The observations on the coast of Lake Superior made on my return are embodied in the journal of the route up the lake.

We were detained by head winds at several points—one whole day at Grand island and another at Shelldrake river, thirty miles from Saut de Ste. Marie.

A severe northwest wind overtook us off the Pictured Rocks on the morning of the 23d, which soon increased to a gale, and made such a sea by the time we reached (the first harbor) the Grand Marais that we could not enter it. For the same reason we could not safely run the boat ashore or beach her, and were forced to run on, with the most tremendous seas of this lake, till we found a lee behind Whitefish Point a little before sunset. We could only keep up a light foresail from the morning, but ran, notwithstanding, a distance of ninety miles before night. But ours being a *small* Mackinac boat, we were in great danger in the afternoon of being overwhelmed by the seas.

We reached Fort Brady safely on the 25th of August, in the afternoon, having been absent eighty days, and travelled in that time a distance of two thousand eight hundred miles.

J. ALLEN, *Lieutenant 5th Infantry.*

23D CONGRESS.]

No. 580.

[1ST SESSION.]

ON THE PRINTING OF TACTICS FOR THE INSTRUCTION OF THE CAVALRY, ARTILLERY,
AND INFANTRY OF THE ARMY AND MILITIA.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES APRIL 19, 1834.

Mr. RICHARD M. JOHNSON, from the Committee on Military Affairs, having had under consideration the subject relative to the publication of the several systems of tactics for the instruction of the cavalry, artillery, and infantry, reported:

That they received from the general-in-chief of the army, in reply to certain inquiries touching the publication referred to, a letter which states that a board composed of officers of the army and militia, of which Major General Scott was president, assembled at Washington in 1829 for the purpose of preparing systems of instruction for the militia infantry and artillery, and also for the cavalry; that these systems were prepared and communicated to Congress, and, after duly considering them, they were approved, and an act passed on the 2d of March, 1829, directing the Secretary of War to cause the instructions for the artillery and infantry to be printed and distributed amongst the several States and Territories and in the District of Columbia for the use of the militia; but that, in consequence of a discussion which arose in the Senate relative to certain manoeuvres, and in order to save time, the cavalry system was not then ordered to be printed. At that time five thousand of the artillery and sixty thousand of the infantry instructions were ordered and distributed.

The printing of the cavalry system has now been rendered indispensable by the formation of the regiment of dragoons, and it has accordingly been executed since the organization of that corps, under the direction of the War Department.

The two hundred and fifty copies required to supply the order of the department will render it necessary to provide for the payment of all the expenses of the undertaking, of which the principal, as will be seen by the estimate connected herewith, is the execution of the plates; these, the committee understand, are executed in the best manner. And as the five thousand additional copies proposed by the reported bill for the use of the militia will cost the government merely the additional price of presswork, paper, and binding, it seems to the committee that it would be well for the government to avail itself of the opportunity of extending the edition, when the effect will be that the cost of five thousand copies will be little more than that of two hundred and fifty.

The committee are of opinion that it would be useful to distribute among the States a system of cavalry instruction drawn from the most improved European works, and adapted to our own condition and military regulations. The distribution of cavalry arms and accoutrements among the States by the general government furnishes little advantage, unless instructions to teach their use, and calculated to introduce a uniform system, are sent with them. Productive as our country is in fine horses, and skill'd as the people of the interior are in horsemanship, nothing is wanting to give the greatest efficiency to that portion of military strength in which the Union is capable of exerting its greatest power but a proper system of cavalry tactics. The committee refer to the letter of the general-in-chief, and estimate of printing, as a part of this report; and they report a bill.

HEADQUARTERS OF THE ARMY, *Washington, April 7, 1834.*

SIR: In reply to your inquiries whether any books containing instructions for the militia in reference to the tactics of infantry, artillery, and cavalry, have been adopted by the United States, I have to state that a board of officers, of whom General Scott was president, assembled in Washington in 1829 for the purpose of preparing a system of instruction for the militia infantry, a system of instruction for the militia

artillery, and also a system for the cavalry. These several systems were prepared, and communicated to Congress by the Secretary of War, and after duly considering them, they were approved, and an act was passed March 2, 1829, directing the Secretary of War to cause the instructions for the infantry and artillery to be printed and distributed among the several States and Territories and in the District of Columbia for the use of the militia. The cavalry system was not ordered to be printed, owing to some discussion which took place in the Senate in reference to certain manœuvres; when, to save time, it was proposed to leave out the cavalry for the present, and to print the infantry and artillery instructions. Congress ordered sixty thousand of the infantry instructions and five thousand of the artillery to be printed and distributed. The cavalry system is now printing for the use of the regiment of dragoons; and as it has been adopted, I would suggest the advantage of a number of copies being printed for the use of the militia—say five thousand copies, the same number as has been printed of the artillery instructions.

I have the honor to be, very respectfully, sir, your most obedient servant,

ALEX. MACOMB, *Major General*

HON. RICHARD M. JOHNSON, *Chairman of the Military Committee.*

Estimate for printing and binding 5,000 copies Cavalry and Light Infantry Tactics, 236 printed pages and 89 plates in each volume—to be printed on folio post paper, worth \$7 per ream.

B. Chambers, for engraving 89 steel plates, at \$20 each.....	\$1, 780 00
For paper for and printing 445,000 impressions, at one cent each.....	4, 450 00
Composition of 236 pages, 1,710 ems in a page, at \$1 13 each, (Congress prices).....	266 68
Presswork 1,180,000 pages, at 87½ cents for every 600, (Congress prices).....	1, 293 41
171 reams folio post paper, at \$7 per ream.....	1, 197 00
Binding 5,000 copies, at 40 cents—(low, it being very difficult on account of the unusual number of plates).....	2, 000 00

10, 987 09

or \$2 20 per copy.

It will be perceived that \$8,427 of the \$10,987 has to be paid out for the plates and paper for printing the work—\$1 68 per volume; therefore the printer cannot make a great profit. He will make about the same profit that a printer for Congress would make on a bill of \$2,500 for printing done for that body.

JOHN C. RIVES.

23^D CONGRESS.]

No. 581.

[1ST SESSION.]

ON GRANTING TO A RAILROAD COMPANY THE RIGHT OF WAY OVER THE GROUNDS
OF THE ARMORY AT HARPER'S FERRY, VIRGINIA.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES APRIL 30, 1834.

Mr. R. M. JOHNSON, from the Committee on Military Affairs, to whom the letters of Mr. Bruce, president, and Mr. Morell, engineer of the Winchester and Potomac Railroad Company, were referred by the Secretary of War, at the instance of the President of the United States, asking for the right of way through the property of the United States at or near Harper's Ferry, reported :

That the Winchester and Potomac railroad, in order to effect a suitable junction with the Baltimore and Ohio railroad at Harper's Ferry, must pass through property belonging to the United States at said place ; and that such a work, penetrating a region among the richest in the Union in agricultural and mineral resources, and offering a route for its ready extension, will greatly promote the interests of the national armory by furnishing materials for its manufacture and supplies for workmen and others there employed ; and, in the event of foreign invasion, might tend to strengthen the national arm by providing a rapid medium of transporting men and munitions of war from the interior of the country to the seaboard. But, independent of the reasons here advanced, the committee are of opinion, as this is a great public work which ought to have a fair encouragement, and as the right of way through the property of the United States at Harper's Ferry, which the company ask, can do no manner of injury to said property, but, on the contrary, greatly increase the value thereof, as also benefit the public in general, the committee therefore report a joint resolution granting to the Winchester and Potomac Company the right of way as asked for.

WAR DEPARTMENT, *April 18, 1834.*

SIR : I have the honor to transmit copies of letters received from Mr. Morell, the engineer, and Mr. Bruce, the president of the Winchester and Potomac Railroad Company, by which it will be seen that that company is desirous of running their road through the public grounds at Harper's Ferry. I am instructed by the President to inform the Committee on Military Affairs that, not feeling authorized to accede to the proposition made on this subject, the matter is referred to the consideration of the committee.

Very respectfully, your most obedient servant,

LEW. CASS.

HON. R. M. JOHNSON, *Chairman of the Committee on Military Affairs, House of Representatives.*

WINCHESTER, *April 14, 1834.*

SIR: A copy of a letter from Colonel Bomford, of the 29th ultimo, to General Rust, containing the decision of the Secretary of War upon the application of the Winchester and Potomac Railroad Company, made through General Rust, has been furnished me as agent of that company. From the terms of the decision I infer that the request of the company has not been presented to the War Department in a manner to make its nature fully understood.

By an act of the general assembly of Virginia, incorporating the Winchester and Potomac Railroad Company, they are authorized "to enter upon all lands and tenements through which they may judge it necessary to make the said railroad, and to lay out the same according to their pleasure, so that neither the dwelling-house, yard, garden, or castilage of any person be invaded *without his consent.*"

The Winchester and Potomac railroad cannot reach the Potomac at Harper's Ferry without passing through the yards, &c., of the occupants of the land held by the government at that place, and the request of the company is not that the War Department shall dispose of the public land, but that it shall not obstruct a great public improvement by withholding its consent to the passage of the road through the yards, &c., of the individuals occupying that ground.

It is contemplated to carry the road in the rear of the dwelling-houses, and to elevate it upon trusses to a height sufficient to admit at all places ready access from the front to the rear of all the lots either by men or horses; and it is believed, by adopting this mode of construction, that there is not a single occupant who would refuse his assent to the passage of the road through his grounds.

If, under this view of the subject, the Secretary of War shall feel authorized to give the consent required, he will please cause me to be notified of the same at as early a period as his convenience will permit.

I am, with great respect, your obedient servant,

WM. H. MORELL.

HON. LEWIS CASS, *Secretary of War.*

WINCHESTER, APRIL 14, 1834.

SIR: It is, I believe, known to you that one of the contemplated routes for the Winchester railroad passes down the left bank of the Shenandoah, near Harper's Ferry, and partly through the United States property at that place. A sketch of the localities of the public property, likely to be affected by our undertaking, was forwarded through General Rust, I think, to Colonel Bomford, that the department might be possessed of such materials as would enable it to determine what facilities could be extended to a work which, no doubt, will be of great benefit to the armory, and enhance the value of property belonging to the government in its vicinity. It has been stated to me, though unofficially, that, as head of the War Department, where I supposed the power to reside, you were disinclined to act on the subject of our request, and, supposing that it arose from an apprehension that our expectations might be greater than they really are, I have taken the liberty thus personally to address you.

Although the location of our road passes through several private yards and gardens, yet the holders of property, save one, have gratuitously conveyed us the right of way. A similar right we solicit of the federal government; and, in addition, the use of a portion of the public ground near the arsenal as a place of deposit for our trade, now occupied, in part, as a wood and lumber yard, out of the region of the workshops, and embracing no improvement of any value whatever. The spot referred to, near the arsenal, is particularly desirable to give efficiency to our operations, as it at once would accommodate the trade of the armory and village, give us easy access to the Chesapeake and Ohio canal, and promises a ready junction with the Baltimore and Ohio railroad. Penetrating the richest valley in Virginia, leading to inexhaustible beds of fine iron ore, from which some of the best metal used at the armory has been obtained, the commencement of a line of improvement, likely to be excelled by few in the accommodation of national trade and travel, I cannot doubt that the general government will extend encouragement to the work commensurate with its importance.

Would it be asking too much of the department to direct a personal examination into the localities and objects above alluded to? The engineer of the company will cheerfully communicate its views, and (excuse me if I should appear importunate) it would give me much pleasure to meet such agent next week, on the ground; Mr. Thomas, of the Baltimore company, having solicited an interview with me upon business of the two companies, on the 23d instant, at Harper's Ferry.

Should you feel indisposed to act decisively in this matter, and advise its reference to the slow action of Congress, I beg you will be kind enough to inform me early, as our desire is to have the subject settled as soon as possible, as well as to put the anxiety of the inhabitants of Harper's Ferry to rest about the final location of the work as to enable the company to decide, however reluctantly, upon occupying the right bank of the Shenandoah, by means of a bridge about a mile above its junction with the Potomac.

Allow me to hope that a work, fostered at its commencement by the general government, and stamped with the testimony of its national importance by the able engineer then employed, will receive the same liberality now advancing towards its completion.

I have the honor to be your most obedient servant,

JOHN BRUCE,

President of Winchester and Potomac Railroad Company.

HON. SECRETARY OF WAR.

[23D CONGRESS.]

[No. 582.]

[1ST SESSION.]

STATEMENT OF THE HISTORY AND IMPORTANCE OF THE MILITARY ACADEMY AT WEST POINT, NEW YORK, AND REASONS WHY IT SHOULD NOT BE ABOLISHED.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES MAY 17, 1834.

Mr. RICHARD M. JOHNSON, from the Committee on Military Affairs, to whom was referred the subject of the Military Academy at West Point, reported:

The objections to the Military Academy at West Point which have been urged in Congress and in the public prints have recently assumed a more imposing character. The legislatures of two of the States of this confederacy have embodied them in formal resolutions, and transmitted them for the consideration and action of the national assembly. These resolutions question the expediency and the constitutionality of this institution, assert that "it has been wholly perverted from the designs of its founders, and that the best interests of the nation require that it should be abolished." The occasion and the circumstances seem to demand of the committee a deliberate investigation of the origin and history of the Military Academy, of its system of instruction and discipline, and of its effects upon the character of the army and of the nation. This investigation has been made, and the committee now present its results.

The general subject of military education appears to have engaged the thoughts of statesmen and legislators at an early day. They perceived that, although the ordinary, subordinate, and mechanical duties of a soldier and officer might be performed without especial training, the higher class of duties, and the capacity for command, could be understood and exercised only by those whose intellectual faculties had been carefully cultivated. They felt that the common interpretation of the axiom that "knowledge is power," significant and important as it is, was not its noblest and worthiest interpretation. Power over matter and over the minds of others is not the choicest gift of knowledge, enviable and glorious though it be; it is, in truth, a dangerous gift. But power over the mind of its possessor, purifying and elevating it, subduing all that is low or selfish to the authority of duty and virtue, this is the distinguishing, the kingly gift of knowledge. They felt, therefore, that the moral as well as the intellectual nature should be sedulously nurtured. They were convinced, also, that in a free State it was most impolitic and unsafe for the army to be separated in habits, interests, and feelings from the other orders of society; and they recognized in knowledge, which is in a great measure the result of mutual interchange of thoughts, the true principle of amalgamation. Many of them had been observers or partakers of the moral dangers of a military life; they were aware of the impoverished means of the members of the army, and of the probable inability of the country for a long period to provide more for them than a mere support; and they were, consequently, solicitous to impart to them knowledge, "in itself an economical possession," whose pursuits are inconsistent with and destroy the desire for indulgence in idle or vicious amusements. To these general considerations were added others growing out of our peculiar form of government and the sentiments and prepossessions of the people.

As an almost necessary consequence of the national experience during the war of the revolution, the subject of military education first presented itself in connexion with the organization and improvement of the militia. While they bore grateful testimony to the services and valor of those of their countrymen who upheld the standard of the United Colonies in the hours of darkest gloom, they could not be insensible that the struggle for independence would have been sooner triumphantly closed if those gallant men had been disciplined or had been led on by officers accomplished in the various branches of the art of war. They accorded a cordial tribute to the few brave spirits who devoted all the skill and science they had acquired in the "seven years war," which commenced in 1754, to the formation of military habits in the new levies which were raised in rapid succession during the whole progress of the contest. But they had before them the admissions of these officers and of their beloved commander that the difficulties of their perilous undertaking would have been greatly diminished if a knowledge of the theory and science of war had been more generally diffused through the army. A striking illustration of the justness of these views is contained in an official report made by General Knox, then Secretary of War, to the President, January 21, 1790. In this report the position is laid down that "all discussions on the subject of a powerful militia will result in one or other of the following principles:*

"1st. Either efficient institutions must be established for the military education of youth, and the knowledge acquired therein be diffused throughout the country by the means of rotation, or, 2d, the militia must be formed of substitutes, after the manner of the militia of Great Britain."

"If the United States possess the vigor of mind," says the Secretary, "to establish the first institution, it may reasonably be expected to produce the most unequivocal advantages; a glorious national spirit will be introduced, with its extensive train of political consequences."

It is not material to the purpose of the committee to give in detail the whole plan sketched in this State paper. The only provision immediately applicable to the present inquiry is that which required the young men from the age of eighteen to twenty years to be disciplined for thirty days successively in each year in camps of instruction, where, in addition to their military tuition, they were to receive lectures from the chaplains explanatory of the value of free governments, and of their dependence upon the knowledge and virtue of the youth of the country. A proposition similar to this, with the exception that the term of instruction was limited to six days instead of thirty, was submitted to the House of Representatives in 1821 by a member from Tennessee. And it may induce those who are inclined to adopt this course now to hesitate to be thus reminded how soon it was abandoned by its first projectors. The obvious objections arising from the expenditure of time and money, from the loss occasioned by the periodical abstraction of labor, and from the but too probable formation of licentious or indolent habits, seem to have been justly regarded as decisive.

In 1793 the establishment of a Military Academy is known to have been a favorite object of the Executive. In the annual message, dated the 3d of December of that year, General Washington suggests

* Penn. Daily Advertiser, February 3, 1790.

the inquiry,* "whether a material feature in the improvement" of the system of military defence "ought not to be to afford an opportunity for the study of those branches of the art which can scarcely ever be attained by practice alone."

Mr. Jefferson has informed us that when the preparation of this message was discussed in the Cabinet, the President mentioned a Military Academy as one of the topics which should be introduced, and that he himself raised the objection that there was no clause in the Constitution which warranted such an establishment; that the above sentence was nevertheless incorporated in the message, and was again the subject of special deliberation. The reply of Washington was, that he would not recommend anything prohibited by the Constitution; "but if it was doubtful, he was so impressed with the necessity of the measure, that he would refer it to Congress, and let them decide for themselves whether the Constitution authorized it or not." An authentic exposition of the views of Congress is contained in the act of the 7th of May, 1794, which provided for a corps of artillerists and engineers, to consist of four battalions, to each of which eight cadets were to be attached; and made it the duty of the Secretary of War to procure, at the public expense, the necessary books, instruments, and apparatus, for the use and benefit of said corps. The result of his subsequent reflection upon the opinions of Washington himself, whose attachment to the national charter was too pure and firm to be perverted by any prepossessions for a particular object, is manifested by his declaration in December, 1796,† that "the desirableness of this institution had constantly increased with every new view he had taken of the subject." "The institution of a Military Academy," he observes in this annual communication to Congress, "is also recommended by cogent reasons. However pacific the general policy of a nation may be, it ought never to be without an adequate stock of military knowledge for emergencies. The first would impair the energy of its character, and both would hazard its safety, or expose it to greater evils when war could not be avoided. Besides that, war might not often depend upon its own choice. In proportion as the observance of pacific maxims might exempt a nation from the necessity of practicing the rules of the military art, it ought to be its care in preserving and transmitting, by proper establishments, the knowledge of that art. Whatever argument may be drawn from particular examples, superficially viewed, a thorough examination of the subject will evince that the art of war is extensive and complicated; that it demands much previous study; and that the possession of it in its most improved and perfect state is always of great moment to the security of a nation. This therefore ought to be a serious care of every government; and for this purpose an academy, where a regular course of instruction is given, is an obvious expedient, which different nations have successfully employed."

In 1798 Congress authorized the raising of an additional regiment of artillerists and engineers, and increased the number of cadets to fifty-six. In July of the same year the President was empowered by another act to appoint four teachers of the arts and sciences necessary for the instruction of this corps.

Thus far the legislative proceedings had been in accordance with Executive recommendation, except that they did not provide for the collection of the regiments of artillerists and engineers at one point, and the erection of buildings adapted to the purposes of education. But the principle upon which the institution as at present organized rests was fully sanctioned; a new grade was created in the army, to which young men were exclusively entitled to be admitted, and means were appropriated for their education in the science of war, that they might be fitted for stations of command. It was soon apparent, however, that something more was required to afford a fair opportunity for imparting systematic instruction. The subject seems to have been carefully investigated in 1800 by Mr. McHenry, then the head of the War Department, and his report was communicated to Congress by President Adams, on the 13th of January, with a special message, in which it was characterized as containing "matter in which the honor and safety of the country are deeply interested."‡

The committee invite the attention of the House to some extracts of this report, and of a supplemental one of the 31st of January, which are equally illustrative of the comprehensive and discriminating talent of their author, and of the beneficial consequences to be anticipated from the establishment of a Military Academy:

"No sentiment can be more just than this: that in proportion as the circumstances and policy of a people are opposed to the maintenance of a large military force, it is important that as much perfection as possible be given to that which may at any time exist.

"It is not, however, enough that the troops it may be deemed proper to maintain be rendered as perfect as possible in form, organization, and discipline; the dignity, the character to be supported, and the safety of the country further require that it should have military institutions capable of perpetuating the art of war, and of furnishing the means for forming a new and enlarged army fit for service in the shortest time possible, and at the least practicable expense to the State."

"Since, however, it seems to be agreed that we are not to keep on foot numerous forces, and it would be impossible on a sudden to extend to every essential point our fortifications, military science in its various branches ought to be cultivated with peculiar care in proper nurseries, so that a sufficient stock may always exist ready to be imparted and diffused to any extent, and a competent number of persons be prepared and qualified to act as engineers, and others as instructors to additional troops, which events may successively require to be raised. This will be to substitute the elements of an army to the thing itself, and will greatly tend to enable the government to dispense with a large body of standing forces, from the facility which it will give of procuring officers and forming soldiers promptly in all emergencies."

"To avoid great evils we must either have a respectable force always ready for service, or the means of preparing such a force with certainty and expedition. The latter, as most agreeable to the genius of our government and nation, is the object of the following propositions."

The laws which have been framed having proved inadequate, he adds, "to afford the requisite instruction to officers and others in the principles of war, the exercises it requires, and the sciences upon which they are founded," it is proposed "that the academy shall include four schools; one to be called the fundamental school, another the school of engineers and artillerists, a third the school of cavalry and infantry, and a fourth the school of the navy. The fundamental school, it is supposed, will be the only one required for the first two years. It is designed to form in this engineers, (including geographical engineers,) miners, and officers for the artillery, cavalry, infantry, and navy; consequently, in this school are to be taught all the sciences necessary to a perfect knowledge of the different branches of the

* House Journal, 3d and 4th Congress, p. 7.

† House Journal, 3d and 4th Congress, p. 610.

‡ State Papers, 1800, v. 1, pp. 229, 485.

military art." "These schools to be provided with the proper apparatus and instruments for philosophical and chemical experiments, for astronomical and nautical observations, and chemical experiments, for surveying, and such other processes as are requisite to the several branches of instruction." "Barracks and other proper buildings must be erected for the accommodation of the directors, professors, and students, and for the laboratories and other works to be carried on at the respective schools." These selections demonstrate that the conception the Secretary of War had formed of the true character of a national institution for military education was in very near accordance with the character of the one which has been long sustained by the beneficent and wise legislation of Congress. The whole report, he observes, "contemplates certain military schools as an essential mean, in conjunction with a small military establishment, to prepare for and perpetuate to the United States, at a very moderate expense, a body of scientific officers and engineers, adequate to any future emergency, qualified to discipline for the field in the shortest time the most extended armies, and to give the most decisive and useful effects to their operations."

These reports were referred to a committee of seven in the House of Representatives, who submitted a bill creating a military academy, which, in the absence of the chairman, was postponed to a day beyond the close of the session, one member only of the committee voting for the postponement. The subject was revived at the next meeting of Congress. The Secretary of War was called upon by a resolution, dated December 22, 1801,† to lay before the House a statement of the existing military establishment, which was furnished accordingly on the 24th. Out of these proceedings grew the act of the 16th of March, 1802, by which the military peace establishment was determined. By this act the artillerists and engineers were made to constitute two distinct corps. To one regiment of artillery forty cadets were attached, and to the corps of engineers ten cadets. The 27th section provided that the said corps, when organized, shall be stationed at West Point, in the State of New York, and shall constitute a military academy. It also provides that the senior engineer officer present shall be superintendent of the academy, and authorized the Secretary of War to procure, at the public expense, the necessary books, implements, and apparatus for the use and benefit of the institution. In the following year another act, dated 28th of February, 1803, empowered the President to appoint one teacher of the French language, and one teacher of drawing.

These acts afforded some of the desired facilities for developing the tendencies of the principle, which had been sanctioned by the previous acts of 1794 and 1798. At the expiration of six years, however, further legislation was considered necessary. And the attention of Congress was called to the subject by Mr. Jefferson in the following message, which evinces not only his deep interest in the institution, but that he no longer entertained the opinion of its unconstitutionality, which he expressed while a member of General Washington's cabinet in 1793.

"The scale on which the Military Academy at West Point was originally established is become too limited to furnish the number of well-instructed subjects in the different branches of artillery and engineering, which the public service calls for. The want of such characters is already sensibly felt, and will be increased with the enlargement of our plans of military preparation. The chief engineer having been instructed to consider the subject, and to propose an augmentation, which might render the establishment commensurate with the present circumstances of the country, has made his report, which I now transmit for the consideration of Congress. The plan, suggested by him, of removing the institution to this place is also worthy of attention. Besides the advantage of placing it under the immediate eye of the government, it may render its benefits common to the naval department, and will furnish opportunities of selecting, on better information, the characters most qualified to fulfil the duties which the public service may call for."‡

This message was referred to Messrs. Nicholas, of Virginia, Troup, of Georgia, Desha, of Kentucky, Upham, of Massachusetts, and Milner, of Pennsylvania. The names of some of these gentlemen are identified with republican principles, and they will not be suspected of having lost sight of or disregarded the strict requirements of the constitution. This committee reported a bill on the 12th of April, which added one hundred and fifty-six members to the corps of cadets, and which passed in the House by a vote of 95 to 16. It may be useful to note the fact, in this connexion, that propositions for removing the Military Academy to this city have been made at several different periods, since the date of this message of Mr. Jefferson, and have been uniformly and promptly negatived.

Under the succeeding administration, the welfare and interests of the institution were repeatedly recommended to the favorable consideration of Congress by the Executive. In his annual communication, dated December 5, 1810, Mr. Madison maintains its usefulness with great earnestness and power, and combats successfully a popular impression that such establishments were only suited to nations whose policy was, to a considerable extent, and by the necessity of their position, warlike.

"The corps of engineers, with the Military Academy, are entitled to the early attention of Congress." "But a revision of the law is recommended, principally with a view to a more enlarged cultivation and diffusion of the advantages of such institutions, by providing professorships for all the necessary branches of military instruction, and by the establishment of an additional academy at the seat of government or elsewhere. The means by which wars, as well for defence as offence, are now carried on, render these schools of the more scientific operations an indispensable part of every adequate system. Even among nations whose large standing armies and frequent wars afford every other opportunity of instruction, these establishments are found to be indispensable for the due attainment of the branches of military science, which require a regular course of study and experiment. In a country, happily without the other opportunities, seminaries where the elementary principles of the art of war can be taught without actual war, and without the expense of extensive and standing armies, have the precious advantage of uniting an essential preparation against external dangers, with a scrupulous regard to internal safety. In no other way, probably, can a provision of equal efficacy for the public defence be made at so little expense, or more consistently with the public liberty."§ It seems almost superfluous to remark that the recommendation for creating a new academy, as well as the whole tenor of this extract, is conclusive evidence that the constitutionality of these institutions was considered by Mr. Madison to be unquestionable. The maintenance of an unconstitutional establishment could not, with any propriety, be said to be consistent "with a scrupulous regard to internal safety," and "with public liberty." In 1811 Congress was again

◊ House Journal, 5th and 6th Congress, p. 634.

‡ House Journal, 10th Congress, p. 234.

† House Journal, 1st session, 7th Congress, p. 56.

§ House Journal, 11th Congress, page 436.

reminded by the President "of the importance of these military seminaries, which, in every event, will form a valuable and frugal part of our military establishment."* Before the close of this session, the act of 29th of April, 1812, was passed, which declares that the Military Academy shall consist of the corps of engineers and the following professors and assistants, in addition to the teachers of French and of drawing already provided for, viz: a professor of experimental and natural philosophy, a professor of mathematics, a professor of the art of engineering, with an assistant for each. A chaplain was also to be appointed, and required to officiate as professor of geography, ethics, and history. The number of cadets was limited to 260; the prerequisites for admission, the term of study and service, and the rate of pay and emoluments were prescribed.

By the act of 3d March, 1815, the army was reduced to ten thousand men, a number deemed to be sufficiently large, in view of the segregation of this country from Europe, and the diminished strength of the Indian tribes. In his last message, dated 5th of December, 1815, Mr. Madison urged "an enlargement of the Military Academy, and the establishment of others in other sections of the Union. If experience has shown, in the recent splendid achievements of the militia, the value of this resource for public defence, it has shown also the importance of that skill in the use of arms, and that familiarity with the essential rules of discipline which cannot be expected from the regulations now in force."

During the sessions of Congress in 1815 and 1817, bills were introduced in the House of Representatives for creating additional military academies, which were not definitively acted upon. In 1821 the army was further reduced to six thousand men. The act of this year, and that of 1815, authorized the retaining of the corps of engineers, as then organized.

In the judgment of the committee these legislative enactments, in relation to the academy, considered in connexion with those in relation to the army, clearly indicate it to have been the settled policy of that day not to rely upon the rank and file of the army, who were enlisted for short periods, and could never therefore be thoroughly disciplined, but to educate officers, so that instructors would be always ready, competent to teach new levies, whenever changes in the political condition of the country might require them to be raised.

The committee will copy but one more of the complimentary notices of the Military Academy, which may be found in the annual communications to Congress of the distinguished statesmen who have since filled the executive department of the government. They will briefly advert to the proceedings of this House in 1821, as the result of them demonstrates most conclusively that the public sentiment, as expressed by the representatives of the people, was strongly and almost unanimously in its favor.

February 6, 1821, a resolution was introduced proposing an inquiry into the constitutionality of the Military Academy.

February 16, 1821, a motion was made to discontinue the pay and rations of the cadets, and discharge them from the academy and the service of the United States; a motion the certain effect of which would have been the abolition of the institution.

The opinion of the House upon the general subject, and upon these propositions, was distinctly pronounced in the vote upon the last, which was decided in the negative by a majority of eighty-nine.

It was subsequent to these proceedings in the popular branch of the government that Mr. Monroe, in his annual message in 1822, pronounced this strong eulogy upon the discipline and management of the academy: "Good order is preserved in it, and the youth are well instructed in every science connected with the great objects of the institution. They are also well trained and disciplined in the practical parts of the profession. It has always been found difficult to control the ardor inseparable from that early age, in such a manner as to give it a proper direction. The rights of manhood are too often claimed prematurely, in pressing which too far, the respect due to age, and the obedience necessary to a course of study and instruction in every such institution are lost sight of. The great object to be accomplished is, the restraint of that ardor by such wise regulation and government, as, by directing all the energies of the youthful mind to the attainment of useful knowledge, will keep it within a just subordination, and, at the same time, elevate it to the highest purposes. This object seems to be essentially obtained in this institution, and with great advantage to the Union.

"The Military Academy forms the basis, in regard to science, on which the military establishment rests. It furnishes annually, after due examination, and on the report of the academic staff, many well-informed youths, to fill the vacancies which occur in the several corps of the army, while others who retire to private life carry with them such attainments as, under the right reserved to the several States, to appoint the officers and to train the militia, will enable them, by affording a wider field for selection, to promote the great object of the power vested in Congress, of providing for the organizing, arming, and disciplining the militia."

The committee have now completed what may be termed the history of the opinions and action of the executive and legislative departments in relation to the academy. They have shown the correctly balanced mind of Washington passing from doubt to assured conviction, upon the question of its constitutionality; the philosophic mind of Jefferson, whose biasses were ever against free constructions, relinquishing the confident opinion he had expressed in the negative upon the same question, and proposing an enlargement of the institution; the clearly discriminating mind of Madison, exerting its great powers to perpetuate the existing, and create new establishments, unshackled by a doubt of the constitutional authority of the government, and his example imitated by his friend and successor. They have shown the recognition by Congress of the soundness of the principle upon which these institutions are based, in the acts of 1794 and 1798; the distinct and not to be mistaken expression of the conviction of the same body, of their power, and of the expediency of exercising their power to establish a Military Academy, in the act of 1802; and this, too, after the project of such an institution had been fully developed in all its extent in the official report of 1800, and had been two years open for their consideration, and the consideration of their constituents; and lastly, they have shown an unbroken series of legislative enactments for the support and extension of the academy, running through a period of nearly twenty years, and the failure of the attempts which have been made to induce an opposite course of legislation. In the apprehension of the committee, it will be difficult to find, in the recorded history of the country, a question upon which public sentiment has been more fully and fairly tested, and has been more unanimous.

They proceed to give a brief sketch of the system of instruction and discipline. Under the existing regulations, the cadets are encamped in the months of July and August, during which period the instruc-

* House Journal, 12th Congress, page 8.

tion is exclusively military. As the candidates annually admitted are required to join the academy in June, they become, immediately upon their entrance, acquainted with the manual and drill of the soldier. The remaining ten months are passed at the institution, where not less than nine nor more than ten hours are daily devoted to study. The cadets are divided into four classes; the oldest is designated as No. 1, the youngest as No. 4. In accordance with the prescribed military course, the cadets of the 4th class are taught the school of the soldier; those of the 3d, the school of the company; those of the 2d, the school of the battalion; those of the 1st, the evolutions of the line. In the scientific course are included French, drawing, rhetoric, moral and political science, mathematics, natural philosophy, chemistry, mineralogy, geology; to these are added a course of artillery, engineering, and the science of war. A few words will illustrate the advantages to be derived from acquisitions in these different branches.

The French language and, next to that, the German are the great repositories of military learning; and he who would become an accomplished officer must be able to read intelligently and with profit the text books in at least the first of these languages. Drawing has been aptly denominated the only language by which visible objects can be described. The practice of this art not only improves the faculty for observation by rendering it more keen and exact, but is specially necessary in military surveys to obtain correct plans of ground for the purposes of war, on which shall be correctly designated the roads, rivers, woods, and ravines, with the prominent points of defence and command. Elementary mathematics comprises algebra, geometry, and trigonometry, which are the foundation of military surveying, and, with descriptive mensuration, constitute the basis of the art of fortification, and also of engineering in its various branches—in the construction of roads, bridges, and canals—and of a knowledge of machines and machinery. The higher branches of mathematics embrace analytical geometry, its application to the investigation of the conic sections, which is indispensable to a comprehensive understanding of the course of astronomy, and the differential and integral calculus, the agents by whose aid the obscure laws in every department of natural philosophy are made manifest. Chemical philosophy, mineralogy, and geology are means to afford a knowledge of the materials to be employed in civil or military engineering, of the places where they are to be found, and of the spots adapted for mining, sapping, or draining. The course of artillery is designed to make the pupils acquainted with the construction, machinery, and materials of pieces of ordnance, and their use in the field. The branches of rhetoric, of moral and political science, have been superinduced because, without some knowledge of them, the education of the cadets would be imperfect, and their association with intelligent men in society would be upon unequal terms.

In imparting this varied instruction, twenty-eight teachers are constantly and sedulously employed; and the facilities for its acquisition are a library, a philosophical and chemical apparatus, and a military laboratory, all of which it is desirable should be enlarged and improved.

During the first six months the studies are confined to the French language and the mathematics. At their expiration the members of the new class are examined. It is estimated that about one-quarter fail to pass this examination. The others are arranged in classes and sections, according to merit. There is thenceforth a free competition, and each must achieve for himself the success which may claim the bestowment of reward. An annual examination takes place in June before a board of visitors invited to attend by the Secretary of War. They who are found deficient, and whose deficiency is attributable to idleness or incapacity, are dismissed. Each cadet obtains rank in each branch of study according to his proficiency in that branch, ascertained from the weekly class reports and the results of the examinations before the academic board in January and the board of visitors in June. A strong stimulus is thus supplied for exertion in that department of study for which a cadet may have a peculiar aptitude; and this stimulus is not weakened by the consciousness that excellence in that department will be neutralized by imperfection in another. An additional incentive for intellectual effort is furnished in the regulation that the relative rank in the army shall be determined by the rank acquired at the academy.

The discipline to which the cadets are subject is a judicious combination of military and paternal rule. No unreasonable restraints or burdens are imposed. Weekly opportunities for explanation and defence are afforded, and two hundred marks of censure must be recorded and remain unexplained before a sentence of suspension can be pronounced.

The implied contract with parents to provide moral instruction for their children is fulfilled; and the obligation of the government is recognized to make the cadet, when in the field, a faithful representative of his countrymen, "by making him a good citizen and an honest man."

There are two provisions in the police of the academy which are worthy of especial notice. Their necessary tendency is to the formation of those habits of thought and of action which constitute distinctive features in a manly character. The first is that which limits the allowance of money by parents and guardians, and places the specified sum in the custody of the superintendent; and at the same time leaves the amount the cadet shall receive monthly in money dependent upon the system and economy of his expenditures. The second is that which imposes upon all the cadets, in succession, the duties of keeping their apartments in a state of perfect cleanliness and order, and of daily inspecting and reporting their condition. The wisdom of the first provision is attested by the collegiate axiom "that the stock of knowledge acquired is in the inverse ratio with the money spent." The wisdom of the second will be apparent, upon a moment's reflection upon the value of a habit of attention to the observance of neatness and regularity to those whom the various fortunes of their profession may place in circumstances in which their personal comfort and health will depend materially, if not entirely, upon themselves. The adoption of these regulations is strongly indicative of the desire of their framers to introduce an equality in dress and expenditure, and to foster a feeling of self-reliance and independence destructive of false pride and of all exclusive or aristocratic pretensions. This feeling of self-reliance enables the mind, free from unworthy external influences, to exert its energies and develop all its capacities, and to secure for its efforts their appropriate and legitimate reward.

After a careful and impartial consideration of the tendencies and operation of this system of instruction and discipline, the committee express their deliberate conviction that it would be difficult to devise one better adapted to form an able and accomplished officer, or combining more encouragements for intellectual and moral effort, in the adequate and enduring honors it promises, with stronger dissuaves from indolence and vice, in the certainty it holds out of immediate humiliation and punishment.

The committee enter now upon an examination of a part of the general subject referred to them, which has given occasion for much of the popular prejudice existing against the Military Academy—the rules by which the selection of candidates for admission is determined, connected with the prescribed qualifications. These qualifications, consisting in a knowledge of reading, writing, and arithmetic, (the acquisitions of pupils of ordinary capacity in the schools of lowest grade in our country,) cannot, in the

judgment of any, be deemed to be too high. On the contrary, they who have considered them in connexion with the positive advantages to be derived from the institution have regarded them as too low. And, at various periods, propositions have been made by different boards of visitors that there should be required, in addition, some acquaintance with the Latin language, and with some of the higher branches of mathematics. But these propositions have not induced a change, as both justice and policy equally demanded that the academy should be accessible to all grades of society. A yet stronger reason against innovation was found in the fact, familiar to those who are conversant with mental philosophy, or who have been observant of the mental habits of youth, that the capacity for successful effort may exist in a dormant state, from the absence of the incentives and the means of preparation for exertion, and be awakened to vigorous action by being brought in continued contact with these incentives and means.

Prior to 1817, various circumstances connected with the condition of the country and of the academy contributed to render admission to it far less an object of ambition than it has since become. The openings for the aspiring, before the commencement of the second war for independence, were indicated by the pacific policy of the country. The talents of the young were exerted in achieving pre-eminence in the legislative or judicial halls, or in acquiring the wealth to be gained in commercial intercourse with foreign lands. Undoubtedly military science and skill assumed more important aspects in the public mind during the progress of that war. But the sure means of obtaining this science and skill were not as perceptible in the then imperfect organization and instruction of the Military Academy as they have been since the year 1817, when a gentleman and a soldier of rare endowments, and of peculiar fitness for the station, was placed at its head and entrusted with its direction and superintendence. From that period the increasing reputation of the institution attracted towards it the public attention, and young men of ardent minds and strong powers sought a participation in its privileges and advantages. This general emulation imposed on the department, by which the selection of candidates was to be made, the necessity of adopting some general rule which should exclude the imputation of favoritism, and be equitable for all. One principle was admitted to be fundamental—that the doors of an institution which was sustained by the munificence of the country should be first opened to receive the sons of those who had bravely perilled, or who had nobly lost, their lives in its defence. Another principle which naturally suggested itself to the minds of those who wished that the army should be deservedly honored was, that uncommon intellectual ability should be a guarantee of success to an applicant. In the application of these principles, however, even upon the supposition that selections were limited to these two classes, there might often occur a serious practical difficulty. The very word *selection* implies a balancing of claims, and it is not to be supposed that any individual, however extensive his intercourse with society might have been, would be able, from his personal knowledge of candidates, to frame, in all cases, a just award. This difficulty increased as the number of admissions to be granted increased, and as the classes from which a selection was to be made were multiplied. To rely entirely upon the representations of individuals residing at a distance, and equally unknown with those whom they recommended, would be obviously most unsafe. It would be reposing confidence under circumstances which would not justify trust in ordinary matters of mere pecuniary interest. The representative branch of the government, including under this denomination the Senate and the House, afforded a means of obtaining the information prerequisite to a decision which promised an effectual security for the rights of all. No inference could be more legitimate than this, that they who were entrusted with the higher concerns of the people, and who were directly responsible to the people, would be safe counsellors in the administration of this interest.

From these and similar views originated, probably, the rule of selecting one cadet from each congressional district, and of allowing great weight to the recommendations of the representatives of the respective districts. This rule, while it afforded to the appointing power the means of judging correctly, or rather of avoiding error, was acceptable to the representatives and to their constituents. To the former, as it gave them opportunities of extending their personal influence, or of gratifying their feelings of personal regard. To the latter, who could thus present their claims with the more freedom and confidence through the medium which the Constitution and their own choice had provided. It is true that, in some instances, a representative might feel himself bound to present the names of several candidates, and that then the final decision must be made by the head of the department. But such instances are of rare occurrence, and it is believed the fact is susceptible of positive proof that, in a vast majority of cases, the selections have been determined by the representative of the district, or by the joint action of all the members of a delegation from the State. The necessary operation of this rule leaves but little patronage with the appointing power, and the danger of an abuse of the privilege allowed them by the representatives is guarded against, not only by their responsibility to their constituents, but by the sense of honor which will forbid them to mislead the judgment of him who relies upon them for the means of deciding rightly. It has been alleged, however, that under the influence of the motives which have been alluded to, (the extension of their personal interest and the gratification of personal regard,) the representatives have exerted themselves for the success of the wealthy or powerful. A complete vindication of a majority of those who have had an agency in the appointments which have been made for a long series of years is furnished in the facts that not more than one-fifteenth of any one class could have received, without this aid, more than a common English school education, and that a still smaller number of the officers of the army possess any income or means of support beyond their regular pay and emoluments. It seems to the committee that this objection underrates the intelligence and moral feeling of both representatives and people. The sentiments of gratitude and veneration for the worthies of the revolution have not so far subsided, nor the appreciation of uncommon mental power become so rare in any community that the overlooking, by a representative or an officer of the government, of a son of the former, or the possessor of the latter, in favor of one whose only recommendations were wealth or influence with a party, would not draw upon him their distrust and contempt. The committee have given this answer to the imputation that undue preference has been shown for the wealthy, because the truth warranted them in so doing. But they by no means admit that where there are natural endowments and capacities of a high order, the possession of wealth would be a proper ground of exclusion from the academy. It should be open to all.

The committee will admit for the moment that the objections of exclusiveness, favoritism, and aristocracy are well founded. The question immediately occurs, will these objections be removed by abolishing the Military Academy? While the academy exists the rank of cadet is the lowest grade in the army; if it be discontinued, the rank of second lieutenant will be the lowest. The change is simple and apparently unimportant, the consequences are worthy of grave consideration.

The average number of vacancies in the army for the last ten years is 25. The average number of admissions to the academy for the same period is 119. The opportunities for entering the army, therefore,

will be diminished in the ratio of 119 to 25. This certainly will not render it less exclusive. But it is said it will be more popular, because the vacancies will be filled by selections from the community at large. Do not the wealthy and those possessing political influence constitute a part of the community? and will not the appointing power have the same inducements for preferring their applications for lieutenants' commissions that he now has for preferring their applications for cadets' warrants? Will not these applications be made through the representatives, and will there not be the same reasons for relying upon their recommendations? How, then, will the opportunities for favoritism be lessened? On the other hand, the vacancies which annually occur are now supplied by those graduates of the academy who have acquired distinction by their conduct and attainments, and are prepared to undertake the higher duties of their profession. If these vacancies are to be filled from the mass of our citizens, there will be added to the army each year twenty-five lieutenants, to whom every branch of duty and service will be new, and who, after four years, instead of being familiar with the theory, science, and practice of war, will be very slightly and imperfectly acquainted with the two first, and only tolerably proficient in the last. And, to accomplish this result, a considerable pecuniary expenditure must be made. The pay of the twenty-five lieutenants for the four years will be \$75,800; that of the twenty-five cadets for the same time, including everything for their education, will be \$46,200. The difference (\$29,600) is the amount the nation will be required to pay for a change in the military establishment, which will deprive it of its great ornaments of talent, learning, and skill, and effect a general deterioration in the character of the officers and the army. The military and scientific information diffused throughout the country by those who pass two or three years at the academy, but do not complete the course, or who complete the course, but do not enter the army, is considered, in this estimate, to be a fair equivalent for the expense of their education, as this information is, or may be, applied to perfecting the discipline of the militia and the construction of works of improvement.

The result to which the committee have arrived is, that the imputation of favoritism is one which is incident to all governmental appointments; that it will not be avoided by making the grade of second lieutenant the grade of admission in place of that of cadet; and that it is as carefully guarded against by the existing rules for selection as it can well be; that it is equally unwise and impolitic to dispense with that system of previous trial to which candidates for the army are now subjected, by which the incompetent are excluded. If it be dispensed with, persons will be advanced to important posts who can never be distinguished, and who will outrank others of far more capacity to be useful and eminent. The military profession will soon cease to excite the ambition of the aspiring and gifted, the moral force of the army will be diminished, and its physical force may then prove too feeble for its defence against internal or foreign foes.

It is natural to remark, in this connexion, that the same system, in all its essential features, exists in the Navy Department with regard to the admission and education of midshipmen. The regulations of that service prescribe that these young men, who are selected by the Secretary of the Navy, shall spend five years on shipboard, during which period of probation they shall be instructed by the chaplains or schoolmasters; and that they shall pass an examination by a board of officers before they can be candidates for the rank of lieutenants. Here, then, is a body of young men, who are selected by an individual, educated at the public expense, liable to be dismissed if they fail at an examination through incapacity or idleness, and who alone can be advanced to the posts of lieutenants. Is there not obviously the same reason for the charges of exclusiveness and favoritism as there is in the case of cadets? The only difference is, that a ship is the school for the one; the academy at West Point for the other. The consequence of this difference is that the former are less thoroughly and extensively taught than the latter. It cannot surely be that the very perfection of the military institution, and the many advantages it combines and holds out, occasion the objections to it and the efforts that are made to render it unpopular in the country. The impulse of true patriotism would be to extend to the navy similar means of improvement with those enjoyed by the army; to substitute for the mere theoretical teaching in navigation young midshipmen derive from their schoolmasters, and the practical acquaintance with nautical instruments they are obliged to seek from the lieutenants or older midshipmen, a naval school—a school in which they may acquire a "competent knowledge even of the art of ship-building, the higher mathematics, and astronomy; the literature which can place our officers on a level of polished education with the officers of other maritime nations; the knowledge of the laws, municipal and national; the acquaintance with the principles of honor and justice" which constitute the distinction of "the warrior patriot."

The committee are inclined to believe that not a small part of the unfriendly feeling which has been manifested towards the Military Academy is attributable to a vague impression that it is maintained at a heavy and unreasonable expenditure. In refutation of this impression they submit a statement of the expenses of this institution for successive periods:

From 1802 to 1821 the annual cost to the country for each cadet was.....	\$555 50
From 1817 to 1821 it was.....	525 25
From 1823 to 1833 it was.....	421 55

These sums include all the expenditures of every kind; and the statement exhibits the singular fact that the expenditures have sensibly diminished, while the means and advantages for education have increased—a fact which demonstrates the strict observance of a system of rigid economy and supervision. The monthly pay of the cadets, which forms a part of the above amounts, is \$28 20; from this deductions are made, in conformity with the regulations, for boarding, clothing, books, &c.; the balance, which the cadet may receive in cash, seldom exceeds \$4 50 per month. This matter was carefully scrutinized by a sub-committee of the board of visitors in 1824, of which the late Mr. Johnston, of Louisiana, was chairman. And few, probably, will dissent from their conclusion "that while care and prudence will enable a cadet, by the provision made for him, to meet his necessary expenses, nothing but great exactness will produce this result; and the pay and emoluments could not be reduced without very serious injury to the institution."

Remote as is our native land from the military governments of Europe, and distinct as has ever been its policy, it is evident, from the extract which has been copied from the annual message of Washington, in 1796, that these circumstances did not, in his view, justify remissness in preparing for war. The new governments which have sprung up in this hemisphere since that date render this duty of preparation far more obligatory. It is our interest as well as duty to be equally ready with any other nation for active warfare; and we may learn wherein they are superior, and at the same time discover the fallacy of a very common impression that the emergencies of war can be always met by brave men, although undisciplined,

by a brief and rapid notice of the establishments existing in other countries for the education of soldiers and officers.

In 1812 the Duke of York issued a general order for the formation of regimental schools, to be conducted upon military principles, and designed for the instruction of non-commissioned officers. In 1801 a government was appointed for the Royal Military College, which had been then two years in existence, and which was intended for youths upon their entrance into the service, and for officers who had attained to manhood and desired to qualify themselves for staff appointments.*

The first department was to be filled by selections from the following classes:

1. The sons of officers of all ranks, whether of the land or sea service, who had died in the service, leaving their families in pecuniary distress.
2. Sons of all officers of the army above the rank of subalterns, upon payment of annual stipends varying in amount from £30 to £70.
3. Orphan sons of officers who had not left their families in pecuniary distress, upon an annual payment of £125.

The qualifications exacted of those who had been classically educated were, a knowledge of the four elementary rules of arithmetic, with a power of translating Virgil, Cæsar, &c.; and of others was required a knowledge of grammar, orthography, and arithmetic as far as vulgar and decimal fractions. The rank of the members of this department, on leaving the college, was to be regulated by the result of the examination and the merit-rolls of conduct. The course of study prescribed for them in mathematics rose from simple arithmetic, through algebra, geometry, &c., to the conic sections; in fortification, it comprehended the three systems of Vauban, the construction of field-works, and the science of attack and defence; in military drawing, it included the art of copying plans and of delineating the military survey of a country; and in the languages, it embraced the French, German, and Latin. To these were added a miscellaneous course of geography, ancient and modern history, and of natural and experimental philosophy. A commission could be obtained either by proficiency in the whole course of mathematics, fortification, and military drawing, with a tolerable acquaintance with the languages, or by public examination in any three of the branches of Latin, German, French, and general history, supported by certain designated attainments in geometry, drawing, and fortification.

The members of the senior department in this college were required to be twenty-one years of age, to have served three years abroad or four years at home, and to pay for their instruction thirty guineas per annum. Their studies were distinguished from those of the junior department only by being more extensive. The annual charge to the country for the maintenance of this college is \$115,200.

Of the practical school for engineers at Chatham, and the Royal Academy for artillery and engineers at Woolwich, only this cursory mention can be made.

In France the polytechnic school, which has taken the place of the first school for engineers, established at Mézières in 1746, is designed to communicate such theoretical knowledge as is necessary in common to the civil and military engineers, the officers of artillery, the constructors of ships, the engineers of mines, and the topographical engineers. All candidates are admitted who pass a public examination in arithmetic, geometry, algebra, trigonometry, and statics, who have been members of the third Latin class in one of the Lycées, and are able to draw, and to speak and write their native language with purity and correctness. At the expiration of two years the pupils choose the branch of the public service to which they will be attached; they then repair to the school in which the appropriate studies for that branch are pursued, called a school of application.

The schools of application for civil engineers, for the topographical corps, and the engineers of mines, are at Paris. The students in the first witness the construction of public works during the spring and summer: In the winter they make projets of roads, canals, &c., estimates of their cost, and memoirs on the progress of their construction. The students in the second are provided with a large cabinet of minerals, and those in the third with a collection of maps and topographical memoirs. The schools for the military engineers and the students of artillery are at Metz, where they have constantly before them fortifications of great strength and framed with great skill; an arsenal of construction, a foundery, manufactory of powder, and parks of artillery. The term of instruction in each of these schools is two years, at the close of which the pupils are detailed to fill vacancies in the corps for which they have been educated. The number of dismissals within the four years is in the proportion of 37 to 100.

In Hanover, Sweden, Prussia, and Russia, similar establishments for military education exist, and are conducted upon a larger or less extended scale.

If nations, warlike in their temperament and habits, surrounded with fortifications and well furnished repositories of all the implements of war, incur the expense of these primary schools for their soldiers and officers, does not the conviction strike every mind irresistibly that they must be much more essential in a republic like this, whose policy and the pursuits of whose people are pacific; where there are but few fortifications, and where the armories and arsenals contain only the most common instruments of warfare, and where the expense of maintaining these institutions is comparatively unimportant? Who does not perceive, who has not learned from the history of his country, how unequal must be the contest with an enemy led on by officers who have been thus carefully formed for command if the nation have no other defenders than its undisciplined militia? Who would not prefer to sustain a military academy in each State of the Union rather than witness the blood of his brave countrymen fruitlessly shed? The praise of heroic valor will not compensate for the loss of the dead, or the sorrows of their friends who survive, or the humiliation of defeat. It would be legislative cruelty to break up an institution in which officers can be formed who will guide triumphantly our brave citizens to combat upon equal terms with the well-trained troops of a foreign power. And if we would be secure from insult and invasion, we shall cherish this institution as the surest means of being always in such a state of preparation as will deter an enemy from both by requiring him to maintain an army and apparatus too vast and expensive to be long supported.

Our whole army possesses now far more of the public respect and confidence than it did not many years since. It is the great distinction of the academy at West Point that it has contributed largely and effectually to this elevation of the character of the military establishment. And it has accomplished a nobler service by sending forth numbers annually competent to superintend the construction of those chains of internal improvement which are to be the eternal bonds of our national Union. The railroads which connect the capital of Massachusetts with the "heart" of the State and with important harbors in

* Dupin's Military View, vol. 1, p. 52.

Rhode Island and Connecticut; the improved facilities of communication afforded to the whole country by the Susquehanna and Baltimore and Baltimore and Ohio railroads, and the similar construction between Charleston and Hamburg; the new roads which have augmented the wealth of the Territories of Michigan and Arkansas by opening new channels of transportation, and the securities extended to the internal and foreign commerce of the nation by important harbor improvements upon the shores of the lakes and upon the sea-coast—these are some of the enduring memorials of the usefulness of the Military Academy, and of the returns it has made for the care, and time, and money which have been bestowed upon it. Other testimonials and other rewards have been accorded to it by the literary institutions of our land which have invited its graduates to fill important professorships. The president and one of the professors in the College of Louisiana; the president of Hamilton College, and the vice-president and the professor of mathematics in Kenyon College, in Ohio; the professors of mathematics in the College of Geneva and in the University of Nashville; the professors of chemistry in the Universities of Pennsylvania and Virginia have all been members of the academy, and have resigned their commissions in the army upon receiving these honorable appointments; and very recently two second lieutenants have accepted vacant chairs in the University of New York. No words can demonstrate with one-half the force and impressiveness the beneficial influences of the Military Academy upon the characters of its members and upon the national reputation. Within the short period of thirty years this institution, whose own high reputation is now sustained by professors all of whom, with but one exception, have been educated within its walls, has not only furnished to the army gallant and accomplished officers and to the country skilful engineers, but has sent forth principals and professors to ornament and sustain colleges and literary seminaries. To this list of those who have been thus distinguished might be added the name of Ritner, who graduated with a highly respectable rank, in possession of his comrades' affection and confidence, and became the professor of civil and topographical engineering in Washington College, in Pennsylvania, and died at the moment when the prospect of serving his native State dawned upon him, and when his native State began to rejoice in the anticipation of his usefulness and success.

The committee beg leave to remark, in concluding their report, that if to owe its origin to Washington, the father of his country; to have been sustained and fostered by the countenance and support of other framers of our Constitution and their associates in the public service; if to have redeemed and elevated the character of the army and increased the national renown; if to have multiplied and cemented the bonds of union; if to have proved itself clear of having afforded just cause for the imputations of exclusiveness and favoritism; if these circumstances can entitle any institution to the continued liberal aid of the national legislature, the Military Academy at West Point will not be deemed to have perverted the designs of its founders, nor will it be thought that the public interest requires that it should be abolished. The national legislature will still cherish it by a parental and judicious legislation, adapted to render it more perfect and to increase its capacity and facilities for accomplishing in their fullest extent the purposes of its creation.

Resolved, That the committee be discharged from the further consideration of this subject.

23^d CONGRESS.]

No. 583.

[1ST SESSION.]

ON GRANTING SUITABLE TESTIMONIALS TO MAJOR GEORGE CROGHAN, AND THE OFFICERS AND SOLDIERS UNDER HIS COMMAND, FOR THEIR GALLANTRY IN DEFENDING FORT SANDUSKY IN 1813.

COMMUNICATED TO THE SENATE JUNE 18, 1834.

Mr. PRESTON, from the Committee on Military Affairs, to whom was referred a resolution "that the Committee on Military Affairs be instructed to inquire into the expediency of giving suitable testimonials to Major George Croghan, (now a colonel in the army of the United States,) and to the officers and soldiers under his command, for their gallantry and good conduct in defending Fort Sandusky against the attack by the combined forces of British and Indians during the last war;" reported:

That few events during the late war are entitled to more honorable mention than the defence of Fort Stephenson on the 1st and 2d of August, 1813, whether we consider the boldness of the design, the gallantry of the execution, or the important consequences which resulted from its success. The course of the campaign on the northwestern frontier up to that period had thrown the main body of the American army under the immediate command of General Harrison in the rear of Fort Stephenson, and rendered a still further retreat into the interior not improbable. The commanding general, upon assuming his position at Seneca town, left Fort Stephenson under the command of Major Croghan, with orders that if the enemy approached with cannon he should relinquish the post, and fall back upon the main army at Seneca town, where the general had established his headquarters. Fort Stephenson was at that time in a perfectly defenceless state. It was a slight stockade, planked with block-houses, without a ditch or any other exterior defence, to be defended by between 130 and 140 effective men, provided with one six-pounder, having seven charges of powder and a keg of lead, and the ammunition amounting to forty rounds of musket cartridges. Upon receiving the command, Colonel Croghan addressed himself with great assiduity to such preparations as would enable him to withstand an attack; with an insufficient and accidental supply of tools and implements, he surrounded the fort by a ditch, cut down and removed the forest to musket-shot distance from the fort, and made such repairs as were absolutely necessary upon the stockade.

These improvements, pushed on with unceasing diligence and labor, were just completed when intelligence was received at headquarters that the enemy had raised the siege of Fort Meigs, and that General Proctor, at the head of his British and Indian forces, and provided with cannon and howitzers, was approaching the American stations on Sandusky. This state of things seemed to make the contingency upon which Fort Stephenson was to be abandoned, and accordingly an order from the commander-in-chief was sent to Colonel Croghan directing him to fall back upon Seneca town. Upon consultation with his officers, Colonel Croghan came to the conclusion that the fort could be held out, and that it was proper to make the effort, notwithstanding the orders. Whereupon the commanding general superseded him, and ordered him to headquarters; while there the commanding general became satisfied of the propriety of Colonel Croghan's course so far that he was permitted to resume his command at the fort. Soon after his return the enemy assembled, and made the usual formal summons to surrender, and the flag-officer received the usual defiance. This conference being finished, the British forthwith commenced the attack. A cannonade was opened from the gunboats and from some pieces stationed on the shore, and the firing was continued with but little cessation for nearly forty hours. The smallness of the force in the fort rendered a sortie impracticable, and the scarceness of ammunition prevented a return of the enemy's fire during this period. There is perhaps no higher test of gallantry than this sustained inactivity under an attack. At length, about six o'clock on the evening of the 2d of August, the welcome sound of a bugle gave notice to the besieged that the British were preparing for the assault, and they were seen advancing in several columns under cover of a fire from their artillery. The first attempt was made upon the north-east front of the fort defended by Lieutenant Johnston, to whose assistance Ensign Duncan promptly hastened, and by their united efforts the enemy's column, led on by Lieutenant Colonel Short, was repulsed with loss. He, however, with great gallantry, recovered the assault on the northwestern angle defended by Lieutenant Meek and Ensign Ship. These officers, in obedience to the earnest injunctions of Colonel Croghan, reserved their fire until the enemy approached within thirty feet, and then poured it upon him with deadly aim; for a moment he recoiled, but recovering himself with a gallant effort, he threw himself into the ditch. The six-pounder had been placed in a position to rake the ditch, masked, and heavily charged with slugs beaten out of the pig of lead. It was under the command of Sergeant Weaver, and manned by five or six Pittsburg and Petersburg volunteers. At the instant that the ditch was filled with the enemy this piece was discharged upon them, and, raking its whole extent with leaden slugs, effected the most fatal slaughter; a second discharge of this piece, accompanied with a fire of musketry, crowded the ditch with killed and wounded, and rendered further contest hopeless. In the meantime, Lieutenant Colonel Warburton, who, at the head of a large party of the enemy, had made a circuit around the fort, attacked it with great spirit on the southeast front. He was repelled by the gallantry of Lieutenant Baylor, assisted by Ensign Duncan, to whom had been assigned the duty, most gallantly discharged by him, of affording relief at every point which might be hard pressed. Their united efforts drove back Colonel Warburton and his two hundred troops in confusion at the moment that the second discharge of the six-pounder had so fatally terminated the assault on the other side of the fort. Any further attempt upon it was manifestly hopeless, and the British general drew off his forces, leaving behind him near one hundred white men killed and wounded. Amongst the killed was Lieutenant Colonel Short, and six other officers. The number of regular troops brought to the attack of Fort Stephenson was about five hundred. It is more difficult to estimate the Indian force, the British and American accounts varying their number from two hundred to several thousand. That their numbers must have been very considerable appears from the fact that the enterprise was undertaken in obedience to their wishes, General Proctor having been compelled, contrary to his own judgment, to indulge their desire of taking the scalps and plunder at Sandusky; and, during the conference, the British flag-officer assured Ensign Ship that the Indian force was so large that, in the event of the capture of the fort, they would be beyond the control of the British regulars. It appears, therefore, that about one hundred and thirty effective men, under Colonel Croghan, successfully defended a slight stockade fort, badly provided with ammunition, against more than three times the number of British regulars, with a multitude of Indians amply provided with all the materiel of an army. In such an achievement it is obvious that all to whom the defence of the fort was intrusted were called upon for their utmost exertions; and accordingly, with a single exception, both officers and men displayed throughout the highest gallantry. The conduct of Lieutenants Johnston, Meeks, Baylor, Ensigns Duncan and Ship, was such as to elicit the warmest encomiums from their gallant commander. By the successful defence of Fort Stephenson the plan and purposes of the British campaign were wholly frustrated. General Proctor, with a reinforcement of all the effective strength of the 41st regiment, and a vast accession of Indian force, had left Sandwich, on the 20th July, with high and not unreasonable hopes of destroying the American establishments and stores upon the lake, so as to obtain complete command of it. His main objects were the possession of the supplies at Cleveland and the destruction of the naval preparations at Erie, the successful accomplishment of which would have lost to our country the glory and advantage of Perry's victory. The Baron de Rothenburg, writing to General Proctor, says, in reference to the affair at Sandusky, "I sincerely lament that you have been compelled by your Indian force to undertake an expedition contrary to your own judgment, and, ultimately, with inadequate numbers, the result of which has been so disastrous." The possession, too, by the enemy, of the southern shore of the lake would have exposed our northwestern frontier to the usual calamities of Indian excursions.

Nor is it at all improbable that, in the event of the fall of Sandusky, the army under General Harrison would have been under the necessity of falling back upon the interior, pressed by superior numbers, and compelled to maintain a defensive position, instead of being able to push on in that brilliant career which was terminated by the battle of the Thames. These results, to be sure, are but conjectural; they are, however, certainly not improbable.

The committee, upon a view of the whole matter, have come to the conclusion that, whether we consider the bold and hazardous responsibility assumed in the defence of the fort, the courage and good conduct which rendered that defence successful, or its important results, either in evil avoided or good attained, those who participated in it deserve the gratitude of their country and some testimonial from Congress.

23D CONGRESS.]

No. 584.

[1st Session.]

ON AN APPLICATION FOR THE ERECTION OF A MONUMENT TO THE MEMORY OF CAPTAIN NATHAN HALE, OF THE REVOLUTION.

COMMUNICATED TO THE SENATE JUNE 27, 1834.

Mr. BENTON, from the Committee on Military Affairs, to whom was referred the memorial of sundry inhabitants of Coventry, in the county of Tolland, in the State of Connecticut, praying that a monument may be erected to the memory of Captain Nathan Hale, reported:

That they have duly examined and considered the memorial referred to them, and from the facts therein set forth, aided by historical records and traditionary details, they are fully and clearly of opinion that Captain Hale is justly entitled to the grateful recollection of his country, and to any reward or memorial which has ever been conferred under the like circumstances.

The perilous service in which Captain Hale risked and lost his life was one which he accepted from patriotic motives alone, and in compliance with the wish and request of General Washington. No mercenary consideration mingled with or alloyed in the slightest degree the generous and noble feeling by which he was actuated. If, after having so successfully accomplished the object of his enterprise, he had escaped the personal danger to himself, and returned in safety to the camp of the American army, there can be no doubt but that he would have received the high reward most acceptable to his feelings and principles, that of public approbation and promotion in the line of his profession. If now alive, he would be entitled to a place on the list of revolutionary pensioners; but death—a death more painful to the feelings of a gallant soldier, from its manner, than mere loss of life could ever be—cut him off from all these advantages at the very moment of the successful completion of his enterprise; and, in the long course of half a century which has since elapsed, no evidence of national gratitude or of national recollection has been extended to his memory.

The committee fully appreciate the laudable motives and feelings which have impelled the memorialists to ask of Congress the erection of a monument in honor of Captain Hale; but they are not aware that a mark of national respect, of that kind, has been heretofore conferred under the like circumstances, and, for the present, forbear to recommend it, and submit the following resolution:

Resolved, That the memorial aforesaid, and this report, be printed, and that the committee be discharged from the further consideration thereof.

MEMORIAL OF SUNDRY INHABITANTS OF COVENTRY, TOLLAND COUNTY, CONNECTICUT, PRAYING THAT A MONUMENT MAY BE ERECTED TO THE MEMORY OF CAPTAIN NATHAN HALE.

To the honorable the Senate and House of Representatives of the United States in Congress assembled:

The memorial of sundry inhabitants of the town of Coventry, in Tolland county, State of Connecticut, respectfully sheweth: That Captain Nathan Hale, an inhabitant of said town of Coventry, at the age of twenty, was among the first to rally around the standard of his country in the year 1775. With the troops from Connecticut he marched to Boston, and soon received a captain's commission in the regiment commanded by Colonel Webb. After the American army retreated from Long Island in the following year, General Washington, being desirous of obtaining accurate information as to the situation and designs of the British force, designated Captain Hale for that service. It was a field in which no laurels could be won, but it was a post of danger, and Hale readily accepted it.

He left Harlem heights, and had to proceed to Norwalk before he could procure a passage across the sound. There he left his only companion and his uniform, assumed the garb of a private citizen, and the character of a schoolmaster. On his arrival on Long island he found that the British army had gone to New York. He followed them, and had almost completed his mission, and had nearly reached his quarters, when he was stopped by the picket guard of the enemy between the lines of the two armies. He was soon recognized by one of his former friends and relations, who basely betrayed him. He was immediately hung as a spy, and a flag was sent to our lines to proclaim the fact.

Thus fell Captain Nathan Hale at the age of twenty-one years, lamenting that he had but one life to lose for his country.

We cannot but compare his character and fate with that of Major Andre. Both were young, both well educated and highly accomplished, both enjoying the confidence of their commander, both selected for a most important but dangerous expedition, although Hale was not to contaminate himself with a traitor; both had executed their missions, and had nearly arrived at their respective quarters, both were executed as spies, and both died like heroes.

But here the parallel ends. The one was tried by a court-martial composed of men as brave as himself; their sentence was carefully reviewed and solemnly sanctioned by the commander-in-chief. The other was executed almost instantaneously by an order from the British general. The one was surrounded by sympathizing foes, who did all that duty would permit to alleviate the sufferings of the unhappy prisoner, and bore a willing testimony to the courage with which he met his doom. The other was not permitted to inform his friends of his fate, and communicate to them his last requests. It is said his keepers were not willing it should be known how bravely a rebel could die; and even the consolations of religion were denied him, and he was refused the attendance of the chaplain. And since their deaths, how different is the space they occupy in public view! The name of Andre has been celebrated by the poet and the historian on both sides of the ocean. Locks of his hair are preserved as relics even in our own country. Pilgrimages have been made to his grave, and, at last, his bones have been transported across the Atlantic to his native land, where, it is said, a proud monument has been erected to his memory, and his family have received pensions from their government. But the name of Hale is almost as unknown as the place of

his interment; and when a few remaining friends have passed away, it is to be feared that his services, as well as his name, will be forgotten.

His immediate connexions, who best knew his worth and most mourned his loss, believing that he died a Christian patriot, have not called upon his country to notice his loss, nor do they now. They content themselves with the assurance that his reward is in heaven, and his record is on high. But his neighbors and fellow-citizens, seeing the bounty of the country so liberally bestowed upon the survivors of the revolutionary army, can no longer forbear to present these facts to the consideration of the representatives of the people, with the hope that the services and sufferings of this youthful martyr to liberty may be thought worthy the attention of the legislature.

And they would respectfully suggest whether a plain monument, erected near the sepulchre of his father, in the place of his nativity, commemorative of his services and of his country's gratitude, would not be a tribute due to his memory. This they ask, or that your honorable body would, in some other way, show that this republic is not insensible to the value of the sacrifice made by this devoted youth.

All which is respectfully submitted.

COVENTRY, *December 17, 1833.*

23D CONGRESS.]

No. 585.

[2D SESSION.]

ANNUAL REPORT OF THE SECRETARY OF WAR, SHOWING THE CONDITION OF THAT DEPARTMENT IN 1834.

COMMUNICATED TO CONGRESS, WITH THE PRESIDENT'S ANNUAL MESSAGE, DECEMBER 2, 1834.

WAR DEPARTMENT, *November 27, 1834.*

SIR: The annual period for submitting to you a statement of the proceedings of this department having arrived, I have the honor, in conformity with your instructions, to lay before you an abstract of its operations, together with the reports and estimates from the various bureaus, exhibiting the condition of those branches of the public service connected with its administration.

Since my last annual report no military movement of any importance, with the exception of the expedition of the regiment of dragoons, has been rendered necessary. The reports and information which have reached the department respecting the situation of the army are highly gratifying. In its discipline, its moral character, and the general performance of its duties, the government and the country have every reason to be satisfied with its condition and prospects. As a safeguard for the frontiers, as a school of practical instruction, as a depository of military information, and as the means of preparing and providing in peace for the exigencies of war, the present military establishment has fully answered the objects of its organization and support. And it is but an act of justice to state that in all the essential requisites of capacity and conduct the officers of the American army do honor to themselves and their country.

It is known to you that some of the western tribes of Indians, roaming through the extensive prairies west of Arkansas and Missouri, particularly the Comanches and Kiowas, have, for some years, interrupted the peace of that quarter by predatory attacks upon our citizens, and upon the indigenous and emigrant Indians, whom we are under obligations to protect. Their war parties have annoyed our citizens in their intercourse with the Mexican States, and have rendered the communication difficult and hazardous. It became necessary to put a stop to this state of things, either by amicable representations or by force. Those remote tribes have little knowledge of the strength of the United States, or of their own relative weakness; and it was hoped that the display of a respectable military force, for the first time in their country, would satisfy them that further hostilities would lead to their destruction. The dragoons, being peculiarly adapted to this service, were ordered to penetrate into that region, and to endeavor by peaceable remonstrances to establish permanent tranquillity; and, if these should fail, to repel any hostile demonstrations which might be made. Fortunately the efforts to introduce amicable relations were successful, and the object of the expedition was obtained without a single act of hostility. Colonel Dodge, who led the expedition, and his whole command appear to have performed their duties in the most satisfactory manner, and they encountered with firmness the privations incident to the harassing service upon which they were ordered. It is to be regretted that the prevalence of sickness prevented the whole regiment from joining in this duty, as the same zeal for the public interest pervaded the whole. That sickness deprived the country of some valuable lives, and among others of Brigadier General Leavenworth. Impelled by his anxiety to forward the views of the government, he exposed himself, while yet weak, to the hardships of a border campaign, and sunk under the malady which these induced. His high personal character, his services during the late war, and his exemplary official conduct since, are too well known to you to require from me anything more than this brief allusion to his worth and fate.

Among the accompanying documents will be found a full statement of the proceedings of Colonel Dodge, and of the satisfactory result of his expedition.

The report of the chief engineer contains a summary of the various objects intrusted to his supervision, and of their progress and condition. It will be seen that the Cumberland road, east of Wheeling, will be soon completed in the manner required by an act of last session, and for the amount allowed by law. No further appropriations will be asked for. As much progress has been made in the other works as the advanced state of the season when the appropriations were made would permit.

I beg leave to ask your particular attention to that part of the report of the chief engineer which recommends an addition to the number of officers of his corps. I believe the public service requires this measure. New duties have recently been imposed upon the engineer corps by express acts of Congress, while in other cases it has been found necessary, by Executive regulation, to require from the officers services not originally contemplated in the organization of the department. The erection of

fortifications, the construction of roads, the establishment of fixed points by astronomical observations in boundary lines, and the improvement of harbors and rivers, are among the objects committed to the engineer officers. And I feel bound to report to you that, as far as my observation or information has extended, their duties have been performed in the most satisfactory and exemplary manner. In scientific acquirements and in their practical application these officers are deserving of high commendation, and it is very desirable that their numbers should be so far augmented as to insure their personal attention to all the objects within the control of the Engineer department. This cannot now be done, and the public service suffers in consequence of it.

Similar reasons call for a reorganization of the topographical corps, and the officer at the head of it has submitted a *projet* for this purpose, which, while it will render that corps more efficient, will not increase the public expense. I ask for it your favorable consideration. The duties connected with this branch of the service require peculiar attainments and great practical experience. They can best be performed by officers devoting their whole time and attention to the subject. A system of detail requiring periodical changes, however proper it may be with relation to a just routine of military duties, so long as temporary assistants are selected from, and continued in, the line of the army, it is still not calculated to insure the best execution of the functions appropriately belonging to the topographical engineers. The remedy would be to remodel the corps, and permanently to attach to it as many officers as may be necessary; and, by consolidating with it the civil engineers, the general operations would be simplified, and the duties of the corps might embrace all the objects connected with surveys for civil or military purposes. There is in this corps a fund of experience and information which cannot but be useful to the country.

It will be seen, by adverting to the report of the officer in charge of the Topographical bureau, that difficulties have occurred in the execution of the joint resolution of Congress, passed at the last session, and providing for the construction of a railroad through the public grounds at Harper's Ferry. Some modification will be necessary before the object of Congress and of the company can be attained, and this may probably be effected by requiring the latter to pay the value of any improvements injured by the road, or by giving authority to replace them in other positions, should they be deemed of sufficient importance to require being paid for or removed.

The present condition of the work at the Delaware breakwater is shown in the report of the quartermaster general, and in that of the commission lately instituted by your orders to examine it. It has been known for some time that gradual depositions were making in the vicinity of this work by which the depth of water was somewhat reduced; but until this season the process was so slow and uncertain that no anxiety was felt with respect to its final effect upon this great national improvement. Recently, however, the accumulation of sand in the artificial harbor has been much more rapid, and indicated the necessity of a thorough examination by scientific persons in order to ascertain, if possible, the causes of this occurrence and to check or obviate them. The views of the officers selected for this purpose will be found in their report, and, agreeably to your directions, they have been adopted by the department. An estimate for one hundred thousand dollars, to be applied to this work, is among the annual estimates of the department, and, if approved by Congress, that sum will be appropriated in the manner pointed out by the report, to the completion of that part of the work already begun, and yet unfinished. In the meantime, by a series of observations frequently and carefully taken, the probable operation of the tides and currents may be ascertained and the best remedy to counteract them pointed out.

The act of March 2, 1829, "to continue the present mode of supplying the army of the United States," expires by its own limitation on the 2d of March next. The Subsistence department, which was continued by this act, has been found highly useful to the army and beneficial to the public by the efficiency and economy of its administration. From my own knowledge of its officers and operations, as well as from what I have otherwise learned of these, I feel called upon to present this subject particularly to your attention, satisfied that the continuance of the department is demanded by the best interest of the service.

The reports of the major general and of the other heads of bureaus will communicate all the necessary information in relation to subjects respectively committed to them. I am not aware that there is any particular matter requiring your special attention. These reports are satisfactory in the views they exhibit of the course of administration, and of the reduced expenditures which are required for the service of the coming year.

At the last session of Congress so much of the laws as authorizes the conferring of brevets for ten years' service in one grade was repealed, and the nominations of all officers who had completed that term prior to the repeal was confirmed. This change seems to bear with some severity upon those who had served during the greater portion, but not the whole of such term. The existing laws and the practice under them held out to all officers as an inducement to good conduct the prospect of promotion after ten years' faithful services in one grade. In military life the hope of professional distinction is essential to a high and honorable discharge of the duties to which its members are devoted. If this is destroyed or neglected, little more than a mechanical execution of these duties can be expected. In our army this sentiment is as dear and as much cherished as in any other, and if not the cause, it is certainly the accompaniment of zealous devotion to the public interest. All the officers who, before the repeal of this law, had entered upon what may be termed their probation, expected, and had a right to expect, that if, at its termination, they should have complied with the condition by faithful service, the reward held out would be granted to them. I venture respectfully to suggest whether justice does not require such a modification of this law as to authorize the granting of brevets to every one whose term of ten years had commenced before its repeal at the end of such term, if the conditions of the law shall be fulfilled. This would insure the ultimate abolition of the practice which Congress had in view, while it would seem to be giving due weight to claims founded, if not in right, certainly in strong considerations connected with the services and situation of the officers. This valuable class of the community is exposed to every vicissitude incident to climate and situation, and the pecuniary consideration they receive is barely sufficient to enable them to meet the demands to which they are liable.

Disclosures have been made during the past season showing the necessity of a thorough investigation into the operation of the laws granting pensions and gratuities for military services. It is ascertained that many frauds have been committed—some in the application for pensions, and others in the continuance of these payments. As these disclosures have been the result of accident; it is impossible to judge to what extent frauds may have been committed; but enough has occurred to satisfy me that some new mode of proceeding is essentially necessary to detect and check these abuses.

In the administration of the laws on this subject, the parties are required to make certain declarations before the judicial tribunals, and the opinions of these tribunals are requested in order to determine the

validity of the application. In the administrative examination of the papers submitted in support of a claim, if the name of the applicant is found upon the recorded muster-rolls, and his identity is established by his own declaration and the proper certificates, the pension is granted as a matter of course. In far the greater number of cases, however, no muster-rolls of the corps exist, and frequently where they do exist they are defective, and a resort to other testimony in the examination of the claim becomes, therefore, necessary. Here a more detailed statement of services is required from the party, combining the various circumstances connected with such duty, best calculated to enable the proper examining officers to compare the statement with the records of the office, and with other facts known to them, and thus to assist in detecting frauds, if any exist. In addition to this, a certificate of two respectable persons, acquainted with the party, is made necessary, stating his age, and the opinion in the neighborhood where he resides that he is a soldier of the revolution, and their concurrence therein; and to this must be added the certificate and opinion of the proper court upon the whole matter.

Besides this course of proceeding, which is applicable more particularly to the militia claimants, very few muster-rolls of which remain, the testimony of two persons actually acquainted with the services of the applicant is necessary, wherever he served in the regular army, and his name is not to be found on a muster-roll, as, in that case, evidence is necessary to rebut the presumption against him.

This system was adopted upon great consideration, and it is difficult to see how the law can be administered if further requisites are demanded. But experience has shown that the prescribed certificates are sometimes granted without due caution, and that persons desirous of converting the provisions of the law to their own benefit have been enabled to procure official attestations, and even the seal of the court, under circumstances calculated to weaken, if not to destroy, the public confidence in these safeguards. Seals have likewise been taken from useless attestations and affixed to others, and direct forgeries have been committed in the preparation of the whole papers. And these proceedings have been resorted to not only to establish the original claim by placing the applicant upon the roll, but also to establish his right to each semi-annual payment by proving his identity. It is obvious that a system depending for its correctness upon the conduct of such a variety of persons and officers not responsible to the general government, and where, frequently, a natural sympathy for the claims for the time and war-worn veterans would lead to much practical relaxation, must be liable to abuse; although till very recently the extent to which such abuses may have gone was not suspected. Some plan is now necessary by which a re-examination may be made—a plan which, while it insures to the honest and gallant survivors of the revolution all that they expect, and all that the country has provided, shall at the same time lay open the frauds which have been committed, and prevent their occurrence hereafter.

In the report of the Commissioner of Pensions his views upon the subject are given, which appear to me practical and judicious, and, as such, I ask for them your favorable recommendation to Congress. An examination at the residence, or in the neighborhood of each person now drawing a pension, into the circumstances of his case, appears to me to present the only effectual means of accomplishing the desired object. Undertaken by proper persons and conducted with proper discretion, it could scarcely fail to confirm the grants made to honest applicants, and to detect those which have been fraudulently obtained by dishonest ones. It appears to me that the expense of such a measure ought not to delay its immediate adoption. It is impossible even to conjecture the amount of surreptitious claims; it may be far greater than the data now before the office enable us to estimate. And possibly conjecture and recent disclosures may have led to the suspicion that the ramifications of the system have been more extended and the abuses greater than a rigid inquiry may confirm. In the one case the beneficial result would be the relief of the treasury from fraudulent payments and the punishment of those concerned in them; and, in the other, it would be satisfactory to know that, while the bounty of the government has been justly appropriated, it has not been improperly applied.

The provision of law for the establishment of a pension office as a branch of this department expires by its own limitation at the end of the present session of Congress. It is essential to a due execution of the duties connected with the system of pensions and gratuities for military services that this arrangement should be renewed and continued. The applicants and grantees are so numerous, the aggregate amount disbursed so great, equalling at least three million two hundred thousand dollars annually, and the doubtful questions, both of fact and principle, so frequent and complicated, that unless a branch of administration, carefully superintended, is devoted exclusively to this service, the public interest must materially suffer.

The Commissioner of Indian Affairs has exhibited, in detail, the transactions in the important branch of the public service confided to his superintendence. It is only necessary that I should advert to the more prominent subjects which have received, or which require the action of the government.

The commission for the adjustment of unsettled relations with the Indians west of the Mississippi terminated, by the provisions of the act instituting it, in July last. Important benefits have resulted from the labors of the commissioners in the adjustment of difficult questions connected with the Indians of that region, and in the treaty arrangements which have been entered into by them. The country assigned for the permanent residence of the eastern Indians has been so apportioned among them that little difficulty is anticipated from conflicting claims or from doubtful boundaries, and both in quality and extent there can be no doubt but that the region allotted to them will be amply sufficient for their comfortable subsistence during an indefinite period of time.

An important council has been held at Fort Gibson by Colonel Dodge and by Major Armstrong, the superintendent of Indian affairs, with the chiefs of several of the tribes of that quarter, including some of the wandering bands, whose predatory operations have heretofore kept the frontier in alarm. At this council the situation of the Indians was fully discussed and amicable relations established. It is to be hoped that the feelings with which they separated will be permanent, and their intercourse hereafter uninterrupted.

The united tribe of Pottawatomies, Ottawas, and Chippewas, possessing the country in the vicinity of Chicago, have conditionally acceded to the alteration proposed in the boundaries of the tract assigned for them west of the Mississippi, by the treaty concluded in 1833. Should their proposition be accepted, an extensive and valuable region will be opened for settlement, and they will be removed to a district whose climate is suitable to their habits, and whose other advantages cannot fail to offer them strong inducements for moral and physical improvements.

An arrangement has been made with the Miamies for the cession of a part of their reservation in the State of Indiana. The tracts held by them are far more extensive than they require; and as they appear to be not yet prepared for removal, this relinquishment, without injuring them, will relieve the State, in

some measure, from the embarrassment caused by such large reservations as they possess, embracing a most valuable part of the country, and interrupting the settlements and communication.

Instructions were given, immediately after the last session of Congress, for purchasing from the Wyandots in Ohio, if they were disposed to sell, the reservation secured to them in that State, and for their removal to the west. The commissioner, Governor Lucas, conducted the negotiation with great fairness and propriety, fully explaining to the Indians their own position, the wishes of the government, and the course of circumstances urging their removal. The matter is not yet terminated, the Indians having requested time for further consideration.

The necessary appropriations will be asked for the removal of the Seminoles, agreeably to the treaty formed with them; and arrangements have been made for the emigration of the Creeks as fast as they are prepared for a change of residence. There has not yet been sufficient time to ascertain the result of these measures.

I am not able to submit to you any more favorable views of the condition of the Cherokees than were embraced in my last annual report. While every dictate of prudence, and, in fact, of self-preservation, urges their removal, unhappy councils and internal divisions prevent the adoption of that course. Where they are, they are declining, and must decline, while that portion of the tribe which is established in the west is realizing the benefits which were expected to result from a change of position. The system of removal, however, by enrolment, is going on, and during this season about one thousand persons have passed to the west.

The treaty concluded the 24th of May last with the Chickasaws has altered the relations in which they were placed with the United States. The proceeds derivable from a portion of their present possessions have been assigned to them, and reservations have also been provided for such as choose to become citizens of the United States. Their future condition now depends upon their own views and experience, as they have a right to remain or remove, in conformity with their own judgment. The means placed at their disposal are fully adequate to their permanent comfortable establishment, and it is to be sincerely hoped that they will apply them wisely.

The acts of the last session of Congress on the subject of Indian affairs have introduced important changes into those relations. Many of the provisions of former laws had become inappropriate or inadequate, and not suited to the changes which time and circumstances had made. In the act regulating the intercourse with the various tribes, the principles of intercommunication with them are laid down, and the necessary details provided. In that for the reorganization of the department, the number of officers employed has been much reduced, and the current expenses diminished.

Any changes which experience may show to be necessary in these acts can from time to time be provided, until they shall become fully adapted to the situation and condition of the Indians, and to the intercourse, both commercial and political, which ought to exist between them and our government and citizens. The system of removal has changed essentially the prospects of the emigrants, and has imposed new obligations upon the United States. A vast tract of country, containing much more than one hundred millions of acres, has been set apart for the permanent residence of these Indians, and already about thirty thousand have been removed to it. The government is under treaty stipulations to remove nearly fifty thousand others to the same region, including the Illinois and Lake Michigan Indians, with whom a conditional arrangement has been made. This extensive district, embracing a great variety of soil and climate, has been divided among the several tribes, and definite boundaries assigned to each. They will there be brought into juxtaposition with one another, and also into contact, and possibly into collision, with the native tribes of that country; and it seems highly desirable that some plan should be adopted for the regulation of the intercourse among these divided communities, and for the exercise of a general power of supervision over them, so far as these objects can be effected consistently with the power of Congress, and with the various treaty stipulations existing with them. It is difficult, indeed, to conceive how peace can be preserved, and the guarantee of protection held out to the eastern Indians fulfilled without some legislative provision upon this subject.

It will be seen, by adverting to the estimates, that the ordinary expenditures of the Indian department have been reduced to the sum of fifty-nine thousand eight hundred dollars, a material diminution, which the provisions of the law of the last session, organizing that department, has rendered practicable, and which brings down its expenditures to a sum less by one-half than the average annual amount for some years past. The appropriations for annuities, being fixed and depending upon treaty stipulations, cannot be reduced by administration.

The resolution of the Senate of December 23, 1833, requiring the correspondence of the Indian department, together with a detailed statement of expenditures for some years past, has been complied with. These documents will enable Congress to judge of the operations of this branch of the public service, both in its administrative and fiscal concerns.

I have the honor to be, with great respect, your obedient servant,

LEWIS CASS.

The PRESIDENT of the *United States*.

List of documents accompanying the report of the Secretary of War.

- No. 1. Major general commanding the army. Report and documents A to G, &c.
- No. 2. Quartermaster general. Report and statement A.
- No. 3. Chief engineer. Report with documents, and report from the visitors of the Military Academy.
- No. 4. Chief of the Topographical bureau. Report.
- No. 5. Paymaster general. Report and document A.
- No. 6. Commissary general of subsistence. Report and statement.
- No. 7. Chief of Ordnance department. Report and documents A to H.
- No. 8. Surgeon general. Report.
- No. 9. Commissary general of purchases. Report and documents No. 1 to No. 6.
- No. 10. Clothing bureau. Report.
- No. 11. Commissioner of Indian Affairs. Report and documents A, B, C, D.
- No. 12. Commissioner of Pensions. Report and documents A to H.
- No. 13. Bounty Land office. Report.
- No. 14. Second Auditor. Report and documents A, B.
- No. 15. Third Auditor. Report and documents A, B.
- No. 16. Tabular statement of the War Department.

No. 1.—REPORT OF THE MAJOR GENERAL OF THE ARMY.

HEADQUARTERS OF THE ARMY, *Washington, November 28, 1834.*

SIR: In compliance with the instructions contained in your letter of the 15th August, I have the honor to submit herewith the under-mentioned statements and returns:

1. A statement showing the organization of the army, marked A.
2. A return of the actual state of the army, marked B.
3. A return exhibiting the strength of the eastern department, designating the posts and garrisons, marked C.
4. A return exhibiting the strength of the western department, designating the posts and garrisons, marked D.
5. A statement showing the number of recruits enlisted in the army from the 1st of January to the 30th of September, 1834, marked E.
6. An estimate of the funds required for the recruiting service for the year 1835, marked F.
7. An estimate of the contingent expenses of the headquarters of the army, including those of the office of the Adjutant General, for the year 1835, marked G.

By these returns it will be perceived that the several corps of the army are kept to their establishment, as nearly as practicable, without exceeding the numerical force authorized by law.

Since my last annual report the five companies of the regiment of dragoons which remained to be raised, have been recruited; and, after having been organized at Jefferson Barracks, they took up their march to Fort Gibson, where the headquarters of the regiment were established, preparatory to entering the Indian country, in conformity to your instructions.

In consequence of the lateness of the arrival of these companies at Fort Gibson, and a variety of unforeseen difficulties in obtaining the proper arms and equipments for the regiment, the movement to the west was delayed until the 15th of June.

In the meantime, General Leavenworth, who had been appointed to the command of the troops on the western frontier, south of the northern boundary of the State of Missouri, detached one company of that regiment as an escort to the caravan of traders to Santa Fé, in Mexico. He also employed detachments of the 3d and 7th regiments of infantry in opening roads between the posts on the Arkansas and Red rivers, and in establishing new posts beyond the settlements of the emigrated Indians, for the purpose of facilitating the movements of the expedition, and covering the country occupied by those Indians, in the event of a failure to secure a friendly intercourse with the wild tribes inhabiting the country beyond them.

These arrangements having been made, the expedition, consisting of nine companies, under Colonel Dodge, was put in motion, accompanied by a deputation from the several tribes of friendly Indians to act as guides and interpreters, and to aid in bringing about a general good understanding between the several nations; and in order that the friendly intercourse might be further promoted, two Indian girls, the one a Pawnee and the other a Kiowa, who had been captured by the Osages, also accompanied the expedition for the purpose of being delivered to their friends.

Owing to the sickness which prevailed among the troops the command, on reaching the river Washita, about one hundred and eighty miles west of Fort Gibson, was so much reduced as to render a reorganization of the companies necessary. Colonel Dodge, accordingly, out of the effective force formed six companies, each forty-two strong, and, under instructions from General Leavenworth, continued his march to the Pawnee village, situated on a branch of the Red river. Here Colonel Dodge held a council with the Comanches, the Pawnees (or Toyaslas,) the Kiowas, and the deputation of Indians which accompanied him, amounting in all to about two thousand persons. He explained the object of the expedition and was instrumental in bringing about a friendly intercourse between several hostile tribes. He also obtained the surrender of the son of a Mr. Martin, an American citizen, who had been murdered by the Indians, and of a black boy captured by them. A more particular account of the interview between Colonel Dodge and the assembled tribes will be found in the journal of the expedition annexed to this report.

After delivering the two Indian girls to their parents, Colonel Dodge, accompanied by several of the chiefs of the Comanches, Pawnees, and Kiowas, returned with his command to Fort Gibson, whence the regiment proceeded to take up the positions previously fixed on. Four companies under Colonel Dodge marched to Fort Leavenworth, on the Missouri; three companies, under Lieutenant Colonel Kearney, to the Des Moines; and three, under Major Mason, to a point on the Arkansas about eighty miles above Fort Gibson. These companies have arrived at their destinations and are engaged in preparing their winter quarters.

The reports of the inspectors general as to the condition of the army are highly favorable. The dispersed state of the troops prevents any great improvement in extended evolutions; but the police and administration are, in every respect, creditable to the officers in command. The character of the soldiery is evidently improving. The law for bettering the condition of the rank and file seems to have already produced the most beneficial results. The vice of drunkenness has diminished, and with it desertion and other crimes; while at the same time better men enlist.

The services performed by the officers of the line are diversified and extensive. Besides the duties in camp and quarters, they furnish assistance to the various branches of the staff and the Military Academy, in all of which the number of officers authorized by law is insufficient for the performance of the multiplied duties imposed on them beyond their ordinary service. The number of officers detached from regimental duty amounts to one hundred and twenty-two. The corps of engineers, and the topographical engineers, as well as the Ordnance department, are insufficient, according to their present strength, to accomplish all that is required of them. The duties of these officers are daily becoming more extensive, and to enable them to execute these duties, details, to a great extent, are constantly made from the line. The effect of diverting so many officers from their appropriate functions is to derange the regular routine of duty, to disorganize the service in the line, and frequently to leave companies with only one officer. In addition to which, the officers who are thus employed are too apt to lose their *esprit du corps*, and to return to their duties in the line with a distaste for them.

I would, therefore, respectfully suggest that great economy and much good would result to the service, if the requisite number of officers for the engineers, topographical engineers, ordnance department, and the Military Academy, were permanently detached from the line and made members of those several branches. These branches might be so organized by law as to give from the line of the army to the engineers six 1st and six 2d lieutenants, and to the topographical engineers, the ordnance, and the Military Academy, each, ten 1st and ten 2d lieutenants, making in all seventy-two officers; these officers to be taken from the line of the army, so as to leave one 1st and one 2d lieutenant with each company.

Respectfully submitted.

ALEX. MACOMB, *Major General, Commanding the Army.*

Hon. the SECRETARY OF WAR.

A.

Organization of the army of the United States, 1834.

	Major general.	Brigadier general.	Adjutant general.	Inspectors general.	Quartermaster general.	Quartermasters.	Commissary general of subsistence.	Commissaries.	Surgeon general.	Surgeons.	Assistant surgeons.	Paymaster general.	Paymasters.	Commissary general of purchases.	Military storekeepers.	Colonels.	Lieutenant colonels.	Majors.	Adjutants.	Captains.	First lieutenants.	Second lieutenants.	Sergeant majors.	Quartermaster sergeants.	Sergents.	Corporals.	Principal musicians.	Chief buglers.	Buglers.	Musicians.	Farrers and blacksmiths.	Artificers.	Enlisted men for ordnance.	Privates.	Total commissioned.	Total non-commissioned officers, musicians, artificers, and privates.	Aggregate.
General staff.....	1	2	1	2	1	4	1	2																										14	14	14	
Medical department.....									1	12	55																								68	68	68
Pay department.....												1	14																						15	15	15
Purchasing department.....														1	2																			3	3	3	
Corps of engineers.....																1	1	2		6	6	6												22	22	22	
Topographical engineers.....																		6		4														10	10	10	
Ordnance department.....																1	1	2		10					44							250	14	294	308		
Regiment of dragoons.....																1	1	1		10	11	10	1	1	40	40	1	2	20	10		600	34	715	749		
First regiment of artillery.....																1	1	1		9	18	18	1	1	36	36				18		27	378	48	497	545	
Second regiment of artillery.....																1	1	1		9	18	18	1	1	36	36				18		27	378	48	497	545	
Third regiment of artillery.....																1	1	1		9	18	18	1	1	36	36				18		27	378	48	497	545	
Fourth regiment of artillery.....																1	1	1		9	18	18	1	1	36	36				18		27	378	48	497	545	
Aggregate of artillery.....																4	4	4		36	72	72	4	4	144	144				72		108	1,512	192	1,988	2,180	
First regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2						420	33	514	547	
Second regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2						420	33	514	547	
Third regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2						420	33	514	547	
Fourth regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2						420	33	514	547	
Fifth regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2						420	33	514	547	
Sixth regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2						420	33	514	548	
Seventh regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2						420	33	514	547	
Aggregate of infantry.....																7	7	7		70	70	70	7	7	210	280	14			110			2,940	231	3,598	3,829	
Grand aggregate.....	1	2	1	2	1	4	1	2	1	12	55	1	14	1	2	14	14	22		136	159	158	12	12	438	464	15	2	20	212	10	108	250	5,052	603	6,595	7,198

NOTE.—The law authorizes the appointment of fifty assistant commissaries of subsistence and twenty assistant quartermasters, to be taken from the line of the army. The former are confined to the rank of lieutenants.

HEADQUARTERS OF THE ARMY, Washington, November, 1834.

ADJUTANT GENERAL'S OFFICE, Washington, November, 1834.

ALEX. MACOMB, Major General, Commanding the Army.

R. JONES, Adjutant General.

B.—General return of the army of the United States—Continued.

1834.]

REPORT OF THE SECRETARY OF WAR.

	PRESENT.												ABSENT.						PRESENT AND ABSENT.								
	On extra or daily duty.						In arrest or confinement.						Commissioned officers.	Non-commissioned officers, musicians, artificers, and privates.	Detached service.			With leave, or on furlough.			Total.	Aggregate.					
	Field officers.	Captains.	Subalterns.	Non-commissioned officers.	Musicians.	Artificers.	Privates.	Field officers.	Captains.	Subalterns.	Non-commissioned officers.	Musicians.			Artificers.	Privates.	Field officers.	Captains.	Subalterns.	Non-commissioned officers, musicians, artificers, and privates.			Field officers.	Captains.	Subalterns.	Non-commissioned officers, musicians, artificers, &c.	Non-commissioned officers, &c., in confinement, &c., (sick.)
General staff.....																									14		
Medical department.....																									68		
Pay department.....																									15		
Purchasing department.....																									3		
Corps of engineers.....											2														28		
Topographical engineers.....																									10		
Ordnance department.....																								227	241		
Regiment of dragoons.....			3	2		27							5	26	477		3	16		4	6		104	597	636		
First regiment of artillery.....			1	3		25				3			12	32	485		2	17		6		4	1	3	495	550	
Second regiment of artillery.....	1			5		22				2	1		23	24	361	2	2	18		10		2	6	1	5	377	429
Third regiment of artillery.....			1	2		14							21	31	452	1	19		2			4	1	4	459	514	
Fourth regiment of artillery.....	1	1		5		29							20	20	467			22		1		2	4	2	5	475	523
Aggregate of artillery.....	2	3	15		5	90				5	1		76	107	1,765	2	5	76		19		4	18	5	17	1,806	2,016
First regiment of infantry.....			4	12		85				1	1		56	23	504		3	8		1		1	4		2	507	546
Second regiment of infantry.....	1	4		7	1	47					2		38	30	443	1	1	4		18		1	1	5	6	472	510
Third regiment of infantry.....			2	6		47							8	24	404	1	3	3		9		1	1		4	417	450
Fourth regiment of infantry.....			1	6	1	23				1	1		60	23	395	1	4	9		8		1	4		6	409	451
Fifth regiment of infantry.....	1	3		5		62				2	1		21	21	490		5	9		14			2	2	6	512	549
Sixth regiment of infantry.....	1	3		4		14				1			38	24	391		4	9		1			3		1	393	433
Seventh regiment of infantry.....			2	19	1	96							9	16	372		5	12		37		2	5	3		412	451
Aggregate of infantry.....	1	3	19	59	3	374				1	4	5	230	161	2,999	3	25	54		88		6	20	10	25	3,122	3,390
Recruits and unattached soldiers.....																									403	403	
Grand aggregate.....	5	25	76	3	5	491				1	9	6	311	294	5,241	5	30	133		123		14	44	15	146	5,928	6,597

* Enlisted men of ordnance (227) are not included in the grand aggregate —R. J.
 NOTE.—The major and one captain of the 2d regiment of artillery, and one captain of the 7th infantry, holding appointments in the "general staff," are omitted in the "aggregate" of their respective regiments, being reported and included in the aggregate of the general staff.

HEADQUARTERS OF THE ARMY, Washington, November, 1834.
 ADJUTANT GENERAL'S OFFICE, Washington, November, 1834.

ALEX. MACOMB, Major General, Commanding the Army.
 R. JONES, Adjutant General.

C.—Position and distribution of the troops of the eastern department, under the command of Brevet Major General Winfield Scott.

No.	Posts.	Situation.	Commanding officers.	Regiments.	Number of companies.	PRESENT.																	
						For duty.																	
						Colonels.	Lieutenant colonels.	Majors.	Adjutants.	Surgeons.	Assistant surgeons.	Captains.	First lieutenants.	Second lieutenants.	Bvt. second lieutenants.	Sergeant majors.	Quartermaster serg'ts.	Sergeants.	Corporals.	Principal musicians.	Musicians.	Artificers.	Privates.
1	Fort Winnebago	Portage, Fox, and Wisconsin rivers	Lieut. Col. Cutler	5th infantry	4	1				1	1	2	1	2			9	10		7		126	
2	Fort Brady	Sault St. Marie, Michigan Territory	Bvt. Major Cobbs	2d infantry	2					1	1	2	1	1			7	8		4		59	
3	Fort Mackinac	Michilimackinac, Michigan Territory	Captain Clitz	do.	2					1	2	1	1	1			5	7		3		49	
4	Fort Howard	Green Bay, Michigan Territory	Bvt. Brig. Gen. Brooke	5th infantry	4	1		1	1		1	2		1	1		12	12	2	5		118	
5	Fort Dearborn	Head of Lake Michigan, Illinois	Major Green	do.	2			1		1	2		1				6	7		3		61	
6	Fort Gratiot	Outlet of Lake Huron, Michigan Territory	Bvt. Major Hoffman	2d infantry	2					1	1		1	2		1	6	5		4		46	
7	Madison Barracks	Sackett's Harbor, New York	Lieut. Col. Cummings	do.			1	1						1			1					2	
8	Hancock Barracks	Houlton, Maine	Bvt. Major Clarke	do.	4					1	3	2	1	2			10	13	1	4		104	
9	Fort Sullivan	Eastport, Maine	Bvt. Lieut. Col. Brooks	3d artillery	1			1		1	1	1					3	4		1	2	38	
10	Fort Preble	Portland, Maine	Bvt. Major McClintock	do.	1					1	1	1					3	4		2		41	
11	Fort Constitution	Portsmouth, New Hampshire	Bvt. Major Ansart	do.	1					1	1	1	2				4	3		2	3	37	
12	Fort Independence	Boston, Massachusetts	Not occupied, repairing																				
13	Fort Wolcott	Newport, Rhode Island	Bvt. Major Lomax	3d artillery	1					1	1	1	2	1			4	3		1	3	37	
14	Fort Trumbull	New London, Connecticut	Bvt. Major Paine	1st and 4th artillery	2					1	1	2					7	6		4	5	78	
15	Military Academy	West Point, New York	Bvt. Lieut. Col. De Russey	Detachment													2	1		1		6	
16	Fort Columbus	New York, New York	Not occupied, repairing																				
17	Fort Hamilton	do. do.	Bvt. Major Pierce	4th artillery	4					1	2	3	1				12	9		6	4	128	
18	Fort McHenry	Baltimore, Maryland	Bvt. Brig. Gen. Fenwick	do.	1	1				1	1		1	1			3	1		2	2	29	
19	Fort Severn	Annapolis, Maryland	Bvt. Col. Walbach	1st artillery	1		1				1	1		1			4	2		2	2	30	
20	Fort Washington	Left bank of Potomac, Maryland	Bvt. Major Mason	do.	1						1	1	1	1			3	4		1	2	35	
21	Fort Monroe	Old Point Comfort, Virginia	Bvt. Brig. Gen. Armistead	1st, 2d, 3d, and 4th artillery	9	1	1	1	1		1	8	3	6	1	1	25	25	1	12	11	314	
22	Fort Johnston	Near Smithville, North Carolina	Bvt. Major Churchill	1st artillery	1						1	1	1				3	1		1	3	44	
23	Fort Macon	Near Beaufort, North Carolina	Bvt. Major Kirby	do.	1					1	1	1	1				4	2		1	3	43	
24	Fort Moultrie	Charleston harbor, South Carolina	Major Gates	do.																			
25	Castle Pinckney	do. do.	do.	do.	2			1		1	1	3	1	1			6	6		3	2	69	
26	Augusta Arsenal	Augusta, Georgia	Colonel Lindsay	2d artillery	1	1		1		1				1			4	4		2	3	35	
27	Oglethorpe Barracks	Savannah, Georgia	Bvt. Capt. Merelant	do.	1						1	1					4	2		1	2	20	
28	Fort Marion	St. Augustine, Florida	Captain Drane	do.	1					1	1	1	1				4	2		2	3	37	
29	Camp Armistead	Near Tellico Plains, Tennessee	Bvt. Major McIntosh	4th infantry	2					1			1				1					18	
					51	4	4	4	4	1	19	33	35	24	19	3	4	152	141	4	72	50	1,604

C.—Position and distribution of the troops of the eastern department, &c.—Continued.

No.	Posts.	Situation.	Commanding officers.	Regiments.	Number of companies.	ABSENT.													PRESENT & ABSENT.		
						Detached service.						Furlough.							Total.	Aggregate.	
						Field officers.	Captains.	First lieutenants.	Second lieutenants.	Bvt. 2d lieutenants.	Non-commissioned officers, &c.	Field officers.	Surgeons.	Assistant surgeons.	Captains.	First lieutenants.	Second lieutenants.	Bvt. 2d lieutenants.			Non-commissioned officers, &c.
1	Fort Winnebago	Portage, Fox, and Wisconsin rivers	Lieut. Col. Cutler	5th infantry	4	2	2	1		10						1	1	1	5	215	231
2	Fort Brady	Sault. St. Marie, Michigan Territory	Lieut. Major Cobbs	2d infantry	2					3								1	1	101	109
3	Fort Mackinac	Michilimackinac, Michigan Territory	Captain Clitz	do	2					15									1	103	109
4	Fort Howard	Green Bay, Michigan Territory	Brevet Big. Gen. Brooke	5th infantry	4	3	3	1											1	204	230
5	Fort Dearborn	Head of Lake Michigan, Illinois	Major Green	do	2		1	1		4										93	101
6	Fort Gratiot	Outlet of Lake Huron, Michigan Terr'y.	Brevet Major Hoffman	2d infantry	2		1									1				82	91
7	Madison Barracks	Sackett's Harbor, New York	Lieut. Col. Cummings	do						2										8	10
8	Hancock Barracks	Houlton, Maine	Brevet Major Clarke	do	4	1	1	2										4	3	185	200
9	Fort Sullivan	Eastport, Maine	Brevet Lieut. Col. Brooks	3d artillery	1		1	2	1											54	62
10	Fort Preble	Portland, Maine	Brevet Major McClintock	do	1		1	1										1		56	61
11	Fort Constitution	Portsmouth, New Hampshire	Brevet Major Ansart	do	1		1													55	61
12	Fort Independence	Boston, Massachusetts	Not occupied, repairing																		
13	Fort Wolcott	Newport, Rhode Island	Brevet Major Lomax	3d artillery	1		1													59	66
14	Fort Trumbull	New London, Connecticut	Brevet Major Paine	1st and 4th artillery	2		2	3							1		1	1		117	129
15	Military Academy	West Point, New York	Brevet Lieut. Col. De Russey	Detachment																52	52
16	Fort Columbus	New York, New York	Not occupied, repairing																		
17	Fort Hamilton	do do	Brevet Major Pierce	4th artillery	4		2	5		1					1	1	2		1	211	232
18	Fort McHenry	Baltimore, Maryland	Brevet Brig. Gen. Fenwick	do	1		1	1								1				50	58
19	Fort Severn	Annapolis, Maryland	Brevet Col. Walbach	1st artillery	1			2								1				50	59
20	Fort Washington	Left bank of Potomac, Maryland	Brevet Major Mason	do	1		1	1		1										51	59
21	Fort Monroe	Old Point Comfort, Virginia	Brevet Brig. Gen. Armistead	1st, 2d, 3d, & 4th art.	9	1	9	12	1	7					1	1		2		475	533
22	Fort Johnston	Near Smithfield, North Carolina	Brevet Major Churchill	1st artillery	1		1	1	1											59	65
23	Fort Macon	Near Beaufort, North Carolina	Brevet Major Kirby	do	1		1	1												58	64
24	Fort Moultrie	Charleston harbor, South Carolina	Major Gates	do																	
25	Castle Pinckney	do do do	do do	do do	2		1	2		5					1				2	114	127
26	Augusta Arsenal	Augusta, Georgia	Colonel Lindsay	2d artillery	1		1	2							1			1	1	55	64
27	Oglethorpe Barracks	Savannah, Georgia	Brevet Capt. Merchant	do	1	1	1	1										1	2	39	46
28	Fort Marion	St. Augustine, Florida	Captain Drane	do	1		1	1												59	65
29	Camp Armistead	Near Tellico Plains, Tennessee	Brevet Major McIntosh	4th infantry	2	2	1		2	44					1		1		1	83	92
					51	10	34	40	5	91	1		2	4	6	5	6	13	23	2,688	2,966

HEADQUARTERS OF THE ARMY, Washington, November, 1834.
 ADJUTANT GENERAL'S OFFICE, Washington, November, 1834.

ALEX. MACOMB, Major General, Commanding the Army.
 R. JONES, Adjutant General.

E.

ADJUTANT GENERAL'S OFFICE, *Washington, November 22, 1834.*

Statement showing the whole number of recruits enlisted in the army, from the 1st of January to the 30th of September, 1834, according to the latest returns.

GENERAL RECRUITING SERVICE, EASTERN DEPARTMENT—Lieut. Col. J. B. Crane, 2d artillery, superintendent:

At Albany, New York	108	At New York, N. Y	172
Boston, Massachusetts	47	Philadelphia, Pennsylvania	121
Baltimore, Maryland	84	Plattsburg, New York	14
Easton, Pennsylvania	33	Port Deposit, Maryland	3
Fredericktown, Maryland	109	Rochester, New York	50
Fredericksburg, Virginia	4	Sackett's Harbor, New York	32
Ithaca, New York	1	Utica, New York	93
Lancaster, Pennsylvania	30	Whitehall, New York	30
Lynchburg, Virginia	5	York, Pennsylvania	2
			938

GENERAL RECRUITING SERVICE, WESTERN DEPARTMENT—Lieut. Col. W. S. Foster, 4th infantry, superintendent:

At Cincinnati, Ohio	62	At New Orleans, Louisiana	24
Chillicothe, Ohio	20	Pittsburg, Pennsylvania	46
Cleveland, Ohio	3	Wheeling, Virginia	29
Louisville, Kentucky	46	Zanesville, Ohio	17
Nashville, Tennessee	38		285

REGIMENTS.

In the dragoons			280
1st artillery	81	In the 3d artillery	64
2d artillery	32	4th artillery	98
			275
1st infantry	37	5th infantry	3
2d infantry	32	6th infantry	30
3d infantry	47	7th infantry	31
4th infantry	44		224
Detachment at West Point			16
Band at West Point			15
Detachment of orderlies at Washington			3
For the hospital department			7
At ordnance depots			68

Total number enlisted from the 1st of January to the 30th of September, 1834..... 2, 111

Amount of recruiting funds advanced to officers from the 1st of January to the 30th of September, 1834.....	\$16, 412 71
Amount of those funds accounted for within the same period.....	15, 173 53

Balance in the hands of recruiting officers on the 30th of September, 1834..... 1, 239 13

Amount of recruiting funds advanced for raising the regiment of dragoons from the 1st of January to the 30th of September, 1833.....	1, 585 87
Amount of those funds accounted for up to the same period.....	791 25

Balance in the hands of dragoon officers on the 30th of September, 1833..... 794 62

Respectfully submitted.

R. JONES, *Adjutant General.*

Major General ALEX. MACOMB, *Commander-in-chief United States Army.*

F.

ADJUTANT GENERAL'S OFFICE, *Washington, October 20, 1834.*

SIR: Pursuant to your instructions, I submit the following estimate for the expenses of the recruiting service of the army for the year 1835:

1st. "Two months' extra pay," allowed by the act of March 2, 1833, to each musician and private who may re-enlist into his company or regiment, to wit:

For 335 re-enlisted musicians and privates, at \$12 for each man.....	\$4, 020 00
From the above sum of \$4,020, deduct the balance of the appropriation for "extra pay," on account of re-enlistments for the current year, which, it is calculated, will remain in the treasury on the 31st of December, 1834	3, 966 66

Total amount required to be appropriated for "two months' extra pay" allowed to re-enlisted musicians and privates, for the year 1835.....	<u>\$53 34</u>
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2.—CONTINGENT EXPENSES,

Including quarters, fuel, bunks, straw, compensation to citizen surgeons for examination and medical attendance, magistrates' fees for administering the oath of allegiance to recruits, and all other expenses on their account, until put in march to join their regiments, at \$8 per man for 2,441 recruits, exclusive of the number (335) of soldiers that will, it is calculated, re-enlist	19, 528 00
From the above sum of \$19,528 deduct the balance of the appropriation for "expenses of recruiting" for the current year which it is calculated will remain in the treasury on the 31st of December, 1834.....	<u>1, 868 47</u>
Total amount required to be appropriated for "expenses of recruiting" for the year 1835.....	<u>17, 659 53</u>

RECAPITULATION.

Amount required for two months' "extra pay" allowed to each musician and private who may re-enlist in 1835	53 34
Amount required for "expenses of recruiting" in 1835.....	<u>17, 659 53</u>
Aggregate sum required to be appropriated for the recruiting service for the year 1835	<u>17, 712 87</u>

It is, perhaps, here proper to state, that of the appropriation for the year 1833, under the specific head of "bounties and premiums," there remains in the treasury, unexpended, the sum of \$38,379 52; which sum, since the change made in the mode of enlisting, by the act of March 2, 1833, is not properly available for these objects; but should this balance of the unexpended appropriation for 1833, for "bounties and premiums," be deemed to be applicable to the general expenses of the recruiting service, then the sum of \$17,712 87, as above required to be appropriated for the year 1835, may be deducted therefrom, and so applied, and the balance, amounting to \$20,666 65, remain in the treasury, subject to appropriation for any other purpose.

REMARKS AND EXPLANATIONS.

The number of recruits, as above estimated for, to fill up the rank and file of the army for 1835 is calculated as follows, to wit:

The recruits required for the several regiments of the army on the 30th of September, 1834, as exhibited by the latest monthly returns received, were.....	813
To which add the number of discharges that will take place by the expiration of enlistments, from the 1st of October to the 31st of December, 1834.....	164
Add also the estimated number of casualties by deaths, desertions, and discharges for disability, &c., for the same period.....	<u>388</u>
	1, 365
From the above deduct the number of recruits in depot, not assigned to regiments.....	308
Deduct also the estimated number that may be enlisted between the 1st of October and the 31st of December, 1834.....	<u>550</u>
	858
Number of recruits required to fill the rank and file of the army on the 31st of December, 1834,	507
To the above number of vacancies (507) add the number of discharges that will take place by the expiration of service, from the 1st of January, 1835, to the 31st of December, 1835....	695
Add also the estimated number of vacancies occasioned by deaths, desertions, and discharges for disability, &c., for the same period.....	<u>1, 574</u>
Total number of recruits (inclusive of re-enlistments) required for the military establishment, exclusive of the enlisted men for the Ordnance department, for the year 1835.....	<u>2, 776</u>

Respectfully submitted.

R. JONES, *Adjutant General.*Major General ALEX. MACOMB, *Commander-in-chief United States Army.*

G.

ADJUTANT GENERAL'S OFFICE, *Washington, October 20, 1834.*

SIR: The following estimate, to meet the expenses incident to the Adjutant General's office during the year 1835, is respectfully submitted:

For compensation of one clerk.....	\$1, 150
For compensation of one clerk, per act of April 20, 1818.....	1, 000
For compensation of one clerk, per act of March 2, 1827.....	800
	<u>2, 950</u>

For printing the Army Register, printing "Orders" announcing promotions and appointments in the army, regulations, sentences of courts-martial, &c.; stationery, binding official records and congressional documents, &c.....	\$1,000
For congressional documents, professional books and maps, and other contingent expenses for the general-in-chief's office.....	200
	1,200

I am, sir, very respectfully, your obedient servant,

Major General MACOMB, *Commanding the Army.*

R. JONES, *Adjutant General.*

Journal of Colonel Dodge's expedition from Fort Gibson to the Pawnee Pict village.

FORT GIBSON, August 26, 1834.

COLONEL: In obedience to your instructions I have made, and have the honor herewith to present to you, a journal of the campaign of the regiment of dragoons for the summer of 1834.

With great respect, your obedient servant,

T. B. WHELLOCK, *First Lieutenant Dragoons.*

Colonel HENRY DODGE, *United States Dragoons.*

In consequence of the late arrivals of the companies from Jefferson barracks, the regiment did not move as early as could have been wished.

The nine companies destined for the campaign (Captain Wharton's company, "A," marched in May to escort a body of traders to Santa Fé) began their movement from Camp Jackson on the 15th of June, and under the direction of the field and company officers encamped on the west bank of the Arkansas, three miles from Fort Gibson; thence moved eighteen miles westwardly to Camp Rendezvous. Strength of the regiment about five hundred.

Arrangement of officers for the campaign.

Colonel—Henry Dodge.

Lieutenant Colonel—S. W. Kearney.

Major—R. B. Mason.

Staff.—Adjutant—First Lieutenant J. W. Hamilton.

Ordnance officer, &c.—First Lieutenant T. B. Wheelock.

Acting assistant quartermaster—First Lieutenant Thomas Swords.

Acting assistant commissary of subsistence—Second Lieutenant John S. Van Deveer.

Company officers.—Company "B"—Captain Sumner, Second Lieutenant Burgwin, Brevet Second Lieutenant McClure.

Company "C"—Captain Duncan, Brevet Second Lieutenant Bowman.

Company "D"—Captain Hunter, First Lieutenant Moore, Second Lieutenant Steen.

Company "E"—Captain Perkins, Brevet Second Lieutenant Kingsbury.

Company "F"—First Lieutenant Davis, Brevet Second Lieutenant Eastman, 2d infantry.

Company "G"—First Lieutenant Cooke, Second Lieutenant Territt.

Company "H"—Captain Boone, Brevet Second Lieutenant Ury.

Company "I"—Captain Brown, Brevet Second Lieutenant Edwards.

Company "K"—First Lieutenant Izard, Second Lieutenant Shaumburgh.

Eight companies (company "K" was left at Camp Jackson to complete preparations for the march) were assembled at Camp Rendezvous on the evening of the 20th June.

June 21.—Twenty-three men, pronounced by the surgeon unfit for the campaign, sent back to Fort Gibson. The regiment took up the line of march for the Washita upon the new road made by General Leavenworth, at eight o'clock in the morning; moved twenty miles southwest; crossed the north fork of the Canadian; encamped one mile thence; difficulty with wagons ascending the bank of this stream; assistance of thirty or forty men required to each. Good water at our camp—great want of it on the road. Sounds of the rapids of the north fork cheering to men and horses. With the command seventy beeves. Face of the country to-day, in general, open, rolling prairie, soil light; a few miles from our halt much timber and stony land.

Agreeably to previous arrangements, four bands of Indians joined us to-day, viz: eleven Osages, eight Cherokees, six Delawares, and seven Senecas. These men are to serve as guides, hunters, and interpreters, also as representatives of their several nations, should we, as we hope to do, meet with the Pawnees; and thus open the way to a friendly understanding between these nations. Among these Indians are some of the *élite* of the nations to which they belong.

Dutch, chief of the Cherokee party, remarkable for personal beauty, daring character, and successful enterprises against the Osages.

George Bullett, or *Pon-da-gne-se*, is the principal man of the Delaware party.

Beatte, a Frenchman, who has lived nearly all his life among the Osages, has charge of this band, and is celebrated for his skill as a hunter.

De-nath-de-ago is the leader of the seven Senecas.

We take with us, under conduct of the Osages, two Indian girls. One a Kiowa, about fifteen years of age, captured by the Osages a year or two since; the other a Pawnee prisoner, about eighteen years of age, taken by the Osages five or six years ago.

The restoration of these captive girls to their respective nations will, it is expected, facilitate the intercourse aimed for, conciliate the Indians, and pave the way to desirable treaties.

CAMP CASS, June 22.—The command marched at nine o'clock, westwardly, fifteen miles. Captain Brown's company ("I") left in rear on account of breaking down of company wagon—*wagons great drawbacks to military expeditions*. Route to-day chiefly through timber, here and there small prairies; water scarce; beds of creeks dry. Encamped at the foot of a prairie mound, four hundred feet in height, from the summit of which is seen a magnificent valley, stretching in every direction some twenty-five or thirty miles. We found here good water and grazing.

June 23.—Marched from Camp Cass at nine o'clock, west by south, seventeen miles; alternate prairie and timber; water less scarce than before, but warm, of a milky color, and in pools.

June 24.—The advance was sounded at nine o'clock; marched twenty-one miles west by south, halted at four o'clock p. m. and encamped near good water and grazing; excellent spring, impregnated with sulphur and iron. Captain Brown's company joined us this morning; road to-day chiefly through timber; met two infantry soldiers going from the post at the mouth of Little river to Fort Gibson.

June 25.—Colonel Dodge and staff reached Camp Canadian, on the west bank of the Canadian, thirteen miles from last camp, at twelve o'clock; reported to General Leavenworth, whom we found in camp; command came up at two o'clock. Road to-day through open, level prairie, well watered; crossed the Canadian half a mile below the mouth of Little river; Canadian two hundred yards wide, bed nearly dry, low banks; Indian name signifies "river without banks." Near the east side passed Lieutenant Holmes, 7th infantry, with a company of the 7th regiment of infantry. Lieutenant Holmes just commenced building a fort and quarters for two companies. At Camp Canadian another sulphur spring, and good grazing and water.

June 26.—At half-past eight o'clock Colonel Dodge and part of his staff and a detachment of about twenty dragoons, and our bands of Indians, preceded the command, and found General Leavenworth at at Camp Osage, five miles south of Cave creek; halted at half-past five o'clock p. m., thirty-two miles from Camp Canadian. Streams to-day frequent, and abundantly supplied. The regiment, under command of Lieutenant Colonel Kearney, left camp at half-past eight o'clock; left twenty-seven sick men at Camp Canadian, with Assistant Surgeon Hailes and Lieutenant Edwards in charge. Lieutenant Cooke was left here sick. Ten miles from Camp Canadian passed a band of Osages, between 500 and 600 in number, employed in curing buffalo meat, second chief of the nation, "Black Dog," in command—famous as a warrior; two Osages joined us as volunteers.

June 27.—Left Camp Osage (General Leavenworth in company) at half-past six o'clock; marched twenty three miles westwardly, and encamped on a creek at the end of a thirteen mile prairie; limestone, excellent streams of water, and frequent; soil in general, since leaving Fort Gibson, light and sandy, but often rich, and well adapted to grain. Crossed Blue river ten miles from Camp Osage; saw in the vicinity much rich iron ore scattered over the surface of the earth. Met with and killed the first buffalo seen since the commencement of the march. Mineralogy of the country, thus far, of secondary formation; sandstone, limestone, freestone, and slate.

June 28.—Set out at seven o'clock; marched westwardly twenty-five miles, encamped on Bois d'Arc creek; passed a herd of buffalo this morning, some thirty or forty in number; Indians with us killed six of them. Road to-day chiefly over brushy prairie and through timber, some open prairie; water plentiful and good; character of timber, in general, small—post oak and black jack, and some trees of Bois d'Arc, a wood valuable to Indians for bows—a yellow, elastic wood of great tenacity. Entered the Washita bottom eight miles on the day's route; elm trees, sycamores, and ash. Health of the party good.

CAMP WASHITA, Sunday, June 29.—Marched fifteen miles west by south; reached Captain Dean's camp (two companies of 3d infantry) a mile or two from the Washita, at half-past 12 o'clock; encamped near him. Road to-day through timber and brushy prairie; limestone gave place to-day to red sandstone; saw more iron ore. Delightful spring near Captain Dean's camp. Captain Dean informs us that Pawnees have been seen in the neighborhood within a few days.

June 30.—General Leavenworth declares his intention of commanding in person the expedition to the Pawnee country. Learned that some companies of infantry were to accompany us. Lieutenants Northrop and Steen, with twenty dragoons, joined us from west side of Washita; report Pawnees seen in that direction. (Remained in camp.)

July 1.—The regiment under Colonel Kearney arrived at 10 o'clock a. m. and encamped near the Washita. Our detachment joined main Camp Washita. Forty-five men and three officers sick—Lieutenants McClure, Eastman, and Ury. The surgeon attributes the sickness to exposure in the heat of the day. Seventy-five horses and mules disabled; rapid marching in the heat of the day and poor grazing at night are supposed to have been the causes. (Remained in camp.)

The "note of preparation" is now heard over the camp; all are engaged in making ready for a Pawnee chase.

July 2.—Remained in camp.

July 3.—Preparations for crossing the Washita; a platform upon two canoes fixed for that purpose. Whole day occupied with passage of the left wing; horse and mule lost in crossing. Captain Trenor joined. Osborn, a deserter from company "F," brought in by a party sent in pursuit of him; sutler's wagon arrived; Lieutenants Swords and Van Deveer arrived. Great disappointment in not receiving by Lieutenant Swords horse-shoe nails; sent blacksmiths to Fort Towson to make nails. Lieutenant Edwards arrived with twenty-three men, who were left sick at the Canadian on the 26th ultimo; men chiefly recovered. Lieutenant Cooke had gone back to Fort Gibson on surgeon's certificate of ill health. (Remained in camp.)

July 4.—The right wing of the regiment crossed the Washita. Command encamped about four miles west from Camp Washita. Four horses drowned; last wagon passed over after dark in the evening. The Washita is a narrow stream, about forty-five yards in width; water of a dark red color; banks bold; shores miry; inconvenient landing for horses. Monsieur Beyrick, botanist, &c., joined us to-day, with the view of accompanying the regiment to the prairie. Mr. Catlin, portrait painter, is also with us.

General Leavenworth declares his intention of sending Colonel Dodge with two hundred and fifty men to the Pawnee villages. He changes his determination to command in person. Left sick at Dean's camp, near the Washita, Lieutenants Swords, McClure, and Eastman. Left here — men for duty, and — sick.

July 5.—Change of camp promises to improve the health of the command; fine range for our horses, who have suffered of late for want of good grazing. Our horses in general, though thin, are apparently

well able, if treated with care, to perform the campaign before us; spirits of the officers and men good; sanguine expectations of a successful march upon the Pawnees. (Remained in camp.)

July 6.—Moved westwardly eight miles, to Camp Leavenworth.

July 7.—Marched at 4 o'clock p. m. westwardly five miles. Major Mason and a party of officers killed several buffalo. General Leavenworth joined us a short time previous to setting out from Camp Leavenworth. Left him there. By his order the regiment was reorganized. Number of companies six, each consisting of forty-two rank and file. Left one hundred and nine men for duty, and eighty-six sick. Left the following named officers: Captain Trenor in command, Lieutenants Shaumburg, (sick,) Ury, (sick,) Bowman, Kingsbury, and Van Deveer.

New arrangement of officers.

Field and staff—Colonel Dodge, Lieutenant Colonel Kearney, Major Mason, Lieutenant and Adjutant Hamilton, and Lieutenant Wheelock, temporarily attached.

Company "B"—Captain Sumner, Lieutenant Burgwin.

Company "C"—Captain Duncan, Lieutenant Territt.

Company "D"—Captain Hunter, Lieutenants Moore and Steen.

Company "E"—Captain Perkins, Lieutenant Davis.

Company "H"—Captain Boon, Lieutenants Izard and Northrop.

Company "I"—Captain Browne, Lieutenant Edwards.

Companies "G" and "K" were temporarily broken up and divided amongst the six companies.

The command furnished with ten days' provisions and eighty rounds of cartridges per man; baggage reduced to lowest possible quantity; marched in two columns.

July 8.—Waiting for lost horses. A stupid sentinel last night mistook a horse for a hostile Indian, fired at and killed him; alarmed the camp, and sent off in a *stampede* the rest of the horses; recovered all save ten. The men of the regiment are excellent material, but unused to the woods. They often discover deficiencies in this kind of service. Among the officers are several excellent woodsmen; talent of this kind is exceedingly valuable to the regiment. We found here chalk. (Remained in camp.)

July 9.—The command marched at half-past 8 o'clock, northwest course, fourteen miles. Colonel Dodge this morning received instructions from General Leavenworth to send back a field officer to command at Camp Leavenworth. Lieutenant Colonel Kearney was ordered to report to General Leavenworth for that duty. Ten men whose horses were lost on the night of the 7th instant were sent back to Camp Leavenworth.

Soon after starting this morning several persons on horseback were discovered, supposed to be Pawnees. Face of country to-day high and rolling prairie. Encamped in a small prairie, in sight of a large mound, some three or four miles distant, bearing south 40° west.

July 10.—Cross Timbers; course to-day west 16 miles; country rough and broken, with but little water; little rain last night and this morning; cloudy weather during the day; some buffalo killed during the day; not much water at camp.

July 11.—Command divided into three columns; the right column under command of Major Mason, the centre column under Captain Hunter, the left column under command of Captain Sumner. Country to-day small prairies, bushy ravines, scrubby oak ridges; want of good water on the road; bad water at camp to-night; several buffalo killed to-day; course to-day west, distance twenty miles.

July 12.—Encamped in a grove of small open timber, near a fine grove; marched at 8 o'clock; course west, distance twelve miles; slips of prairie, timber, and bushy thickets.

CAMP CHOCTAW, July 13.—Passed through the last of the Cross Timbers, and entered upon the Grand prairie; marched at half past 8 o'clock from Camp Choctaw west by north twenty-three miles, and encamped on a creek; highly beautiful country, tolerably well watered; command impeded to-day by sick men in litters; Indians, supposed to be Pawnees, were seen to-day; wild horses in large herds; one of the Indian guides caught one of them; immense herds of buffalo; passed several springs of rock oil, (*petroleum*.) Command halted at 6 o'clock p. m.; rear guard did not come up until 10—kept back by the sick falling in the rear.

July 14.—Marched at half past 8 o'clock seventeen miles west; number of sick decreased. The command had advanced about half a mile, when on a hill to our right we discovered a party of horsemen; our spy-glasses soon determined them to be Indians. Colonel Dodge halted the columns, ordered a white flag, and with it and his staff moved in the direction of the Indians. After some delay, one of the party advanced upon full gallop, bearing a white flag upon his lance; he proved to be a Spaniard, who early in life had been taken by the Camanches. Colonel Dodge received him kindly, and through our interpreter, who spoke a little Spanish, made known to him our pacific disposition. Gradually the whole band, about thirty Indians, came to us and shook hands; they proved to be Camanches; discovered a good deal of alarm and eagerness to convince us of their disposition to be friendly; they rode good horses; they were all armed with bows and arrows and lances, and carried shields of buffalo hide. We inquired where their village was; they answered, "two days' journey," and seemed anxious to conduct us thither. In reply to our inquiries concerning the *Pawnees*, they seemed not to understand the term; told us the *Toyash* village was one day's journey from their camp; that they would send for the *Toyash* chiefs, if we would accompany them to the camp. They signified, however, their desire to have Colonel Dodge wait with his command in their camp, and go on the next day. Colonel Dodge paid no regard to their requests, but showed an indifference to their movements and an independence of them, which had the effect to make them follow us; they accompanied us. Found another band, making in all some forty or fifty; they told us that they were a very numerous people. Colonel Dodge told them that we were a very numerous people; that more troops were coming behind, with large guns. After we halted to encamp for the night, they came to beg tobacco, and to talk with Colonel Dodge, who informed them "that the President, the great American captain, had sent him to shake hands with them; that he wished to establish peace between them and their red brethren around them, to send traders among them, and to be forever friends." They shook hands with the Osages, Cherokees, Delawares, &c., who were with us, and seemed highly satisfied with their interview with us, and offered to accompany us to the *Toyash* village. Country to-day beautiful, open prairie; game scarce—two or three deer were killed, no buffalo seen; a herd of wild horses passed near us; provision threatens to be scarce; Colonel Dodge anxious to expedite business, lest his men may suffer on this account; one or two horses broke down to-day.

The Camanche is a fine looking Indian, in general naked; some of them wore blankets. The squaws are dressed in deer skins, and are good looking women; among them were several Spanish women,

evidently long used to Comanche habits; appearance of a Comanche fully equipped on horseback, with his lance and quiver and shield by his side, is beautifully classic. This has been an interesting day to us; our goal seems in sight; uncertainty of reaching the Pawnees much lessened.

July 15.—Marched at half past 7 o'clock twenty-four miles northwest; severe rain last night; Comanches left us this morning, with the exception of one, who remained as guide; he assures us that we shall reach the Comanche camp to-morrow. Colonel Dodge learns that the Comanches, Kiowas, and the band called by us the Pawnee Picts, but correctly termed the *Toyash*, are friends, and to a certain degree allies, and mingle so as to be, except in language, much the same people. The Comanches are, we learn, the largest band, the proudest and boldest; therefore the colonel has resolved to visit them first; thence to the *Toyash* village, establish friendly understandings with one or both, or war with one or both, as may be; officers and men on the alert, as if in the atmosphere of war.

July 16.—Marched at 9 o'clock, halted at half past 2 o'clock; course north by west, distance twelve miles; an accident occurred in camp last night—Sergeant Cross was shot by a dragoon in the hip. We had marched three or four miles, when we discovered a party of Comanches on our left. Colonel Dodge sent two officers to meet them and shake hands with them. They were a hunting party, some ten or twelve in number; they were brought to Colonel Dodge; the columns were halted; they shook hands with the colonel and his officers and the Indians; we then moved on together for the Comanche camp; the Pawnee girl recognized an old acquaintance in the captain of this party, and rendered service by interpreting what he said, through the Osages. The Comanche captain informs us that it is but a short distance to their camp; his people wish to be our friends, &c. Two or three miles with our new friends brought us in sight of their camp, situated in a valley. Here we met about a hundred mounted Comanches, who had come out to welcome us, and evidently not a little alarmed. We shook hands with them; the Cherokees, Osages, &c., advanced and performed the same ceremony, when we all moved together for their camp. On arriving at it, they invited us to cross the creek and encamp with them; Colonel Dodge, however, preferred leaving the creek between us and our red friends. This day has been a very interesting one—absolutely so and peculiarly so, as we were anxious, impatient, and uncertain as to the movements of these Indians. Six nations, some of whom had but recently been at war with each other, shake hands together—a form, it is true, but a type, we believe, of a permanent peace that must promote the interest of all. Our camp, "Comanche," an admirable position—the steep bank of a creek in front, and a ravine bounding the other three sides; habitual form of our camp a rectangle; horses picketed within it at night, and surrounded by a chain of sentinels; orders issued that no man should visit the Comanche camp, nor officer, without special permission. The Comanches have hoisted an American flag over their camp, which contains more than two hundred skin lodges; herds of horses, in all not less than three thousand, are grazing around them; they have been here evidently but a day or two; their chief is absent with a hunting party. We are now in sight of a chain of *peaks*, so called—mountains, bearing south and west; behind these are the *Toyash* villages. Some of these hills cannot be less than two thousand feet above the prairie at their base. Number of sick, twenty-nine; in litters, four. Our guide, yesterday, was not a little wavering in his disposition to serve us. Colonel Dodge presented him with a gun, which produced a fine effect upon his spirits. He could not hear the Pawnee girl; but no sooner was he in actual possession of the yauger, and felt the well-filled cartridge box buckled around his body, than his grave face became wreathed with smiles, his sense of hearing was suddenly restored, his arms sawed the air with signs, and, through the magical influence of the gun, we gained several fragments of useful information. We are exceeding unfortunate in not having an interpreter; our Spanish interpreter, a Cherokee, is very imperfect.

July 17.—Comanche chief still absent. Some of our officers purchased wild horses to-day. A blanket or butcher knife is equivalent to a horse. Waiting to-day for the Comanche chief to return to his camp. Colonel Dodge hopes to be able to induce him to accompany us to the *Toyash* villages. The Kiowa girl is quite sick to-day. One of the Comanches informs us that their great chief will be here to-morrow when the sun is high, and that he can talk to the Kiowa and Pawnee girls. Remained in camp.

July 18.—The chief has not arrived. Doubt somewhat the sincerity of the Spaniard who informed us he would certainly come. The Comanches visit our camp and trade with us. Monsieur Beyrick, the botanist, left us on the 7th instant. Number of sick to-day thirty-three. Three officers sick. Waited for the chief until eleven o'clock, when the advance was sounded; marched seven miles westwardly; found a Pawnee Mohaw who has been to the *Toyash* village, and who promises to guide us thither.

Two miles from camp; command delayed two hours waiting for the litters to come up; six litters, including Mr. Catlin's. Remarkable absence, day and night of mosquitos and flies. A chain of hills five miles from us, bearing south by west; country exceedingly beautiful; soil good; water abundant; grazing excellent. The season is a remarkably dry one, but we have suffered very little for want of good water. Our men seem somewhat discontented on account of the scarcity of game; they are very improvident; brought ten days' provisions on the 7th, with orders to make it last twenty days; have been supplied with a plenty of buffalo meat till within a day or two, yet many of them are entirely out of provisions; plenty of deer in the neighborhood, but no buffalo; out of the buffalo range to-day; our sick encumbered us so much that Colonel Dodge resolves to leave them behind.

July 19.—Marched at 8 o'clock for the *Toyash* villages; command reduced to 183 men; left in sick camp, covered by a breastwork of felled timber, seventy-five men; thirty-nine of these sick; Lieutenant Moore left here sick; Surgeon Findlay for duty; Lieutenant Izard in command; left our jaded horses; marched twenty-three miles southwest; two miles from camp began to ascend hills, apparently a ridge of mountains, running south by east; limestone; curious regularity of limestone upon the first hill passed over; rows of pavement resembling, at a little distance, furrows in a field; road rough, leading over rocky ravines, and close passes in the mountains; our guide seems to have chosen the most uneven and circuitous route; height of these mountains from 200 to 1,500 feet; wagons nor artillery could possibly pass these hills; halted at 3 o'clock, and encamped near a creek; a few miles before reaching our halting place for the night the face of the country changed; secondary formation gave way entirely to primitive rock; mountains of granite, almost wholly without soil; upon the side of one of them noticed a shining spot, apparently a waterfall, glistening in the sunlight; an old woodsman astonished us by informing us it was a mass of *salt*; no buffalo; our unshod horses suffered very much to-day; wild horses in abundance, and bears; many deer were seen; a few were killed; scanty allowance of provisions for our men; we march too fast to be able to hunt much on the road; game is now divided among the command with great care; marched in three columns; baggage reduced to three pack horses to each company.

July 20.—The command moved at half past 7 o'clock, west course; halted at half past 4 o'clock, thirty-seven miles; road literally of granite rock for miles; after a few miles struck high prairies, thinly

scattered with bushes; then ravines and difficult passes; immense blocks of granite piled on each other from 500 to 1,000 feet in height; many horses gave out to-day; traces of buffalo, but saw none; about the middle of the day's march the mountains became more detached; passed to-day what is called a "dog village." The prairie dog, or "marmot," is an animal somewhat larger than a squirrel, with a head like that of a dog; they live in holes in the ground, about twenty paces apart from each other; five or six miles were covered by the habitations of these little animals. We encamped five miles from the Toyash village, which is situated on a branch of Red river; soon after we had pitched our camp Lieutenant Northrop was directed to pursue and endeavor to bring to camp an Indian who was discovered on horseback; Lieutenant Northrop after some difficulty induced the Indian, who proved to be of the Toyash nation, to accompany him; he was very much alarmed; conversed readily with the Pawnee girl: We behaved kindly to this Indian; assured him of our friendly disposition, and allowed him to return to his village. The Toyash girl is now of very great service as an interpreter. The band not coming out to meet us to-day convinced us that they had either fled or had determined to make a stand and give us a fight; bayonets were fixed, and every preparation made for a conflict. Water to-day at our camp *sal.* Width of the branch of Red river about 500 feet from bank to bank; water low. Dutch, the Cherokee guide, very ill; the Kiowa girl ill also.

July 21.—The command marched at 8 o'clock for the Toyash village; proceeded a mile or two when we met about sixty Indians who had come out to meet us; shook hands with them, and moved on in company with each other; they stated that the principal chief was absent on a visit to the Pawnee Mohaw's country; passed their cornfields on our way to their town; these fields are well cultivated, neatly enclosed, and very extensive, reaching, in some instances, several miles; we saw also here melons of different kinds, squashes, &c. The Indians discovered a good deal of alarm as we approached their village; frequently halted, and begged Colonel Dodge not to fire on them; Colonel Dodge promised them safety. These Indians are chiefly naked, and are armed with bows and arrows. They have few horses, and seem altogether an unwarlike people. Before we started this morning the uncle of the Pawnee girl rode up to our camp; he embraced his relation, and shed tears of joy on meeting her. We soon reached the village, which is situated immediately under mountains of granite some 600 feet in height; in front of the village runs the river. We counted near 200 grass lodges; these are made of poles fixed firmly in the earth, fastened together at the top, and thatched substantially with prairie grass and stalks from their cornfields; many of these lodges are thirty feet high and forty feet in diameter; in the centre of the floor a shallow excavation serves as a fireplace; around the sides are comfortable berths, large enough to accommodate two persons each. We encamped on a fine position, about one mile from the village. Toyash men are less fine looking than the Comanches. Their women are prettier than the Comanche squaws; indeed, some of their girls are very pretty; naked, save a broad garment of dressed deer skin, or red cloth, worn about the middle; some of the men wear coats of red cloth, obtained from the Spaniards of Mexico. Most of our officers visited them on the day of our arrival, and were hospitably entertained. Our own provisions were almost entirely exhausted; we had met with little or no game for several days, and found most excellent fare in the dishes of corn and beans which they dress with buffalo fat; they served us thus liberally, and for dessert gave us watermelons and wild plums. Our men purchased green corn, dried horse meat and buffalo meat; we depended, during our stay with them, on their dried meat and corn, which, with vermilion and articles of clothing, knives, &c., we were able to purchase of them.

The Comanches now began to arrive.

July 22.—At the Toyash village Colonel Dodge and several of his officers met, agreeably to previous notice, the Toyash chiefs and warriors in council. Council being in order, Colonel Dodge proceeded to speak as follows: "We are the first American officers who have ever come to see the Pawnees; we meet you as friends, not as enemies, to make peace with you, to shake hands with you. The great American captain is at peace with all the white men in the world; he wishes to be at peace with all the red men in the world; we have been sent here to view this country, and to invite you to go to Washington, where the great American chief lives, to make a treaty with him, that you may learn how he wishes to send among you traders, who will bring you guns and blankets, and everything that you want. The great American chief wishes also to make peace between you and the Osages; you have been at war with the Osages; and to secure peace between you and the Cherokees, Senecas, Delawares, and Choctaws, and all other red men, that you may all meet together as friends, and not shed each other's blood, as you have done. On our way to your village we met a party of Comanches. We showed to them a white flag, which said to them, 'we wish to be friends.' Their principal men were gone to hunt; we treated their old men, women, and children, with kindness; we gave them presents; they had many horses; we could have taken their horses from them, but did not; we showed to them that we wanted to be at peace with them; they told us that you were their friends; we were glad to hear of it; we have come to your town, and found you as defenceless as the Comanches; we have treated you as we treated them; the American people show their kindness by actions, and not by words alone; we have been told that a white man was taken prisoner by you last summer, that a boy was made prisoner by you last spring; we have come now to require the boy at your hands, for we are told that he is in your town. Give us the white boy, and we will give you the Pawnee girl that we have brought with us; we wish all that has passed to be put behind us—to be forgotten; we wish to shake hands with you and be friends; you must now give me a positive and direct answer in regard to the white man who was taken last summer, and the boy who was taken last spring." (Remained in camp.)

The chief, We-ter-ra-shah-ro, replied: "I know nothing of the man who you say was taken last summer; the white boy is here."

Colonel Dodge resumed. "I wish the boy brought to me; I will then give to you the Pawnee girl; this act, together with all the information you can give concerning the man who was taken last summer, will be the best proof that you can give of the sincerity of your disposition to shake hands and be at peace with us. I cannot leave the country until we obtain possession of the boy and gain information respecting the man who was taken last summer. His name was Abby; he was taken between the Blue river and the Washita, about this time last year."

Chief.—"I know nothing of it. I believe they were Comanches who took the man." On receiving some intelligence from one of his friends, the chief continued: "I remember now; the Oways, who live south, did it."

Colonel Dodge.—"Do the Oways hunt on the grounds between the Blue and Washita rivers?"

Chief.—"They hunt there, and I have heard that they took the man Abby, and when they got near their camp they killed him."

Colonel Dodge.—"How far do the Oways live from here?"

Chief.—"They follow the buffalo as the Comanches do; they have a town." Here a pistol was accidentally fired in the council lodge, which caused much confusion. It was soon explained, however, and business proceeded. The white boy, who had been sent for, was brought in and presented to Colonel Dodge; the boy was entirely naked, about seven years of age; his name is Matthew Wright Martin.

Chief.—"I am glad to shake hands with you, with the red men that you have brought with you, the Osages, Delawares, and Cherokees; the principal chief is not here, but you are as gladly received as he would have welcomed you; the chief has gone to the country of the Pawnee O'Mohaws; he believed that you had gone that way. The father of the Toyash girl went with the chief to seek his daughter."

Colonel Dodge.—"How did the Comanches obtain the American flag I saw flying in their camp?"

Chief.—"The Pawnees from La Platte sent two flags—one for the Wacoahs, and the other to the Comanches."

Colonel Dodge.—"Do the Spaniards come here to trade with you?"

Chief.—"They do. They left us not long since, and went west."

Colonel Dodge.—"The Americans will give you better and cheaper goods than the Spaniards do. Tell me, if you know, where the ranger (Abby) was taken, and how he was killed?"

Chief.—"I have inquired, and have learned this day that the Indians who live near St. Antoine, in Mexico, captured Abby, and that they killed him on Red river."

Colonel Dodge.—"What Indians killed our Santa Fé traders?"

Chief.—"There is a roving tribe of very bad Indians called Wakinas; they range north of the country of the Arkansas." Colonel Dodge here presented the girl to her friends, whereupon they conducted her from the council.

Colonel Dodge.—"I am very much pleased at the exchange of prisoners. I hope the friends of the girl will be happy with her; she is a good girl; I wish her well. I will restore the little boy to his mother; her heart will be glad, and she will think better of the Pawnees; a bright sun has shined on us this day; I hope the Great Spirit will let it shine continually upon us. You have some Osage prisoners; the Osages have some Pawnee prisoners; we will exchange, and give you your Pawnee friends, and you shall restore the Osages to their friends. How many Osages have you?"

Chief.—"There are Osages here; they are men who were raised here, and do not wish to leave us. The Delaware woman and boy that we took died of the smallpox. A great many of the Toyash have died of smallpox."

Colonel Dodge.—"The American President will have a treaty of peace made between you all; then you will meet and exchange prisoners; this will be done when the next grass grows. The Osages who are with the Pawnees, who then wish to return to the Osages, will be able to return; and the Pawnees who are with the Osages can come back to their people."

Chief.—"We wish to have it done soon."

Colonel Dodge.—"The American President wishes to see some of each nation shake hands before him; he will give presents to those who visit him, and fix a permanent peace between their nations. Peace cannot be made with all the tribes till a large white paper be written and signed by the President and the hands of the chiefs. Will your chiefs go with me now to see the American President? I wish also to take with me some Comanche chiefs. The President will be happy to see you, and will make you, as I told you before, presents of handsome guns, coats, &c."

Much demurring among the chiefs.

Colonel Dodge.—"This is the proper time to make peace with the red men and the white men; if you do not seize this opportunity you may not have another. The bright chain of friendship can now be made bright between all the Indians and the white men."

Chief.—"We do not like to pass through the timber; it will be hard for our horses to pass through the thick timber country between us and the white men."

Colonel Dodge.—"There are roads; a big road is now being made."

Chief.—"We have met here as friends, we hope to remain so. The Great Spirit has seen us as we see now the white men, Cherokees, Osages, Delawares, and Senecas, as friends; we hope to remain so."

Colonel Dodge.—"I hope so. How came you by the negro who is here with you?"

Chief.—"This Comanche brought him; he found him on the Red river; you can take him and do as you please with him."

The council here closed.

July 23.—We-ter-ra-shah-ro, and two other principal men, met Colonel Dodge at his tent this morning, and held further talk with him. The four leaders of the bands of Indians who were with us were present at the talk, and participated therein. Colonel Dodge spoke as follows: "Toyash chiefs! I told you yesterday that I wished to show you the road that leads to the great American captain, and make you acquainted with the Indians that live on the way thither; have you thought of going with me? Our great father wished you to see the red men who live on the way, that you may be the better able to settle all difficulties with them. You shall be well treated; presents shall be made to you, and you shall be sent back in safety. Peace cannot be made unless some of you go; I am not the great captain, *he only* can make peace with you and other red men; I wish only a few of you to go with me; I wish you to go willingly and as friends; had I chosen to force you to go it would have been easy for me to do so; you see I do not wish to force you." After a good deal of consultation, one of the chiefs (a Wacoah) consented to go. Here the following interesting ceremony took place: The boy whom we recovered yesterday is the son of the late Judge Martin, of Arkansas, who was killed by a party of Indians some weeks since; the son was with his father on a hunting excursion, and being parted from him—his death, however, he did not witness, and is now in ignorance of it—the boy relates that, after being parted from his father, the Indians who had taken him were disposed, save one, to kill him; this one shielded him and took care of him in sickness. Colonel Dodge, as a reward for this noble kindness, gave him a rifle, and at the same time caused the little boy to present to him, with his own hand, a pistol. Colonel Dodge now assured the chiefs that they should receive further presents if they would go with him to his country; that he regretted he had nothing of value with him, but begged them to accept some rifles and pistols, which they did with *much evident satisfaction*. We-ter-ra-shah-ro, and the other chiefs with him, here consulted some time together on the subject of visiting the President. We-ter-ra-shah-ro spoke: "We have been at war with the nations which we see around us to-day; we wish now to make peace with them."

Colonel Dodge answered him: "It is the wish of the President that you make peace with them; that you present to each other clean hands; it is to effect this that I wish you to go with me."

The chief resumed: "We wish much to make peace with the Osages; we have been long at war with them; we wish to see the lands of the Creeks and Cherokees also, to shake hands with all. We want now to hear those Indians who came with you speak to us." The chief men of the four parties now spoke as follows:

Dutch, the Cherokee.—"I am now going to tell you what the chief of the Cherokees bade me say to you if we met as friends. He says to you his people wish to come to you without fear, and that you should visit them without fear. My heart is glad that we are all willing to be friends; a long time ago it was so, there was no war between us. I am rejoiced, and my people will be rejoiced, when they hear that it may be so again. Look at me, you see I speak the truth; I have nothing more to say."

Beatte, leader of the Osage band. "We came for peace; I have brought a few Osages, who were not afraid to come among you, with hearts inclined for peace. We look on our friend (Colonel Dodge) as our father; he is a true father to us all. I hope you will believe all that he says to you, and trust that he will prove a father to you. We wish you to visit our people, to see how we live since the white men have been our friends. They have made us happy; they will make you happy. You should go with our father as he wishes; you must then come and see the Osages. I have said all that I can say."

Monpisha, an Osage youth, spoke to the Toyash men. "We shake hands with pleasure. I am nothing but a boy; my father was an Osage chief. We wish to be your brothers—dogs fight; we wish to be peaceable men, and friends. Our good father has made, in coming to you, a great road; we hope it will never be stained with blood. My father told me he was once a wild Indian; that white men taught him to be happy, instructed him how to build houses, raise cattle, and live like white men. I was sent to the white man's school, (missionary school;) was taught to read and write. This will be extended to you if you make peace with white men. Your buffalo will be gone in a few years. Your great father, the President, will give you cattle, and teach you how to live without buffalo."

George Bullett (Pon-da-gne-se) spoke. "When I tell the Delawares that we are friends, and can now hunt without warring together, they will be happy; our children will hereafter be happy, and not fear each other; we will no more fear the prairie Indian, and you will not be afraid of us."

Colonel Dodge resumed. "I am glad to hear what our friends say to you. I must say to you now that I am very sorry that a few of our horses got into your cornfield last night; I shall pay you for the damage done; it is not my wish to disturb your property in any manner. White men will always be just to you. I must also repeat that I regretted that the pistol was accidentally fired in the council lodge yesterday; I did not wish to alarm your people; I was pleased with the coolness of your chief; he was not alarmed. I wish you now to consider if some of you will go with me."

The chiefs signified that they would go home and decide who should accompany the command on its march back, and accordingly left our camp.

Many Comanches arrived to-day; amongst them the principal chief, Ta-we-que-nah, and two other chiefs. Colonel Dodge held the following talk with them in his tent:

"The great American captain has sent me to view this country, and to offer the hand of friendship to all the red men who are here; he wishes to see you all at peace with each other; he desires you to come and see him, that he may fix a permanent peace with your tribes; he will make you presents, and he will send traders among you who will serve you with a great many things that you want to make you happy. The President, who is a good father to you, wishes to see you at peace with the Osages, Cherokees, Delawares, and all red men. We have endeavored to give you evidence of our friendship; we did so when we passed your camp; you were not at home; your women and children were defenceless; we treated them kindly; we confided in you, too. Our sick men we left behind near your camp."

Ta-we-que-nah replied. "I passed a night in your camp with your sick men; they treated us with kindness."

Colonel Dodge.—"You say that the Indians over Red river are your enemies; they kill you when you meet; these are Mexican Indians, and do not make treaties with our great father, the President; but he will protect you when you make peace with the Osages and other tribes that have been at war against you. The flag that you have come to you from the great father at Washington. The Pawnee O'Mohaws have such a flag, and all other red men who are our friends; whenever you show it you will be known as friends. I was glad to see the flag over your camp."

The chief spoke. "I wish to be at peace with you; there are many bands of Comanches; I shall visit them all this year, and will say to them what you have said to me; they will all be glad to make peace with you. I am an old man now, but never since I was a boy did I kill one of your people. You ask me who killed the ranger, Abby; I can tell you, for I remember when this white man was taken; the Texas Comanches took this white man, and carried him over the Red river, and there killed him."

Colonel Dodge.—"I wish some of you to go with me, that you may see our country, and that peace may be made strongly between you and the red men as well as between ourselves. The Pawnee O'Mohaws met the Osages, and Delawares, and Cherokees on our lands, and there made peace; they were enemies before; they are now friends, and do not hate each other. We wish you to come to us and make, in the same way, peace with us."

Ta-we-que-nah.—"You have a girl who was taken from our friends, the Kiowas. I have a Spanish girl; I will give you the Spanish girl in exchange for the Kiowa girl that you have brought with you."

Colonel Dodge.—"I wish to secure your friendship and the friendship of the Kiowas. I wish you to accompany me. I wish some of the Kiowas to go also; but I do not mean to sell the girl to them; I mean to give her to her relations and friends without price; I will give the girl to her tribe; they shall see how much their friends we are."

Ta-we-que-nah.—"If I go with you I shall be afraid to come back through the timber."

Colonel Dodge.—"I pledge myself that you shall be safely conducted back."

Ta-we-que-nah.—"I cannot go myself; my brother will go with you."

Here the talk was interrupted by a band of some twenty or thirty Kiowas rushing on horseback into camp, and almost into the door of Colonel Dodge's tent; the squaws and children fled in great alarm. The indignation of these Indians against the Osages had kindled to a great pitch, and could scarcely be kept in respectful bounds in their relation to us. The Osages, not many months previously, had murdered a large number of the women and children of the Kiowas whilst the men were absent hunting. We held in possession, of which they were informed, a Kiowa girl, who was taken on the occasion of the massacre alluded to; the Kiowas having just arrived, were not aware of the intention on our part to restore the girl, and consequently presented themselves in a warlike shape, that caused many a man in camp to stand by his arms. Colonel Dodge, however, immediately addressed them with assurances of our friendly dis-

position, and gradually led them into gentleness. They are a bold, warlike-looking Indian. Some of their horses are very fine; they ride well, and were admirably equipped to-day for fight or flight; their bows strung, and quivers filled with arrows. They kept their saddles chiefly. A relation of the Kiowa girl embraced her, and shed tears of joy at the intimation that she should be restored to her father and friends. She proves to be a relation of one of the chiefs. An arrangement was now made for a general council, to be held the next day, between the Comanches, Toyash, and Kiowa nations. (Remained in camp.)

July 24.—At 10 o'clock the chiefs of the council began to assemble at the place appointed for the meeting, which was in a wood about two hundred yards from our camp. The father of the Kiowa girl having learned that she was to be restored, in a speech addressed to the Kiowas, whose numbers every moment increased, gave vent to his joy and praise of his white friends. All came mounted and armed. Many of our officers were present. There were not less than two thousand mounted and armed Indians around the council. Great excitement prevailed among the Indians, but especially with the Kiowas, who embraced Colonel Dodge, and shed tears of gratitude for the restoration of their relative. An uncle of Wa-ha-sep-ah, a man of about forty years of age, was touchingly eager in his demonstrations, frequently throwing his arms around Colonel Dodge, and weeping over his shoulders, then invoking blessings upon him in a manner the most graceful and ardent. The women came in succession and embraced the girl, who was seated among the chiefs. The council being now in order, and the pipes having made their rounds, Colonel Dodge addressed the Comanche chief, who sat on his right, and who interpreted his words to the Kiowas, whilst a Toyash Indian, who speaks the Caddo tongue, communicated with the Toyash men from Chiom, one of our Cherokee friends, who speaks English and Caddo: "I am glad to see together the great chief of the Comanche nation, the chiefs of the Kiowa and Toyash people, and the American officers who are with me. We have been strangers until now. I am glad to meet the captain of the Comanches, (Ta-we-que-nah.) You must be a great man, and have much power with all the tribes around you. I ask you to urge to these Indians what I have said to you: that we are your friends, and that to secure our mutual and lasting friendship, it is better for some of each of you to go with me, as I have before mentioned to you."

Here another band of Kiowas, about sixty in number, rode up, led by a principal man, handsomely dressed. He wore a Spanish red cloth mantle, prodigious feathers, and leggings that followed his heels like an ancient train. Another of the chiefs of the new band was very showily arrayed; he wore a perfectly white dressed deer-skin hunting shirt, trimmed profusely with fringe of the same material, and beautifully bound with blue beads, over which was thrown a cloth mantle of blue and crimson, with leggings and moccasins entirely of beads. Our new friends shook hands all round, and seated themselves with a dignity and grace that would well become senators of a more civilized conclave.

Colonel Dodge resumed. "Kiowa chiefs! I herewith present to you your relation; receive her as the best evidence of the sincere friendship of Americans. Our great captain, the President, purchased this girl of the Osages, who took her from your people, and has sent me to restore her to the arms of her friends who love her. The Comanche chief (Ta-we-que-nah) offered me yesterday, in exchange for her, a Spanish girl. I would not accept of his offer, for the delivery of the girl is an act of justice, and is but one of the many acts of kindness that the great American captain will be glad to show to you. You and the Indians who came with us have long been at war with each other; it is time you were at peace together. It is the wish of the President to secure a permanent good understanding among you all. He will send traders among you; you want guns, blankets, &c. The buffalo are becoming scarce; there are less and less every year. You shall have cattle which you can keep with you; you can plant your corn and cultivate the soil, as the Cherokees and other Indians do. Here is a young man (Mr. Chadwick) who has come out with me to see you, and who will return next summer, and bring goods and trade with you. I now wish you to consider the invitation given you to go with me, and I assure you that you shall receive presents, and be safely conducted through the timber country." One of the chiefs inquired: "Will you go to-morrow?"

Colonel Dodge.—"I wish to go as soon as practicable, as we have far to go. I wish you to visit General Leavenworth, another of your friends, and a captain under the great captain; he wishes to see you; he has never seen you; I should be glad to introduce to him two chiefs from each nation, or one chief and some of the warriors of each people."

Titche-totche-cha, chief of the Kiowas, signified his willingness to go. We-ter-rah-shah-ro, an old chief, 70 years of age, urged his red brethren to rely on the truth of Colonel Dodge's words. "He is a good man," said he, "believe his words."

The father of the Kiowa girl begged Colonel Dodge to accept a present, which the colonel declined, repeating what he had before said, that he did not wish for ransom or reward; that the child was given to the father as an evidence of the good feeling of his people for them.

Titche-totche-cha spoke. "The American captain has spoken well to-day; the white men have shown themselves our friends. If a white man ever comes to my country, he shall be kindly treated; if he wants a horse, or anything that I have, he shall not pay for it; I will give him what he wants."

The council here closed; we returned to our camp, and left the Indians to decide in regard to accompanying us. It is on all accounts desirable to move from here. Our provisions prove unhealthy for our men, consisting entirely of green corn and dried horse and buffalo meat. The weather has been excessively hot and dry. Our men, many of them sick, are without a physician or medicines; two or three officers are and have been for several days ill of fevers. The Comanche squaws are very troublesome; they steal everything that they can secrete. The Toyash women are infinitely respectable. The difference in these three tribes seems to be somewhat thus: The Comanche is an arrogant, jealous, savage don; the Toyash, a savage farmer; whilst the Kiowa, more chivalric, impulsive, and daring than either, reminds one of the bold clannish Highlander, whose very crimes are made by the poet captivating. This tribe has roamed more towards the Rocky mountains until within a few years past.

July 25.—The chiefs of the three tribes early visited our camp. Colonel Dodge presented them with guns and pistols. Fifteen Kiowas, including the chief, Titche-totche-cha, were the first mounted and equipped, ready to march with us; the Comanche chief, very cautious and apparently suspicious, deferred till late, when four Comanches, a squaw, and our early acquaintance, the Spaniard, joined us; there was much delay on the part of the Toyash. At length the old chief, We-ter-ra-shah-ro, a Wacoah chief, (of a small band, who speak the same language as the Toyash people, and live near their town,) and two Toyash warriors, rode into our camp prepared to move with us.

The command, with the Indians, the white boy, and the negro in company, marched at 3 o'clock, halted at 5 o'clock, and encamped on a creek six miles east.

July 26.—Marched at half-past 7 o'clock; our guide, the Pawnee O'Mohaw, who had promised to remain with us, left us; he was no loss, for he had led us over a uselessly long route, over rocks and hills, through deep ravines, all of which our guide to-day, a Toyash, has avoided, and, in place thereof, we have passed through a beautiful valley four or five miles in width, over an open, level prairie, leaving the granite roads on our right and left in the mountains; course to-day east, distance twenty-one miles; water scarce, grass very much destroyed by heat and dry weather; encamped on a stream of good water, good grazing; severe shower of rain, the first that has blessed us for many days; parched corn and dried buffalo meat our fare; health of command tolerably good. From conversation to-day with one of the Indians (Ski-sa-ro-ka, an intelligent Toyash) we learn that their nation lived formerly south; that their oldest men were born there, and that they and the Comanches have long been in habits of friendly intercourse; the Comanches exchange buffalo meat for the agricultural productions of the Toyash; the Comanches not much liked by the Toyash; they cheat them and ride away. The Kiowas, a newer acquaintance, more honest and gentle. The Comanches of Texas a much more powerful tribe than those on this side of the Red river; they are called the Ho-ishe Comanche.

July 27.—Marched at half-past 7 o'clock, course east, distance twenty-three miles; reached the sick camp at 4 o'clock; found Lieutenants Izard and Moore both sick with fevers; also Mr. Catlin very ill; twenty-nine sick men in both camps. Lieutenant Wheelock's servant, left sick on the 19th instant, died in our absence. Our road to-day lay through a valley; occasional interruptions from timbered creeks and small thickets, until we reached "Roaring river," a short stream, but containing a considerable volume of water; empties into Red river. The Comanches who set out with us, left us to-day on account, as they say, of the sickness of the squaw. The Spaniard, who seems to belong to that tribe more than with any other, remains with us. These Indians seem well contented, and move without restraint, encamping with us at night, and setting out with the command, or after it has marched, as they please. Colonel Dodge and all the officers unable to account for not hearing from General Leavenworth. From the short supplies taken, we have reason to expect to hear from or meet with our wagons; our buffalo meat very short, and no game as yet.

July 28.—Broke up the sick camp, and marched at half-past 9 o'clock, with the whole command, taking again with us the Senecas, who had been left to hunt for the men left at this camp. Excessive hot weather; 43 sick, 7 in litters; course east by north, distance 12 miles. The heat to-day has been overpowering, both to men and horses; water tolerable; course north, from our trace going out; camp to-night about six miles from former trace.

Colonel Dodge sent an express in search of General Leavenworth, to inform him of our return from the Pawnee villages. Colonel Dodge resolves to wait in the buffalo range for orders from General Leavenworth. Deer abundant to-day; one or two killed. One of the men killed a panther yesterday; passed to-day many hills of gypsum.

July 29.—Marched to-day at 8 o'clock, east by north, distance fifteen miles; provisions very short. At 12 o'clock the cry of buffalo was heard, and never was the cheering sound of land better welcomed by wearied mariners, than this by our hungry columns. The command was halted, and some went together; the report of Beatte's rifle, and the fall of a fat cow; halted at 4 o'clock; killed two more buffaloes. Passed to-day more plaster of paris; road to-day over open, rolling prairies, between two forks of the Washita; met a small party of Toyash Indians. Our red friends suffer exceedingly from the heat of the sun; we covered them this morning with shirts.

July 30.—Marched at 8 o'clock; weather excessively hot; course northeast, fourteen miles; course interrupted by frequent deep gullies totally impassable for wagons. Nine miles from camp passed the Washita; good water to-day; encamped on a fine stream; large fishes visible from the bank; timbered creeks, blackjack, elm, and mulberry trees; more gypsum.

July 31.—Marched at half-past 8 o'clock; men in fine spirits; abundance of buffalo meat; course northeast; distance 10 miles; encamped on a branch of the Canadian; three buffaloes killed this morning; no news yet from express; anxiously looked for; face of country rolling prairie; frequent deep gullies; one of the Kiowas killed three buffaloes with *three arrows*.

August 1.—The signal for advance was sounded at half-past 8 o'clock; course north by east; distance 15 miles; halted at half-past one o'clock; 10 miles from camp crossed the Canadian; plenty of water to-day; passed the Canadian about 100 miles from our ford going out; abundance of buffalo, immense herds in every direction from the camp; men employed at night in drying meat; officers and men fortunate who have been provident enough to save a small quantity of corn for parching. Camp alarmed this evening by the cry of "secure your horses from the buffalo;" a herd was rushing upon our camp, around which our horses had just been picketed, and had approached within two hundred yards of us, when our mounted sentinels changed their direction, and thus saving us from another "*stampede*." We have been fortunate in having had but one occurrence of this not uncommon evil with bodies of horse on the prairies.

August 2.—Rest! Welcome rest for men and horses; occupied in killing and drying buffalo meat for the anticipated march to Fort Leavenworth; probable distance thither 400 miles; our men not unfrequently lost in hunting; in several instances absent from camp all night; our men find an excellent substitute for tea and coffee in a wild sage plant; we still have the advantage of being not at all troubled with flies or misquitos; the nights are so cool that the covering of a blanket is pleasant.

August 3.—Moved a mile at half-past 10 o'clock, for change of grazing and police; our horses are in bad order, so much so that it is feared they may not be equal to a march to Fort Leavenworth; may possibly be compelled to move to Fort Gibson to recruit and shoe them. Little Martin flourishes, and is a great favorite in the command; he is an uncommonly fine boy.

August 4.—The command marched at half-past 8 o'clock, southerly direction, eight miles along the Canadian, in search of buffalo; they have fled from the vicinity of our last camp; passed large herds of buffalo; the Kiowas dashed in amongst them and killed, with their arrows, a great many of them; grass very much dried, scarce affording subsistence for our horses. Colonel Dodge has decided on marching to Fort Gibson. The prairie took fire to-day near our camp and was with difficulty extinguished.

August 5.—Rested for the day; men employed in curing meat; the express to General Leavenworth returned. Intelligence from Captain Dean of 3d infantry, announces the death of General Leavenworth; he died at his camp near "Cross Timbers," on the 21st of July; Lieutenant McClure, of this regiment, died at the Washita on the 20th of July; bilious fevers; one hundred and fifty men sick at the Washita.

August 6.—Marched at 8 o'clock for the fort at the mouth of Little river; course southeast; distance, twenty-three miles; road through "Cross Timbers." This is a timbered thicket, small blackjack sap-

plings so close as to frequently require the axe to make a road for a horseman. Five litters in our train; men in them extremely ill. Colonel Dodge sent an express to Colonel Kearney, who is at Camp Smith, near the mouth of the Washita, directing him to move his command to Fort Gibson; herds of buffalo broke and rebroke through our columns to-day; encamped in timber, in the bottom of a branch of Little river; found excellent grazing in the pea vines; litters came up several hours after the command.

August 7.—Our columns started at eight o'clock; course, south by east; gained eighteen miles; still in the "Cross Timbers," which promise to continue till we strike the road to Fort Gibson; a few small prairies interspersed amongst the severest blackjack thickets. Our route to-day has been on the dividing ridge between the Canadian and Little rivers. Scarcity of water; fortunately found at four o'clock good water and grazing.

August 8.—Marched at eight o'clock, halted at three o'clock; distance, 18 miles; course, east by south; exceedingly warm day; stubborn thickets; crossed and encamped in the bottom of Little river; shallow stream, narrow bed, miry shores, no water from morning till the halt for the night; passed many creeks the beds of which were entirely dry; our horses looked up and down their parched surfaces, and the men gazed in vain at the willows ahead, which proved to mark only where water had been. The timber is larger here; black walnut and sycamore; lime and freestone; the woods abound to-day in plums, and a variety of finely-flavored grapes; no longer any trace of the buffalo; sick report numbers thirty men and three officers.

August 9.—Marched at the usual hour and made twenty miles in a northeast course; cross timbers, but more open than for the last three days; tolerable supply of water; soil sandy; encamped at 4 o'clock in open timber, near where we struck the road from Fort Gibson to the Washita, which was three miles from the post at the mouth of Little river.

August 10.—Dragoon camp "Canadian." We drew from Lieutenant Holmes, commander of the infantry camp "Canadian," at the mouth of Little river, provisions for four days; Lieutenant Holmes well advanced with his buildings; one block-house, and quarters for one company erected; vast many sick; on our sick list thirty. Remained in camp.

August 11.—Marched at eight o'clock; left our sick, whom we brought in litters, at the infantry camp; gained on the road to Fort Gibson 22 miles; our men happy, with pork and flour.

August 12.—Command moved at eight o'clock; express returned from Camp Smith; Lieutenant Colonel Kearney reports many sick; 71 for duty, 41 sick; 8 for duty at Camp Washita, and 70 sick; many of our horses disabled; led by men in rear of the columns; tolerable water, wholly in pools. It is worthy of remark that the mules of the command look better than when we started on the campaign, while it would be difficult to select ten horses in good order. The command ordered to walk and ride one hour alternately; this relieves the horses.

August 13.—Marched at half-past seven o'clock, and reached the Creek settlements at the north fork of the Canadian, 17 miles. The Toyash and Kiowas met the Creeks this evening and shook hands with them; we purchased here corn for our horses; informed here by a citizen that the mother of little Martin has recently offered two thousand dollars for his recovery; she will soon be made happy by his restoration without ransom or reward.

August 14.—We marched at eight o'clock, 20 miles to our former camp, ("Rendezvous,") from whence the regiment started on the 21st of June. Our horses are exceedingly worn, though somewhat aided to-day by the corn we gave them yesterday at the North fork. The season is unfortunately late for grazing; it is only in timber that tolerable grass is found; extraordinary heat to-day; the breeze comes against the face and hands with an unpleasant heat, so that one turns from it as from the keen blasts of winter; water scarce and in pools; our men present a sorry figure, but one that looks like service; many of them literally half naked; sick list reduced to nineteen.

August 15.—Marched at half-past seven o'clock; an officer was sent in advance to purchase corn; the command marched 14 miles, and encamped three miles from the west bank of the Arkansas. Colonel Dodge and staff, together with the Indians, crossed the river late in the evening, and reached Fort Gibson.

August 16.—Fort Gibson; Major Mason and three companies ordered this side of the river; Captain Sumner and three companies directed to remain in camp on the west side of the Arkansas.

August 24.—Colonel Kearney's command arrived yesterday; great number of sick men, and worn down horses; officers belonging to it are Captain Trenor; Lieutenant Swords, (sick;) Lieutenant Van Deever, (sick;) Lieutenant Eastman, (sick;) Lieutenants Bowman, Ury, and Kingsbury; Assistant Surgeon Hailes, (very sick.)

Runners have been sent to the chiefs of the Osages, Cherokees, Creeks, Choctaws, &c., for the purpose of assembling them in council with the Indians who have accompanied us. Our friends from the prairie are in good health, and are apparently contented. Little Martin is still with Colonel Dodge, and the negro we brought from the Toyash village has been delivered to his master.

T. B. WHEELLOCK, *First Lieutenant Dragoons.*

No. 2.

REPORT OF THE QUARTERMASTER GENERAL.

QUARTERMASTER GENERAL'S OFFICE, *Washington City, November 22, 1834.*

SIR: In obedience to your order, and in compliance with the regulations for the government of the department, I have the honor to submit the following report of the operations of that branch of the service confided to my administration for the 1st, 2d, and 3d quarters of the present year, to which I have added that portion of the last year not included in my report of the 27th November, 1833.

The balance remaining to be accounted for by the several officers of the department at the date of that report amounted to \$84, 286 48

To which is to be added—

1st. Remittances, viz:	
In the 4th quarter, 1833	\$330, 237 26
In the 1st quarter, 1834	155, 703 74
In the 2d quarter, 1834	181, 522 90
In the 3d quarter, 1834	317, 410 82

\$984, 874 72

	Brought forward.....	\$984, 874 72	\$84, 286 48
In small sums, during the year, from other departments, not on requisitions from this office, but accounted for through it.....		8, 341 19	993, 215 91
2d. Proceeds of sales of public property, either unfit for service or no longer required for public use, and rents received for public lands and buildings not required for military purposes.....			20, 489 01
Making the total to be accounted for.....			1, 097, 991 40
Of which there has been accounted for—			
1st. By disbursements, viz:			
In the 2d and 3d quarters of 1833, not included in the last report, the accounts not having been received at its date	\$6, 118 50		
In the 4th quarter, 1833.....	281, 929 98		
In the 1st quarter, 1834.....	179, 545 33		
In the 2d quarter, 1834.....	207, 528 55		
In the 3d quarter, 1834.....	315, 424 19		
		\$990, 546 55	
2d. By deposits to the credit of the Treasurer of the United States.....		4, 434 38	
3d. By amount turned over to the Ordnance department by the assistant quartermaster at Detroit, being part of the proceeds of public property sold at that place.....		5, 053 48	
Total accounted for.....			1, 000, 034 41
Leaving a balance to be accounted for, of.....			97, 956 99

The accounts of four officers remain to be received for the second quarter, and of eight officers for the third quarter of the present year, which will probably reduce the balance about fifteen thousand dollars. The remainder is distributed among more than sixty officers at the various posts, and connected with the several public works directed by the department throughout the Union; and I confidently believe that the whole of it will be applied to the proper objects, and accounted for at the close of the present quarter.

The property under the administration of the department is promptly accounted for by the officers who receive it, as well of the department as of the several corps of the army.

The balance remaining in the treasury, of the appropriation for the Quartermaster's department proper, with the sums due to it for expenditures on account of other branches of the service, will not only be sufficient for all demands against it for the remainder of this year, but will leave twenty thousand dollars applicable to the service of the next year.

The balance remaining on account of the transportation of troops, supplies, &c., will, it is believed, be sufficient to meet all demands against it within the year; and the experience of the present year has induced me to venture on a small reduction of the estimate for the next year.

The appropriation for the transportation of ordnance has been found inadequate to the wants of the service. My estimate was cut down one-fourth at the last session of Congress; in consequence of which an unusual number of arms and a large quantity of ordnance stores have accumulated, and must necessarily be removed during the ensuing year.

The appropriation made at the last session of Congress for the transportation or travelling allowance of the officers of the army, including those of the dragoons, when moving on duty without troops, was several thousand dollars less than the actual expenditure in 1833, without including the dragoons. I estimated for a sum barely sufficient to meet the expenditure at the then established rate, but my estimate was cut down fifteen thousand dollars; the consequence was the reduction of the rate, before low enough, to nine cents per mile, the utmost that the present appropriation will bear. The mileage to officers of the navy, when travelling on duty, authorized by the regulations submitted to Congress at its last session, is twelve and a half cents to captains, commanders, and judge advocates, and ten cents to all others. Officers of the army are subjected to as much expense in travelling as those of the navy, and in common justice ought to have an equal allowance. The expenditure on this account may seem large, but it is to be remarked that the United States are engaged in improvements, both military and civil, upon as great a scale as any other civilized nation. The greater part of those improvements are directed by officers of the army; they are to be found on all our frontiers, and dispersed over every part of our extensive territories, directing the construction of fortifications, arsenals, barracks, roads, bridges, breakwaters, and other national works; surveying routes for canals, railroads, and military roads; assisting in a trigonometrical survey of our coast, and in hydrographical surveys, and in improving numerous harbors, and removing the obstructions to the navigation of rivers; a large portion of them are emphatically workingmen, and can say with truth that, whosoever may eat the bread of idleness, they are not of the number. The improvements on which they have been engaged since the termination of the war with Great Britain, besides their great commercial advantages, will, when completed, have more than quadrupled the defensive military power of the country. Of what consequence is the saving of a few thousand dollars, cut off from the travelling allowance of men thus engaged, compared with the positive advantages which the nation is deriving from their labors? The reduction having been made in the House of Representatives, I have not felt at liberty to estimate for more than the amount appropriated last year, but I most respectfully and earnestly recommend that the subject be so placed before Congress that a just and equitable allowance be granted.

From the numerous casualties attending the service of the regiment of dragoons, I have been obliged to increase the estimate for horses and equipments to thirty-five thousand dollars, being fifteen thousand dollars more than the estimate of last year.

Of the works under the direction of the department, the barracks authorized in the vicinity of New Orleans were commenced early in the season, and at the date of the last report, although the operations had been greatly retarded by the heat and rains, as well as by the prevalence of the yellow fever, the buildings had been covered; every part of the work is reported to have been executed in the best manner. To complete the work, with its defences, the appropriation asked for at the last session of Congress will be necessary.

Of the works authorized at Savannah, the soldiers' quarters, though not entirely finished, are reported to be in a state to be occupied; the officers' quarters are in progress, but, to complete them and the defences, a further appropriation will be necessary.

The works at Baton Rouge, Fort Severn, and Green Bay, are in rapid progress; at the latter place, it is believed, all the labors will have terminated by the end of the present year, except upon the hospital, which will probably be finished by the 1st of June.

The new barracks at Fort Crawford were, at the date of the last report, in such a state of forwardness as to leave no doubt of their being soon completed.

The repairs at Fort Gibson, for which an appropriation of five thousand dollars was made at the last session of Congress, have not been commenced; the buildings are in so bad a condition that the late commanding officer gave it as his opinion that the appropriation would be entirely lost if applied to the old work. He urged the necessity of a new work, and recommended that it be built of stone, of which there is an abundance in the neighborhood, and of good quality.

A property adjoining Fort McHenry, near Baltimore, which is now rented by the public for the accommodation of the garrison, will be sold in a short time, under a decree of the chancellor. Regarding Fort McHenry even as a secondary work, according to the classification made by the board of engineers, the United States should own the property referred to. I therefore respectfully ask that authority be obtained from Congress to make the purchase; no appropriation will be required, as the necessary sum may be spared from the Quartermaster's department.

A new post has been established, and barracks, stables, and other buildings have been erected at the Des Moines, on the Upper Mississippi, for three companies of dragoons, and accommodations for four companies at Fort Leavenworth and for three companies near Fort Gibson were in a state of preparation at the last reports from those posts.

The amount appropriated at the last session of Congress for the purchase of an additional lot of land at Fort Sullivan, required for military purposes, has been applied as designed, and the land is now the property of the United States.

The military road in Maine has been thoroughly repaired and completed; and, in compliance with the provisions of an act of Congress approved the 30th of June last, it has been transferred to the State of Maine.

Instructions have been given to the principal officer of the department in Arkansas to resume the repair of the Memphis and Little Rock road so soon as the season shall permit, and also to take measures to cause the following roads, authorized at the last session of Congress, to be surveyed and opened, viz: a road from Helena to the mouth of Cache river; a road from Jackson, in the county of Lawrence, by Liberty and Fayetteville, in the county of Washington, to Fort Smith; a road from Strong's, (a point on the military road from Memphis to Little Rock,) by Litchfield, in Jackson county, to Batesville; and a road from Columbia, in Chicot county, to Little Rock.

A road has been opened, by the labor of the troops, on the southwestern frontier from Fort Towson to False Washita of Red river; also one from Fort Gibson to the Little Red river of Arkansas, and thence to the mouth of False Washita, and one direct from Fort Gibson to the point where the latter road crosses the north fork of the Canadian.

On the road from Pensacola to Tallahassee, in Florida, repairs have been made, and bridges have been erected over several rivers, creeks, and sloughs. The officer in charge of the work, finding that the money expended would probably be lost by closing his operations when the appropriation was exhausted, went on to complete the work, and has exceeded the appropriation eighteen hundred and seventy-five dollars and five cents. I have not included that sum in my estimate, but I respectfully recommend that application be made to Congress for an appropriation to cover the expenditure.

The appropriation for the road from Fort Howard to Fort Crawford not being sufficient to carry on the work with advantage by means of hired laborers or by contract, and the troops at both posts being engaged in building, nothing has yet been effected except the survey of the route.

The labors at the Delaware breakwater were resumed early in July, and on the 18th of October, when they were suspended for the season, one hundred and twenty-two thousand nine hundred and ninety-five tons of stone had been deposited at the work, the greater part of which was used in bringing up that portion of it which had been previously founded. The whole of the appropriation made at the last session of Congress, except a small sum reserved for contingent expenses during the winter, will have been expended in closing the accounts of the work for the season.

For three years past the surveys of the work have exhibited a trifling deposit of mud and sand within the western extremity of the breakwater, but it was not until September of the present year that the shoal had assumed such a form and extent as to cause any apprehension of injury to the harbor. On reporting to you the fact, you caused a board of survey to be formed, and directed it to proceed to and carefully examine the work. The annexed paper, marked A, is a copy of their report, from which it will be seen that the facts previously reported are confirmed. In consequence of the unanimous opinion of the board, and with your assent, I have reduced the estimate for next year to one hundred thousand dollars. That sum will be sufficient to bring the whole of the work already founded to its destined height, or nearly so; and, until the course of observations indicated by the board be completed, more should not be attempted.

Before closing my report, I deem it my duty respectfully to call your attention to the situation of the officer, clerks, and sergeants employed in my office. It has been stated in a semi-official form, and under high official sanction, that the increase in the expenses of the army are in a great measure to be ascribed to the employment of officers and sergeants in the public offices at Washington. It is not my place, nor would it be proper, in a report like this, to refer to other offices; but, so far as this office is concerned, the statement made, and the opinion founded on it, are entirely incorrect. There is one officer attached to the office who, under a regulation of 1818, receives, in addition to his pay as an assistant quartermaster, a per diem of one dollar and a quarter; there are three sergeants attached to the office, two of whom receive five hundred dollars and the other three hundred dollars per annum, in addition to their compensation as sergeants. The two sergeants who receive the highest compensation get, altogether, only seventy-five cents over eight hundred dollars, the pay of the lowest class of clerks in the civil offices, and the other sergeant receives less than a messenger in a civil office. They, as well as the clerks in the office, have often to labor on Sunday and at night, to prevent the business from falling back. Now, all I ask for them is, that a thorough investigation be made, and their compensation be fixed in relation to the labors which they actually perform, and to the responsibility of their stations. This would satisfy them; less would not be just.

It has been the practice of the government under every administration, as far as I have been able to

trace the matter, (and I have traced it as far back as 1806,) to allow extra compensation for extra services. Under this practice, known to have existed so long, officers of this department, as well as of other departments, sometimes claim a percentage for expenditures which they consider as not within the range of their appropriate duties. Independently of orders and regulations, they will probably continue to claim that which they deem to be their right, and there is but little doubt of the courts of the country ultimately allowing it to them. Recent decisions of the Supreme Court seem to have settled the principle. In this state of the case, I respectfully suggest whether it be not advisable that their duties be defined by law, or that power be conferred on the President or Secretary of War to define them; and either that the percentage for that which is now considered extra duty be positively granted or positively withheld.

In 1821 more than twenty officers of the Purchasing department were disbanded, and their duties were assigned by the Secretary of War to the Quartermaster's department; and in May, 1826, Congress assigned to the department, by law, the direction of the accountability for clothing. This is an extremely disagreeable duty, abounding in laborious details, and one which brings the department into constant collision with the army. It can be effectually performed only by a department having the entire control of the subject. A separate bureau having been established and specially charged with the administration of that branch of the service, I respectfully ask that application be made to Congress so to modify the law above referred to, that I may be relieved from that part of the duty which I am now compelled to perform, and that it be transferred to the officer in charge of the Clothing bureau.

I have the honor to be, very respectfully, your obedient servant,

TH. S. JESUP, *Maj. Gen. and Quartermaster General.*

Hon. LEWIS CASS, *Secretary of War, Washington City.*

A.

LEWES, *Delaware, November 10, 1834.*

SIR: In compliance with the instructions of your letter of October 25, we have made an examination of the Delaware breakwater, and now present the following report thereon:

It appears by an inspection of the maps representing the state of the works at the close of operations of each year that, since 1830, every year has presented new additions to a shoal near the west end of the breakwater, and that within the last year, particularly, this shoal has greatly increased.

Before 1833 little had been done on the ice-breaker; since that period the work has been brought nearly to completion, and a shoal on either side of this mass has been observed to be simultaneously forming.

These are the principal facts bearing on the question before us, and, after a deliberate consideration of them, we unanimously concur in the following opinions, viz:

That the next year's operations should be confined to giving to all the work already begun the ultimate dimensions, omitting any further extension of the work eastward, and waiting during the year, and, if necessary, for a longer period, the further growth of the shoal.

That, in the meantime, very numerous and careful observations should be made to determine the precise amount of enlargement, both in lateral limits and in elevation, of all the shoals.

That a system of observations should be steadily pursued whereby the force and direction of the flood and ebb currents at different times of tide, and at different distances from the works, may be accurately given and clearly represented on the map.

With the extension of the work above water herein contemplated, the immediate advantage will be obtained of a considerable augmentation of sheltered space; the same extension will serve to indicate, in a more decided manner, the form and magnitude which the shoals may be expected ultimately to attain. It will bring nearer to a solution the important question as to the most proper width to be given to the eastern entrance to the harbor; and, with the aid of the information obtained by the observations on the shoals and on the tides, an opinion less liable to error may be formed as to the exact cause of the shoals, the extent to which they may reach, and, if remedy or correction be possible, the mode and manner of remedy or correction.

Sooner than herein contemplated we believe it would be premature to resolve on any other change than that indicated of the original project, as we believe it would also be premature now to fix upon the matters of detail in the style or manner of its ultimate finish.

We have the honor to be, very respectfully, your most obedient servants,

TH. S. JESUP, *Major General and Quartermaster General.*

JOS. F. TOTTEN, *Lt. Col. of Engineers and Bvt. Colonel.*

S. THAYER, *Brevet Lieutenant Colonel.*

Hon. LEWIS CASS, *Secretary of War, Washington.*

No. 3.

REPORT FROM THE ENGINEER DEPARTMENT.

ENGINEER DEPARTMENT, *November 1, 1834.*

SIR: In compliance with your instructions, I have the honor to submit the following report relating to the operations of this department during the year ending on the 30th September last. It is accompanied by three tabular statements, marked A, B, and C. The first two relate to its fiscal concerns, and the last exhibits the works projected by the board of engineers which have not been commenced, and an estimate of their cost.

FORTIFICATIONS.

Fort Independence, Boston harbor.—Operations on Castle island, the site of this fort, have been confined to the works referred to in my last annual report. The sea and wharf walls are nearly completed; their total length is 1,052 feet, and 2,342 cubic yards of stone have been used in their construction. All that part of the island exposed to abrasion from the action of the waves is, with the exception of about

150 feet, now amply protected. A portion of the old wall is, however, in a ruinous condition, and should be rebuilt without delay; an estimate for that object will therefore be submitted.

You will, no doubt, recollect that a revised project for rebuilding Fort Independence, with certain improvements, was presented by the board of engineers in March last. The question as to the adoption of this project not having been settled, it was deemed proper to limit the arrangement for executing that work to the collection and preparation of such materials only as will be alike required on the original and revised plan. The material and workmanship of the fort, in its present condition, are such as to render it probable that the whole work will have to be rebuilt.

Fort Warren, Boston harbor.—The late period at which the appropriations were made at the last session of Congress rendered it proper to limit the operations at this work to preparatory measures for efficient prosecution of the fort during the next working season. The buildings necessary to accommodate the laborers and other persons employed at the work are in progress of construction, and will be finished in due time. A wharf, requiring for its construction about 2,000 cubic yards of stone in walls and 17,000 yards of earth embankment, will soon be ready for the reception of materials. Everything will be prepared to commence the masonry of the work early next spring.

Fort Adams, Narragansett Roads, Rhode Island.—Operations at this work have been prosecuted in the usual satisfactory manner. The fort, as far as constructed, is in good condition, and the funds appropriated for it have been applied to advantage.

Fort Hamilton, Narrows, New York.—The slight defects in construction, always to be expected in a work of this magnitude, have been repaired, and the fort may, by the end of the present year, be considered as finished.

Fort Lafayette, Narrows, New York.—A portion of the unexpended balance remaining on account of this work has been applied to the repairs of the sea-wall. This became necessary in consequence of the failure of the mortar with which it was pointed, and the settling of the wall in many places.

Fort Columbus and Castle William, Governor's island, New York.—The report of the engineer charged with the repairs of these works is highly favorable. In the former the scarp-walls, except the pointing and parapets, have been finished; the counterscarp revetments and revetments of the glacis are nearly completed. The facing of the covered-way revetment leading from Fort Columbus to Castle William will be done this fall. The masonry of the magazines and barracks, as well as that of the communications connecting the former, is finished, as is also the facing of the *redan*. All the masonry of the barracks on the south, west, and north fronts is nearly finished, and the roofs are in readiness to receive the covering; the masonry of those on the east front is in a state of forwardness. Measures have been taken to finish the repairs of Castle William as speedily as practicable.

Fort Schuyler, Throg's Neck, East river, New York.—Agreeably to your instructions, the operations on Throg's Neck have been limited to the making of such arrangements as will enable the officer charged with the construction of this fort to prosecute the work with efficiency during the next working season. The most ample preparations have been made. A permanent wharf will be in readiness by the time it is required; the necessary boats and machinery have been provided; an ample quarry, of good quality of stone, prepared; and, indeed, everything that may tend to expedite the work, when commenced, will be found in waiting.

Fort Delaware, Delaware river.—The annual report of the officer charged with this work has not yet been received. This is, no doubt, owing to his perpetual engagements with the several works in course of construction under his supervision.

Fort Monroe, Hampton roads, Virginia.—All the permanent parts of this work were completed last year. The ramparts of fronts 5, 6, and 7, together with the glacis and road in advance of these fronts, were, with the exception of a small portion of front 5, formed and covered with earth. The rampart of covertway and place of arms, in advance of front 5, was in a state of forwardness along its whole extent, and fifteen thousand cubic yards of sand were deposited towards the construction of the redoubt; five hundred tons of stone were collected and put in place for the protection of the beach in front of the casemated battery and the glacis of front 6; conduit pipes for conducting the water from the roof of casemated battery laid; the piazzas of curtains 2 and 3 completed, and all the materials for the draws to bridges and gates procured; the draws and gates to main entrance finished, and the timber for the others partly prepared; the earth for the parapets on all the fronts, except 1, 2, and 3, was collected at the foot of the scarp-wall; the ditches of all the fronts were excavated to their proper depth, and the glacis and road in advance formed, except those on front 1; the casemated covertway on front 4 was completed, and the funds available, with the force then organized, amply sufficient for the completion of the fort, with the exception of putting parapets on the main and out-works, which was not deemed advisable for the present, when the operations of the Engineer department were arrested by general order No. 54. This order directed that the work, with its funds, be placed under the immediate orders of the officer commanding the troops on that station. The main work was, therefore, entirely completed, except the gates, the raising of the half parapets on fronts 1, 2, and 3, and the whole parapets on the other fronts—the earth required for these last being placed at the foot of the scarp. Four thousand three hundred and ten cubic yards of earth were required to complete the rampart of covertway on front 5; twenty-one thousand three hundred and eighty to finish the rampart of redoubt; twenty thousand two hundred and ninety-seven yards for the construction of the parapet on covertway; and eight thousand eight hundred and ninety for the parapet of the redoubt.

It has already been stated that the funds available for this work were, at the time they were transferred, deemed amply sufficient for its completion according to the terms of the estimate upon which the appropriation of the last session of Congress was requested; and but for the circumstance above referred to, I should most likely have had the gratification of reporting it finished. It is proper to remark here, that the original plan of this work contemplates the revetment of the counterscarp, excepting on front 4, with sods. Doubts are entertained, however, as to the durability of this material in a position like this, exposed to the abrasions of the waves and other action of the water in the ditches; and the question may arise as to whether it may not be proper to replace it by stone. This subject it was my intention to have brought to the notice of the War Department at the present time, and, if deemed necessary, to have submitted an estimate for a counterscarp revetment of stone.

Fort Calhoun, Hampton roads, Virginia.—The funds appropriated for this work have been applied in furtherance of the views referred to in my last annual report. Upwards of twenty-eight thousand tons of stone have been added within the year to that previously received. Of the whole quantity received 654.04 tons have been dressed for building, leaving 5,139.07 tons rough building, and 23,073 tons break-

water stone. All the stone required for building is now accumulated; and the position that will be eventually occupied by the mole serving as the basis of this work is covered and protected by breakwater stone. Three thousand four hundred and sixty-five cubic yards of sand have been deposited within the interior of the fort towards elevating the terreplein. All the stone received this year, except eight hundred tons required for the extension of the mole to its proper limits, has been placed so as to act with a uniform pressure over the foundation of the walls of the work. It is estimated that the fort, when finished and garrisoned, will add to the permanent weight now acting on the foundation about sixty-three thousand tons; of this there are accumulated along its whole extent, and operating in a similar manner, 61,866 tons. It is proposed to add to this weight 25,000 tons of breakwater stone, the probable balance required for the graduation of the mole, and to compensate for its subsidence, and to allow the whole to remain until an equilibrium is established between the pressure and resistance, when the work may be resumed.

A careful examination has shown that although the weight added within the present is double that of the previous year, yet the last annual subsidence of the centre of the work is less than one and a third of what it was in 1833—giving fair indication that the equilibrium will, ere long, be attained. Another favorable indication is, that those parts of the mole that formerly settled most have this year gone down the least. On the whole, it may be inferred that all irregularity of settling is rapidly disappearing, and that the substratum is approaching a state of uniform compressibility throughout. During the gale of last winter the temporary wooden wharf constructed for the reception of materials, having been much worm-eaten, yielded to the action of the sea, and was almost entirely carried away; another has, therefore, become necessary, and it is proposed, with the funds now available, to build a new one, that its foundation may undergo the same test as that of the work.

Fort Macon, Beaufort, North Carolina.—Soon after I had the honor to submit my last annual report, when it was supposed that this work would, within a very short time, be finished, it was found necessary to fit up some of the casemates for the accommodation of the troops; to rebuild the wharf, which had become useless from decay, and to construct a dike to connect it with the fort. An estimate was submitted, and an appropriation made. The funds have been applied to these several objects, as well as in procuring materials for the preservation of the site, this being also contemplated by the estimate. The fort is completed and ready for inspection. The dike and wharf are, no doubt, done by this time, and the operations for the preservation of the beach have produced results of a very satisfactory character.

Fort Caswell, Oak island, North Carolina.—This work is in readiness to receive a garrison, and it is respectfully recommended that one be ordered to occupy it.

Fortifications in Charleston harbor, South Carolina.—Operations under this department in Charleston harbor have been directed, since my last report, to increasing the mole previously commenced on the site of Fort Sumpter, and to the protection of the beach in the immediate vicinity of Fort Moultrie. They have, however, been but limited in consequence of the late period at which the funds for the present year were rendered available. Five thousand five hundred and twenty-four tons of stone were added to the foundation of Fort Sumpter in the fall of 1833, and the month of January last, when the shipments from the north were suspended for want of funds. Except the alteration produced by this addition, the mole remains in the same state as at the end of the last fiscal year. The heap, except at one place, is now raised to a level of two feet above low water, requiring about eleven thousand tons of rough stone to complete it, besides ten thousand tons of split granite to form the foundations of the walls between high and low water. In this state it is proposed to leave the work till the question of jurisdiction over the spot shall be settled, and the necessary orders to that effect have been issued. This, it is hoped, will not be attended with much, if any, delay. No estimate will, however, be submitted for that work, it being intended to apply the amount estimated for fortifications in Charleston harbor to the preservation of the site of Fort Moultrie.

In the month of September last one hundred and twenty-seven tons of rough stone were deposited in the breakwater at Fort Moultrie. In consequence of not being able to procure sufficient stone in time, a portion of this work was washed away during the last winter and spring; this injury has, however, been repaired, and the whole work extended about one hundred and thirty feet; it is now upwards of one thousand three hundred feet long, presents a firm and substantial appearance, and has withstood several severe gales. The sand is accumulating about it, and experience thus far affords flattering assurances that the interesting and very desirable object for which it was commenced will soon be realized. It is proposed to extend it about four hundred feet further.

Fort Pulaski, Cockspur island, Ga.—This work has been prosecuted to the extent of the available means. The report from the local engineer presents it in a very satisfactory state.

Fort Marion, St. Augustine, Florida.—Little or nothing has been done at this work since my last report. Circumstances which are known to you led to the belief, in the early part of the season, that the officer charged with operations at it had failed, in the application of the funds, to produce any satisfactory result. He was immediately suspended and brought to trial. He is still in arrest, and no report as to the condition of the work has as yet been received at this department. This, although much to be regretted, will be attended with comparatively little injury to the public service, owing to the very slight influence which the position exerts in our system of coast defence.

Fort Pickens, Pensacola harbor, Florida.—The estimate submitted last fall for this work was at the time deemed amply sufficient to finish it, but the result has shown the amount was too low. This has arisen in part from the great difficulty in anticipating all the contingencies incident to bringing a work of such magnitude to a final completion, and partly from the delay and consequent additional expense in making the last appropriation, which did not become available till some time in June. Another appropriation has become necessary, and the objects to which it is proposed to apply the funds are, masonry, clay, sods, shells, carpentry, store-rooms, gates, magazines, a road and bridge. The work was to have been delivered over to a garrison, in excellent condition as far as completed, on the 1st of October last.

Fort on Foster's bank, Florida.—Ample preparations have been made for prosecuting this work with economy and despatch. Wharves, with other fixtures, and quarters, have been provided; a large amount of materials has been collected, and a well organized force of mechanics and laborers engaged. The operations have been somewhat retarded by the exposed position of the work, which rendered it proper to limit the excavations for the scarp-wall during the month of September. This will not, however, be necessary after the 1st of October. The maximum estimate of \$125,000, submitted by the local engineer, contemplates the completion of the whole work by the end of 1835, which he considers altogether practicable with the facilities in the way of materials and workmanship at his command.

Fort Morgan, Mobile point, Ala.—This work has been finished according to the original plan, and is garrisoned.

Fort Livingston, Grande Terre, La.—The negotiation for the purchase of the site of this work, pending at the date of my last report, was, as anticipated, soon brought to a satisfactory termination. The purchase had been effected, and considerable preparation made for an efficient prosecution of the fort, when the works were suspended in consequence of a want of an officer of engineers to take the immediate direction of the operations. This occurred in July last, since which time nothing has been done further than to comply with the engagements entered into prior to the adoption of this measure.

Contingencies of fortifications.—Nine thousand three hundred and eighty-seven dollars and forty-two cents have been expended under this head during the fiscal year. This money has been applied to Fort McHenry, towers of Bienvenu and Dupre, Fort Jackson, Fort Hamilton, the survey of the fort at Provincetown harbor, and contingencies of the engineer department.

INTERNAL IMPROVEMENTS.—HARBORS AND RIVERS.

Chicago harbor, Ill.—The operations for constructing an artificial harbor at this point on Lake Michigan, have progressed in a most satisfactory manner considering the late period at which the appropriation became available, and the difficulties in a country just emerging from a state of wilderness to be overcome in procuring the necessary supplies of materials and workmen. The great importance of this improvement to the increasing commerce of the west is already felt—one hundred and eighty vessels having, between the opening of navigation and the 30th September last, arrived and discharged their cargoes at this point, to be distributed along the shores of the Mississippi, through the valley of the Illinois. That this improvement is destined to form an essential link in the most important thoroughfare between the lakes and the Mississippi country, there can be no manner of doubt, and for that reason I would recommend that it be perfected as rapidly as circumstances will permit.

La Plaisance bay, Mich. Ter.—The operations on this work were resumed late in the working season, because of the prevalence of cholera, and the consequent difficulty of collecting the requisite force. Hopes are entertained, however, that ere this they have been brought to a close, and the pier completed in the manner contemplated.

For the condition of the works on the south shore of Lake Erie, as well as the progress made in their construction, I beg leave to refer you to the report of the general superintendent herewith appended, marked D.

Genesee river and Big Sodus bay, Lake Ontario, N. Y.—Concurring fully in the views and suggestions of the immediate superintendent of the very important improvements at these places, I therefore beg leave to refer to his report, hereunto appended, marked E, as furnishing a concise statement of their actual condition, and also submitting the agent's views with regard to their permanent preservation.

Oswego, Lake Ontario, N. Y.—The funds appropriated for the works at this place became available at so late a period that it was found impracticable to do more than to repair the injuries sustained by the storms of ice of the last winter, and to strengthen the mole by a deposit of about nine hundred cords of large stone. The unexpended part of the appropriation is supposed to be ample to meet the wants of the service for next year; no estimate for this work will therefore be submitted at this time. The sum of \$3,666 was appropriated at the last session of Congress for erecting a beacon-light at the end of one of the piers of this harbor. The application of this sum was committed to this department late in July last. The local engineer was accordingly instructed to carry into effect the object of the appropriation. It was soon found, however, that the sum appropriated would not accomplish the object, and for that reason the work was suspended till the facts could be made known and the further action of Congress obtained.

Monument on Steele's ledge, Penobscot bay, Me.—The sum of \$4,600 was appropriated at the last session of Congress for this structure. It became available too late in the season to admit of much being done during the present year. The measures proper to carry the intention of Congress into effect have, however, been taken, and the work will progress with as little delay as practicable.

Piers at Kennebunk, Me.—The damages sustained last winter by the pier on the western entrance into this river and the "Perch rock" pier were repaired during the last summer. Preparations have been made to commence early next season the construction of the eastern pier, for which an appropriation was made at the last session of Congress in a permanent manner. The lateness at which the appropriation became available rendered this postponement indispensable.

Merrimack river, Me.—The breakwater at this place has been strengthened by the addition of three hundred and twenty-four tons of stone placed at the end and sides most exposed to the violent action of the sea. The pier leading from Badger's rock to Salisbury shore, commenced in August, is two-thirds finished, and hopes are entertained that it will be completed before winter sets in. These improvements have sensibly benefited the navigation, and will afford a safe point of refuge to vessels which may be compelled by stress of weather to seek shelter in that neighborhood.

Deer island, Boston harbor, Mass.—All the works projected for the preservation of this island have been completed.

Provincetown harbor, Mass.—The season proper for prosecuting the works to preserve this important harbor having passed before the funds for this purpose became available, operations were, from necessity, postponed till the next spring, when it is hoped that at least two hundred acres will be planted in grass. Those parts of the beach heretofore worked on are represented as doing well.

Plymouth beach, Mass.—Five hundred feet of stone wall have been constructed since my last report on the west side of the breakwater at this place. Grass, to arrest the drifting sand, has been set out at various places on the beach to the extent of about 50,000 feet, and 1,870 feet of brush fence, having the same object, have been constructed. The general condition of the beach is represented as good. The local superintendent says his operations are attended with success, and believes that the estimate now submitted, amounting to \$700, will be sufficient to provide everything necessary to place the beach in a condition to require but little more, unless the inroads of the sea should produce a new state of things.

Hyannis breakwater, Mass.—Owing to the lateness of the season at which the appropriation for this work became available, but little progress could be made towards its extension during the present year. It is, however, represented as affording to the coasting navigation considerable protection, and as promising to be very effectual when completed.

Hudson river, N. Y.—At the last session of Congress \$70,000 were appropriated towards the improvement of this river from a point a little below Albany to Waterford. This sum was committed to this

department for application. The law making the appropriation designates the plan upon which the improvement is to be made. With the view, therefore, to take the measures proper to carry into effect the wishes of Congress, this plan was for the first time examined in this department; and the result of this examination is a serious apprehension that the plan is impracticable and totally inadequate to produce the desirable results for which it is plain the appropriation was intended. This may appear somewhat surprising, as the law refers to this plan in a way to induce the belief, on a casual examination, that the project had been sent to Congress for its action after having received the sanction of the War Department. Such is not, however, the case. The gentleman who projected this plan, being at the time a civil engineer in the employment of the general government, was required simply to make an examination of the river within the limits mentioned, with the view to procure all the facts in relation to the obstructions, which it is the object of this appropriation in part to remove. These facts, his instructions expressly stated, were to be laid before the board of internal improvement, to enable it to devise and mature a plan for the purpose. The examination seems only to have been made, however, to the extent deemed necessary by the gentleman charged with it, to enable him to devise a plan himself. This plan is that referred to in the law. Before it was submitted by its author, the branch of service to which he belonged was separated from this department, and, of course, his returns were not made to it, but to the Topographical bureau, where they were filed, and the subject never went before the board. Soon afterwards, March 15, 1832, it was resolved by the House of Representatives "that the Secretary of War be requested to communicate to this House the survey and report for the improvement of the Hudson river;" and on the 30th of the same month all the papers embracing the plan were sent up, without the expression of any opinion as to its merits or of the survey upon which it was based.

This improvement is one of the most important that has ever been committed to this department, and its difficulty is commensurate with the vast interests to be affected by it. Under these circumstances, it was deemed proper that a competent agent should be sent to the Hudson to verify the survey and to supply the defects of the drawings, after an examination into the natural causes which operate to produce the obstructions to be overcome; to report upon the plan devised to remove them; and, finally, to submit in detail such views as might be suggested by the nature of the difficulties. This seemed indispensably necessary, in order that the department might have some fixed and well-defined project upon which to go to work with the hope of success.

An officer of engineers, in whose ability the department has the utmost confidence, was therefore designated for the performance of this duty, and to manage the improvement generally; but owing to the crippled and totally inadequate force of the corps of engineers to meet the increasing demands upon it, it was found impracticable for some time to relieve the officer thus detailed from the duties with which he had been previously charged. After some delay, however, he was finally despatched to the Hudson, and is at present actively engaged in his new duties. It is hoped that the course pursued with reference to this improvement may prove satisfactory. It was adopted from a conviction of its necessity, and a strong belief that it will be found in the end to have expedited the work, and to have saved a large amount of money from total loss. It is probable that the proper plan for prosecuting this improvement may differ widely from that alluded to in the law. In which event some further legislative action on the subject will become necessary before the funds now available can be expended. As soon as the subject shall be matured it will be submitted, that such further measures may be taken as circumstances may seem to you to render proper.

Harbors of Newcastle, Marcus Hook, Chester, and Port Penn, Delaware river.—No report in reference to these improvements has as yet reached the department, and for the reason, no doubt, which has operated to delay the report for Fort Delaware, the same officer being charged with both.

Ocracoke inlet, N. C.—The report of the officer charged with the improvements at this place is herewith submitted, (marked F.) It possesses considerable interest, and I would therefore respectfully call your attention to it.

Cape Fear river, N. C.—The appropriations for the improvement of this river having exceeded the original estimates without being attended with any permanent benefit, and the local engineer having suggested a system of improvement requiring further appropriations, his report is herewith appended, (marked G,) to which I beg leave to call your attention.

Savannah river, Ga.—The requisite surveys to ascertain the extent of the obstructions to be removed for the improvement of this river have been completed, and a return thereof submitted to the consideration of Congress at its last session. The dredge and tow-boats and mud-flats, with machinery, are in a forward state of preparation; and it is anticipated that the operations for clearing the channel will be commenced at an early day with much force and vigor.

Inland pass between the St. John's and St. Mary's, Florida.—Nothing has been done as yet at this place, and for reasons stated in my last annual report. The result would have been the same, however, even if one or more of the dredging boats in operation under the department on that section of the coast had become available for this improvement, for the department had no officer whose services were not imperiously required elsewhere.

Ochlochney river, Florida.—The expenditures on this river have been directed to the removal of the rafts and trees which obstructed its navigation. The river is now open for a distance of one hundred and fifty miles from its mouth.

Appalachicola river, Florida.—The improvement of the Appalachian harbor to the opening of the "straight channel" has been attended with great success. Vessels of the largest class, trading in that quarter, now pass up to the wharves of the town. It remains to be determined whether it will be necessary to obstruct the other outlets of the river to force the water more effectually into the new channel. Should this become necessary there are abundant funds available to effect it.

St. Mark's river and harbor, Florida.—The want of funds during the last year, and the high waters of the present, have retarded very considerably the operations for the improvement of the river. The works on the river are for the present suspended. Similar causes, joined to the prevalence of disease, have operated to the prejudice of the harbor improvements. All unnecessary delay will be avoided to bring these works to a close.

Escambia river, Florida.—Soon after the appropriation was made for the improvement of this river the work was put under contract, subject to the general supervision of an officer already charged with several works of equal and perhaps greater importance, because the department had no officer in whose immediate charge it could be placed. The department is now informed that the contractors have failed to fulfil their engagements. Up to the middle of December last they had but partially cleared a small

portion of the river of its obstructions, when their operations were arrested by high water, which continued from that time to the close of August. In consequence of the dilatory proceedings of the contractors last year, and their having made no preparations to resume operations the present, it was determined, in August last, to take the work out of their hands, and to prosecute it with hired labor. The exorbitant price asked for labor at that time was, however, a source of further delay, and the probability now is that, notwithstanding the work may have been commenced, as was expected, on the first of October, it may not have been with sufficient force to finish it before the winter freshets begin. All of this difficulty, which cannot but be attended with a sacrifice of much money, would have been avoided if an officer could have been spared to take the immediate direction of the improvement in the first instance. The further prosecution of the work has been, from necessity, transferred to the Quartermaster's department.

Mobile harbor, Alabama.—As anticipated in my last report, the operations at this place were, early in the present year, brought to a satisfactory termination. The channel through this pass is one hundred feet wide and ten deep. Vessels navigating the bay have now a direct passage into port, and are no longer obliged to reach it by the circuitous route of the Spanish river. The width of the channel was, however, soon discovered to be insufficient to admit the free passage of vessels with adverse winds; and, to avoid this difficulty, an enlargement to three hundred feet was recommended. An appropriation of \$10,000 was accordingly made, at the last session of Congress, to effect this object. In taking the usual measures to apply this money, it was soon perceived that the machinery used under former appropriations was out of order and very much worn, requiring extensive repairs to render it useful. That the funds might not be exhausted in making these repairs the work was put out to contract. The contractor, having expressed fears of not being able to make the improvement for the price stipulated, was desirous of being released from his obligation; but this having been refused him on the part of the government, because of the great delay occasioned by his having taken the contract, it was hoped that he had commenced the work, as it was believed that, with proper management and economy, he could have accomplished it for the contract price and obtained a fair profit. A letter has just been received, however, communicating the determination of the contractor to have nothing to do with it. To repair the old machinery of the government and prosecute the improvement by hired labor the funds would be insufficient. An additional appropriation will, therefore, be necessary, and it is to be regretted that this information did not reach the department in time to include the amount in the regular estimate. It is \$18,000.

Pascagoula river, Mississippi.—The difficulties with the contractor, referred to in my report of last year, still continue to a certain extent to exist, and to retard the operations of the improvement at the mouth of this river. The work is progressing, yet so slowly and so little to the satisfaction of the general superintendent, that he proposed, should no improvement in this respect have taken place by the first of this month, to resort to legal measures to abrogate the contract; after which the work will be prosecuted either by hired labor or a new contract, under penalties that will insure its execution. The available funds are supposed to be ample to effect the object.

Ohio and Mississippi rivers.—For the information as to the state of the improvements in these rivers, I beg leave to refer you to the reports of the officer charged with their general superintendence. They are appended, marked H, H 1, and H 2.

Red river, Louisiana.—Operations on this river were suspended last fall for want of funds. The appropriation for their further prosecution was made at so late a period as to render it impracticable to do anything during the last summer. The agent charged with the improvement has, however, made all the necessary preparations to prosecute the work with despatch, to the extent of the available means, and is no doubt at the great raft ere this.

Arkansas river, Arkansas Territory.—The operations for the improvement of this river were prosecuted last winter till the funds were exhausted. They extended from the mouth of the river to Little Rock, a distance of 250 miles. Within these limits 1,557 snags were taken from the channel, and 3,370 snags and logs cut from the sand bars, and under the banks within the bed of the river. The navigation has been much benefitted, but there is yet much room for improvement.

Cumberland river.—The operations for improving the navigation of this river have, since the date of my last report, been directed to strengthening the wing dams at Flax Patch bar, the head and foot of Harpeth island, and to quarrying and removing the rock from the channel way of Harpeth shoals, the bottom of which is stated to be reduced to an even surface, and to have more water over it than the sand bars below. A number of the most dangerous snags have been removed from the bed of the stream between the shoal and Line island. A conglomerate of gravel and iron ore, forming a ledge in the channel of the Devil's chute, at a place where it is but twenty-seven feet wide, has been in part taken out, and the whole will most likely be removed this fall. After this the force will be concentrated at Line island to raise the steamer President, wrecked last June in the channel at that place.

LIGHT-HOUSES AND BEACON-LIGHTS.

The appropriations for the lights at Huron, Grand river, Cunningham creek, Ashtabula creek, Conneaut creek, in the State of Ohio; Genesee river, Big Sodus bay, and Oswego, in New York; and Goat island, Rhode Island, were referred for application to this department. Measures have been taken to apply the funds for the first five named, but those for the latter not being sufficient to accomplish anything of a permanent and substantial character, it was deemed proper to wait the further action of Congress in the matter. The reports, with estimates of the agents at Genesee, Big Sodus, Oswego, and Goat island, have been referred to the proper department, that they may, if deemed necessary, be laid before Congress.

ROADS.

Roads from Detroit to Fort Gratiot, Saganaw, mouth of Grand river, and Chicago, in the Territory of Michigan.—No appropriations having been made at the last session of Congress for the continuation of these roads, operations on them were, of course, limited to the funds remaining to be applied from the appropriations of the previous year. Estimates for the completion of the first and continuation of the others will be submitted.

Road from La Plaisance bay to the road leading from Detroit to Chicago, Michigan.—Circumstances have conspired to render the last season one of the most unpropitious for the progress of this road. The continued rains of last fall and spring, and the prevalence of disease throughout the Territory during the summer, retarded the work to a very considerable degree. Eighteen and a half miles have, however,

been finished in portions at different points of the route, and eight and a half are in progress, with fair prospects of being completed this season, leaving twenty and three-quarters miles unfinished, for which an estimate will be submitted. Such portions of the road as are done are represented as having been well executed, and upon very reasonable terms.

Roads from Clinton to the rapids of Grand river; from Sheldon to the mouth of the St. Joseph's; from Niles to the same point; from Port Lawrence to Adrian; and from Vistula to the Indiana State line, Michigan.—The appropriations for these roads having been referred to this department, the necessary instructions have been issued to apply them in a manner to meet the views of Congress. No returns having been received from the agents, it is impossible to state, at this time, how far operations have progressed.

Road from Line creek to the Chattahoochee, Alabama.—No appropriation was made for this road at the last session of Congress. The unexpended balance of the former appropriation has been applied during the year, and an estimate for continuing the operation to the completion of the road will be submitted.

Road from the north boundary line of Florida to Appalachicola, Florida.—A topographical engineer is now engaged in making a survey of the route of this road, in conformity to the requirements of the law. The survey not having been finished, nothing has been done, of course, towards construction.

Road from Memphis to the St. Francis river.—The returns of the survey of this road did not reach this department till the 18th of June last. It was, therefore, not till the 25th of July that the preliminaries necessary to enter into the object of the appropriation could be accomplished. A re-examination and survey of the route were then made, and advertisements issued for proposals to construct by contract. In the meantime the requisite subdivisions of the route to be embraced by the contracts were marked off; and the superintendent now reports that the work contracted for has progressed to his entire satisfaction, the contractors evincing every disposition to prosecute their engagements with energy, and giving little apprehension that any of them will be forfeited from failure or other cause. Nine miles of the distance, over the worst part, are nearly completed, and on the remaining distance of sixteen miles the work is progressing well. The agent represents the necessity of forcing his operations, this being required by the great emigration to Arkansas, that has no other road by which to reach its destination. This being also consistent with economy, he has accordingly submitted an estimate of the sum required to complete the road, which, together, with the amount appropriated, will make the total cost less than the original estimate.

Cumberland road in Illinois and Indiana.—Little or nothing has been done on the national road in these States, in the way of extension, since the date of my last annual report. For reasons then stated, with regard to the road in Illinois, and in consequence of the increasing difficulties on that in Indiana, it became a matter of great importance to limit the expenditures in these States to the fulfilment of existing contracts, in the hope that some legislative action might be had that would produce a better state of things. This hope was only realized in the month of June last, after a great portion of the best part of the working season had passed. An officer of engineers, possessing much experience, was designated, with as little loss of time as practicable, to take charge of the work. He has been engaged, since his arrival on the road, in ascertaining the state of its affairs, and in organizing an efficient force for the active prosecution of operations. His annual report has not yet reached the department. This is, doubtless, owing to the sickness with which he has been much afflicted during the past summer; but, as soon as it is received, it shall be laid before you.

Cumberland road in Ohio.—For the condition of that portion of this road yet in the hands of the general government, as well as for the progress made in its construction, I beg leave to refer to the report of the superintendent herewith submitted, marked I.

Cumberland road east of the Ohio.—No report on the present condition of this road has been received. This is to be attributed to the causes referred to under the heads of Fort Delaware and harbors in the Delaware river—all appertaining to the superintendence of the same officer.

Northern boundary of the State of Ohio.—Observations for the determination of this line were prosecuted last summer to the extent that the available means would allow. The results have not yet been communicated, and for the reason that the officer who made the observations has as yet had no time to complete his calculations, having been constantly occupied with duties that would not admit of delay. Indeed, it is impossible to say when they can be looked for; certainly not till the examination of the Hudson shall be made. The same officer is now charged with both.

Monument to the memory of General Brown.—This is nearly completed. It was put under contract in New York soon after the appropriation was made. It will be in its place by the 1st of January, at furthest.

Basement story of War Office.—The appropriation for fitting up the basement story of the War Office has all been applied to the objects for which it was made.

The lithographic press of the War Department has been employed during the past year in the usual way.

Military Academy.—This institution continues to sustain its high reputation, as is shown by the report of the board of visitors who attended the last annual examination of the cadets. The report is submitted herewith, marked K. I visited the academy in September.

The board of engineers.—The duties of the board have been the same as heretofore.

Office of the chief engineer.—The current business of the office is of the same character as heretofore, though somewhat increased in consequence of the additional works referred to the Engineer department.

The subject of an increase of the corps of engineers has been so repeatedly and earnestly urged on the attention of the War Department and of Congress without finding any remedy for the evils as frequently referred to, that I almost consider it out of place to renew it here. The palpable inadequacy, however, of this arm of service to meet the numerous requirements of Congress still leaves room to hope that, if the facts are fairly stated and understood, the labor and responsibility annually thrown upon the department will either be diminished or its force made commensurate with them. This is not to be understood as a complaint that Congress require too much; it is a candid declaration of what is really the fact, that all they require cannot be accomplished with the present means. What are the facts?

Ninety-one different appropriations, amounting to more than two millions of dollars, have been referred to this department for application within one fiscal year; and to accomplish this, and to meet all the responsibility which it involves, the department is provided with only *twenty-seven* officers whose services can, with certainty, be commanded; and of these about one-third have had no experience. The consequence is that works of the utmost importance, with large sums of money, are committed to the hands of agents unknown to the department, with no certainty whatever that the one will be properly managed or

the other faithfully applied and accounted for. Besides, these agents are very numerous; their compensation is drawn from the appropriations under which they are employed; citizens acting in the responsible capacity of constructing engineers and disbursing agents must be well paid, and hence large amounts of many of the appropriations are diverted from their proper objects and applied to the payment of salaries. But if this was the extent of the evil it would be comparatively unimportant.

Large sums are lost for want of sufficient agents qualified to project and execute plans for the improvements ordered by Congress. A reference to the numerous reports on the failure of works, particularly to my last annual report, will abundantly show that this remark is not induced by any hypothetical case. It is unfortunately the suggestion of experience; so that, besides being executed badly as to durability, and, as regards neatness and appearance, in a manner little calculated to do us any credit, many of our public works cost on an average at least fifty per cent. more than they would under a different arrangement. There is certainly no economy in this. Enough money has been wasted within the last few years to have supported a corps of professional engineers sufficient for the proper management of all the national improvements in the country.

The completion and the consequent advantages expected from our public works are, moreover, retarded and deferred by the operation of the same causes. One million and seventy-six thousand dollars of the appropriations made and referred to this department in the beginning of 1833 remained unexpended at the end of that fiscal year. The sum of one million seven hundred and ninety-nine thousand dollars and upwards, applicable to the works of fortifications and internal improvement, was undrawn from the treasury on the 1st of October.

A comparative view of the face of our country twenty years hence, improved under the present system and that proposed, with the same amount of money, if such a thing were possible, would present a difference in favor of the latter that could not fail to impress every mind feeling the least interest in the subject with the extravagance of our present mode of doing business.

The evils here complained of cannot be remedied by any system of supervision at this place, however vigilant. The character of every work of improvement, if it satisfy the object of its creation, must necessarily depend upon circumstances peculiar to its locality and the end to be attained. These can only be understood and appreciated by those possessing an acquaintance with the sciences, and a professional experience which cannot be expected from persons who may be induced in advanced age to quit other pursuits to commence the subject of engineering from considerations of mere pecuniary gain; yet the department must act and authorize expenditures upon information derived from agents of this description, or, what in many cases might be better, cease to act at all.

An efficient and economical execution of the will of Congress in matters referred to the Engineer department can only be expected from a regular and well-constituted corps of professional men whose interests shall be identified with a faithful performance of the duties required of them. This cannot be looked for under the present state of things.

An effort has been made to organize a system of inspection, by which the errors of inexperience might be corrected before they could lead to consequences of a serious character; but the only officers fitted by skill and experience for such duty being literally broken down by the mass of labor already heaped upon them, the effort proved unavailing. There is not one of these officers who is not charged with the responsibility of conducting some half dozen works at the same time, leaving them little time for study, and less for the relaxation absolutely essential to health.

For the reasons stated, it is recommended to increase the present corps of engineers to the extent deemed absolutely essential to meet the wants of the department. The plan of increase proposed would add annually three members to the lowest grade of the corps till it should attain the form and organization presented in Senate bill No. 78, of the session of 1829-30, as amended and reported by the Committee on Military Affairs, 12th February, 1829. This bill is as follows:

A BILL providing for the gradual increase of the corps of engineers, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the President of the United States be, and he is hereby, authorized to add to the corps of engineers, whenever he may deem it expedient to increase the same, one lieutenant colonel, two majors, six captains, six first and six second lieutenants: *Provided,* That not more than three lieutenants shall be added annually over and above the number necessary to fill vacancies which may occur in said corps until the whole corps shall take the form and organization above prescribed.

SEC. 2. *And be it further enacted,* That the pay and emoluments of the officers of the said corps shall be equal to those allowed to the officers of the light dragoons, under the act of the 12th of April, one thousand eight hundred and eight, except so far as relates to the rations allowed to the captains and lieutenants by said act; in lieu of which the captains and lieutenants of said corps shall be entitled to receive the same subsistence as is now allowed to the other corps of the army; and that, in cases in which forage is not drawn in kind, the officers of the said corps shall be entitled to receive, in lieu thereof, eight dollars per month for each horse which said officers may, by their rank, be entitled to keep.

SEC. 3. *And be it further enacted,* That so much of the act passed the twenty-ninth day of April, one thousand eight hundred and twelve, entitled "An act making further provision for the corps of engineers," as provides that one paymaster shall be taken from the subalterns of the corps of engineers, be, and the same is hereby, repealed; and that the paymaster so authorized and provided be attached to the Pay department, and be in every respect placed on the footing of other paymasters of the army.

SEC. 4. *And be it further enacted,* That the officers authorized to be appointed by this act be subject to the rules and articles of war as they are now, or may be hereafter, established.

SEC. 5. *And be it further enacted,* That all letters and packets to and from the chief engineer, which may relate to his official duties, shall be free from postage.

All of which is respectfully submitted.

C. GRATIOT, *Brigadier General, Chief Engineer.*

A.—Table exhibiting the fiscal concerns of the Engineer department for the year ending September 30, 1834, in which the funds that had accrued within that period, and the manner of their accruing, are stated and accounted for by showing their application; and showing also the amounts expended upon the several works under construction.

Designation of the appropriations and the objects to which they are applicable.	Available for 1834, and whence derived.			Amounts available accounted for.			Aggregate accounted for, corresponding with the aggregate available.
	From appropriations for 1833.	From balances remaining undrawn from the treasury, and remaining in the hands of agents, on the 30th of September, 1833.	Aggregate available.	Amount applied, corresponding with the amount of accounts rendered for settlement to the 30th of September, 1834.	Amount undrawn from the treasury October 1, 1834.	Balance in the hands of agents October 1, 1834.	
FORTIFICATIONS.							
Fort Adams.....	\$100,000 00	\$54,260 77	\$154,260 77	\$109,416 68	\$21,500 00	\$23,344 09	\$154,260 77
Preservation of George's island, Boston harbor.....		734 49	734 49	454 49	280 00		734 49
Fort on George's island.....	100,000 00	25,124 00	125,124 00	21,671 86	100,900 00	2,552 14	125,124 00
Preservation of Castle island, and repair of Fort Independence.....	17,594 80	40,368 58	57,963 38	22,944 67	17,594 80	17,423 91	57,963 38
Repairing a wharf at Fort Independence.....		1,500 00	1,500 00	1,500 00			1,500 00
Repairs at Fort Lafayette.....		2,906 63	2,906 63	498 08		2,408 55	2,906 63
Repairs at Fort Columbus and Castle William.....	50,000 00	26,121 04	76,121 04	25,857 01	50,000 00	264 03	76,121 04
Fort Hamilton.....		3,701 38	3,701 38	1,948 76		1,792 62	3,701 38
Fort at Throg's Neck.....	100,000 00	22,000 00	122,000 00	21,841 75	96,400 00	3,758 25	122,000 00
Fort Delaware.....	79,000 00	23,035 34	102,035 34	36,028 16	60,000 00	6,007 18	102,035 34
Fort Monroe.....	15,000 00	35,372 80	50,372 80	44,093 18		6,279 62	50,372 80
Fort Calhoun.....	120,000 00	38,022 44	158,022 44	69,757 96	85,000 00	3,264 48	158,022 44
Fort Macon.....	7,000 00	3,658 20	10,658 20	9,287 11	1,200 00	171 09	10,658 20
Fort on Oak island.....		12,910 00	12,910 00	6,878 86	1,410 00	4,621 14	12,910 00
Fort on Cockspar island.....	82,000 00	42,048 55	124,048 55	73,185 79	40,000 00	10,882 76	124,048 55
Fortifications in Charleston harbor.....	50,000 00	21,169 37	71,169 37	54,265 67	15,300 00	1,603 70	71,169 37
Fort at Mobile Point.....		29,787 32	29,787 32	25,821 84	790 65	3,174 83	29,787 32
Fortifications at Pensacola.....	40,000 00	5,649 50	45,649 50	45,549 92		99 58	45,649 50
Fort Jackson.....		733 71	733 71		733 71		733 71
Fort at Grand Terre.....	50,000 00	25,000 00	75,000 00	15,532 35	50,000 00	9,467 65	75,000 00
Fort on Foster's bank.....	50,000 00	20,941 49	70,941 49	40,841 49	30,100 00		70,941 49
Repairs at Fort Marion, &c.....		15,703 28	15,703 28	12,348 02		3,355 26	15,703 28
Contingencies of fortifications.....	10,000 00	10,100 68	20,100 68	10,283 97	6,498 45	3,318 26	20,100 68
	870,594 80	460,849 57	1,331,444 37	649,967 62	577,707 61	103,769 14	1,331,444 37
INTERNAL IMPROVEMENTS.							
Cumberland road east of the Ohio river.....	300,000 00	86,610 14	386,610 14	156,492 34	230,038 42	79 33	386,610 14
Cumberland road in Ohio.....	200,000 00	125,035 49	325,035 49	206,502 47	97,600 00	20,933 02	325,035 49
Cumberland road in Indiana.....	150,000 00	117,039 10	267,039 10	83,526 01	160,882 00	17,631 09	267,039 10
Cumberland road in Illinois.....	100,000 00	83,510 75	183,510 75	24,238 78	136,331 97	22,940 00	183,510 75
Road from Detroit towards Chicago.....		16,111 64	16,111 64	5,771 24	8,068 18	2,272 22	16,111 64
Road from Detroit to Fort Gratiot.....		10,710 37	10,710 37	10,285 68	424 69		10,710 37
Road from Detroit to Saginaw bay.....		24,250 09	24,250 09	9,665 72	6,000 00	8,584 37	24,250 09
Road from Detroit to Grand river.....		23,528 24	23,528 24	9,505 42		14,022 82	23,528 24
Road from La Plaisance bay to the Chicago road.....		23,440 85	23,440 85	14,845 01		8,595 84	23,440 85
Road from Sheldon's, on the Chicago road, to St. Joseph's river.....	20,000 00		20,000 00		20,000 00		20,000 00
Road between Port Lawrence and Adrian.....	10,000 00		10,000 00		5,000 00	5,000 00	10,000 00
Road between Niles and the mouth of St. Joseph's river.....	10,000 00		10,000 00		10,000 00		10,000 00
Road from Clinton, Chicago road, to the rapids of Grand river.....	8,000 00		8,000 00		8,000 00		8,000 00
Road from Vistula to the Indiana State line.....	10,000 00		10,000 00		5,000 00	5,000 00	10,000 00
Road from opposite Memphis, Mississippi river, to St. Francis river.....		100,000 00	100,000 00	2,233 51	78,000 00	19,766 49	100,000 00
Road from Line creek, Alabama, to the Chattahoochee, Georgia.....							
Road from the northern boundary of Florida to Apalachicola.....	12,000 00		12,000 00		9,500 00	2,500 00	12,000 00
Improving the navigation of the Ohio, Missouri, and Mississippi rivers.....	50,000 00	31,456 04	81,456 04	37,165 63	9,600 00	34,690 41	81,456 04
Improving the navigation of Red river.....	50,000 00	639 65	50,639 65	456 78	16,800 00	33,382 87	50,639 65
Improving the navigation of Arkansas river.....		14,719 64	14,719 64	14,681 64	38 00		14,719 64
Removing obstructions in Savannah river.....	30,000 00	23,673 85	53,673 85	12,421 68	34,000 00	7,252 17	53,673 85
Improving Cape Fear river below Wilmington.....	5,234 00	23,756 82	28,990 82	20,821 24	6,064 00	2,105 58	28,990 82
Improving Ocracoke inlet.....	15,000 00	12,008 19	27,008 19	13,600 31	10,600 00	2,807 88	27,008 19
Deepening the channel into Pascagoula river.....		14,221 85	14,221 85	3,650 25	8,962 94	1,608 66	14,221 85
Deepening the channel through Pass au Heron.....		4,282 64	4,282 64	157 21	4,125 43		4,282 64
Improving the harbor of Mobile.....	10,000 00	5,199 33	15,199 33	4,981 43	10,000 00	217 90	15,199 33
Removing obstructions in the Apalachicola river.....		5,535 28	5,535 28	5,085 78		449 50	5,535 28
Improving the harbor and river of St. Mark's.....	4,600 00	1,302 39	5,902 39	2,640 05	100 00	3,162 34	5,902 39
Improving the inland channel between St. Mary's river, Ga., and the St. John's, Florida.....		9,000 00	9,000 00		9,000 00		9,000 00
Improving the navigation of Escambia river.....		4,891 50	4,891 50	414 83	2,830 00	1,626 67	4,891 50
Improving the navigation of Ochochney river.....		1,474 17	1,474 17	1,474 17			1,474 17
Improving the harbor of Chicago.....	23,801 00	18,987 50	51,788 50	25,269 06	19,200 00	7,319 44	51,788 50
Breakwater at the mouth of Merrimack river.....	3,860 00	7,400 00	11,260 00	699 72	8,760 00	1,800 28	11,260 00
Preservation of Plymouth beach.....	2,000 00	339 14	2,389 14	1,766 05	500 00	103 09	2,389 14
Preservation of the beach at Provincetown harbor.....	4,400 00	239 41	4,639 41		4,639 41		4,639 41

A.—Table exhibiting the fiscal concerns of the Engineer department, &c.—Continued.

Designation of the appropriations and the objects to which they are applicable.	Available for 1834, and whence derived.			Amounts available accounted for.			Aggregate accounted for, corresponding with the aggregate available.
	From appropriations for 1834.	From balances remaining undrawn from the treasury, and remaining in the hands of agents, on the 30th of September, 1833.	Aggregate available.	Amount applied, corresponding with the amount of accounts rendered for settlement to the 30th of September, 1834.	Amount undrawn from the treasury October 1, 1834.	Balances in the hands of agents October 1, 1834.	
INTERNAL IMPROVEMENTS—Continued.							
Preservation of Deer island		\$37,517 78	\$37,517 78	\$35,989 79	\$1,130 00	\$397 99	\$37,517 78
Breakwater at Hyannis harbor	\$10,000 00	1,022 67	11,022 67	4,028 09	6,230 00	764 58	11,022 67
Removing obstructions in the Piscataqua river.....		8 59	8 59	8 59			8 59
Piers at the entrance of Kennebunk river.....	10,300 00	101 00	10,401 00	1,250 33	7,300 00	1,850 67	10,401 00
Rebuilding the monument on Steele's ledge.....	4,600 00		4,600 00		4,600 00		4,600 00
Pier and mole at Oswego harbor	30,000 00	3,603 29	33,603 29	8,002 21	24,800 00	801 08	33,603 29
Piers at Buffalo harbor ..	20,000 00	17,652 23	37,652 23	15,641 29	17,646 69	4,364 25	37,652 23
Piers at Dunkirk harbor	4,000 00	1,098 26	5,098 26	3,415 72	1,000 00	682 54	5,098 26
Pier at Black Rock harbor.....	12,000 00	464 29	12,464 29	2,992 61	8,000 00	1,471 68	12,464 29
Improving the entrance of Genesee river	20,000 00	3,104 39	23,104 39	13,349 29	7,643 95	2,111 15	23,104 39
Removing obstructions at Big Sodus bay.....	15,000 00	1,698 76	16,698 76	12,968 11	3,400 00	330 65	16,698 76
Improving the harbor of Presque Isle	23,045 00	1,087 72	24,132 72	9,555 52	12,045 00	2,532 20	24,132 72
Improving the harbors of Newcastle, Marcus Hook, Chester, and Port Penn, Delaware river.....	6,133 00	6,789 73	12,922 73	7,725 83	5,033 00	163 90	12,922 73
Removing obstructions at Ashtabula creek.....	5,000 00	4,516 32	9,516 32	2,341 05	6,799 94	375 33	9,516 32
Removing obstructions at Cunningham creek.....		71 92	71 92	33 57		38 35	71 92
Improving the mouth of Cohaneeut creek.....		1,119 14	1,119 14	1,093 50		25 64	1,119 14
Removing obstructions at Huron river	6,700 00	532 00	7,232 00	1,107 34	6,074 97	49 69	7,232 00
Removing obstructions at Grand river	10,000 00	4,704 20	14,704 20	3,130 66	11,009 49	564 05	14,704 20
Improving Cleveland harbor	13,315 00	1,200 89	14,515 89	2,097 99	9,229 81	3,188 09	14,515 89
Removing sand-bar at the mouth of Black river ..	5,000 00	1,379 73	6,379 73	2,489 08	2,000 00	1,890 65	6,379 73
Piers at La Plaisance bay.....	4,895 00	554 44	5,449 44	1,598 87		3,850 57	5,449 44
Improving the navigation of Cumberland river	30,000 00	16,245 33	46,245 33	15,411 87	24,500 00	6,333 46	46,245 33
Improving the navigation of Hudson river	70,000 00		70,000 00		70,000 00		70,000 00
	1,327,883 00	893,863 75	2,221,746 75	817,583 32	1,148,527 89	255,635 54	2,221,746 75
LIGHT-HOUSES.							
Beacon-light at Grand river, Ohio	1,456 00	26 03	1,482 03		1,456 00	26 03	1,482 03
Beacon-light at Huron river, Ohio.....	2,600 00		2,600 00		2,600 00		2,600 00
Beacon-light at Cunningham creek, Ohio.....	2,000 00		2,000 00	1,366 00		634 00	2,000 00
Beacon-light at Conneaut creek, Ohio.....	2,000 00		2,000 00	648 76	1,000 00	351 24	2,000 00
Beacon-light at Ashtabula creek, Ohio.....	2,000 00		2,000 00		2,000 00		2,000 00
Beacon-lights at Genesee river and Sodus bay.....	4,000 00		4,000 00		4,000 00		4,000 00
Light-house or beacon-light at Oswego.....	3,666 00		3,666 00		3,666 00		3,666 00
Removal of a light-house on Goat island.....	13,600 00		13,600 00		13,600 00		13,600 00
	31,322 00	26 03	31,348 03	2,014 76	28,322 00	1,011 27	31,348 03
MILITARY ACADEMY.							
Defraying the expenses of the board of visitors.....	2,000 00						
Fuel, forage, stationery, &c.....	8,486 30						
Repairs, improvements, and expenses of buildings and grounds.	9,610 96						
Pay of adjutants and quartermaster's clerks	909 00						
Philosophical apparatus.....	698 00						
Models for the department of engineering	800 00						
Models for the drawing department, &c.....	1,117 00	27,521 34	70,232 79	20,806 80	30,639 73	18,786 26	70,232 79
Departments of mineralogy, artillery, and sword exercises.....	1,130 00						
Increase and expenses of the library.....	1,216 22						
Completing the outbuildings	1,081 50						
Miscellaneous items, &c.....	1,671 47						
Building for military and other exercises.....	14,000 00						
Chapel							
	42,711 45	27,521 34	70,232 79	20,806 80	30,639 73	18,786 26	70,232 79
MISCELLANEOUS.							
Ohio northern boundary line.....		13,610 00	13,610 00	7,802 77		5,807 23	13,610 00
Lithographic press of the War Department.....	750 00	22 41	772 41	529 12		243 29	772 41
Executive building occupied by the War Department.....	600 00	439 81	1,039 81	1,026 65		13 16	1,039 81
Monument over the remains of Major General Brown.....	1,000 00		1,000 00		1,000 00		1,000 00
	2,350 00	14,072 22	16,422 22	9,358 54	1,000 00	6,063 68	16,422 22

B.

Statement showing the amount of money drawn from the the treasury, and remitted to the officers and agents disbursing under the Engineer department, from October 1, 1833, to September 30, 1834, inclusive; and the amount of accounts rendered by them, respectively, within the same period.

Names.	On what account.	Amount re-mitted.	Amount of ac-counts ren-dered.
Colonel J. G. Totten	Fort Adams.....	\$109,680 00	\$109,416 68
Lieut. Colonel S. Thayer.....	Fort on George's island.....	24,100 00	21,671 86
	Preservation of Castle island and repair of Fort Independence.....		22,944 67
	Repairing wharf at Fort Independence		1,500 00
	Contingencies of fortifications.....		658 89
	Preservation of George's island.....		454 49
Lieut. Colonel R. E. De Russey.....	Military Academy.....	31,022 50	20,806 80
Major J. L. Smith	Fort Hamilton		1,948 76
	Fort at Throg's Neck	25,610 00	21,841 75
	Repairs at Fort Lafayette		498 08
	Repairs at Fort Columbus and Castle William.....	23,000 00	25,837 01
Major George Blaney.....	Fort at Oak island	11,500 00	6,878 86
	Improvement of Cape Fear river	20,931 00	20,821 24
Captain W. H. Chase	Fortifications at Pensacola	45,649 50	45,549 92
	Fort on Foster's bank.....	38,000 00	40,841 49
	Fort at Grand Terre.....	25,000 00	15,533 35
	Fort at Mobile Point		883 70
	Contingencies of fortifications	300 00	49 53
	Escambia river	2,000 00	414 80
	Mobile harbor.....		285 05
	Pascagoula river	2,000 00	886 00
Captain R. Delafield	Fort Delaware	39,000 00	36,028 16
	Harbors of Newcastle, &c.....	2,050 00	7,723 83
	Cumberland road east of Ohio.....	113,361 58	156,492 34
Captain A. Talcott.....	Fort Monroe	23,991 96	40,309 37
	Fort Calhoun	40,055 69	56,181 77
	Ohio boundary line.....	7,500 00	7,892 77
Captain W. A. Eliason.....	Fortifications at Charleston	12,489 59	19,087 44
Lieutenant Hy. Brewerton.....	Cumberland road in Ohio	202,419 22	206,562 47
Lieutenant J. K. F. Mansfield.....	Fort on Cockspur island.....	78,800 00	73,185 79
	Savannah river improvement.....	16,000 00	12,421 68
Captain C. A. Ogden.....	Fort at Mobile Point	25,000 00	24,933 09
	Mobile harbor.....		4,696 43
	Pass au Heron		157 20
	Pascagoula river	3,000 00	2,764 25
	Cumberland road in Indiana.....	20,000 00	25,292 59
	Cumberland road in Illinois.....	22,940 00	
Lieutenant A. H. Bowman	Road from Memphis to St. Francis river	22,000 00	2,233 51
Lieutenant George Dutton.....	Fort Macon	8,219 79	9,287 11
	Ceracoke inlet.....	15,800 00	13,600 31
Lieutenant S. Tuttle.....	Repairing Fort Marion, &c.....	12,600 00	11,948 02
Lieutenant T. S. Brown	Fortifications at Charleston	34,700 00	35,178 23
Lieutenant W. H. C. Bartlett.....	Contingencies of fortifications.....	800 00	648 31
	Executive building, War Office.....	600 00	1,028 65
	Lithographic press.....	750 00	513 71
Lieutenant R. E. Lee	Fort Calhoun	13,000 00	13,576 19
Major W. G. McNeill	Road from Alabama to Apalachicola.....	2,500 00	
Major J. D. Graham.....	Contingencies of fortifications	1,500 00	634 09
Major B. K. Pierce.....	Contingencies of fortifications	390 00	978 35
Major H. Whiting.....	Road from Detroit to Fort Gratiot		10,285 68
	Road from Detroit to Grand river.....	15,000 00	9,505 42
Captain N. Baden.....	Contingencies of fortifications		25 50
Captain H. Smith.....	Piers at La Plaisance bay.....	4,895 00	1,598 87
	Road from La Plaisance bay to the Chicago road.....		14,845 01
	Road between Port Lawrence and Adrian.....	5,000 00	
	Road from Vistula to the Indiana State line	5,000 00	
Lieutenant E. S. Sibley	Road from Detroit to Chicago.....	7,500 00	5,771 24
	Road from Detroit to Saginaw bay	15,000 00	9,665 72
Lieutenant G. W. Long.....	St. Mark's river and harbor.....	4,500 00	2,640 05
	Apalachicola river and harbor	3,700 00	5,085 78
	Ochlochney river.....		1,474 17
Lieutenant R. C. Smead	Oswego harbor	7,162 00	8,002 21
Lieutenant J. Allen	Chicago harbor.....	25,884 00	25,269 06
Lieutenant H. Thompson	Contingencies of fortifications	5,100 00	5,082 23
Lieutenant J. R. Irwin.....	Lithographic press		415 41
Lieutenant A. Drane.....	Contingencies of fortifications	1,000 00	547 90
Lieutenant Charles Dimmock	Fort Monroe	9,000 00	3,783 81
Lieutenant — Dancy.....	Repairs at Fort Marion		394 78
General J. G. Swift	Genesee river.....	13,500 00	13,349 29
	Sodus bay	12,600 00	12,968 11
Thomas B. Smith	Deer island, preservation of.....	17,980 00	35,989 79
E. Crowell.....	Hyannis harbor	4,215 00	4,028 09
T. M. Clark	Merrimack river.....	2,500 00	699 72

B.—Statement showing the amount of money drawn from the treasury, &c.—Continued.

Names.	On what account.	Amount re- mitted.	Amount of ac- counts ren- dered.
Jos. Bradford	Plymouth beach.....	\$1,500 00	\$1,766 05
B. Palmer	Kennebunk river.....	3,000 00	1,250 33
T. Ferguson.....	Piscataqua river.....		8 59
A. Dart	Conneaut creek.....	664 48	1,093 50
	Beacon light at ditto.....	1,000 00	648 76
A. W. Walworth.....	Cleveland harbor.....	4,320 00	2,097 99
Jabez Wright.....	Huron river.....	1,000 00	1,107 34
Henry Phelps.....	Grand river.....		3,130 66
	Beacon light at ditto.....		
M. Hubbard	Ashtabula creek.....	1,790 00	2,341 05
Jos. D. Selden.....	Cunningham creek.....		33 57
	Beacon light at ditto.....	2,000 00	1,366 00
	Black river.....	3,319 40	2,489 08
	Presque Isle harbor.....	11,000 00	9,555 52
	Dunkirk harbor.....	3,000 00	3,415 72
	Buffalo harbor.....	15,500 00	15,641 29
	Black Rock harbor.....	4,000 00	2,992 61
H. M. Shreve.....	Ohio, Missouri, and Mississippi rivers.....	74,130 00	} 37,165 63
	Red river.....	33,200 00	
	Arkansas river.....	681 64	
Wm. McKnight.....	Cumberland river.....	13,500 00	15,411 87
H. Johnson.....	Cumberland road in Indiana.....	43,700 00	44,298 50
John Milroy.....	Cumberland road in Indiana.....	40,925 00	18,933 92
Wm. C. Greenup.....	Cumberland road in Illinois.....	15,350 00	27,238 31
John Martin.....	Road from Line creek, Alabama, to Chattahoochee, Georgia.....	10,040 00	5,469 75
Total.....		1,524,337 35	1,508,518 11

C.

Statement exhibiting the works projected by the board of engineers which have not been commenced, and the estimate of their cost.

FIRST CLASS—TO BE COMMENCED AS SOON AS POSSIBLE.

Designation of the works.	Estimate.
Fort St. Philip, Louisiana.....	\$77,810 79
Fort at Sollers's Point flats, Patapsco river.....	673,205 44
Fort Tompkins, New York.....	420,826 14
Redoubt in advance of ditto.....	65,162 44
Fort at Wilkins's Point, New York.....	456,845 51
Fort at Dumpling's Point, Rhode Island.....	759,946 57
Fort at Rose island, Rhode Island.....	82,411 74
Dike across west passage Narraganset roads.....	205,000 00
For the defence of Boston harbor:	
Fort on Nantasket head.....	539,000 00
Lunette in advance of ditto.....	79,000 00
Redoubt No. 2, in advance of ditto.....	32,000 00
Redoubt No. 1, (on Hog island,) in advance of ditto.....	29,000 00
Dike across Broad Sound Passage.....	140,000 00
Cutting off the summit of Gallop island.....	2,429 00
Narraganset bay, Rhode Island, (works for the defence of Conanicut island).....	220,053 43
	3,782,691 06

SECOND CLASS—TO BE COMMENCED AT A LATER PERIOD.

Designation of the works.	Estimate.
Tower at Pass au Heron, Bay of Mobile.....	\$16,677 41
Fort at Hawkins's Point, Patapsco river.....	244,377 14
Fort at St. Mary's, Potomac river.....	205,602 33
Fort opposite the Pea Patch, Delaware river.....	347,257 71
Fort at the Middle Ground, outer harbor of New York.....	1,681,411 66
Fort at the East bank, outer harbor of New York.....	1,681,411 66

SECOND CLASS—Continued.

Designation of the works.	Estimate.
Fort Hale, Connecticut	\$31, 815 83
Fort Wooster, Connecticut.....	27, 793 34
Fort Trumbull, Connecticut.....	77, 445 21
Fort Griswold, Connecticut.....	132, 230 41
Fort on Fort Preble Point, Portland harbor, Maine.....	103, 000 00
Fort on House island, Portland harbor, Maine.....	32, 000 00
Fort Pickering, Salem	116, 000 00
Fort for Nangus Head.....	35, 000 00
Fort Seawell, Marblehead.....	116, 000 00
Fort for Jack's Point	96, 000 00
Fort on Baldhead, North Carolina.....	120, 000 00
Fort on Federal Point, North Carolina.....	12, 000 00
	5, 075, 982 70

THIRD CLASS—TO BE COMMENCED AT A REMOTE PERIOD.

Designation of the works.	Estimate.
The rafts to obstruct the channel between Forts Monroe and Calhoun	\$240, 568 00
Fort on Craney Island flats.....	258, 465 14
Fort at Newport News	244, 337 44
Fort at Naseway shoal	673, 205 00
For the defence of Patuxent river:	
Fort on Thomas's Point.....	173, 000 00
Fort on Point Patience	164, 000 00
Fort on the Narrows of Penobscot river, Maine	101, 000 00
	1, 854, 575 58

RECAPITULATION.

First class, (15).....	\$3, 782, 691 06
Second class, (18).....	5, 075, 982 70
Third class, (7).....	1, 854, 575 58
	10, 713, 249 34

REMARKS.—The classification in this table, distinguishing three periods, exhibits the works enumerated in the order of their efficiency to meet the earliest possible emergency.

D.

ERIE, Pennsylvania, October 20, 1834.

SIR: In compliance with the orders and regulations of the Engineer department, the following report in relation to the public works of internal improvements on the south shore of Lake Erie is most respectfully submitted:

Huron harbor, Ohio.—The appropriation was made so late in the season, and the cholera appearing immediately after, (everywhere more or less upon the lake shore,) that the prosecution of the public works was greatly retarded here, as at every other place under my charge, rendering it very difficult to procure materials and laborers to carry on the works to advantage. Therefore at this place little as yet has been done this year except to procure materials. They are now in readiness to sink one pier, and before the close of the season hope to sink three more, extending the piers 120 feet further into the lake. The appropriation is considered sufficient for all that the works will require until it should be thought proper to commence the mason work, except so much additional expense as may be required to make repairs. The works remain in good condition. The depth of water the same as last year—eight feet at its shoalest place.

Black River harbor.—The money that has been expended this season has been applied in deepening the channel and procuring materials for extending the works further into the lake. About 860 cords of gravel and sand have been removed, and a further removal is expected to be made so as to give nine feet of water at the close of the season; 125 sinking logs and 75 ties are already prepared and framed for sinking, and will be put down as soon as the spring opens and the weather permits. The estimates made out by the superintendent for extending the piers 150 feet is two cribs more, or 60 feet further than was calculated in the last annual report. This additional extension, I think, may be dispensed with,

which will reduce the estimates two-fifths, making the appropriation called for to complete the works at \$3,598. The estimate accompanies the report, marked A.

Cleveland harbor, Ohio.—The present appropriation is deemed to be as much as will be required for the works this season and for 1835. The piers are extended into the lake the whole distance contemplated. The labor and materials now applied are for strengthening the works and keeping them in repair. The depth of water remains as last year—from ten to eleven feet. All the timber above water in these works is going fast to decay, and will require renewing from time to time, until the piers become so well based as to warrant the safety of the superstructure of solid mason work which is expected to result in the security of the whole. The amount estimated to complete the works in a permanent manner is \$125,320. For the details I refer you to the estimate made out by the superintendent, accompanying the report, marked B.

Grand river, Ohio.—The progress, condition, and disbursements, as well as the several estimates, have not been reported to me. They may have been to the department. In August they were filling the piers with stone where they had settled and placing stone on the outside.

Cunningham creek, Ohio.—No appropriation was made at the last session of Congress for extending or securing this work, though much wanted. If the old pier is not repaired next season it will go to ruin. The appropriation for Beacon light-house has been applied to the object and will be completed in this and the next month. For the estimates for strengthening, securing, and completing this work, I would refer you to the estimates and remarks of the superintendent, marked C.

Ashabula harbor, Ohio.—The labor on the harbor this season has been applied principally in removing the rock and gravel which obstruct the channel. The machine for cutting up the rock and the dredging-machine for taking it out operate to great advantage. A new scraper has been constructed this season on a larger scale than the old one, taking out rock weighing from one to two tons. About thirteen thousand tons of stone and gravel have been removed this season. A depth of water is obtained from eight to nine feet alongside the east pier. The rock in the channel between the piers dips to the east from three to eight feet. The present appropriation is considered sufficient for removing all the obstructions in the channel within the piers. The contemplated additional 150 feet of diverging piers is expected not only to give greater safety to vessels entering the harbor, but to remove, by an increase of current, a shoal that now lies in the lake a short distance without the piers. The cost is estimated at \$7,591. For the estimates in detail for constructing these 150 feet of piers permit me to direct your attention to the last annual report. From a register kept since the 1st of May last it appears that 531 vessels have touched at this port this season, showing a very great increase of business, as, but a few years ago, I am informed, the arrivals would not exceed half a dozen the whole season.

Conneaut harbor, Ohio.—The small sum that was left of last year's appropriation is nearly or quite expended. It has been applied in repairing the works and deepening the channel. This sum has not been sufficient; 760 cords more of stone are required to fill in the piers where they have settled and to add to the stone on each side of the piers to strengthen the works, amounting to \$3,040; also, for extending the piers 100 feet further into the lake to a shoal, \$5,360, making, in the whole, \$8,600. For the estimates, see statement D.

Presque Isle harbor, Pennsylvania.—The depth of water at the entrance is the same as last year, twelve feet, and from thence to the borough piers nine and a half feet at its shoalest place. The borough piers are now made convenient for boats to lay alongside, land their passengers, discharge their loading, and take in wood, and are found more convenient than the United States works. The inlet across the Presque Isle, near the west end of the harbor, presents no appearance of any change since the survey was taken on the 1st of August, and communicated to the department on the 12th of the same. No sensible effect has since been produced by this inlet on the eastern entrance of the harbor. The effects of the currents and counter-currents on the sand on which the piers are placed, render any estimates that can be made for completing them uncertain. The currents, which are constantly setting in or out of the harbor at the rate of from two to three miles an hour, and frequently changing every hour, have a powerful effect in removing the sand. In my annual report I submitted the estimates for closing the breach at the junction of the south breakwater and pier. The quantity of stone then estimated for the object being five hundred cords, double the quantity of stone then estimated will be required. Eight hundred cords have already been placed in the breach, and two hundred cords more, according to calculation, will be required, making, in the whole, one thousand cords. The stone have been thrown in on a line with the piles and suffered to roll down and graduate themselves. At the extremity of the bar there is now thirty feet of water. In many other places deep basins have been worn and will swallow up more stone than was calculated. Other places alongside of the breakwater have filled up with sand, where there was a depth of from six to eight feet and a breach formed for several rods. The breach in other places has disappeared and a basin formed six to eight feet deep; these changes have taken place in several instances within the last two years. What will be the effects of placing stone on each side of the piers and breakwater time alone can determine. I am of opinion that this is the only method that can be adopted to give strength and permanency to the work; furthermore, as fast as the stone within the piers or breakwater, or on the outside, settle, to bring them up to their proper height by adding more, and continuing the supply until a firm base is secured. When this important end is gained and a superstructure of solid mason work executed the whole length of the piers and breakwaters, the work may be considered complete, when the constant watchfulness and repairs which they now require may, in a great measure, be dispensed with.

From calculation, 1,000 cords of stone, in addition to the estimates of 1833, will be required for 1835, amounting, with the contingencies, to \$5,000; this sum, with the balance now remaining, will be sufficient for all expenditures previous to commencing the mason work.

Two valuable quarries of stone, which promise a large supply for constructing these works, have been opened this season on the margin of the lake within one mile of the piers. The stone can be taken by scows direct to the works without the expense of carting. The stratum has a smooth surface of equal thickness, is from 18 to 20 inches thick, and can be easily wrought to any length or breadth required. Stone of this description, and so conveniently situated, will greatly facilitate the operation of the mason work.

An estimate of the stone, lime, and mason work required for the top of the piers and breakwaters, commencing at low-water mark, at the harbor of Presque Isle.

	Cubic feet.
South breakwater 3,450 feet in length, 8 by 3 feet in length.....	53, 800
North breakwater 3,000 feet in length, 8 by 3 feet in length.....	72, 000
South pier 800 feet in length, 14 by 4 feet in length.....	44, 800
North pier 1,250 feet in length, 14 by 5 feet in length.....	87, 500
	263, 100
	263, 100
263,100 cubic feet, estimated at 12½ cents per cubic foot, delivered at the works.....	\$32, 887 50
All the stone to be large, none less than half a ton. Coping for breakwaters to be 8 feet in length, and for piers 7 feet; 1 barrel of water lime for every 128 cubic feet of wall is 2,055½, at \$2 per barrel.....	4, 111 00
Laying 263,100 feet of masonry, at 6 cents the cubic foot, furnishing their own sand.....	15, 786 00
Superintending, say.....	2, 000 00
Taking down old piers level with the water.....	1, 000 00
Add 10 per cent. for contingencies.....	5, 578 49
	61, 362 95

Dunkirk harbor, New York.—In order to give a full view of the condition of this harbor, and the amount of funds necessary for repairs, and for extending the piers and breakwater, I would refer you to the estimates and remarks of the superintendent, marked E.

Buffalo harbor, New York.—These works approximate nearer to completion than any other on the south shore of Lake Erie. Much commendation is due to the superintendent for the skill, industry, and perseverance with which he has prosecuted this object. There is ten feet water in the channel, so that no vessel need ever be detained except for a very short time, when the water is lowered by the most severe gales from the east, which very rarely occur. Much labor has been directed this season to removing the stone and rubbish of the old piers which impeded the landing of boats alongside the south pier. The diving-bell has been constantly and successfully employed all this season. It is, however, a slow operation, and will take to the middle of next summer to remove all the obstructions caused by the old pier. The front wall of the towpath of large stone, in water lime masonry, about seven hundred running feet, and a corresponding amount of towpath flagging, has been completed; several yoke of oxen, with road scrapers and dredging machines, with other facilities, have been constantly employed in excavating and removing the sand within the harbor opposite the old light-house. No additional appropriation will be required for 1835; the present amount available is deemed sufficient to complete the works.

Black Rock harbor.—A portion of expenditures that have been incurred this season has been to strengthen the works on Bird island, and the transverse piers, but mostly in the construction of a new pier, for which the appropriation was principally designed, to protect the harbor against the influx of the sand along the lake shore, and at the same time to shield it against the reaction of the surf. This work is putting down in the lake, where the depth of water is from 18 to 20 feet, and in front of a beach, which is much exposed to the wind and waves. The exposed situation renders the progress of the works slow, but a sufficient length of pier will be put down to show the effects, and can be prosecuted should the result prove favorable. The funds are considered sufficient—\$5,000 for this year's service and \$7,000 for 1835.

With respect to the amount of expenditures for the fourth quarter of the present year, and for 1835, likewise for completing the works, I would remark that although I have directed your attention to the estimates made out for the several works, it is with no expectation that any certainty is attainable. The utmost that can be known must rest upon a mere probability; winds that seem light upon the land often so agitate the waters of the lake, that little or no work can be done, and days together the laborers are obliged to lay by waiting for a calm to sink a crib or unload a scow of stone. Until the main object is made certain, namely, a permanent foundation, and the superstructure completed, there will occur expenditures for repairing the timber exposed to the weather above the low-water mark, of which it will be difficult to make an estimate, as timber thus situated is not regular in its decay, and is also much exposed to being removed by heavy storms and other casualties—the stone wall of mason work that is eventually to be erected upon the several piers and breakwaters commencing upon an unstable bottom; but still the forwarding operation of the laborers must depend greatly upon the weather. Therefore any estimate that is or can be made as to time and cost must rest upon contingencies. How soon a secure base on which to raise a superstructure can be obtained for the several works now in progress, experience shows that it is impossible to foresee; but that it can in the end be obtained there is no reasonable doubt. The successful operation at Buffalo will warrant the expectation of the same result when a proportionate amount of labor and materials has been applied.

I am happy to say that the present condition of the harbors affords great security to the shipping and encouragement to enterprise, as the increased amount of vessels and business will show. Last season there were fourteen steamboats constantly employed in transporting passengers and merchandise; this season the number of steamboats has more than doubled, besides a great increase of other shipping.

Very respectfully, your obedient, humble servant,

JOS. D. SELDEN, *Agent.*

Brigadier General C. GRATIOT, *Chief Engineer.*

A.

The superintendent of the public works at Black river has furnished an estimate of the funds required for the service of the year 1835. The following is a copy :

Amount of stone required to fill 5 piers 30 feet long, 16 feet wide, 16 feet water.....	\$1, 500 00
200 sinking logs.....	200 00
400 ties.....	150 00
Labor for same.....	475 00
Iron bolts for same.....	100 00
Plank and spikes for same.....	100 00
300 feet cap logs.....	24 00
60 piles.....	180 00
Securing east pier angle.....	500 00
Dredging out channel.....	3, 000 00
Stone for securing east and west piers.....	3, 100 00
	9, 329 00
Deduct from the above the appropriation of 1834 not expended, and applicable to the service of 1835.....	2, 000 00
	7, 329 00

I certify that the above estimate is correct, and that that amount will be necessary to finish the same.
JNO. MYERS, *Superintendent.*

B.

Estimate of funds required for securing and rebuilding the public works constructing at the mouth of Cuyahoga river, in the State of Ohio, in a permanent and durable manner, with stone.

Nature of workmanship, materials, and contingencies embraced in the intended application of the funds required for the works.	Extent.	Cost.
Perches of stone, at 75 cents.....	120, 000	\$90, 000 00
Feet of coping stone, at 25 cents.....	18, 000	4, 500 00
Piles, at \$1.....	1, 700	1, 700 00
Rebuilding, piling, engine, and boats.....		900 00
Laborers, 8 months each, 4 years, at \$22 per month.....	20	14, 080 00
Master masons, 32 months, at \$50 per month.....	1	1, 600 00
Bushels of lime, at 20 cents per bushel.....	10, 000	2, 000 00
Sand.....		500 00
Iron and blacksmithing.....		3, 000 00
Horses, at \$60 each, and keeping 4 years, at \$50 per year each.....	4	1, 040 00
Superintendent, 4 years, at \$1,000 per year.....	1	4, 000 00
Contingencies.....		2, 000 00
		125, 320 00

REMARK.—In this estimate it is expected that the stone will be laid in solid masonry, in the place of the wood work that now supports and is a part of the present piers.

A. W. WALWORTH, *Agent.*

CLEVELAND, *October 1, 1834.*

C.

HARPERSFIELD, *Ohio, October 8, 1834.*

SIR: I herewith transmit my quarterly account and accompanying vouchers for the quarter ending September 30, 1834, and also report herewith the progress of the public works at Cunningham creek, Ohio, which are under my charge; and also subjoin the estimates for the further extension and completion of the works which will be necessary to be provided for by appropriation for the year A. D. 1835, at that place, &c. 1st. The beacon light (which is the only work in progress at Cunningham creek this year) is now nearly completed, and is supposed might be lighted by the 15th of November next if thought advisable; the appropriation of \$2,000, which was made at the last session of Congress, is deemed sufficient for the erection of the tower and light, which are already nearly finished, and also that part of the foundation on which the tower now stands. But a further sum is necessary in order to finish and secure the foundation by stone, without which the beacon must soon be injured and go to ruin. The estimate of the stone necessary to secure and finish the foundation next year is as follows: 250 cords of rock, at \$5, \$1,250

It is supposed that the stone can be placed around the work at the above price, and that amount is absolutely necessary in order to secure the light.

2. The further appropriation is also necessary to finish and secure the present pier and pier head at this place, neither of which is finished, nor are they secure as they now remain; neither is the pier head in any way at present attached to or connected with the present work, owing to no appropriation having been made at this place for the last year. The following is an estimate for finishing pier head and repairing present pier, to wit:

Stone to fill up piers, 150 cords, at \$4 per cord.....	\$600 00
1,200 feet durable timber, at 5 cents per foot.....	60 00
6,000 feet of plank, at \$10 per M.....	60 00
300 pounds of spikes, at 12 cents per pound.....	36 00
For labor and board of hands.....	300 00
	1,056 00

Which sum of \$1,056 is necessary in order to secure and finish the present pier and pier head agreeably to the first and original plan adopted by the late Major Maurice; and it is necessary also to connect the beacon-light with the main pier, and is wanted for the next season.

And the following is the estimated cost of the eastern pier, on plan submitted to the department by Colonel Totten last year, and for the construction of which an appropriation is wanted for the next year, to wit:

Wharf stone, 400 cords, at \$3 50.....	\$1,400 00
Flat and square timber, 14,000 feet, at 5 cents.....	700 00
3,000 feet ties, at 2 cents.....	60 00
9,000 feet plank, at \$10 per M.....	90 00
Blacksmith's bill.....	250 00
Two crane scows.....	525 00
Four tons of iron, at \$120 per ton.....	480 00
Labor and subsistence of hands, &c.....	2,750 00
For the eastern pier.....	6,255 00

Estimate and expense of constructing breakwater according to plan No. 2, of last year, submitted by Colonel Totten, to wit:

It is to be 22 feet high, 28 feet wide, and 200 feet long, and will require of square and flat timber 19,330 feet, at 5 cents per foot.....	\$966 50
Round ties, 4,000 feet, at 2 cents per foot.....	80 00
Wharf stone, 385 cords, at \$4.....	1,540 00
Labor and subsistence of hands.....	2,975 00
3 tons of iron, at \$120 per ton.....	360 00
600 pounds of spikes, at 12 cents per pound.....	72 00
5,600 feet of plank, (3-inch).....	84 00
Blacksmith's bill, estimated.....	225 00
1,440 feet of white-oak post, at 6 cents per foot.....	86 00
	6,388 50

Necessary appropriation for the breakwater for the year of our Lord 1835; and this amount is supposed to be sufficient for the completion of the above work, &c.

And I would here remark that the rapid increase of business at this place, and particularly the continued extension of the great iron-works in the immediate neighborhood of this place, call loudly for an extension of the public pier. It is confidently believed that an extension of these works, according to plan No. 2, submitted to the department last year by Colonel Totten, as well as yourself, will afford ample accommodation for vessels and boats at all times, and perfectly secure from storm or danger. The average depth of water, on each side of the present pier, for the distance of 400 feet is, this season, 16 feet, and no bar to obstruct.

I am also satisfied that the foregoing estimates are sufficient to construct the works alluded to, and also to finish the present; and I will here remark that, unless the present works are finished or secured, they cannot remain long in their present condition, and it would be at the imminent danger of their total destruction to suffer them to pass the next season without further appropriation.

I am, sir, with great respect, yours,

R. HARPER, *Superintendent of Public Works at Cunningham creek, Ohio.*

D.

Estimate of funds required for the operations at Conneaut creek, Ohio, during the year 1835, exhibiting in detail the nature, extent, cost, and probable application in the respective quarters within the time above specified of the several objects of contemplated expenditure.

Nature of workmanship, materials, and contingencies embraced in the intended application of the funds estimated for.	First quarter.		General designation of the parts of construction to which it is proposed to apply the objects contemplated by the expenditure anticipated.	Second quarter.		Third quarter.		Fourth quarter.	
	Extent.	Cost.		Extent.	Cost.	Extent.	Cost.	Extent.	Cost.
<i>Workmanship.</i>									
Carpentry—Chief carpenter.....	1.....	\$156 00	.....	1.....	\$156 00	1.....	\$100 00	1.....	\$412 00
Assistant carpenter.....	1.....	80 00	Framing and sinking piers, &c.....	1.....	80 00	1.....	56 00	1.....	216 00
Laborers.....	10.....	400 00	.....	10.....	400 00	10.....	300 00	10.....	1,100 00
Smithery.....	.....	40 00	Making and repairing tools, &c.....	.....	40 00	.....	30 00	.....	100 00
Stone.....	200 cords.....	800 00	.....	200 cords.....	800 00	100 cords.....	400 00	500 cords.....	2,000 00
<i>Materials.</i>									
Lumber—Logs.....	100.....	100 00	For extending the piers further into the lake.....	100 logs.....	100 00	75 logs.....	75 00	275 logs.....	275 00
Ties.....	200.....	50 00	.....	200 ties.....	50 00	140 ties.....	35 00	540 ties.....	135 00
Square timber.....	1,500 feet.....	90 00	.....	1,500 feet.....	90 00	1,000 feet.....	60 00	4,000 feet.....	240 00
Square plank.....	2,000 feet.....	20 00	.....	2,000 feet.....	20 00	2,000 feet.....	20 00	6,000 feet.....	60 00
Stone.....	300 cords.....	1,200 00	For filling up the old cribs from which the stone has settled, and for depositing on the side of the cribs to prevent the action of water from undermining.	300 cords.....	1,200 00	160 cords.....	640 00	760 cords.....	3,040 00
<i>Contingencies.</i>									
Subsistence.....	.....	225 00	.....	.....	225 00	.....	150 00	.....	600 00
Compensation for disbursing.....	.....	83 00	.....	.....	83 00	.....	49 00	.....	215 00
Other contingencies.....	.....	76 00	.....	.....	76 00	.....	45 00	.....	197 00
		3,320 00			3,320 00		1,960 00		8,600 00

REMARKS.—It was supposed when we sunk the present last cribs that we had reached the outer sand bar; but from the latter part of the last and of this season a sand bar is found frequently to form from 80 to 100 feet from the end of the present piers, on which a number of vessels and steamboats have grounded. The present appropriation is asked to extend the works to this outer sand-bar, and thus remove the obstruction to the free entrance to the harbor. It is also proposed, as above stated, to fill up the old cribs from which the stone has settled, and to deposit stone on the side of the cribs to prevent them from being undermined by the action of the water. It may be found necessary to dredge out the channel still more; but I am in hopes that the next spring fresh will remove the present sand and gravel from the channel, and render further dredging unnecessary. I am of the opinion that if the above appropriation should be granted, it would be sufficient to complete the works in as good condition as works built of timber can well be. It will doubtless be necessary, when the wooden materials that compose the present works decay, to build of more permanent materials.

A. DART, Agent.

E.

DUNKIRK, *New York*, October 2, 1834.

Sir: In conformity with your instructions, I now have the pleasure of transmitting herewith to you my abstracts and vouchers for the first, second, and third quarters of the year 1834; estimates for funds required for the service of the year 1835; and an estimate of the probable expenses of the fourth quarter of 1834; the annual and monthly reports of the progress, state, and condition of the works at this place; and, in conclusion, a general report, with the necessary remarks, &c.

I am, very respectfully, your obedient servant,

THOMAS FOSTER, JR., *Superintendent.*

JOSEPH D. SELDEN, Esq., *U. S. Agent for the Improvement of Harbors on Lake Erie, Pa.*

REPORT.

A.—An estimate of funds required for the service of the year 1835 for filling up with stone and putting in complete order 352 yards of the outer pier or breakwater.—(See estimate, remarks, &c.)

After making the necessary and thorough survey of this work, I find that the stone has settled in 352 yards of it to average about three feet through the whole length; and to put it in a thorough state of repair this estimate is submitted. If the work be filled up and repaired next season it will last for a number of years, and if suffered to remain in its present condition it will not last more than one or two years. In consequence of the vacancy made by the settling of the stone, the ice and water have a chance (and do) of rushing and passing through the whole length of the work; consequently, more or less of the planking will be knocked off at every storm and rise of water we have, (more particularly when the ice is making in the fall,) and, in this event, great quantities of the stone will be thrown out. In conclusion, if filled up, the ice and water could not have the same chance of operating on it.

The timber above water is fast decaying.

B.—An estimate of funds for extending and completing the pier or breakwater in front of the harbor.

In reference to this estimate, it is only a renewal of the application made for funds for the service of the present year, (1834,) and submitted to you last October, and by you to the department.

C.—An estimate for funds for extending and completing the pier running from the main land towards the channel at the western entrance into the bay.

An estimate for the same object was submitted to you on the 1st of October last, (1833;) the amount, however, is a little larger. In making out this one I find some items had been estimated too low in the former. In regard to the application for funds for this pier or work, I consider of far the greatest importance the original design of this work, which was to break off the very heavy swell coming into the bay from southwest, west, and northwest, and giving protection to the wharves and warehouses and vessels at anchor in the bay. The present pier is just carried far enough from the shore to throw the whole weight of the ice and water coming down with the westerly winds directly into the bay and against the wharves, and, if continued to its designed length, it would afford the desired protection, and the ice and swell would pass by and strike the breakwater about midway, and pass off without any injury. I would more particularly refer you to Colonel Totten's report on this subject, which will be found in the documents accompanying the President's message to the last Congress, pages 91 and 92. Allow me, sir, in this place to suggest to you the propriety of presenting to the department the necessity and importance of the contemplated improvements, and endeavor to have them passed at the coming Congress. You are no doubt aware that by partial and late appropriations but little is gained or saved to the government. The whole of these works can be completed with the amounts estimated for in two years, if early appropriations are made—one-half, if requested, to be expended the coming season, and the residue the following. At the long sessions of Congress appropriations are made at so late a period that the best part of the working season is passed away; for instance, the present season.

F.—An estimate of the probable expenses of the fourth quarter of 1834.

The western and main channel into this harbor has, at the very lowest stage of the water in the lake, never less than nine feet in the shoalest place, and this but a short distance, say about 100 feet, and this is inside of both piers, and between those piers in the channel there is 10, 11, 12, 15, and 18 feet water. The eastern channel is very crooked and narrow; it is only used by vessels coming in and going out in calm and southerly weather; there is about 10 feet in the shoalest part of the bar; the anchorage inside of the piers is from 15 to 18 feet and clay bottom. The channels into the bay are not subject to any alteration by the shifting of winds or drifting sands; the bottoms are of smooth rock; the only alteration is by the rise and fall of the lake.

A.

Estimate of funds required for the service of the year 1835, for filling up with stone 352 yards of the outer pier or breakwater, and for removing and replacing plank, &c., viz:

360 wharf stone, delivered in the works, at \$2 75 per cord.....	\$990 00
3, 000 feet 3-inch plank, hemlock, at \$13 per M.....	39 00
110 red beech ties, 18 feet long, 12 inches diameter at small end, 1,980 feet, 1½ cent per foot.....	29 20
200 pounds 7-inch spikes, for spiking in plank, 200, at 10 cents.....	20 00
500 pounds bolt iron, for bolts and other objects, (worked,) 500, at 10 cents.....	50 00
800 feet white oak timber, for caps and posts, 800 feet, at 10 cents per foot.....	80 00
10 days' service of one carpenter, at \$1 50.....	15 00
10 days' service of ten laborers, 100, at 74 cents.....	74 00
	7 50
Add 10 per cent. for contingencies, \$1, 135 70.....	113 57

1, 418 27

B.

Estimate of funds required for the service of the year 1835, for extending and completing the pier or break-water in front of the harbor of Dunkirk, New York, viz: 20 cribs, 32 feet each, to be sunk in 8 feet water and carried up 5 feet above the surface, 22 feet wide at bottom and 18 feet at top, making 216 yards.

60 sycamore sills, each 35 feet long, square, 14 by 15 inches, making 2,100 feet, at 6 cents a foot.....	\$126 00
160 hardwood side sticks, 34 feet, hewn on two sides to 12 inches, 5,440 feet, at 5 cents.....	272 00
160 hardwood side sticks, 34 feet, hewn on two sides to 12 inches, 5,440 feet, at 3 cents.....	163 20
100 yellow poplar sticks, 34 feet, square and bevelled, 12 by 16, 3,400 feet, at 6 cents..	204 00
100 yellow poplar sticks, 34 feet, square, 12 by 12, 3,400 feet, at 6 cents.....	204 00
120 white oak posts, 13 feet, square, 14 by 14, 1,560 feet, at 10 cents.....	156 00
60 white oak caps, 22 feet, square, 14 by 14, 1,320 feet, at 10 cents.....	132 00
3,000 white oak trenails, 2½ by 2¾ inches, 3,000 feet, at 1½ cent.....	45 00
600 hardwood ties, 20 feet 10 inches in diameter at small end, 12,000 feet, at 1 cent...	120 00
460 red beech ties, 18 feet 10 inches in diameter at small end, 8,280 feet, at 1½ cent...	124 20
1,140 cords wharf stone, delivered in the works, 1,140 cords, at \$2 75.....	3,135 00
11,520 feet 3-inch hemlock plank, 11,520 feet, at \$13 per M.....	149 76
1,330 pounds 7-inch spikes, for spiking in plank, at 10 cents.....	133 00
1,200 pounds bolts, of various sizes, and for various purposes, 1,200 pounds, at 10 cents..	120 00
1 superintendent, superintending construction of works generally, 8 months, at \$60 per month.....	480 00
1 chief carpenter, superintending carpentry, 8 months, at \$60 per month.....	480 00
2 assistant carpenters, 8 months each, 16 months, at \$52.....	416 00
14 laborers, 8 months, 112 months, at \$20.....	2,240 00
Add 10 per cent. for contingencies, \$8,700 16.....	870 00
Total amount required.....	<u>9,570 16</u>

C.

Estimate of funds required for the service of the year 1835 for extending and completing the pier running from the mainland towards the channel at the western entrance into the harbor at Dunkirk, New York, viz: 15 cribs, of 34 feet each, to be sunk in 10 feet water and carried up 5 feet above the surface, 22 feet wide at bottom and 18 feet at top, making 510 feet or 170 yards.

45 sycamore sills, each 34 feet long, squared 14 by 18 inches, 1,475 feet, at 6 cents per foot.....	\$88 50
150 hardwood side sticks, 34 feet long, 18 inches diameter, and flatted on two sides to 12 inches, 5,100 feet, at 5 cents.....	255 00
150 hardwood side sticks, 34 feet, 14 inches in diameter, and flatted on the two sides to 12 inches, 5,100 feet, at 3½ cents.....	178 50
75 yellow poplar side sticks, 34 feet, squared and bevelled, 12 by 16, flatted on two sides to 12 inches, 2,550 feet, at 6 cents.....	153 00
75 yellow poplar side sticks, 34 feet, square, 12 by 12, flatted on two sides to 12 inches, 2,550 feet, at 6 cents.....	153 00
90 white oak posts, 18 feet, square, 14 by 14, flatted on two sides to 12 inches, 1,620 feet, at 10 cents.....	162 00
45 white oak caps, 22 feet, square, 14 by 14, flatted on two sides to 12 inches, 990 feet, at 10 cents.....	99 00
500 hardwood ties, 22 feet, 10 inches diameter at small end, 11,000 feet, at 1 cent....	110 00
450 red beech ties, 18 feet, 10 inches diameter at small end, 8,100 feet, at 1½ cent....	121 50
3,000 white oak trenails, 2½ by 2¾ inches diameter, 3,000 feet, at 1½ cent.....	45 00
1,100 cords wharf stone, delivered at the works, 1,100 cords, at \$2 75.....	3,025 00
10,200 feet 3-inch hemlock plank, 10,200 feet, at \$13 per M.....	132 60
1,020 pounds 7-inch spikes, for spiking on plank, 1,020 pounds, at 10 cents.....	102 00
900 pounds bolts for various purposes, 900 pounds, at 10 cents.....	90 00
1 superintendent, superintending construction of works generally, 8 months, at \$60 per month.....	480 00
1 chief carpenter, superintending carpentry at works generally, 8 months, at \$60 per month.....	480 00
2 assistant carpenters, 8 months each, 16 months, at \$26 per month.....	416 00
12 laborers, 8 months, 96 months, at \$20.....	1,920 00
Add 10 per cent. for contingencies, \$4,715.....	471 00
Total amount required.....	<u>8,482 61</u>

E.

OCTOBER 10, 1834.

SIR: I have the honor to transmit the annual report of the condition of the United States works at the mouth of Genesee river, and at the entrance of Big Sodus bay, on Lake Ontario, State of New York, on September 30, 1834.

1. Of what has been done in the year.
2. Of what remains to be done to complete the plan, the lights, &c.
3. Of what is to be done to make the work permanent.
4. Remarks on the stability of upright piers, and conclusion.

1. What has been done at

Genesee river.—Twenty thousand dollars were appropriated for these works in the year 1834. The accounts of expenditure to September 30, 1834, are rendered to the War Department. Twenty-six cribs of thirty by twenty feet have been constructed and sunk this year at Genesee river, in from twelve to fifteen feet of water, and the work raised out of water, and will, before the close of the season, together with eight other cribs, one forty feet, another thirty feet square, be carried up and levelled at the usual point, five feet above the surface of the water, with timber, iron bolts, and stone, giving an extent of 2,876 feet on either side of the river, making a total of 5,752 feet of pier. This work has opened a crooked passage over sand bars, having seven feet of water upon them, to a free and straight line navigation of fifteen feet depth of water into Rochester harbor, where there are from eighteen to twenty feet of water; the work thus constructed is firm, and answers all the purposes expected from it. Should the mobility of the sand threaten at a future day to impede the present open channel that has continued open now three years, one month's work with the dredging machine that is contemplated to be used at Sodus bay would entirely free the channel from any such sandy obstruction. A beacon-light would have been placed this year on these piers, but the appropriations were late, and it was found that a permanent light could not be constructed upon a temporary foundation not yet fully settled in the sandy bottom for the sum appropriated; its construction was therefore deferred until the ensuing year.

Big Sodus bay.—Fifteen thousand dollars were appropriated for the work of 1834 at this bay. The accounts of expenditure to September 30, 1834, are rendered to the War Department. At this bay there have been constructed 5,378 feet in length of pier, distributed on both sides of its entrance, to which have been added this year twenty-four cribs, fourteen at the T piers, sunk in from eleven to thirteen feet of water, and ten cribs deposited at the isthmus to prevent the waves of the lake from breaking through into the bay. The cribs at the T are of the usual dimension of thirty by eighteen feet, and will, with three others, one of forty feet square and another of thirty, be elevated to the usual height and finished five feet above the surface of the water. The depth of the water at the entrance of the T's is now thirteen feet, but decreasing inward to nine feet depth, for the action of the current here is upon "hard pan," and not, as at Genesee river, upon sand, rendering it, therefore, necessary to break up this pan by a steam plough to open the channel to a proper depth hereafter described. From the above-mentioned depth of nine feet the water deepens inward to more than thirty feet, over a space of several square miles, forming Sodus bay. The pier work at the close of the year will form an extent of 5,900 feet in length at the entrance of the bay, exclusive of the 300 feet thus far deposited at the isthmus, which, from present appearances, promises to effect the desired object. It is, however, an experiment that may require additional cribs; the weather of November and December will probably decide the question. The plans accompanying this report give the form, position, and extent of these works at Genesee river and Sodus bay.

2. What remains to be done to complete the original plan, the beacon-lights, &c.

At Genesee river, after the close of the year 1834, it will be necessary to make the outside pier, now forty feet square, permanent, to fit it for the reception of the beacon-light; to do which it will be necessary to face it above water with stone laid in hydraulic cement. Such a structure will also be a commencement of the system of perpetuating the existing work, as recommended by Colonel Totten, for which an estimate is enclosed, and marked A; and, also, an estimate marked B, to build the beacon-light on a permanent plan, for which \$2,000 were appropriated by Congress at the last session, but which sum is not equal to that object, standing, as the light must, extended into the lake, and exposed in the winter to heavy drifts of ice. A plan of such a light is herewith sent, marked C. The curved slope of the face of this building is, as you well know, intended to lead the sliding masses of ice, driven by the wind up the face, until it falls back by its position and gravity. The necessity for the thickness of the walls is apparent, from the circumstance that floats of ice to the thickness of fifteen feet have been driven upon the piers by the waves of the lake; of course the structure should be so planned and built as to turn off such masses of ice.

At Sodus bay.—The continuance of the work on the original plan is to secure a channel way entrance of fourteen feet of water. The pier work will be finished this season, so far as to render it necessary to apply the steam plough and dredging machine for the purpose of breaking up and removing the hard pan, so as to obtain a free navigation for fourteen feet depth of water. This hard pan having been frequently penetrated with piles, in the course of my work, can therefore be broken up and removed by the machinery heretofore and now recommended. For the construction of a suitable engine, and for operating with it for two years, the time necessary, in my opinion, to effect this object, I herewith transmit estimates that are marked D.

The forty feet square pier at the outer extremity of the Sodus piers will also require, as at Genesee, to be built permanently, as per estimate marked A, and a beacon-light to be erected thereon, of form and structure, to guard against the ice, as detailed for Genesee.—(See the plan marked C, and its estimate marked B.)

3. What is necessary to be done to make permanent both the works at Genesee and Big Sodus bay?

Colonel Totten, the inspecting engineer, recommended that, as the timber of these works must decay, masonry in hydraulic cement should be substituted for timber above the surface of the water. Reference to the report on that subject makes it unnecessary to repeat here his remarks.

The works thus far constructed are proofs that useful harbors have been formed by them; means, therefore, to secure the existing work, and to render the same permanent, have been deemed necessary. Estimates of the sum required have been carefully made, upon inquiries repeated this year, similar to those made last year, to determine the expense of constructing the necessary walls upon the pier work, to be laid in hydraulic cement on the exterior courses of masonry; and those inquiries corroborate the propriety of the estimates of last year; they are enclosed and marked E and F.

4. Of the stability of upright piers.

The stability of the piers at Genesee river depends on their bulk and weight, and their subsidence into the sand at the bed of the lake, where, conformably to the different degrees of firmness and tenacity of that bed, they have in five years settled from one to five feet, and will, in my opinion, settle no more, and have thus become secure, and, to the surface of the water, will endure for many years.

The piers at Sodus bay, of similar form and structure, stand generally on hard pan, have maintained a general level for five years; and there is, in my opinion, no danger of their being upset. Before the construction of harbors, by the aid of square-sided piers, the common belief was that upright surfaces were not as safe, and could not resist the surge of waves with effect equal to that of sloping surfaces.

Many judicious remarks from Colonel Totten have induced me to give more attention to this subject than I otherwise might have done. He has, I believe, given the whole subject of the motion of wave much thought for several years past. In the course of my work at Genesee and Sodus, I have remarked that the surge of the lake appeared to expend a great part of its force before it reached the vertical face of the pier, although approaching the pier with much apparent velocity. The undulation of water by the force of wind diminishes below the surface in proportion to the depth of water; the power and velocity of the surface wave depend on the duration and force of the wind; the water below the surface wave, so much less as, by my observation, to be resisted by the vertical face of the pier without shock. In the reflex motion of this under mass of water, it meets and receives the principal part of the force of the coming surface wave, and thus prevents it from expending its force upon the face of the pier; whereas a sloping pier leads the roll of the surge, and receives the shock of the wave. It is my opinion that, in depths of water not exceeding four fathoms, it would be easily practicable to construct vertical sided piers, and also that they would form the most durable and the least expensive resistance to the waves of the sea.

The construction of these lake harbors has increased navigation from a few shallops to hundreds of vessels that convey produce and manufactures in numerous directions. The harbor at Genesee created a railroad from Rochester, the commerce of which city involves at least half a million of dollars, and whose mills send forth two hundred thousand barrels of flour per annum.

The harbor of Sodus, when completed, would afford safe anchorage to five hundred sail of vessels to ride at one time in any gale, as may be seen by consulting the sketch herewith sent.

The direct line of communication through the rich country that lies between Chesapeake bay and this harbor at Sodus has already elicited the attention of Pennsylvania.

Few stronger bonds of union, that depend on agricultural and commercial interests, could be created than would result from a steamboat navigation to unite the Chesapeake by the river Susquehannah and Seneca lake with Sodus bay at Lake Ontario. In reference to defence, it would be the best of military lines of operation, for the magazines would be the productive fields and arms on its covered flanks and rear.

Respectfully submitted.

J. G. SWIFT.

Gen. CHARLES GRATIOT, *United States Chief Engineer.*

A.

Estimate of the expense of finishing the United States work at the mouth of Genesee river, Lake Ontario, to render permanent the forty feet square pier in hydraulic masonry.

30 cords of best stone, at \$7.....	\$210
Rough hammering the two surfaces, 5,000 superficial feet, at 12½ cents.....	630
750 copper bolts, at 50 cents.....	375
15 barrels of lime, and 6 of cement.....	63
40 cords of filling stones, at \$3.....	120
Workmanship.....	660
Contingencies and superintendence.....	332
	2,390
A. The same for Big Sodus bay.....	2,390
	4,780

OCTOBER 10, 1834.

J. G. SWIFT.

B.

Estimate of the expense of erecting a permanent beacon-light on the extremity of the pier at Genesee river, N. Y.

35 cords best building stone, at \$7.....	\$245
1,300 feet flagging, at 25 cents.....	325
610 copper bolts, at 50 cents.....	330
Rough hammering 8,600 feet bed stone, at 12½ cents.....	1,075
1,250 copper clamps, at 25 cents.....	315
90 feet sheet copper.....	75
Copper framed glass light room and lamp.....	310
Workmanship.....	850
Contingencies and superintendence.....	350
	3,875
B. The same for Big Sodus bay pier head.....	3,875
	7,750

OCTOBER 10, 1834.

J. G. SWIFT.

[C.—Map accompanying the original.]

D.

Estimate of the expense of constructing and working a steam engine and iron plough and dredging machine and other implements, to excavate the hard pan in the channel between the T's of the piers at Big Sodus bay, New York.

One twenty-horse power steam engine.....	\$3,000
Copper boiler, gratings, and extra shafts.....	1,400
Chain pump, gearing, and dredging shaft.....	1,200
Vessel for the same, and wheels.....	1,700
Iron plough.....	300
Wrought iron carriage, wheels, and scow.....	300
Four chain cables.....	400
Iron dippers, rakes, crane, and chains.....	475
Two gondolas and cranes.....	225
Four anchors.....	400
One steam engineer, and also eight men.....	1,500
Fuel, repairs, and contingencies.....	3,100
	14,000
For the year 1835.....	14,000
The same machinery, &c., &c., used in 1836, or second year's work.....	6,000

OCTOBER 10, 1834.

J. G. SWIFT.

F and E.

Estimate of the expense of rendering permanent the present pier work at Big Sodus bay, by substituting stone masonry for the timber work four feet above water, conformably to the plan in the annual report of last year.

1,000 cords of building stone, in lengths not less than to square 4 feet, at \$7.....	\$7,000
3,000 cords of fragment stone, at \$3.....	9,000
800 cords stone, squaring 2 feet, at \$5.....	4,000
20,000 pounds copper bolts, at 25 cents.....	5,000
Workmanship, including lime and cement, to wit, 6,300 perches masonry, at \$1.....	6,300
14,000 feet dry wall work, at 25 cents.....	3,500
Blacksmith's work.....	760
Repairs and contingencies, and superintendence.....	2,940
	38,500

E.—Genesee river, same work: deduct \$4,000 for the greater facility in procuring stone upon that river; therefore, the expense of similar work on Genesee river would be..... 34,500

This work at both harbors might be accomplished in two or three years, as might best suit the wants of the public service to appropriate means in either of those propositions.

J. G. SWIFT.

OCTOBER 10, 1834.

F.

FORT MACON, October 1, 1834.

SIR: I have the honor to report that the operations for improving the navigation at Ocracoke inlet by means of dredging machines have been continued since the 30th September last, with a suspension of the same during the interval contained between the 14th November and 15th April last, rendered necessary by the state of the weather during that period, which was chiefly occupied in repairing and refitting the vessels for the present season.

The two boats which had been used during the last year were put in readiness, one of which, although nearly worn out, was so repaired as to be made serviceable throughout the greater part of the summer, but was discontinued on the 1st September, being rendered inapplicable from the decay of the machinery. The operations, with the aid of a regular and efficient organization, have progressed without interruption since the above date, and the machinery unremittingly and perseveringly applied upon the obstructions, without other impediment than that occasioned by rough weather, and the quantity of earth excavated since the date of last report has amounted to 35,300 cubic yards, the greater part of which has been transported to the distance of about three-quarters of a mile. It was in contemplation at the close of last season to aid the operations with a steam towboat for towing away the lighters when loaded, the expense of procuring which was embraced in the estimate for the current year, but the funds for its purchase becoming available at so late a date, rendered it impracticable to procure it in time to be applied during the present season, and the work for which it was intended has in lieu been performed by an additional

force of laborers. Although the earth was required to be transported further this season than that excavated during the last, it was found that it could more conveniently be done by laborers than was at first anticipated, whence no disadvantage has resulted excepting, perhaps, in the cost, which may be less by the former method, leaving out of consideration the first cost of the steamboat. The boats have been principally occupied in cutting a channel through that part of the obstructions called the 8-foot shoal, and in widening and further improving the flounder slue. A cut has been made through the former, in length 950 yards, from 9 feet on each side, and about 33 yards wide, and from 9½ to 11 feet deep, rendering this part of the channel practicable for 9 feet to the entrance of the flounder slue, the latter having a depth of a few inches over 8 feet, but, from its narrowness, great care is necessary to prevent vessels from grounding on either side whilst effecting the passage.

The result of the operations to the present time has been to render this channel, which was not formerly practicable, the best at the inlet, both as regards the draught of water which can be carried through and the shelter afforded against storms; also, a thoroughfare for the whole commerce of the middle counties of North Carolina on the seaboard, which, by a registry regularly kept, makes the number of passages within the twelve months past to be upwards of four hundred, with a draught of water varying from 7½ to 7¾ feet, showing an increased depth to which vessels now load of nearly 1 foot, and estimated to save in ligherage about 200 barrels, and the detention corresponding, to which may be added the advantage of a safer outlet than before existed. Thus it appears that although the operations have been but partially successful, they have nevertheless been productive of a decided and useful improvement in the navigation. There are circumstances, however, arising out of the peculiar nature of the locality which, according to the experience of the last season, are such as to create strong doubts of the practicability of improving this navigation to that extent desired by those interested in its improvement, the principal object having been to obtain a draught of 10 feet water at high tide. The causes here alluded to are the uncertain and shifting character of the shoals lying near the inlet. On an examination of the general map of the navigation at Ocracoke, it will appear that the inlet is enclosed on the side of the sound by the extensive royal shoal, which is penetrated by four channels, to wit: Teache's hole and Blair's to the northeast, and the old ship-channel and Wallace's channel to the southwest. In each of these are found shifting sand shoals, presenting obstructions to the passage of vessels, the depth of water on them being from 6 to 8 feet. Of this nature is the mouth of Teache's hole, the junction of Blair's channel with the sound, the Bulkhead in the old ship, and the mouth of Wallace's channel. The mouth of Teache's hole, which, according to a survey made upwards of thirty-five years since, was practicable for 6 feet water only, has within late years improved so as to admit the passage of vessels drawing 7 feet, but is subject to sudden and frequent changes. The passage of this bar is dangerous in the extreme; the ocean swell, when of any magnitude, breaks heavily upon it, and greatly endangers the safety of vessels which may have grounded upon it in their passage out. This channel, like the others, has a bar or swash on the side of the sound. Blair's channel, which has its general direction about south, and debouches into Beacon Island roads, has at its entrance from the sound a bar about 1,000 yards wide between the depths of 9 feet on each side, and upon the highest part is found 6 feet water. The formation of this bar has been attentively examined, and the sand composing it found to be loose, clean, and obviously shifting in its nature. It is exposed to the full scope of the northerly winds from northwest to northeast, which have the whole range of Pamlico sound, without any interposing barrier to their action upon this part of the navigation. The former, of well known violence when prevalent, passes in a longitudinal direction along the royal shoal and across the mouth of this channel, at which lies the bar. It is thus, in addition to its unfavorable formation, more exposed to disturbing causes on the side of the sound than either of the others. With reference to the old ship-channel, the shoal in it called the Bulkhead, situated at the point where the current of Blair's meets that descending, it is of a character precisely similar to the others, and even more variable than those, from the cross currents and eddies which are always met with at this point. With regard to the shoals described above, there are facts connected with the fate of vessels wrecked and lost upon them which illustrate in a forcible manner the nature of these impediments to the navigation. The number of vessels lost and abandoned on them has been great, and yet not a vestige thereof is found to remain, or for a distance below the bottom in which they were originally, the wrecks having in every instance sunk and disappeared in the sand. It must be obvious that neither of these channels is susceptible of permanent improvement by dredging machinery. There remains, after these, the southern or Wallace's channel. In the selection of this for the application of the machinery two objects were held in view, the principal of which was the permanency of the excavations to be made, and, secondly, the proving of a sheltered anchorage for coasters. The most favorable prospect of attaining these ends was presented in the channel last referred to, which on the commencement of the operations was thoroughly examined throughout its whole extent to its mouth, lying four and a half miles from the swash, and near the jaws of the inlet. As the formation at this point is unfavorable to improvement by dredging machinery, it was necessary to success that there should be found at all times a sufficient depth of water thereon to permit the passage of vessels. It was, therefore, closely examined, and found to have 11 feet water at flood, which, being 1 foot more than required, no difficulty on this head was anticipated. There remained, therefore, only the muddy and apparently cohesive formation of the swash and flounder slue to overcome in the accomplishment of the desired object, the prospect of its permanency being favorable from the fact stated above, which also rendered it apparent that those shoals could not be subject to sudden and irregular changes, and that, in the event of a channel being opened, it could be injuriously affected only by the gradual deposit of alluvion, held in suspension by the descending currents, which might be successfully counteracted by machinery. This conclusion was fully confirmed by the result, the obstructions in question having been made navigable for 8 feet draught, showing a gain on the flounder slue of 3 feet; whence it would appear that if the practicability of opening a channel of 10 feet depended solely upon these obstructions, which alone were had in view in the original project, and the act applicable to the execution of the work, there would remain but little doubt that the requisite depth could in time be acquired and maintained by the use of machinery. Notwithstanding, after the latter had been in operation upwards of twelve months, it was found that the mouth of Wallace's channel was undergoing a change and shoaling, an event which was not anticipated. In consequence of this result, attention was drawn to a channel about one mile above the mouth referred to, connecting Wallace's channel with Beacon Island roads, and understood to be of recent formation. This channel, called Beacon Island slue, had at its junction with Wallace's channel a shoal or bulkhead about 350 yards wide, from 10 feet on each side, the shoalest part being 6 feet deep at flood and 4½ feet at ebb tide, the bottom being, however, of an unfavorable character, and similar to those hitherto described in the preceding part of this report, at the

same time, if removed, it would present a nearer passage by one mile to Beacon Island roads than the main channel, and afford useful data as an experiment. To accomplish the above object, suggested by the changes going on at the outlet of the general channel, a boat was placed on the shoal referred to, and in the space of six weeks about 7,500 cubic yards were removed therefrom, and a narrow channel cut through nine feet deep at high water.

The sand, being loose, was excavated with great ease and rapidity. On resuming the operations in the spring of last year, the work done, as stated above, was found to have entirely disappeared, and the bar of Beacon Island slough had resumed its former state of shoalness—an evidence conclusive of the inutility of dredging in bottoms of that nature. At the same time that this effect was observed, the mouth of Wallace's channel was found to have shifted its position and deepened to upwards of ten feet at high water; and as the impracticability of permanently deepening or otherwise improving the shoals lying near the entrance by dredging was manifest from the experiment hitherto described, and the outlet being found thus favorable, the operations were then vigorously pressed forward on the swash and flounder slough, with the expectation that the greater volume of water which would thus be induced to pass out thereat, and through the general channel, might tend to maintain the requisite depth at the mouth. It was then that the greatest improvement was effected on the flounder slough, and the current through the same increased from 22 to 32 inches per second, which facts were embraced in the report of last year. This channel was also open to the coasting trade, and has ever since been used as the regular thoroughfare for the commerce. An exception to the above may be stated in regard to the vessels from the north counties, which, although generally of a lighter draught than those heretofore referred to, are few of them in the habit of using this channel; whence it is inferred that the want of a sufficient knowledge of the superior advantages of this route has induced them to prefer the danger of Teache's Hole to sailing around the Royal shoal, twelve miles further, to the swash roads. It has not unfrequently occurred during the past season that very many of these vessels have been lying detained in that channel during the constant passage of vessels out to sea through that of the flounder slough.

The foregoing was the state of the operations at the date of the last annual report, in which, as also in my letter of the 30th November following, it will be recollected special reference was made to the outlet of Wallace's channel, and the necessity of being content with the depth of water that might be found thereon. During the present season, however, this mouth has again shown a tendency to shoal, but affords at high water $8\frac{1}{2}$ feet, the tide rising at this point $3\frac{1}{2}$ feet; there is at low water 5 feet; it is therefore at present necessary for vessels drawing 8 feet to wait the rise of the tide in order to effect the passage, although vessels of that draught now pass with very little detention. It does not, therefore, appear that this outlet in its natural state can be relied upon at all times for a depth of 10 feet, whence the inferences are drawn which have been already adverted to in the foregoing part of this report. The history of this navigation shows that great changes have taken place within the present century, not only in the shoals and channels, but in the extent and form of the projecting points bounding the inlet. That these changes are in constant progress admits of not a doubt. Hence, whatever depth may be obtained by the present process, it can hardly be relied on as possessing permanency so long as the gradual operations of nature remain the same. An examination of the map of this navigation shows that nearly all the channels at the inlet converge to the general channel or common entrance at the inlet; and the meeting and interference of these currents naturally cause the formation of shoals of greater or less magnitude, which must be coexistent with the channels themselves as the causes producing them. To reduce the number of these to one which should discharge the surplus water received into Pamlico sound by artificial means, has long been looked upon as visionary and impracticable so long as there exists the immense inner basin of the sound, which may be considered the common estuary of the various rivers whose waters meet those of the sea through Ocracoke inlet, and, from its dimensions, affording ample room for the formation of any series of shoals and channels on the inner side which an artificial alteration of the inlet might occasion.

During the past season great interest has been manifested by those concerned in the commerce of the north counties on the subject of Blair's channel, and a desire expressed for the application of the machinery upon the bar at its mouth. Although this, if navigable, would afford a more direct passage for the trade from those counties, and is uninterrupted by the shoals near the inlet, yet from the facts already reported with regard to this channel, it is quite evident that its permanent improvement by dredging machinery is uncertain, if not impracticable.

The operations during the months of October and November of the present year will consist in widening and deepening the flounder slough, the narrowness of which at present offers the principal impediment to the passage of vessels drawing 8 feet water. The department is referred, in illustration, to the general map of Ocracoke inlet forwarded with my report of last year, and to a special chart of the channel improved, which is now in preparation and will shortly be forwarded.

The funds available at the close of this year will be greater than anticipated, and are explained in the first part of this report, the contemplated purchase of an additional steam vessel not having been made.

The following statement exhibits the amount of funds available for the fourth quarter of 1833 and the year 1834, with the disposition of the balance remaining unexpended on September 30, 1834:

Balance in the hands of the agent on September 30, 1833.....	\$608 19
In the treasury at the same date.....	11, 400 00
Appropriation for the year 1834.....	15, 000 00
Refunded during the year.....	98 99
Making the amount available for the fourth quarter of 1833 and the year 1834.....	27, 107 18
The expenditures during the year ending on September 30, 1834, were.....	13, 699 30
Leaving a balance unexpended on September 30, 1834, of.....	13, 407 88
Of the latter sum there was in the treasury undrawn on September 30, 1834.....	10, 600 00
And in the hands of the agent.....	2, 807 88
The expenditures during the fourth quarter of 1834 are estimated at.....	3, 407 88
Which will require to be drawn from the treasury to complete the service of the year 1834....	600 00
Leaving a balance which will not be required at any time this year, and which may be applied to the service of the year 1835, of.....	10, 000 00

Respectfully submitted.

G.

SMITHVILLE, N. C., *October 23, 1834.*

SIR: The annual statement of expenditures made on account of the improvement of the navigation of Cape Fear river, below the town of Wilmington, is forwarded herewith, and exhibits the cost of those improvements to September 30:

The balance which remained in the hands of the agent on September 1, 1833, was.....	\$1, 687 65½
The balance of appropriations in the treasury on that day was.....	21, 781 00
And the appropriation for the year 1834 was.....	5, 234 00

Which made the sum of.....	28, 702 65½
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available for the fourth quarter of 1833 and the year 1834.

The balance in the treasury on September 30, 1834, was.....	\$13, 864 00
From which is to be deducted the balance due the agent on September 30, 1834..	5, 694 52½
	<u>8, 169 47½</u>

Showing the expenditure for the year ending September 30, 1834, to be.....	20, 533 18
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The whole amount of appropriations equal.....	132, 627 00
And the expenditures to September 30, 1834, per annual statement.....	124, 705 24

Which leaves of the several sums appropriated.....	7, 921 76
To which add this amount, being for articles sold, &c.....	247 71½

Making available for fourth quarter of 1834 and the year 1835.....	<u>8, 169 47½</u>
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My last report stated the difficulties which we had to encounter in constructing the jetties for the middle shoal, near Old Town, on the western side of the river, and Barnhard's creek, on the eastern side, in consequence of the washing up of the plank of which they are built. This has been obviated, in some degree, at the jetty near Old Town, by throwing stone on each side of it as far as the quantity of that material which we could procure here would enable us to secure it. One thousand six hundred and eighty-five and one-half tons have been deposited around this jetty; and on those parts of it where the stone has been thrown it has not only resisted the action of the current and preserved the jetty, but it also secured it against the effects of the storm which occurred here on the 4th and 5th of September last. Those parts of the jetty which were not protected were much injured, as were all the jetties on the river, excepting the two on the western side, near the Bulkhead or upper shoal. As a substitute for stone, I shall collect all the oyster shells which the rocks on the Oak Island purchase will supply, and deposit them on those parts of the jetty where there is no stone.

The dredging-machine has been at work on the middle shoal and on the Bulkhead during the season. Over these shoals 10 feet only could be carried when the improvements on the river were first placed under my superintendence, and over the lower shoal, on which we have not done anything, 10 feet could go; this was the greatest draught which could be carried to Wilmington at that time. Now vessels are constantly going drawing 11½ feet over the lower shoal, which must have been benefited in some degree by the jetties near to Old Town and Barnhard's creek; and over the middle and Bulkhead shoal 12 feet can be carried; 11½* feet can be carried to and from Wilmington, which shows that the river has been improved.

The total destruction of all the jetties near the Bulkhead shoal by a storm in August, 1830, and the continual repairs which have been made to those since built near the middle shoal, have caused a large sum to be expended, which would otherwise have been applied to the erection of the jetties for the lower shoal, and the closing of the western channel at Campbell's or Big island. It is in consequence of these casualties that greater success has not resulted from our labors; they could neither be foreseen nor guarded against—were not under human control—and human wisdom, however profound, could not have exercised its power to arrest them.

The experiment which has been made by placing stone around the jetty at Old Town has been so successful that I cannot but hope the government will authorize another appropriation to be made for the purpose of constructing the jetties at Old Town, Barnhard's creek, and Big island of durable materials, that they may be permanent structures. An estimate will be forwarded for this purpose, if you direct one to be made, as soon as the necessary information can be obtained in relation to the cost of the materials which would be used in their construction.

All of which is respectfully submitted.

GEORGE BLANEY, *Capt. Corps of Engineers and Bvt. Major.*

Gen. C. GRATIOT, *Chief Engineer.*

H.

LOUISVILLE, *October 24, 1834.*

SIR: Since the last inspection of the works for the improvement of the navigation of the Mississippi and Ohio, the superintendent has steadily pursued the plan of operations previously adopted on those rivers, and with the same success.

The overhanging trees were removed from the bank before the last report, the island chutes and dry sand-bars have been cleared, and the largest and most dangerous of the snags have been dragged from the channel. By these means the high-water navigation is rendered comparatively safe and easy.

* On spring tides 12 feet can be easily carried to and from Wilmington, and during a freshet the last winter, which was not over 6 inches higher than the spring tides at the jetties, 13½ feet was carried up by an English brig, which is the greatest draught ever carried to Wilmington.

Boats run with security at night where a few years since it was hazardous to attempt a passage even in daylight.

Pursuant to this system, there remain yet to be removed the snags and sunken logs which are below the surface of the water even at its lowest stage, and are the more dangerous from being unseen. A large portion of this work has been effected since the last report. During the past summer the Mississippi has been lower than at any period for years previous, affording a most favorable opportunity for accomplishing this part of the work. Unfortunately the repairs required by the snag-boats, and the impossibility of getting them out of the Ohio when ready for operation, have rendered unavailing circumstances so auspicious for removing the sunken logs and snags.

Those points which demand particular notice as presenting most difficulties from such obstructions as come under the last class of work, are Glasscock's island, Cowpens, point above Rodney, Paupau island, Point Chicot, mouth of White river, Sixty island, Horseshoe island, St. Francis island, chute of Thirty-seven island, Plumb Point, Fourteen island, Ten island, and most of the river from the mouth of the Ohio to the Missouri. Although these are designated as being unfinished, they are not the only points requiring attention before the proposed improvement can be considered complete. The importance of rendering the navigation safe and easy is increasing with the daily increase of trade. A vast amount of valuable produce and merchandise is at all times afloat on this river in steamers or flatboats. Notwithstanding the great security resulting from the improvements already effected, many accidents happen and much property is destroyed by the loss of steamers and flatboats which have been intrusted to ignorant or unskilful management. The danger is, perhaps, rather augmented than diminished by the feeling of safety inspired by what has been done.

Perserverance in the present system of improvement is alone necessary to overcome all difficulty in the navigation of the Mississippi. The practical results produced during the last four years leave it no longer a matter of doubt that the only effectual mode of preventing the recurrence of those obstacles which have obstructed and still obstruct the navigation is to cut off at once the source whence they flow. Experience during the same period has established the fact that it is the banks which are thrown into the stream by the weight of the timber, the action of the current, or the combined influence of the two, that supply the snags or sawyers so frequently occurring in situations from which all such obstructions had been removed. The removal of such trees as are likely to fall into the river becomes, therefore, a matter of the utmost importance. The hostility so strongly manifested against this part of the work at its commencement has at length yielded to the conviction of its utility; and I question if the subject were submitted at this time to the decision of those who were loudest in their denunciations against it, if it would not be decided to have been the most judicious and effectual method yet adopted of permanently benefiting the navigation. Such at least are the sentiments of the steamboat captains and pilots whom I have consulted. This plan is attended with much less expense than that of removing the trees from the channel after they have fallen in with the bank.

Admitting that it be necessary to clear the trees from the alternate bank to the extent of fifty yards for one-fourth of the distance from Natchez to the Missouri, it would amount to 5,294 acres, which, at eight dollars per acre, (about the price which it actually costs,) comes to \$42,352; the average cost of removing snags has been estimated at eight dollars, at which rate the expense of taking out the snags would greatly exceed that of clearing the banks.

The efforts of the superintendent were at an early period directed to the accomplishment of this object, towards which much has been done. The salutary effects of the plan are visible wherever it has been adopted; its advantages are strikingly exhibited for three hundred miles below the mouth of the Ohio. On this part of the river the banks, by the attrition of the water, have assumed a uniform slope, and oppose, consequently, less direct resistance to the action of the stream, and, being no longer loaded with the additional weight of the trees, have, in most instances, ceased to cave; in some places, however, the river has continued its encroachments as far as the clearing had been extended, rendering further attention in such cases necessary.

I am persuaded that the future navigation of the river depends upon the continuance of this branch of the improvement; the rapid settlement of the banks will constantly diminish the expense.

The snag-boat Archimedes, with a suitable force, will proceed with the operations on the Mississippi, commencing at the mouth of the Missouri, as soon as a rise of water in the Ohio shall enable her to get out of that river. After attentively examining the effects of clearing the banks, I am decidedly of the opinion that, if the true interests of those who navigate the Mississippi be consulted rather than the prejudices which existed amongst them at the commencement of this work, the superintendent should be instructed to resume this branch of the improvement.

The work of the improvement on the Ohio was divided into three classes:

1. The removal of all logs and trees from the bed and banks of the river.
2. The removal of all rocks from the low-water channel.
3. The construction of wing dams to concentrate the water in places where it was divided by islands or, from other causes, was spread over too much space.

The operations in the first class of these works since the last report have been confined to the removal of the snags between Troy Reach and Smithland; before it can be regarded as complete, it will be necessary to remove those which have accumulated at Hurricane island, Slim island, Henderson's Bend, Flint island, and a few at the mouth of Salt river.

Of the second class I find nothing demanding attention except a rock near the head of Wabash island, in a dangerous situation, which should be removed.

With the exception of the snags and logs taken out between Troy Reach and Smithland, above mentioned, the operations for two years have been confined exclusively to the construction of wing dams.

The navigation of the Ohio from its confluence with the Mississippi presents no difficulties until we reach Cumberland island. The Grand and Little chasms, once the terror of all who navigated this river, now offer no obstacle. The channel is deep, and the sunken rocks are all removed.

Loud complaints have been made against the dam at Cumberland island, which it was declared had entirely destroyed the navigation at low water; these expressions of dissatisfaction, so general and unmeasured, were not without an appearance of justice. It is known to the department that this work was suspended the first year of its commencement on account of the cholera amongst the laborers; the following year it was again prosecuted; an opening of eighty yards in the dam was deemed necessary for the passage of boats, the channel on the east side of the island being entirely dry. While finishing the extremities of this dam a slight rise in the water caused such a fall over the opening as to render it

dangerous to attempt to pass; the foundation was soon undermined, and this part of the dam wholly destroyed. A general rise succeeded shortly after, which, together with the cold weather, compelled the superintendent to abandon the work for the season. The late period at which the last appropriations were made, and the necessity of repairing the boats before commencing operations, have postponed all action upon the work until within the present month.

During the whole period from the commencement of the dam until this time its passage has been attended with difficulty and hazard, and a great deal of property has been lost by it. The work of filling up the break is now one-third completed, and with the present force (120 men) will be finished in two weeks. This dam promises to fulfil the objects of its construction; it was generally supposed to be injudiciously located, and that it would have possessed more strength and permanence had its course been from the head of Dog island to the head of Cumberland; but I am persuaded that such would not have been the result had it been so constructed, for in that position the direction of the current would have been parallel to that of the dam, and would have drawn it into the stream by cutting away the sand foundation upon which it is built. Such has uniformly been the tendency where the dam runs with the direction of the stream, while those which are transverse to its course have, without exception, accumulated a mass of sand and gravel above and below, which serves to support them against the influence of drift, &c.

Already a bar has formed around the Cumberland dam where finished to a level with the surface of the water; the largest portion of the stream now passes on the east side of the island, where it has excavated a channel four feet deep, which is daily enlarging as the opening in the dam advances towards completion. The increased volume of water thus forced around the Smithland side of the island is likewise opening the bar at the foot of Cumberland, while the channel on the west side is filling up rapidly. There is now three and a half feet water over the lower bar; should it be desirable to increase the depth, it may readily be effected by throwing out a dam two hundred yards in extent at the foot of Cumberland island, by which the water will be confined to a smaller space and produce the desired result.

A sketch of this work, together with all those which are completed or are in progress, exhibiting the shiftings of the bars since the last report, will be forwarded to the department as soon as drawings can be made.

The works at the Sister island have produced a decidedly favorable effect upon the navigation at that point; bars have formed against the dams which concentrate the water between the lower island and the dam on the western side; this dam was not commenced at the shore but at a gravel bar near it, which it was thought would not cut away. A small channel has, however, been formed between the dam and the shore which it is feared will injure the navigation; this must be closed. It will probably be necessary at some future period to throw a dam from the second Sister island to the east shore. The dam which runs from the lower Sister to this shore has entirely closed the channel where formerly ran at least half the water of the river.

Since the last report a dam has been constructed at Three Mile island, which will probably remove all difficulty at this point; it is not entirely completed; but when finished the bars which now occasion delay will soon be excavated to the required depth by the water. A small force intended for the Cumberland dam was directed by the superintendent to accomplish this object on their way down; after working a month it was found inexpedient to proceed on account of the low stage of the water, which rendered it difficult to get rocks to the site; the prosecution of the operations was therefore suspended until a rise in the river.

The bar at Scuffletown no longer presents an impediment to the navigation; the dams have concentrated the water and formed a permanent channel; this was formerly one of the most difficult on the river.

The works at French island have also proved efficient, and require no further expense; boats pass at all seasons drawing three feet water.

From Louisville to Cincinnati the navigation is interrupted by no obstacle of sufficient magnitude to render further attention necessary.

The only places in this river by the improvement of which an advantage commensurate with the expenses of construction could be secured are Hurricane island, Tradewater, Battery Rock bar, Cincinnati bar, five miles below Shawneetown, Raleigh bar, Mount Vernon bar, Flint Island bar, and Blue River bar. These are the only situations where three feet may not be carried at lowest water. It is impossible in the limited time allowed for my inspection (being compelled by my duties at Memphis to return there by the end of the month) to make drawings and estimates of these works. It may, however, be safely inferred that their cost will not exceed the rate of those already constructed.

I beg leave to call the attention of the department to the necessity of having surveys made of those points on the Ohio susceptible of improvement; this is a subject of much importance to the success of the works on this river; without surveys are made all estimates must be altogether hypothetical. It is especially desirable in locating the dams so to establish the outer ends that the current which receives its new course from the dam should not be thrown against the opposite shore, but be so directed as to pass tangent to the first point below. The dams at Scuffletown, French island, Three Mile island, and the Sisters would have produced a greater effect had this been attended to more carefully. It has not been in my power to leave my station at Memphis long enough to visit the works on Red river or the Arkansas; the former has been successfully prosecuted, as I learn from the superintendent, as far as the Caddo agency, a point about seventy miles from where it was commenced. About one-third of this distance he supposes was filled with timber when he began his operations; the latter has been completed so far as the removal of all the snags, sawyers, logs, &c., below Little Rock. The superintendent will leave here for Red river as soon as the Cumberland and Three Mile island dams are finished, with three hundred men, and the steamers Pearl, Java, and Souvenir, all in good order; keel-boats with the requisite supply of provisions are ready and will be taken in tow by the steamers. The Archimedes will commence operations at St. Louis as soon as she can get out of the Ohio, and continue to work down the river until February, when she will ascend the Red river. The Heliopolis, now thoroughly repaired and in perfect condition, will also descend to the Mississippi as soon as the rise in the Ohio will permit, and will commence operations below the mouth of that river and remain there during the whole season.

In the disposition of his forces, his plan of action, the economy and system observed in the execution of the works, in the perfection of the machinery used, and in the selection of agents, the superintendent has exercised good judgment, and has produced most favorable results.

These improvements require much of the personal attention of the superintendent, but from the extent of country over which they are spread it will not be possible for him to bestow upon all that kind

of supervision which they demand; I would therefore suggest to the department the propriety of such a division of the works amongst different superintendents as shall secure to each the attention which it merits.

I have the honor to be, sir, your obedient servant,

A. H. BOWMAN, *Lieutenant of Engineers.*

Gen. CHARLES GRATIOT, *Chief Engineer*

H 1.

Annual report of work done for improving the navigation of the Ohio, Mississippi, Arkansas, and Red rivers, from the 1st of October, 1833, to the 30th of October, 1834.

In the months of October, November, and December, 1833, and January and February, 1834, the steam snag-boats and the machine boats worked by hand removed from the bed of the Mississippi and Arkansas rivers two thousand nine hundred and twenty-two snags, and in the same time the crews of those boats cut from the dry bars of the Arkansas, and felled from the bluff banks of the Mississippi, five thousand nine hundred and ninety-three trees.

One thousand three hundred and eighty-five of the snags removed were taken from the bed of the Mississippi, and one thousand six hundred and twenty-one trees were felled from its bluff banks. One thousand five hundred and thirty-seven of the snags were taken out of the bed of the Arkansas river, and three thousand three hundred and seventy-two of the trees were cut from its dry bars.

The work done in the Arkansas river has produced a very beneficial effect, but has not been completed to the full extent as far up as Little Rock, the highest point to which the work was carried, owing to the stage of water being too high during part of the time the boats were operating in that river. The full amount of the appropriation for that river has been expended. The number of snags removed exceeds the amount reported by Lieutenant Brown, in his examination, to have been in that part of the river.

The work done on the Mississippi during the year has been of much advantage to the improvement of its navigation. The loss of boats during the last year by snags in that river has been less than in former years. But three steamboats were lost in that time. The first, the Napoleon, struck a snag twelve miles above the mouth of the Ohio in March last, when the water in the Mississippi was much lower than the Ohio, consequently backing the former river. The steamer Napoleon was running up in the back water and struck a snag, formed by a large tree which had a few months previously fallen in from the bluff banks, the top of which was but just under water, and, owing to there being no current, the snag made no breaker. The other two boats were lost during the low water. The "Jefferson" was bound up, struck some obstruction lying on a sand-bar, supposed to be three feet under water, which made no breaker. The Return was bound down, struck a snag or log lying on a bar, making no breaker in the water. Obstructions of this description are numerous on the bars of the Mississippi, and dangerous to the navigation in low water. The current in its course on the bars is much broken and kept in continual commotion, resembling in appearance numerous breakers, arising from obstructions lying on the bottom of the stream, but are occasioned by the course of the water gliding swiftly over the uneven surface of the sand; consequently, where there are logs and roots lying on the bars, the break of the water over them is not perceptible by the navigator; the boat striking is the first notice he can have of the hidden obstruction. To remove all the obstructions of that nature will be found impracticable, as they cannot be seen; of course, cannot be removed. It is, however, but a small portion of the year that such obstructions are dangerous. When the water is six feet above its lowest stage the heaviest boat passes over them without a possibility of injury. The water does not fall to that low stage more than two years out of three, and when it is so low the period is short, not usually more than six weeks. I have heard of no losses of flat-bottomed boats in the Mississippi by snags during the year; still they may have occurred unheard of by me. I am of opinion that the steam snag-boats will be able to remove all the accumulation of snags formed from the freshets of last summer during the present season of operations, notwithstanding they have not been worked in that river during the months of August, September, and October, as in former years. Owing to an early fall of water in the Ohio river, the boats were not got out before the water was too low for them to proceed down to the Mississippi. The delay was unavoidable, as the boats could not proceed to work until they had received some necessary repairs, which could not be undertaken until after the appropriations were made, which was late in June, and funds were not received until the 20th of July for that service. The Heliopolis, being five years old, required extensive repairs—a new bottom, and partly a new deck. She is now in good repair, having had new plank last year from the light water line up to the beams, and this year she has had a new bottom below the water line, and all the forward decks and beams new. The frame of that boat is of locust timber, which is yet perfect. The Heliopolis is yet in the Ohio, and ready to proceed to work in the Mississippi by the first rise of water of sufficient height to allow her to pass the bars. The Archimedes is in the Mississippi, and in full operation, removing snags since the — instant. She will work from the mouth of the Ohio up to St. Louis as long as the river remains clear of ice, and will then proceed down to a point where she can work free from interruption by frost.

In the months of October, November, and part of December last year, the dam at the head of Cumberland island was progressed with until the water rose too high to admit of its further prosecution. In September of this year the dam formerly begun at Three Mile island was finished, and the channel of the river at that place improved to the full extent of former calculations. Early in October the work at the dam at the head of Cumberland island was again resumed, and is now so far finished as to warrant the belief that it will be complete in ten days from this time. Of the success of this work I am now able to state to the department, in positive terms, that it has been eminently successful. The foundation of the dam has now stood the freshets of two years without a break in it. The channel has been turned to the left of the Cumberland island, where, at low water, at the time the dam was commenced, the bar was three feet above the level of the water from the Kentucky shore to the island, through which the channel now flows with a greater depth of water by twelve inches than there is on many other bars between it and Louisville, Kentucky. The channel over the bar at the foot of the Cumberland island has also been deepened at least one foot, and in a few months will, in all probability, be much further improved, as well as the channel at the head of the island, which is improving in depth rapidly from day to day.

In relation to the improvement of the bars on the Ohio river by wing dams, there can no longer be a doubt of the great benefits already produced by those built. And should that system of improvement be proceeded with by the government, there can be no doubt of obtaining four feet of water at its lowest stage from the Mississippi to the falls in the Ohio, and from Louisville to the mouth of the Ohio canal, at Portsmouth; and from thence to Pittsburg, three feet six inches may be obtained by the same system of improvement. All the dams that have been built on the Ohio below the falls have been permanent, and produced the good effect anticipated to its navigation.

Preparations have been made for the removal of the great raft in Red river. I have a sufficient force for that work now engaged and at work on the dam at the head of Cumberland island, from whence I shall proceed to Red river on the 15th instant.

HENRY M. SHREVE, *Superintendent.*

We, whose names are hereunto subscribed, do hereby certify that we have been navigators of the Ohio river during the last ten years, and were well acquainted with the bars at which dams have been built under the superintendence of Captain Henry M. Shreve, and do believe that the improvement of the channel at these places is permanent, and that the depth of water at its lowest stage is increased to about double what it was previous to the construction of the dams; and that the dam built at the head of Cumberland island, in particular, is a permanent and valuable improvement to the navigation of the Ohio river, and of great importance to the town of Smithland, Kentucky, so much so that it has enhanced the price of property at that place to more than double its original value. We do unhesitatingly state that the channel to the left of the island, where the bar from the Kentucky shore to the island was dry, is now a good and safe navigable channel, and affords more water at this time than is to be found over many other bars between it and the falls of the Ohio, and that the channel will continue to improve for several years.

ABRAM TYSON.

HENRY LEE.

THOMAS RIDDLE.

JOSEPH PIERCE, Jr.

NOVEMBER 10, 1834.

SMITHLAND, *Kentucky, November 12, 1834.*

SIR: We, the undersigned, citizens of Smithland, having felt deeply interested in the improvement of the channel at the head of Cumberland island, (thereby opening the communication at all seasons with the Cumberland river, and removing the obstructions at the foot of said island,) have noticed closely and steadily the progress of the work from its commencement to the present time, and, from the perseverance and skill exhibited by you during its progress to its completion, we feel it a duty we owe to you to say that the manner in which said work has been conducted has our full approbation, and that you are entitled to our gratitude and that of the public generally as the projector and executor of so important an improvement.

With profound respect, your obedient servants,

William Gordon.

James McCawley.

Jno. Spence.

R. M. Mitchell.

D. B. Sanders.

Jos. Haydock.

Thomas McCormick.

D. W. Patterson.

W. Smedly.

Wm. Sanders.

J. M. Quertenners.

Benjamin Harrington.

H. J. Parsons.

Geo. A. Brown, M. D.

Benjamin Barns.

Henry Wells.

S. P. Gowen.

Jno. Smedly.

Bird Jameson.

H. Ferguson, jr.

Captain H. M. SHREVE.

H 2.

MEMPHIS, *Tennessee, November 12, 1834.*

SIR: I subjoin a report of the progress made in the improvements on the Cumberland river during the last two years.

The obstructions to the navigation of this stream, for the removal of which appropriations have been made by the general government, may be classed under three separate heads, differing from each other in their nature and in the means necessary to be used in overcoming them.

Of the first class are snags, sunken logs, and projecting trees.

Of the second class are rocks, whether occurring in detached masses or in reefs extending across the channel.

The last class consists of gravel, sand, or shell bars.

From the character of the banks of this stream, which are generally rocks, it is subject to none of those changes that render it so difficult to effect permanent improvements on the Mississippi. It may fairly be inferred that if the snags and logs are once removed, no impediment from such causes is to be apprehended in future.

The second class of obstacles exists only to a limited extent, and, from their nature, can never recur when once destroyed.

The most serious difficulty in the navigation, and that which will require far more time and the use of more expensive means for its removal than the other two conjointly, arises from the shoals and bars.

These are, in general, composed of coarse gravel, sand, and shells, sometimes cemented into masses, forming pudding stone, and at others lying loose, and changing their position whenever a strong current is brought to bear upon them. The bars usually stretch diagonally across from the convex points, where the direction is suddenly changed, or below the mouths of other streams, and at the head of island chutes

The means of effecting improvements in the navigation of the river, when it is obstructed by the obstacles above named, must vary according to the nature of the obstruction, and do not differ materially from those already described as used on the Ohio for similar purposes.

The snag-boat, which has been found so efficient in removing sunken logs and trees on the Mississippi, has been adopted on the Cumberland with like results. It has also proved itself a powerful engine, when properly managed, for removing detached masses of rocks. When these are firmly imbedded in the sand, or are too large to be displaced, they are blasted, and the fragments, being raised by this boat, are carried to the wing dams, to the construction of which, at Harpeth shoals, they contributed no inconsiderable portion.

Lateral dams have been commenced for removing some of the bars, and have, in general, produced the desired effect by concentrating the water upon one part of the shoal, and increasing the velocity of the current. In some places, however, even the additional force thus given to the water has been insufficient to produce the expected result, owing to the compact nature of the formation and the size of the gravel. In such situations it will be necessary to adopt the plan, occasionally resorted to on the Ohio, of attaching scrapers to the steamers, and loosen the gravel with them; when once in motion, they are easily carried, by the force of the stream, into the deep places.

Operations were commenced on the Cumberland in October, 1832, with all the hands that could be collected so late in the season. Part of this force, under charge of a suitable agent, was directed to begin at Nashville; and, proceeding down the river, to cut all the projecting trees, and all snags upon dry sand-bars, and in the island chutes, where it could be effected.

In December, this part of the work had progressed as far as the foot of Harpeth island, a distance of thirty-six miles. During the same period, the balance of the laborers, under the direction of the superintendent, were engaged in quarrying rocks for the dam at Harpeth shoals. All operations ceased in December, on account of cold weather, and were not resumed until July, 1833, when the work at Harpeth island and the Flax Patch proceeded. These dams were completed, with the exception of one hundred and fifty yards, which, together with some repairs that had become necessary, have been accomplished this summer. A sketch of these works will be forwarded as soon as practicable.

A stratum of rock, averaging eight inches in depth, was taken out of the river between Harpeth island and the right hand shore, throughout the whole length of the island, and deposited in the dams. While these operations were going on, the same agent who had been employed the previous summer was prosecuting the clearing of the banks, which was finished as far as Camp Rowdy in September.

The superintendent commenced this season in July, with the repairs of Harpeth island dam. In September he left that place with fifty hands for the Devil's chute and Line island, in consequence of the complaints made of the difficulties experienced at those points. A material improvement has been effected at the Devil's chute by the removal of the point of rock on the left hand side of the channel.

At Line island the dams have been marked out and commenced; the snag-boat has been employed in removing the wreck of the steamer President, which sunk directly across the principal chute at this place. This dam will be about one-fourth done by the 15th of next month, beyond which time it will not be practicable to prosecute the work. When the dam at Line island is completed, it is contemplated to move up the river to Nashville, and in descending to remove all snags, and sunken logs, and detached rocks which remain; and also to construct such wing dams as are most essential to the low-water navigation.

This plan would, in the first instance, have been most judicious, and was only departed from by the superintendent for reasons already stated—that the obstructions at Line island and the Devil's chute were too important to be suffered longer to remain.

The services of the steamer Virginian have been wholly lost during the latter part of the season, by her accidentally striking a snag in Palmyra Island chute, in descending to Line island, by which she was so much injured as to render it necessary to run her ashore. She has since been repaired, and is again afloat, but, from the low stage of water, will not be able to reach her place of destination. Little has been done towards removing the snags and logs from the bed of the river; this will constitute one of the earliest objects to which the attention of the superintendent will be directed the approaching season.

A dam is required at Nashville island, to project from the left shore, by which the water will be made to pass down the right hand channel. Dams are also essential on the bars at the following places: Sycamore creek, Harpeth river, Palmyra island, Yellow creek, Bald island, Dover island and shoals, Gatlin shoals, Shelly's island, and Ingram's shoals; for all of which places sketches will be forwarded. There are also shoals at other points which will require attention if the work of improvement be pursued as far as it is capable of being with advantage. Of this class may be mentioned Martin's shoals, Wildcat shoals, Wells's island, Elk creek, Boyd's shoals, Little river, McKnabb's bar, Big and Little eddy, Big and Little Horse ford, and a reef of rocks four miles below Camp Rowdy.

At Harpeth, Dover, and Gatlin shoals, the Devil's chute, and the Big Horse ford, there are detached rocks in the channel which must be removed. When these improvements are completed, there will remain no further means of benefiting the navigation of the Cumberland river from Nashville to its mouth.

In the prosecution of the improvements intrusted to his charge, the superintendent has evinced good judgment, and a thorough acquaintance with the river. Hitherto, the operations have unavoidably been too widely extended to produce the most favorable results. It is his intention, during the ensuing season, to concentrate his forces, and to leave behind him in descending no obstructions which it is possible to remove.

I have the honor to be, very respectfully, your obedient servant,

A. H. BOWMAN, *Lieutenant of Engineers.*

General CHARLES GRATIOT, *Chief Engineer.*

I.

CUMBERLAND ROAD OFFICE, *Columbus, Ohio, October 18, 1834.*

SIR: In compliance with the circular of the department of the 6th of August last, I have the honor to submit a report of the progress made since the 30th of September, 1833, in the construction of the Cumberland road in Ohio west of Zanesville:

Masonry.—The extension of the wing walls of the culvert on the twenty-second and twenty-third

miles west of Zanesville, rendered necessary by an improvement in the grade of those miles, has been completed. The abutments of the bridge over the canal at Hebron have been finished. Early in the month of July it was found that the wooden superstructure erected over Big Walnut creek was failing so rapidly as to require the travel to be diverted from it, and the bridge to be supported by a pier intermediate between the abutments. This has been built of excellent materials, and the workmanship well executed. In order to counteract the diminution of the water-way caused by the erection of this pier, the space between the abutments has been enlarged by the removal of all superfluous earth, which has increased the capacity of the bridge for passing water during any unusual rise beyond what it possessed previously to the construction of the pier. This was rendered the more necessary from the fact of the water-way being already too limited to vent the water during an uncommon freshet, such as occurred in the early part of July last. A double culvert has been substituted for the small bridge on the fifty-first mile, which structure, together with the bridge on the fifty-third mile, as mentioned in my last annual report, was condemned as defective in workmanship. The latter bridge has been repaired and altered to an arched culvert.

The progress made in the masonry of the bridge over the Scioto river at this place has been as great as could have been expected, considering the very limited time of our operations this season, and the injury sustained by the destruction of the temporary bridge by the freshet which occurred the day after the recommencement of the work. The pier of this bridge has been raised above the highest known freshet, and the foundation of the west abutment completed, and the superstructure commenced. It is hoped the foundation of the one on the east side of the river will be laid this fall, although greater difficulties have been encountered in reaching a good foundation than was expected, in consequence of a wharfing constructed on made earth situated immediately in front of the site of this abutment rendering the usual means resorted to for the exclusion of the water unavailable. The foundations are all secured upon a grillage of hewed timber and planks two and a quarter feet in thickness. The masonry is built of the best quality of limestone, in masses weighing from 1,000 to 8,000 pounds each, and in point of workmanship is intended to be at least equal to any work of a similar kind in this country. The masonry between Columbus and Jefferson is now under a complete course of repair. Many of the bridges and culverts have been taken down and reconstructed, with a view not only to an increased discharge of water, but to their stability. The materials employed are of an excellent quality, and the workmanship executed in such a manner as to change entirely the character of the masonry on this portion of the road. The contract for building the bridges and culverts on the ninth and tenth miles west of Columbus, entered into by Brodrick and Risly in the year 1831, has finally been brought to a close by the government completing the work, with the consent of the parties interested, and the balance remaining, after deducting the cost of completion, paid to the contractors.

Between Jefferson and Springfield some materials have been delivered for bridges and culverts, and the work commenced. A good building material on the two extreme points of this line (being the only localities on this portion of the road affording any stone) proves to be more scarce than was at first anticipated. This will increase the cost of the masonry considerably from the original estimate.

Milestones, with suitable references as to the distances of the several towns, have been put up between Zanesville and Columbus.

All the masonry this year has been executed by day's work by the government. The materials of every kind have been selected with care and a view to their indestructibility, and the workmanship is such as to do great credit to the mechanical skill of those employed.

Carpentry.—The wooden superstructure of the bridge over the canal at Hebron has been completed, and forms one of the most prominent improvements made to that portion of the road. The materials of which it is constructed are of white oak, selected from the best growth of that description of timber in the neighborhood, and white pine lumber, of which the bridge is finished. The wooden superstructure of the bridge over Big Walnut creek has been repaired and strengthened by additional braces and the renewal of some of the principal timbers. The cause of the failure of this structure is to be attributed to the sizes of the timbers not being well calculated to its great span, defects in the materials employed, and the manner in which the work was executed. Some slight repairs will be necessary to the other wooden superstructures of the bridges east of this place, caused only by the ordinary wear of the travel over them.

The greater part of the lumber for the bridge over the Scioto river has been got out and planed, ready for framing, and is now covered and piled for seasoning and preservation from the weather during the approaching winter. This lumber is principally of yellow pine, selected with great care from the pine region in the neighborhood of the Ohio river.

The wooden superstructure of the bridge over the Big Darby creek will require to be strengthened by the addition of upper diagonal braces, in order to counteract the tendency which the upper strings have to deviate from the line of the axis.

Preparations have been made to accomplish this work the present month. The flooring of the bridge over Little Darby creek will require repair.

The carpentry this season has been done by day's work by the government, and in such a manner as to leave no doubt of the permanent advantage the road will derive from the character of this part of the work.

Covering.—The third stratum of metal has been placed upon the twenty-one miles contiguous to and west of Zanesville, and this portion of the road has been accepted by the State, and is now under its control. In consequence of the bad quality of the material employed as a covering on eleven miles of this road, it was found necessary to prepare about 2,200 rods, or 7,260 perches, of additional metal, in order to place this section in a proper condition to be received by the State. The first layer of metal has been placed upon eleven miles of the road, viz: from the twenty-second to the thirty-second mile, both inclusive, west of Zanesville, and the second layer on nine and one-eighth miles of the same section, extending to the first quarter of the thirty-first mile; the second stratum will probably be completed at the end of the thirty-second mile the present month. For the same portion of the road 1,854 rods, or 6,118.2 perches, of limestone of an excellent quality have been delivered for the third stratum or last cover of metal. Of this quantity 1,324 rods, or 4,359.2 perches, have been prepared, ready to put on the road. The section of country for about forty miles east of that place, and bordering on the road, not affording a good material for covering, and the carriage of limestone by the canal being of itself very expensive, without taking into account its transport along the line of the road, it was not considered advisable to extend the limestone covering further than the termination of the thirty-first mile. From thence to the vicinity of this

place it was thought most judicious to have recourse to the banks of gravel for a material to cover this district of the road. This plan was accordingly adopted, and the best gravel to be found in the neighborhood was selected, well screened and broken, not to exceed the prescribed weight of four ounces. A considerable portion of this gravel is limestone, increasing in purity the further we advance west.

For the first and second strata of metal between the thirty-second and forty-sixth mile west of Zanesville 4,832 rods, or 15,945.6 perches, have been delivered; of which 3,109 rods, or 10,259.7 perches, have been prepared ready for putting on the road. The advanced period of the season will not permit, however, any portion of this road being covered with metal the present year.

About eighty rods of the first and second strata of metal on the twenty-ninth and thirtieth miles were washed away by the breaking of the banks of the canal feeder in that neighborhood during the freshet in July; the water from the feeder passing into the south fork of Licking creek was dammed up by the stone bridge across that stream, causing it to flow over the road.

The preparation of the metallic covering between the thirty-second and forty-sixth miles, and that of the third stratum of metal for the eleven preceding miles, have been done by the government by the day within less than three months, during which period the cholera made its appearance on a portion of this district of the road, which rendered it necessary to suspend operations for about two weeks, at a time most favorable for the advancement of the work.

Since the date of my last annual report the contracts for putting on the third stratum of metal on the second, third, and tenth miles west of Zanesville have been relinquished, and the contracts for putting on the first stratum of metal on the twenty-fifth and twenty-sixth miles abandoned. The work was subsequently completed by the government.

Graduation.—Previous to the delivery of the twenty-one miles of the road west of Zanesville to the State the grade was thoroughly repaired, the shoulders widened and made up, the slopes brought to the proper angle with the horizon, and the side drains and lateral ditches opened and reformed. The reduction of the grades of the hills on the twenty-second and twenty-third miles west of Zanesville has been completed, and those miles, together with the twenty-fourth and twenty-fifth miles, have undergone a general improvement from the original construction, which was exceedingly defective. The graduation of the road between Hebron and Columbus was finished about the close of last year. Some improvements, which time has developed, and repairs incident to a newly-made road after a winter's travel over it, are now being made on this section.

The graduation between this place and Jefferson is now undergoing a thorough repair; very great improvements have been made on this part of the line; extensive lateral drains have been cut, which the flat, level character of the country and heavy growth of timber upon it greatly required, in order to pass off the water from the road as speedily as possible. About two hundred stumps, left in the bed of the road, have been removed; and the clearing off the timber, which had been but partially effected, is now being done. The freshet in July having again injured the road on the second and third miles west of this place, it was determined, in order to guard against all danger from that source in future, to reduce the embankments between the small stone bridges, forming long and gentle curves, which would pass the water in time of a freshet, and, at the same time, be so low as to make no head by which the road could be injured. This course was considered more advisable than the only other feasible plan—that of levelling the river banks; which construction would not have been so immediately under the eye or control of the superintendent, and therefore more liable to accident, by which the safety of the road would be endangered in the event of a freshet.

The reduction of the grade of the hills to the east and west of Big Darby creek, on the thirteenth mile, has been completed in a very satisfactory manner by the contractor.

Considerable progress has been made in the graduation of the road between Jefferson and Springfield, which is being done by day's work by the government, as was the case with all the work of this description executed this season, with the exception of that placed under contract the preceding year. The portion of road already made on this section has sustained the travel upon it better than any heretofore constructed.

Clearing and grubbing.—The clearing and grubbing between Jefferson and Springfield have been completed, and for about six miles west of the latter place. The continuation of this work towards the Indiana line will be prosecuted this season so long as the weather shall prove favorable for such operations. This work is also being performed by day's labor by the government, and in a very satisfactory manner.

The project of operations for the remaining quarter of the year 1834, and during the year 1835, is as follows:

Masonry.—To raise the wing walls and parapets of a bridge on the thirty-fifth mile, rendered necessary by an improvement in the grade of this mile; repoint such structures as are situated on the portion of the road to be delivered to the State the coming year; complete the abutments and pier for the bridge over the Scioto river at Columbus; finish the repairs of the masonry between this place and Jefferson; complete the necessary bridges and culverts from thence to Springfield, and put up milestones as far as the latter place.

Carpentry.—To complete the wooden superstructure of the bridge over the Scioto river, and those across Deer and Beaver creeks, on the twenty-third and thirty-seventh miles west of Columbus, and make the necessary repairs to those east and west of this place.

Covering.—To put on the third and last stratum of metal between the twenty-second and thirty-second miles, both inclusive, west of Zanesville; put on three strata of metal from thence to the forty-sixth mile, and deliver these portions of the road to the State; and prepare and cover the road from the forty-fifth mile west of Zanesville to the fourteenth mile west of Columbus with two strata of metal.

Graduation.—To prepare the surface of the road for the reception of the metal, and complete the improvements in the grade east of this place and west as far as Jefferson, and finish the graduation between the latter place and Springfield.

Clearing and grubbing.—To complete the clearing and grubbing through the State. The following causes have operated against the advancement of the work the present year: 1st. The late day at which the appropriation of money for the road was made, by which the best portion of the working season was lost. 2d. The recommencement of operations during the time of harvest, when a majority of the laboring class was engaged for that purpose. 3d. The occurrence of a freshet in July, unprecedented in that season of the year, by which a portion of the road was very considerably injured, and the temporary bridge erected over the Scioto river destroyed. 4th. The appearance of cholera along the line of

operations, together with a more than usual prevalence of disease incident to the unhealthy district of country through which the road passes.

Resources of the country as regards materials.—Granite in detached masses, limestone, flint, sandstone, and slate of various qualities, occur at different distances from the line of the road. *Lime* of good quality can be had in abundance at a reasonable rate. *Sand*, in considerable varieties, is found at the streams crossing the line of the road, some of which is pretty clean and sharp, but generally of too fine a grain for stone mortar. During the present season recourse has been had to gravel banks, from which an excellent material has been obtained for forming a good cement. *Lumber.*—Black and honey locusts, white, swamp, black and red oaks, hickory, black and white walnuts, sugar and white maples, yellow and white poplars, blue and white ashes, chestnut and beech, are to be found in greater or less abundance throughout this region of country.

Plan of administration.—The superintendent, aided by three assistants, one inspector and assistant, a superintendent of masonry, and four principal overseers, supervises the operations on the road. Two clerks are employed in the office. Accompanying this report is a list of contracts entered into previously to the 30th of September, 1834, with their condition up to that period, by which it will be perceived that they have all been brought to a close in this State.

An annual statement of the operations on the road up to the 30th ultimo, with an estimate of funds required for the service of the year 1835, and for the completion of the road through the State, will be forwarded to the department as soon as they can be prepared.

All which is respectfully submitted.

HENRY BREWERTON.

Brigadier General CHARLES GRATIOT, *Chief Engineer, Washington.*

K.

WEST POINT, N. Y., June 17, 1834.

SIR: In compliance with your request, the undersigned have attended as a board of visitors during the general examination at the United States Military Academy just concluded, and have "directed their inquiries to a full and free investigation in regard to the course of instruction, both military and scientific, and to the internal police, discipline, and fiscal concerns of the institution." That these several objects of inquiry might be attended to as thoroughly and successfully as possible, the board at its organization referred them to separate committees, who have presented full reports with regard to them, accompanied by some suggestions for the improvement of the institution. Copies of these reports are forwarded to you; and the board take the liberty of referring you to them for details, while they confine their joint report to a general and brief view of the present condition of the academy.

The fidelity of the professors and the assiduity and proficiency of their pupils were tested by an examination on the several subjects, extending over eleven days, and continued each day for eight hours.

The sciences not strictly professional, included in these examinations, were mathematics, taught here from the elements of arithmetic, to the profound theorems of the integral calculus; natural philosophy, including mechanics and astronomy; chemistry, in connexion with mineralogy and geology; and, lastly, rhetoric and moral and political science.

The subjects of professional study are civil and military engineering, and infantry and artillery tactics, with the last of which are connected ballistics and pyrotechny.

A part of the first two years is devoted to the study of the French language, with which a competent acquaintance is required of the cadets.

Lastly, great attention is very properly paid in this academy to the art of drawing, the practical applications of which are so frequent and important in the military profession.

These subjects, combined, certainly constitute an excellent preparatory education for officers of the army, and the examinations proved that they were faithfully and skilfully taught. Marked inequalities were, indeed, observed in the proficiency of the cadets, and defects remain to be corrected in the organization of some of the departments; but still the exhibition was, on the whole, highly satisfactory and gratifying.

Frequent opportunities were presented to the board of witnessing the practical skill of the corps in infantry and artillery exercises; and their fine and soldierlike appearance in the ranks, and the accuracy with which they executed their various evolutions, proved that this essential part of the duties of a military academy was sedulously attended to by both officers and cadets.

The discipline of the institution was carefully examined in its various bearings, and the board have reason to think that it is in an excellent state. The laws seem to be executed with a stern regard to the good of the service, yet with kind and paternal feelings; and the officers and professors are believed to be generally both beloved and respected.

The internal police of the institution was found to be carefully attended to. The rooms in the barracks occupied by the cadets exhibit a gratifying appearance of neatness and order, while, at the same time, they give rise to regret on account of the inadequate accommodation which they offer. The mess-table is well supplied with plain, but good and wholesome food. In the event of sickness, which the board are happy to find has been lately of rare occurrence, suitable and comfortable accommodations are provided at the hospital, with the best medical attendance.

The board directed an inquiry to be instituted, with as much minuteness as circumstances would admit, into the fiscal concerns of the institution. The result, which will be found fully detailed in one of the reports sent herewith, is, that the accounts are kept in a correct and satisfactory manner; that the expenditures are made in accordance with the appropriations; and that a proper attention is paid to economy in the expenses of every kind. To prevent extravagance in the cadets, there is a regulation which prohibits to them the possession of money, or the use of it, or expenditure of it, except with the consent of the superintendent, who stands with regard to them in the place of a parent, and who, it is believed, exercises his authority with enlightened discretion.

The whole investigations of the board lead them to the conclusion that the Military Academy is a most valuable and essential part of the army establishment of the United States; that, at a cost so low as

not to exceed that of a second-rate man-of-war, it prepares and can spread over the whole country officers instructed and capable of giving instruction in the military art; and thus, without the danger arising to liberty from large standing armies in time of peace, enables the government to fulfil the duty which the Constitution so solemnly enjoins of "providing for the common defence;" and, lastly, that if our young citizens were commissioned in the army as lieutenants in the first instance, as they must be if this institution be abolished, they could not obtain in four years even the same military knowledge as the cadets, while their probation and education would be far more expensive to the country.

G. VAN SCHOÖHOVEN, *President.*

ALVIN BRONSON.

JAMES HOOKER.

CHARLES B. PENROSE.

H. P. COMINGE

JOHN T. ANDERSON.

R. M. PATTERSON.

ACHILLE MURAT.

W. P. DUVAL.

WRIGHT C. STANLEY.

PHILIP LINDSLEY.

J. L. SMITH, *Captain of Engineers.*

JAMES LATIMER, JR.

T. B. DALLAS, *Secretary.*

The undersigned freely subscribe to the within report without expressing an opinion with regard to the last paragraph.

WM. SMYTH.

J. W. SCOTT.

The SECRETARY OF WAR.

The undersigned, having been invited to be present as a visitor at the general examination of the cadets of the United States Military Academy, can, with the greatest pleasure, bear testimony to the proficiency generally of the pupils in the various departments of learning, both military and scientific, which have occupied their attention; but in conforming to the letter of instructions forwarded to him by the honorable the Secretary of War, which is as follows: "The object of this regulation is, that the War Department may be correctly informed of the condition and management of all the concerns of the academy; it is therefore desired, in conjunction with the other members of the board, that your inquiries may be directed to a full and free investigation in regard to the course of instruction, both military and scientific; to the internal police, discipline, and fiscal concerns of the institution; for which purpose every facility will be afforded by the superintendent. The result of your observations, with any suggestions for the improvement of the academy, will be communicated to this department"—feels it to be his duty, without an utter abandonment of opinions long since formed and deliberately entertained and expressed for years, but with great deference to the opinions of other members of the board, to dissent from some of the views contained in the general report which has been submitted by the military committee.

Deeming it unnecessary to inquire whether a military academy is necessary and proper for the existence or support of a free republican government, where every citizen will be at all times ready to stand forth in defence of the liberty and independence of his country, the undersigned will proceed simply to make a few observations, which, he thinks, may justly be presented with regard to the administration, and as suggestions for the improvement of this establishment.

By reference to the history of the military school at West Point, it is worthy of remark that, in the early usage of the government of the institution, the pupils were selected mostly from the indigent sons of that class of revolutionary worthies who had shed their blood in defence of our national rights and independence. It would seem, then, that this institution was principally designed by its founders for the education of indigent and meritorious young men. A list of those, however, who have been admitted as cadets shows conclusively that a large proportion of them have been drawn from the rich, the influential, and the wealthy classes of the community; and this, doubtless, may be attributed to the power of nomination and selection being lodged in the hands of senators and representatives.

That such a mode of recommendation and selection is every way objectionable and unjust, there certainly can be but one opinion among men of candid and impartial minds, to say nothing of the bad policy of educating and rearing up, either for the army or for the walks of civil life, the sons and relatives of the rich and powerful at the *public expense*.

Any institution, supported by the funds of the national government, which closes its doors to any class of merit, however friendless and indigent, seems to the undersigned to be unequal and partial in its operations, inconsistent with the spirit and genius of our liberal institutions, anti-republican in its tendency, and should not be tolerated.

Another and most important objection is the *exclusive privilege* to which its graduates are entitled, of being promoted to stations in the army, while other individuals in society, who have not had the advantages (free of expense) of instruction at this Military Academy, though their talents and qualifications may be sufficient, and in every way equal to those of the cadets, are entirely excluded.

The undersigned has thus briefly and candidly sketched some of the objections which, it seems to him, must occur to the mind of every one to the administration of this establishment. Nor is he singular in these views. The people of the State of Ohio, of which he has long been a humble citizen, have been led to examine into the merits of this institution, and have, unless he is greatly deceived, very distinctly declared their opinions, not only through their legislative body, but by an expression of public meetings of intelligent and respectable citizens, against the *expediency* as well as the constitutionality of this seminary.

It is not the province of the undersigned to suggest the remedy: that rests with the Congress of the United States, and not with the board of visitors. But he believes that nothing, *at present*, can have a tendency to allay the well-grounded objections and prejudices against this establishment, until merit and talents, and not the influence of wealth, or of personal or political *favoritism*, shall be the tests of admission.

JOHN HAMM, *of Ohio.*

Report of the committee on internal police.

The committee on internal police, whose duty it was made to inquire into the state of the public buildings, the accommodations for study, for recreations, and for sleeping; the subsistence and clothing of the cadets, and the state of the hospital, and the attention to the sick, have examined the various subjects submitted to them, and do now report the information collected.

The public buildings are of solid and permanent materials, and of good workmanship; they are in a state of good repair, and a remarkable degree of neatness and cleanliness everywhere pervades them.

In the main they are well adapted to the purposes to which they are appropriated; there are some exceptions, and to these attention is now invited.

The *north barracks* contain forty-eight rooms, and in each room are located from four to five cadets; whether this number is not too great, if the comfort of the cadets be consulted, is an inquiry well deserving consideration.

The rooms in the *south barracks* are thirteen feet six inches long and nine feet wide; the doors open directly into the piazzas, and are immediately fronting the fireplace. In each of these rooms are located three cadets. The size and exposed situation of the rooms in these barracks, and the number of cadets quartered in each room, are inconsistent with the health and comfort of the occupants.

A radical alteration in these barracks ought to be made, and additional rooms for the accommodation of the cadets ought to be provided.

The rooms may possibly be rendered less exposed by enclosing the piazzas with a permanent wall, or with temporary blinds during the winter; but, with these alterations, additional rooms ought to be provided. The rooms are entirely too small for the accommodation of three cadets.

In the further prosecution of the inquiries submitted to us, we ascertained that throughout the whole establishment, no room was set apart for chemical purposes, or in which a laboratory had been erected, nor was there a room of adequate size provided in which might be kept the philosophical apparatus. A large and elegant telescope, understood to have cost fourteen hundred dollars, is placed in a slight wooden building-perishable in its nature and insecure in its structure. A house erected with a view of supplying these evident and palpable deficiencies, that is to say, a house which should contain additional rooms for the cadets, rooms for the chemical and philosophical apparatus, if built of permanent materials and in a workmanlike manner, would increase the value of the real estate belonging to the government, by a sum nearly, if not quite, equal to the cost of the building.

The committee inspected the rooms of the cadets; great neatness, cleanliness, and order prevailed throughout. Upon inquiring into the cause of the great uniformity which pervaded each room, it was ascertained that the regulations of the institution descend to the most minute particulars, such, for example, as assigning a particular place for the books, caps, beds, tables, and, in truth, for every article of necessity or convenience belonging to the cadet. No cadet is permitted to use tobacco, or any inebriating drink; and to this regulation may, in part, be attributed the cleanliness of the rooms and the general good order which prevails in the institution.

Your committee next turned their attention to the subsistence of the cadets, and they were surprised to learn that no storehouse had ever been provided at public expense. A small wooden building has been erected at the expense of the contractor, in which are placed for safe-keeping the different kinds of crockery ware. Anything but order reigns. No improper imputation is designed to be thrown on the contractor; a different and a better arrangement cannot be made in a building of so small a size. A permanent building, of adequate dimensions, can be built for one thousand dollars.

The subsistence, as set forth in the bill of fare, and as is provided by the contractor, is abundant and wholesome, and sufficiently varied. The viands and vegetables are varied each and every day. The clothing of the cadets is abundant, of good materials, and supplied at reasonable prices fixed by the board of clothing inspectors. Each cadet is furnished with a check-book, and is not to be supplied with articles by the storekeeper, tailor, or shoemaker, without an order in such book from the superintendent, or, in his absence, of the commandant.

These regulations prevent the cadet from being overreached in prices he might be made to pay for articles purchased, and enables the prudence of the superintendent to inculcate lessons of economy. Articles of necessity and comfort are furnished him; those of luxury and unprofitableness are withheld from him.

Every part of the hospital is well arranged, and is characterized by neatness and cleanliness.

Whatever can render tolerable the bed of sickness, whether it be the appearance of the external objects, or the kindness and assiduity of the physicians, is to be found. Fortunately, the salubrity of the climate, and the elevation of the country, prevent the frequent occurrence of disease.

All of which is respectfully submitted, by order of the committee.

W. C. STANLEY, *Chairman.*

Report of the committee on the course of studies.

The committee on the course of studies report as follows:

The only preliminary knowledge required for admission into the Military Academy is reading, writing, and the first elements of arithmetic. Several previous boards have strongly urged the necessity of adding to these prerequisites; but while the importance of their recommendation must be admitted, the fear of excluding candidates from remote parts of the country, where the means of good education are not at command, has prevented its adoption. It appears, however, to your committee, that there could be no valid objection to extending the prerequisites at least so far as to include geography, (an essential practical science, not taught at the academy,) and English grammar and composition, to be tested by the ability to write correctly on some suitable theme proposed at the examination.

The science which is justly made the basis of instruction at the academy is mathematics. By far the greater part of the first two years is devoted to the pure science, and its applications are met with in nearly all the studies of the remaining course. The examinations included algebra, synthetic, descriptive, and analytical geometry, plane and spherical trigonometry, mensuration and surveying, perspective, and

the differential and integral calculus. These examinations were, on the whole, highly satisfactory, and showed, at the same time, the fidelity of the professors and the assiduity of their pupils.

Natural philosophy is the principal study of the second class. A thorough examination in mechanics having been held in January, the class were now only questioned generally on the subject, and the examination was principally confined to electricity, magnetism, optics, and astronomy, with which studies the class exhibited a competent acquaintance. Your committee are pleased to have it in their power to speak in terms of just praise of the manner in which this department is conducted.

The second class were also examined on chemistry, and your committee were well satisfied with their performance, especially when they consider the unmerited disadvantage under which the department labors. Instead of having an independent organization, established by law, it exists only by executive authority. In the merit roll, chemistry is valued at least one-third of natural philosophy. The acting professor, who has occupied his chair with acknowledged ability for many years, has only the pay of a second lieutenant, and is outranked at the academic board by the assistant professors, many of whom have been his pupils. Your committee cordially join in the recommendations made by previous boards, that the department of chemistry, including mineralogy and geology, be placed on the footing of the other schools, having a permanent professor, and two officers acting as assistant professors, to one of whom the subjects of mineralogy and geology might be specially intrusted.

Engineering and the science of war constitute the principal studies of the senior class. The first examination held was on these subjects, and it was certainly such as must have proved satisfactory to the board. The general excellence of the drawings exhibited and of the sketches executed on the blackboards during the examination was particularly striking.

Infantry and artillery tactics and pyrotechny also form important parts of the instruction of the cadets, but as these subjects have been specially referred to the Committee on Military Affairs it has not been judged proper to introduce them into the present report, any further than to state that the examination on ballistics exhibited one of the most direct and interesting applications of mathematics to the military art, and that it was conducted in a manner equally creditable to the professor and his pupils.

A part of the first two years is devoted to the study of the French language, with which the cadets are required to become at least so far acquainted as to understand its grammar, to be able to pronounce it intelligibly, and to translate it readily into English. They are also exercised in writing French themes. It is also to be regretted that very few of them make such progress as to be able to speak the language. The examinations in this department were as satisfactory as could be reasonably expected from the time allotted to the study.

In this academy great attention is very properly paid to the art of drawing, the practical applications of which are so frequent and important in the military profession. The proofs of proficiency in figure, landscape, and topographical drawing were very satisfactory. During part of the present academical year this department was under the superintendence of a distinguished artist, whose resignation and removal from the country are subjects of general regret.

The instruction in grammar, rhetoric, moral philosophy, and political science is confined to the senior year, which is loaded with professional studies. But five hours in two weeks are allotted to the recitations. The professor therefore justly complains of the want of time for conveying adequate instruction in his department. It appears to your committee that this evil might be remedied, first, by extending the requisites of admission to the degree which they have recommended; and, secondly, by teaching rhetoric to the third class instead of the first. This study ought not to be postponed until incorrect habits of speaking and writing may be confirmed; and, besides, your committee are informed that time can be at present better spared in the second than in any other year of the course.

The professor of this department is also the chaplain of the station, and divine worship is conducted by him once every Sunday in the presence of the officers and cadets of the academy. Your committee think it desirable that further opportunities of religious instruction should be given, but they would not propose that the attendance upon them should be compulsory. A separation of the chaplaincy and professorship is anxiously desired by the reverend gentleman who now holds these offices. There are certainly some good reasons in favor of this measure, and if the duties of both these offices should be increased, as proposed by your committee, this separation would probably become necessary.

Your committee, in compliance with their instructions, have inspected the cabinets of natural philosophy, chemistry, and mineralogy, and have found them generally in good condition, and containing many very valuable articles. The constant advances which the natural sciences are making require, indeed, that additions should be made to these cabinets from year to year, and appropriations will be wanted for this purpose; but the present collections are so extensive that no considerable expense need be incurred. Your committee have regretted to learn, however, that a large part of the mineralogical cabinet is not the property of the government, and they have to express their hope that the purchase of the entire collection will no longer be deferred.

Your committee have also inspected the library. It consists of more than eight thousand volumes of works, for the most part immediately relating to the subjects taught at the academy, the whole appearing to be judiciously selected, well preserved, and kept under good regulations. To keep pace with the progress of science, and to supply deficiencies already existing, it will be necessary, however, that additions be constantly made to it, and it is hoped that a liberal appropriation will be annually made for this purpose.

Among the books at present in the library is a very curious and interesting series of about one hundred volumes of old works on mathematics, natural philosophy, and astronomy, containing among others the works of Galileo, Kepler, and Leibnitz, and the original editions of Lord Napier's logarithms. It was with regret that your committee learned that a requisition had been made for these works, to be employed in the survey of the coast now going forward, and that they were accordingly on the point of being removed from the academy. From the contents and dates of the works, your committee presume it will not be pretended that they are *necessary* in the great geodisical operations for which they are asked, and therefore your committee think that the board ought to protest against their removal from the only library, professedly scientific, that belongs to the nation.

Though the subject of the public buildings has been referred to another committee, the committee on the studies hope they will be excused if they call the attention of the board to the rooms appropriated for the philosophical apparatus, the chemical laboratory, the mineralogical cabinet, and the library. These rooms are not only inadequate to their several purposes, but they are unsafe. The furnaces of the chemical laboratory are in a room with a wooden floor, immediately below the philosophical apparatus

and the library, and no part of the whole building is fire-proof. Besides, the laboratory and the philosophical apparatus are placed in the same rooms in which the classes are assembled to lecture, while the accommodation is scarcely sufficient for either of these purposes singly. On the whole, your committee think a new fire-proof building with rooms for a laboratory, the apparatus, a museum, and the library, and with suitable halls for experimental lectures, is exceedingly desirable. Your committee also think that an astronomical observatory ought to be established at this place. Its importance as a school of practice for cadets who may hereafter be called upon as engineers to conduct topographical and geodetical operations cannot but be felt; an excellent position for it is presented on the land where the instruments could be seated on the solid rock; the building could be constructed at a very moderate cost, and all the instruments necessary to furnish it are already in possession of the government.

Respectfully submitted to the board by the committee.

R. M. PATTERSON, *Chairman.*

JUNE 14, 1834.

Report of the Military Committee.

The committee on military affairs and discipline have the honor to report that they have particularly inquired into all the subjects intrusted to their examination, and that the result has been exceedingly satisfactory to them and creditable to the institution.

The committee directed, first, their inquiries to the class on engineering, and, in common with the other members of the board, they were highly delighted with the proficiency of the cadets. They were surprised to learn that the course of military engineering lasted only four months, and they must particularly commend the industry of both professors and students, which enabled the latter to acquire so much knowledge in so short a time. They found, likewise, a great want of models of the details of the works. These could be easily procured, and would facilitate a great deal the study of this science, which the committee cannot but consider the most important branch of the education which the cadets are intended to receive at West Point.

The examination on civil engineering was likewise highly satisfactory, and shows the particular care paid to it in the institution. The use to which the government, in time of peace, employs the officers of the army renders these studies particularly important, and the country at large will be pleased to learn the attention paid to them. In this department, likewise, models are wanted, and could be procured with very little trouble and at trifling expense.

The examination on artillery showed in the cadets a thorough knowledge of the theory of this science; and their exercises in field manœuvres, target-firing, fireworks, and the explosion of a mine, left no doubt as to their attainments in the practice. The target-firing took place under very unfavorable circumstances, owing to the bad quality of the ordnance. The text books in this department are principally translations or compositions of the best foreign works, executed by the instructor himself, and highly creditable to his zeal and to his industry. The laboratory was examined, and the cadets seem to go through the preparation and manufacture of every sort of fireworks employed in war. The rockets were peculiarly remarkable for their brilliancy, and the space they went over, as compared with their size.

The ordnance was found by your committee very defective. The pieces are generally worn out, and some of them have been condemned as worthless. The shot received is very bad, and being in general too small for the pieces, and of irregular figures, prevents any accuracy at target-firing. The committee, however, have learned that a requisition has been made upon the Ordnance department, and that a compliance with it is looked for during the course of the present season. The committee have observed that all the carriages were of the oldest models, and they are of opinion that no pains ought to be spared to provide this institution with the newest and most approved inventions and models, in order not to teach the cadets to use and employ arms and machines which they will have nothing to do with when they enter on actual service.

The committee heard the examination upon infantry tactics, and saw the cadets exercising with great skill and precision. The manœuvres of light infantry have been successfully introduced, and, although practiced but a short time, were very well executed. The arms were examined, as well as the accoutrements, and were found in the most complete order. The committee found fault only with the shape of the button used in the cadet's uniform. They are too large, and most inconvenient. When the belt, owing to the size of the cadets, comes to pass over one of them, either a most unseemly protrusion is created, or a hole made through the belt, which entirely destroys the uniformity. It is considered that bullet-buttons could be advantageously replaced by flat or nearly flat buttons.

The committee next directed their attention to the military duties required from the cadets, and found them not to be oppressive, nor to abstract any more time from their studies than is absolutely necessary in order to preserve discipline, and give them military and soldierlike habits of precision.

The discipline was examined in its various bearings, and seemed excellent. By many inquiries it was ascertained that whilst power on the one hand was exercised in the most paternal manner, and always for the good of the service, on the other hand the officers and professors were generally found to be beloved and respected—a happy state of things, which the committee cannot commend too much. Some of the regulations contained in the pamphlet which was distributed amongst the board, seemed at first sight rather severe; but it was found compensated by the mildness of its execution. It is believed, indeed, that fewer offences have taken place under this liberal system than if too much rigor should be exercised.

The committee have been highly pleased with all that they have seen; and extending their observations to the vast field of improvements, they beg leave to suggest that since the United States have now added to their army a regiment of cavalry, the cadets ought likewise to be instructed in cavalry tactics. Thirty or forty horses would be sufficient, and could be used at the same time to teach the cadets the service of light artillery. The importance of these two branches of military knowledge is too obvious to require the committee to say any more on the subject.

Another suggestion the committee wish to make is, as to the necessity of a large hall, where military exercises may be, to some extent, conducted in winter. It is thought that this would be in a high degree conducive to the health and comfort of the cadets.

Before taking leave of this subject, the committee will indulge in a few observations upon the general results of the institution. However dangerous standing armies are to a nation's liberty in time of peace, they nevertheless possess immense advantages in time of war. The only way to reconcile the dangers and advantages of a standing army is to organize it in such a way that it may prove, as it were, elastic, so as to be able in the shortest time to assume from the smallest possible size the largest. In order to obtain this *desideratum*, a military academy is absolutely necessary, where the higher branches of the military science should be taught. Officers of infantry and cavalry can easily be recruited from the rank and file of the army; but the engineers, the staff, and the artillery, require men educated for these professions. In time of peace, those cadets who cannot be employed in these corps are embodied in the infantry and cavalry; but as soon as war should be declared, their services would be required in the scientific departments of the army, which would partake of the general increase, and their places in the line would be supplied either from the citizens generally, or from the rank and file of the army. From all these observations made by your committee, they are of opinion that the military education received at West Point fulfils entirely the objects of an institution, the necessity of which can scarcely be doubted.

The whole of which is respectfully submitted.

ACHILLE MURAT, *Chairman.*

The committee on fiscal concerns report:

That, in the discharge of the duties assigned to them, they have examined with as much minuteness as circumstances would admit, the accounts of the institution, and they take pleasure in saying that the result of their investigations has been highly satisfactory.

The committee directed their attention to three points involved in the resolution under which they were appointed: 1st. To inspect the accounts of the institution so far as to see that they are kept in a correct and satisfactory manner. 2d. That the expenditures are made in accordance with the appropriations. 3d. That attention is paid to economy in the expenses of every kind.

Heretofore two separate appropriations, under different heads, for the support of the Military Academy, have been made by Congress. The one is embraced under the item "for the pay of the army and subsistence of officers," for which the appropriation is general, and does not discriminate the amount appropriated for the pay and subsistence of the cadets from the pay and subsistence of the residue of the army; but the whole is included in one general item. This fund is disbursed by the paymaster stationed at West Point, who, by the "regulations," is "treasurer of the cadets." The amount of this fund annually expended, including the pay of the professors, has been estimated at \$93,566 52, and this may be safely considered a fair estimate of the annual expense of the institution for this branch of expenditure.

The other appropriation for the support of the institution is made for the Military Academy, and is specifically appropriated to the different objects of expenditure connected with the institution. These are, usually, for fuel, forage, stationery, printing, transportation, and postage, for repairs, improvements, and expenses of buildings, &c., for the pay of adjutant and quartermasters' clerks, for increase and expenses of the library, for philosophical apparatus, for models for the department of engineering, for models for the drawing department, repairs of instruments for the mathematical department, apparatus and contingencies for the department of chemistry, miscellaneous items, and incidental expenses of the academy, and for defraying the expense of the board of visitors at West Point.

The annual amount appropriated under this head for four years terminating with the year 1833 has varied from \$23,439 to \$36,765 per annum, the latter sum including an appropriation of \$16,000 for the erection of a chapel and a building for military exercises, which, being inadequate to these objects, remains unexpended.

Your committee investigated the accounts of the treasurer and of the quartermaster, which are kept in a correct and satisfactory manner, exhibiting in a tabular form the entire expenditure for a given period, arranged under appropriate heads, each item of which is supported by a voucher, without which the accounts would not be passed by the accounting department.

The expenditures are made in strict accordance with the appropriations, and the entire fiscal arrangements of the institution challenge the unqualified approbation of the most rigid scrutiny.

The third branch of investigation referred to your committee is one of unusual importance. It presents the inquiry "whether proper attention is paid to economy in the expenses of every kind" of the institution. It involves the personal expenses of the cadet and the general expenditures of the academy.

The regulations which prohibit to the cadet the possession or use of money, or the expenditure of it, except with the consent of the superintendent, who is placed *in loco parentis*, and exercises this important power with enlightened discretion, cannot be too highly commended or too scrupulously adhered to.

The pay and subsistence of the cadet is \$16 per month, and two rations, equal to \$12, making together \$28. To carry into effect the important regulation referred to, each cadet provides a check-book, which is ruled and arranged in tabular form, so as to exhibit in one view the expenditures of each period of two months, at the head of which are placed those charges which are regular, fixed, and always uniform. When the cadet wishes to obtain any article he must apply to the superintendent, who, if he consent, indicates it by writing in the opposite column, upon which the article is furnished to the cadet, and the charge is entered by the person furnishing it in another column. The entries in this check-book are constantly exhibited to the superintendent, and are the vouchers upon which the treasurer pays to the persons who furnish the cadets the amounts which may be due to them.

It is manifest that, while this mode of keeping the accounts is perfectly simple and readily understood, it is admirably calculated to secure the cadet from all imposition, and conduces to the strictest economy in his expenses, since he is constantly reminded, by a reference to his check-book, of the extent of his income and the objects to which prudence requires he should appropriate it; and, besides this, it gives to the cadet the habit of keeping accounts of his expenses, so essential to secure a high character in the profession for which he is destined, or in the discharge of the various honorable employments in civil life, for which he is so well fitted by the education he receives at the Military Academy.

This habit of economy, which so much depends upon a habitual attention to accounts, teaches that prudence in affairs without which all other attainments are obscured or rendered wholly useless, and

without which men are but little suited for the simplicity and salutary equality which is not only taught by, but practically results from, our institutions. And your committee have found on this account much to admire and commend in the fiscal arrangements to regulate the expenses of the cadets.

There can be no better evidence of the attention to economy in the general expenses of the institution on the part of the gentlemen charged with the important duty of administering its concerns than is disclosed by the fact that, independent of the sum of \$16,000, already referred to as unexpended, the accounts for the last four years, terminating on the 1st of January of the current year, show an unexpended balance of \$3,764 87½.

It will be perceived that the annual amount expended for the pay of professors, and the pay and subsistence of the cadets, is estimated to average \$93,566 52; to which, if we add the amount of the expenditures for academic purposes, (which, taking the mean of the last four years, may be estimated at about \$23,500, exclusive of the unexpended appropriation for the erection of a chapel and building for exercise,) equal to \$117,166 52, and we have the annual average expenditure of the institution for the last four years. This, too, embraces a large sum which has been expended for the gradual increase of the library, the philosophical apparatus, and mathematical instruments, &c., &c., belonging to the institution, a charge which, as these departments become more perfect, will annually diminish. When it is considered that this national institution assembles from all parts of our extended country the youth of every State in the Union, who here receive instruction from a common *alma mater*, and that *alma mater* their country, and that this is calculated to inspire them with feelings of personal and patriotic affection, connecting more closely the bonds of common union; when it is considered that they carry with them these feelings in the army, where they may become the gallant defenders of that very country, to every part of which they owe so much; when it is considered that at this institution two hundred and fifty cadets are annually taught, and acquire an extraordinary proficiency in the useful and exact sciences, now mainly instrumental in the successful prosecution of the great work of internal improvement to which almost every State in the Union is turning its attention, and in which, should the cadets of the Military Academy be employed, they would so richly repay, independent of every other consideration, the amount expended for their education; when all these things are considered, your committee cannot avoid the conclusion that the amount annually expended for this institution is not only consistent with enlightened economy, but that it is to be regretted that the number of cadets now allowed by law is not greater, so that the benefits of the institution might be more generally extended.

Your committee approve of the policy which prevented the expenditure of the \$16,000 appropriated by Congress for the erection of a chapel and a building for military exercises, so much wanted for the institution. This sum they consider insufficient for the purposes for which it was destined; and they are fully of the opinion that the most salutary economy which the government can exercise on this subject is that which, while it requires the utmost exactness in accounts and contracts, and the greatest prudence in the expenditure of money, admits an expenditure fully sufficient to carry into effect the great design of making this institution worthy of the age and worthy of the country, upon which it is calculated, if properly regulated, to confer so many benefits.

By reference to "the regulations" it will be ascertained that each cadet, upon entering the institution, is required to furnish himself with certain articles of furniture and clothing necessary for his comfort and health. The amount which he is thus required to expend upon entering the institution is about \$75. Your committee have ascertained that very many cadets do not bring with them when they come to the institution money for this purpose. In such case the cadet is forced to contract debts, in anticipation of his pay, to an amount which must occasion him much embarrassment and difficulty; and, besides, should he be so unfortunate as not to pass at the January examination, he is without the means of returning to his place of residence.

It is much to be regretted that parents and guardians should not more generally attend to this. Your committee think it right to bring the subject to the view of the board, so that it may, if the board should consider it proper, be made the foundation of a recommendation to the War Department that each parent or guardian of a cadet, who is previously appointed, should be informed of the importance of sending, for his son or ward, to the superintendent, a sum sufficient to meet the expenditure referred to. Perhaps it would be always best to send this money directly to the superintendent, so as to avoid any improvidence on the part of the cadet.

Among the inquiries which engaged the attention of the committee were the personal expenses of the cadets, with a view to consider whether some reduction in them could not be effected. The committee were satisfied that the amount now appropriated for the pay and subsistence of the cadet is barely sufficient to maintain him. There is no item of expense incurred by the cadet in which it appears a reduction could be made, unless it should be in the item of board, which is charged to the cadet at \$10 per month. Comparing this with the expense of boarding in other literary and scientific institutions in our country, the committee have been induced to suggest the inquiry whether the charge for board might not be reduced without injustice to any one.

CHARLES B. PENROSE, *Chairman of Committee.*

No. 4.

REPORT FROM THE TOPOGRAPHICAL BUREAU.

TOPOGRAPHICAL BUREAU, *October 30, 1834.*

SIR: In obedience to your instructions of the 15th of August last, I have the honor to submit to you a statement, marked A, exhibiting the amount drawn from the Treasury Department and remitted to the disbursing officers under the bureau from the 1st of October, 1833, to the 30th of September, 1834, inclusive, and also the amount of accounts rendered.

The topographical and civil engineers have been employed upon, and the funds appropriated for surveys for the year 1834 have been applied to, the following objects:

1. Surveying the east pass into the Apalachicola bay and river, to ascertain the practicability and cost of removing obstructions and improving the harbor.
2. Surveying the Cumberland river, with a view to its improvement.

3. Survey of a canal route from the Cape Fear river, through Waccamaw lake, to Waccamaw river, North Carolina.
4. Survey of the Delaware river from Newcastle to Port Penn, and a survey of the Pea Patch island.
5. Reconnoissance of a route for a railroad from Memphis, Tennessee, to the Atlantic ocean.
6. Geological and mineralogical surveys and researches in the Territory of Arkansas.
7. Surveying a route for a railroad across the isthmus of Michigan.
8. Survey of the southern shore of Lake Huron, and of the eastern shore of Lake Michigan, in the Territory of Michigan.
9. Survey for ascertaining the propriety of granting the right of way at Harper's Ferry to the Winchester and Harper's Ferry Railroad Company, in pursuance of a joint resolution of Congress at its last session.
10. Reconnoissance for the route of a military road on the frontiers of the State of Maine.
11. The survey of the Susquehannah (with a view to a canal connexion between the Chesapeake and the lakes) was commenced, but suspended on account of the death of the engineer.
12. Survey of a route for a road from the Alabama line, by way of Mariana, to Apalachicola bay.
13. Survey at Newburyport harbor, with a view of ascertaining the damage sustained by a bridge by the erection of the public works at the mouth of the Merrimack river.
14. The survey of the St. Francis river, commenced last year and suspended on account of the high stage of water, was not recommenced this season on account of not having at the disposal of the bureau an engineer to assign to that duty.
15. The survey of the route for a road from Tallahassee to Cape Florida, under the act approved June 30, 1834, was not commenced on account of the inadequacy of the appropriation to carry the object of the act into effect.
16. A survey of a route for a road from Chicago, on Lake Michigan, to Fort Howard, on Green bay.
17. A survey of Provincetown harbor, with the view to the erection of fortifications.
18. In completing the report and drawings of a survey of a canal from Connecticut river to Lake Winnipisogee, New Hampshire, by the way of the Oliverian and Baker's rivers.
19. In completing the drawings of a canal route to unite the waters of Lake Champlain with those of the Connecticut river.
20. In completing the drawings of a survey of Georgetown harbor, South Carolina, for military defences.
21. In completing the drawings of the reconnoissance of the sounds of North Carolina, for military defences.
22. In making a report and estimate for the construction of a canal from Akron, in Ohio, to Beaver, in Pennsylvania.
23. Examination of the Brandywine shoal, Delaware bay, for the erection of a light-house.
24. In superintending the construction of the Potomac bridge.
25. In superintending the construction of the aqueduct across the Potomac river
26. In paying the salaries of the civil engineers and agents employed on several of the foregoing items of duties.

Since the submission of the last annual report the following surveys for military and civil purposes have been completed, and several of the reports in relation to the same have been submitted to Congress:

1. Report of a survey between the waters of St. Andrew's bay and the river and bay of Chatahoochee, and between Pensacola bay and Bon Secour, along the northern coast of the Gulf of Mexico, with a view to ascertain the practicability and cost of canals to connect said bays and rivers, under the act of Congress of July 4, 1832.
2. A survey of the route for a road in the Territory of Arkansas from a point opposite to Memphis to the house of William Strong, or some other point on the St. Francis river, under the act of March 2, 1833.
3. A survey of Portland harbor, Maine, with a view to the erection of a breakwater.
4. A survey of Throg's Point, New York, with a view to the erection of fortifications for the defence of the city of New York.
5. A survey of Burlington bay, Vermont, and Port Kent and Plattsburg harbors, New York, with a view to their improvement.
6. A survey of Vermilion river, with a view to its improvement.
7. A survey between the Pearl and Yazoo rivers, Mississippi, with a view to their connexion by a railroad or canal; also a survey of the "Yazoo Pass," in the same State.
8. A survey of the mouth of Chagrin river, Ohio, with a view to its improvement.
9. A survey of the Potomac river from Georgetown to Alexandria, District of Columbia, with a view to its improvement.
10. The report and maps of the Taunton and Weymouth canal, Massachusetts.
11. The drawings of a survey in order to ascertain the military defences of St. Mary's river, Maryland.
12. The surveys, reports, and estimates of a route for a railroad from Mad river to Lake Erie, in the State of Ohio.
13. The reports and drawings of the survey for a route for a railroad from Williamsport, Pennsylvania, to Elmira, New York.
14. A survey of the Monongahela river, with a view to its improvement.

The duty of carrying into effect the provisions of the appropriation which refer to geological and mineralogical investigations has been consigned to G. W. Featherstonhaugh, esq., who is now engaged upon it.

His report has not yet been received, but his known talents and industry, as well as the various letters which have been received from him, afford the most solid grounds for anticipating that it will be executed in a manner highly creditable to himself and to the government with which it originated.

It is not merely those questions of abstract science which are involved in his observations; it is not merely the additional light which will be thrown by his researches upon various subjects which now agitate and occupy the learned of all the world, which are to give interest to this duty, and which will place its patrons in the attitude of the enlightened and liberal friends of scientific truths, but it is the development of immense and hitherto unknown sources of wealth and of active inland trade; the exposing of the various deposits of coal, iron, lead, and of the precious metals, and the encouragement these will furnish to industry and the profitable employment of capital.

The application of steam to the propelling of boats has thrown, as it were, the western world upon

the borders of the ocean, and has given to the immense agricultural resources of that vast region a degree of activity and of value which if any one had predicted twenty years since he would have been classed among the wildest of visionaries. Now, if to these resources we add those of its mineral treasures, which the researches now being made will develop, may we not reasonably expect a proportionate increase in the extent and value of the results?

The joint resolution of Congress authorizing the President to cede to the Winchester and Harper's Ferry Railroad Company a right of way over the public grounds at Harper's Ferry being committed to this bureau in order to ascertain the facts involved in the exercise of the grant of power, Colonel Kearney and Captain Turnbull were ordered to survey and report in the case. The result of their investigation will be found appended to this report.

The facts exhibited rather indicate the necessity of additional legislation before the grant is consummated.

Having gone through with the exposition of the duties under the direction of this bureau, it becomes my duty, from an imperious sense of its necessity, again to call your attention to the reorganization and enlargement of the corps of topographical engineers. The defects of the present system not only expose this branch of service to serious errors, and to the most inefficient execution of the duties consigned to it, but violate true principles of economy, by producing a minimum of results at a maximum of expense.

I should feel justly obnoxious to reproof if I had not so frequently brought this subject to your consideration, as well in its general aspect as in its most minute details; and should also doubt the correctness of my views, from the failure of success which has so long attended them, if they had not so frequently met with your approbation and the support of your recommendation, as well as the favorable consideration of the Executive.

The corps now consists of six field officers and four captains. The modifications proposed would retain the same number of field officers; altering and increasing the rank of two, would add six to the number of captains, and that proportion of first and second lieutenants which would harmonize with other organizations, and meet the demands for topographical service.

These additions to the corps to be made by transfers and appointments from the army. The scientific and military knowledge absolutely necessary to such a corps, is (with rare exceptions) alone to be found among the graduates from the Military Academy. These now pervade every branch of the army; numbers of them have already acquired much practical knowledge by employment on these duties, thereby furnishing the means of completing the organization proposed, with the best materials and without delay. And if so organized, it would be the fault of him who might command it, if it were not in time to prove itself one of the most efficient and one of the most useful arms of the service.

Respectfully submitted.

JOHN J. ABERT, *Lieutenant Colonel, Top. Eng.*

HON. LEWIS CASS, *Secretary of War.*

A.

Statement showing the amount of money drawn from the treasury and remitted to the officers and agents disbursing under the Topographical bureau from the 1st October, 1833, to the 30th of September, 1834, inclusive; and the amount of accounts rendered by each within the same period.

Names.	On what account.	Amount remitted.	Am't of accounts rendered.
Lieutenant Colonel J. Anderson, T. E.	Surveys under the act of 30th April, 1824	\$2, 500 00	\$1, 002 99
Lieutenant Colonel J. Kearney, T. E. . . . .	.....do.....	4, 250 00	3, 674 82
Major H. Bache, T. E. . . . .	.....do.....	600 00	234 80
Major William G. McNeill, T. E. . . . .	.....do.....	1, 300 00	1, 160 00
Captain J. D. Graham, T. E. . . . .	.....do.....	1, 500 00	1, 325 70
Captain W. G. Williams, T. E. . . . .	.....do.....	3, 500 00	3, 070 72
Captain A. Caulfield, T. E. . . . .	.....do.....	1, 300 00	1, 284 38
Dr. William Howard, civil engineer . . . . .	.....do.....	5, 800 00	4, 847 17
De Witt Clinton, civil engineer . . . . .	.....do.....	1, 121 61	1, 121 61
H. Stansbury, civil engineer . . . . .	.....do.....	3, 160 15	4, 004 32
W. B. Guion, civil engineer . . . . .	.....do.....	1, 700 00	2, 456 71
G. W. Featherstonhaugh, geologist . . . . .	.....do.....	800 00	.....
		27, 531 76	24, 183 22

TOPOGRAPHICAL BUREAU, *October 23, 1834.*

SIR: I have the honor to lay before you the report of Lieutenant Colonel Kearney and Captain Turnbull, of the corps of topographical engineers, in reference to a resolution of Congress passed during its last session, authorizing the President to grant, under certain conditions, a right of way to the Winchester and Harper's Ferry Railroad Company over the public land at Harper's Ferry.

The report, 1st, describes the ground and the improvements which would be interfered with.

2d. It states the conditions which ought to be exacted in case the grant is made.

3d. It alludes to the power to make the grant under the limitation which appears to be placed upon that power in the resolution, and the circumstances which were found to exist.

Upon the last question the whole subject may be considered to depend; but as its interpretation properly belongs to authority higher than this bureau, it is respectfully submitted to your better judgment, with all the papers involved in its consideration.

I have the honor to be, sir, very respectfully, your obedient servant,

J. J. ABERT, *Lieutenant Colonel, Top. Eng.*

Hon. LEWIS CASS, *Secretary of War.*

WASHINGTON CITY, October 7, 1834.

SIR: Agreeably to your orders we have examined the ground on which the Winchester and Potomac Railroad Company propose to locate their road and depots at and near Harper's Ferry, as well as the effect of that location upon the property and interests of the United States, and we have the honor to report:

That the company intend, on leaving the main land near Strider's island, that the road shall traverse the islands which border the northern shore of the Shenandoah river, viz: Strider's, Throop's, Hall's, and Virginius islands, whence it will reach the narrow plains at Harper's Ferry, about forty-three yards above the foot-bridge at the lower end of the island. Upon one of these islands are the works erected by the United States for the manufacture of rifles; and on the main land, near the ferry, are the arsenals for the storage of arms, and many of the houses, offices, and other buildings, intended for the accommodation of the officers and workmen in the employ of the government.

Covered as the ground at the ferry is with houses, gardens, and fences, and crossed by streets and lanes, it would be difficult, if not impracticable, to construct a road of double tracks without interfering with some interest or convenience, and it would be equally difficult to avoid all improved property. The route which the company has traced is, in fact, almost altogether on improved property, on which are several houses, as the maps accompanying this report, and the statement marked F, will show.

We are of opinion, nevertheless, that it is liable to fewer objections on the part of the United States than any other route that the company could have selected on the public lands.

The company call for a breadth of thirty feet for their road in its passage over the islands, and to the eastward of the street or alley on which the Globe inn is situated. From this point (say thirty-four feet east of that street) to the eastern boundary of the United States property the company propose to increase the width of the ground on which their road is to be constructed to fifty feet, to enable them to lay four tracks.

The parallel lines (traced and shaded in red lake) upon the maps hereto annexed, and marked A, B, and C, exhibit the location of the road, which covers about 7,000 square yards of public land.

We are of opinion that a breadth of thirty feet is not more than will be necessary for a double track elevated above the natural surface of the ground; and the connexion of the road with that of the Baltimore and Ohio Company, which has a peculiar width between the rails, renders four tracks indispensable at the place where they unite with each other.

As a place of deposit, and for the general accommodation of the trade, the company ask for the ground lying south of their road and east of the paymaster's dwelling. This is also colored in red lake upon the maps, (marked A and B,) and contains about 2,900 square yards. It includes part of the paymaster's garden and a small house of little value, and it extends to the river shore.

This ground will probably be scarcely sufficient for the purposes for which the company intend it. The privilege of wharfing in front of it would enable the company to communicate directly with the river trade and enlarge their limits. Should the United States be disposed to grant more space than is here indicated, the grant ought to be confined to the ground lying between the railroad and the Shenandoah river, and east of the lane on which the Globe inn is situated.

Between the railroad and Shenandoah street, and to the east of the Globe inn, the United States has no more ground than is required for the establishments which it has formed there. It is through this ground, nevertheless, that the company wish to open a communication between the railroad and Shenandoah street, and they propose to erect a warehouse immediately north of and in connexion with the road, for the benefit of the trade of Harper's Ferry and its neighborhood, and for the general accommodation of passengers.

The company have chosen two modes, by either of which it would be willing to effect this object; that is, directly by the space lying between the arsenal and the master armorer's, and colored in red lake on map A, or otherwise through the Globe Inn lane, and thence between the northern rails and the red dotted lines shown upon the same map.

As it is intended to lay the rails along this part of the line at such a height that their surface will be nowhere less than ten feet above the natural surface of the ground, and as the ground can be easily graded to fourteen feet below the rails, they can be established on trestles or frames, or upon piers, so as to leave sufficient room under them for all purposes of transportation or intercourse between the depots south of the road and the Globe Inn alley, and thence to Shenandoah street.

Inasmuch as the ground which the company require for a depot on the southern side of their road necessarily approaches the paymaster's dwelling rather nearer than is supposed to be consistent with his comfort and convenience, or the safety of his property, and as the buildings which the United States have upon that lot are very conveniently situated for the purpose, and would be useful to the company for the accommodation of their officers and attendants at the depot, it is suggested whether it would not be to the mutual advantage of the parties to yield this lot and its improvements to the company for a fair price. We learn that there is an unexpended appropriation for enlarging the paymaster's establishment. Should it be considered advisable to locate him elsewhere, (on the hill, for example,) there could not be a fairer opportunity, nor one more in accordance with the interests of all parties, than the one now presented.

Should the President of the United States resolve to convey to the company the right of way over the public land, we conceive it to be our duty respectfully to suggest that, among others, the following conditions and restrictions ought to be embraced in the act of conveyance, viz:

Restraining the company from diminishing the watercourses by which the works on the Shenandoah are supplied with water; from impeding the free passage of the water through them; from diminishing the height, length, breadth, or strength of the embankments which now are or may be hereafter erected to protect the works or property against freshets or backwater; the like restrictions as to waste-weirs,

sluices, dams, &c.; from interrupting or reducing the water communication between these channels and the river; from impeding or injuring the navigation of the rivers near the United States property; from preventing or impeding the erection of any dam or other work that the United States may propose to erect upon the Shenandoah, reserving to the United States to add to, enlarge, diminish, or otherwise alter or change such channels, sluices, waste-weirs, dams, embankments, or other works, as now are or hereafter may be deemed necessary or convenient.

Further, we think that the company ought to be restrained from embanking any part of the ground over which their road is to be constructed near the public land without the express permission hereafter of the United States. The rails ought, therefore, to be supported, wherever they are elevated above the natural surface, upon frames or trestles, or upon piers or viaducts, so as to leave free and unimpeded, as far as practicable, the communication between the ground lying north of the road and that which lies next to the river, so that the passage across or under the road may always be free and open to the United States and to the public, so far, at least, as may consist with the safety of the property of the company; and, for this purpose, the surface of the rails ought not to be less than ten feet above the ground anywhere at Harper's Ferry, nor less than fourteen feet above the ground at and east of the Globe Inn alley.

This freedom of communication, so far as it relates to the ground on which the company's depot is to be situated, might be limited to the property of the United States, and to the officers and persons in their employment; and with that limitation might be connected a right to land stores and other property at the wharves and upon the grounds of the company at Harper's Ferry, and to transport them over the said grounds by the most direct and convenient routes, free of charge for wharfage, damage, or use of grounds. The company should be also restrained from obstructing the streets across which their road may be carried, and from interrupting the drainage of the ground north of it. It ought to be held to erect and maintain sufficient fences between its property and that of the United States wherever and whenever required. It ought to remove, at its proper cost, such houses, sheds, &c., as may fall within the limits conveyed to it, to such places as they may be reasonably required to remove them to, and to restore them in as good condition to their owners as they were in immediately before their removal; or (at the option of the owners) it should pay for them at a fair valuation. It ought also to be obligatory upon the company to use every precaution against fire, and to repair any damage or loss that the United States property may sustain in consequence of the proximity of the company's works to the same.

Whether there exists sufficient authority to make arrangements and conditions such as we have suggested, or whether any conveyance of the right of way over the property of the United States at Harper's Ferry at or near the line of location laid down on the accompanying maps, or on any other practicable line, can be made consistently with the provisions of the joint resolution, a copy of which accompanies this report, and especially whether such conveyance may be made consistently with the clause which requires that the ground to be conveyed shall be "at present not improved," we do not conceive to be within the sphere of our duty to inquire. It is for others to determine whether the authority to do so be sufficient or not. Our duty is confined to the simple statement of the facts which we have collected, and the restrictions and conditions which occur to us as being worthy of the President's consideration. If there are any other than those we have stated, they have escaped our attention, or have not appeared sufficiently important to be noted.

Very respectfully, we are, sir, your obedient servants,

JAMES KEARNEY, *Lieut. Col., and Top. Eng.*
WM. TURNBULL, *Captain, and Ass't Top. Eng.*

Lieut. Col. J. J. ABERT, *Topographical Bureau.*

F.

Explanation of maps accompanying the foregoing report.

At the eastern termination of the government land a high stone wall is erected, immediately on the line between the United States and Wager's.

No. 1, carriage-house of superintendent, value \$40; can be removed.

No. 2, carriage-house and stable of paymaster, value \$50; can be removed.

No. 3, carriage-house and stable of master armorer, value \$150; can be removed.

No. 4, dwelling, belonging in part to the United States, and the balance to George S. Butler—say, United States \$100, Butler \$140, as ascertained by appraisers. This building *cannot* be removed.

The other buildings laid down on the map in the line of the railroad are frame smoke-houses, privies, and sheds, of but little value, and can be removed with but little expense. The ground occupied by a kitchen attached to the paymaster's quarters is required for a part of the depot. This building is of frame, of little value, and also easily removed.

It may not be improper to remark that the fencing of the lots will be much increased by the opening of the contemplated railroad. It will also be necessary to secure a free passage along the streets extending from Shenandoah street to the river; that is, that the rails should be sufficiently elevated for the passage of wagons under them.

AUGUST 12, 1834.

No. 5

REPORT OF THE PAYMASTER GENERAL.

PAYMASTER GENERAL'S OFFICE, *Washington City, November 27, 1834.*

SIR: Enclosed herewith I have the honor to present a report of the transactions of the pay department for the fiscal year ending the 30th of September, 1834.

The unexpended funds in the hands of paymasters on the 1st day of October, 1833, and the sums advanced to them from the treasury between that time and the last day of September, 1834, amount to

one million six hundred and six thousand five hundred and sixty-two dollars and fifty-seven cents, all of which have been accounted for except fifty thousand nine hundred and twelve dollars and seven cents. I am daily expecting to receive vouchers for the disbursement of upwards of thirty thousand dollars of this balance; the remainder is charged to late Paymaster Phillips, who informs me that it will be paid over to the Treasurer as soon as his accounts are settled and he has received the credits he is entitled to. This I do not doubt, and am also confident that the government will not lose one cent by the transactions of the department for the last year.

As soon as the appropriations for the army were made Paymaster Stewart was despatched to Fort Gibson with sufficient funds for all the troops at that station, including the dragoons, with the hope that he would arrive before the latter left the post on their late tour of duty. This was impracticable, and the paymaster had to await the return of the regiment to the post. Unfortunately the muster-rolls of some of the companies were sent to Fort Leavenworth; in consequence of which he could only pay the officers of the regiment and the companies that remained at Fort Gibson. Apprehending that he might not fall in with the other companies, Paymaster Wright was instructed to use every exertion to have them paid immediately after their arrival in his district. He received funds for that purpose on the 10th of October, and intended leaving St. Louis to make the payment without delay. Unfortunately for the department, this valuable officer died on the 9th instant. I have no information that the duty was performed before his death, but from the circumstance of his not reporting to me any impediment in the way, and from his character for energy and zeal, I am of opinion that it was. I have official information of the payment of all the other troops to as late dates as is practicable with the present number of paymasters.

I beg leave, respectfully, to call your attention to the following extract from my report of last year on the state of the department:

"When the military establishment was reduced, in 1821, fourteen paymasters were retained for the army, and one for the engineer corps and West Point. Since then the number of troops has increased seven hundred, the number of posts is one-third more, and the annual disbursements half a million of dollars greater than they were, while the number of paymasters remains the same; and, in addition to the increased duty in paying the army, they are now required to pay all the militia called into service.

"It is not in the power of the department, with the present number of paymasters, to indulge them with furloughs, and great inconvenience is felt if one is prevented by sickness or any other cause from performing his duty.

"Under such circumstances, I earnestly solicit you, sir, to recommend to Congress to provide by law for the appointment of three additional paymasters; also to amend the law requiring paymasters to select clerks from the rank and file of the army, (where suitable qualifications cannot always be found,) and to authorize the appointment of citizens, with salaries not to exceed five hundred dollars per annum."

The situation of the department at this time forcibly illustrates the necessity of increasing the number of its officers, if it is expected the troops will be paid as often as the law contemplates. Owing to the death of two paymasters, and to other circumstances over which the department has no control, there are now four districts without a paymaster. It is impossible for the other officers to pay them without omitting a regular payment to the troops in their own districts. In other branches of the staff when vacancies occur, or when the duties of the officers are suspended, the commanders of the districts or posts can appoint officers to perform the duties until the heads of the departments are informed, who can then make permanent appointments from the line without delay. In this department paymasters must be first appointed by the highest authority, and then furnish bonds, to be approved by the Secretary of War, before they can be assigned to duty. Great delay must necessarily take place, and, in the meantime, no relief can be afforded the vacant districts with the present number of paymasters.

Many other arguments occur to me; I will only trouble you with the following: the regiment of dragoons (recently added to the army) will, from the nature of the duty it has to perform, be subject to frequent change of position, and unless a paymaster can be specially assigned to it, it will be necessary to keep all officers of the department who are liable to be called upon always supplied with sufficient funds to pay the regiment in addition to their districts. The advances to these must therefore be greater than heretofore—much more so than is desirable to the paymaster of the government.

Respectfully, your obedient servant,

N. TOWSON, *Paymaster General.*

Hon. LEWIS CASS, *Secretary of War.*

A.

Statement of moneys drawn from the appropriations for the Pay department and remitted to the disbursing officers on account of payments for the 4th quarter 1833, and the first three quarters 1834; the amount unexpended and forming part of their estimates for the 4th quarter 1834; the balances to be accounted for; the periods to which the troops have been paid and accounts rendered.

Paymasters.	Amount of funds remitted in the fourth quarter of 1833 and the first three quarters of 1834.					Amount unexpended and forming part of their estimates for the fourth quarter of 1834.					Balances remaining to be accounted for.				Periods to which the troops have been paid and accounts rendered.
	Pay and subsistence.	Forage.	Clothing of servants.	Payments in lieu of clothing.	Amount.	Pay and subsistence.	Forage.	Clothing of servants.	Payments in lieu of clothing.	Amount.	Pay and subsistence.	Forage.	Clothing of servants.	Amount.	
Thomas Wright*	\$148,800 00	\$2,200 00	\$1,000 00		\$152,000 00										September 1.
Asher Phillips†	39,200 00				39,200 00						\$20,216 44			\$20,216 44	Do.
B. F. Larned‡	64,450 00	1,950 00	600 00		67,000 00										Do.
D. S. Townsend	73,820 00	2,530 00	850 00	\$1,800 00	79,000 00	\$3,749 79	\$227 88	\$304 17		\$4,281 84					Do.
Daniel Randall	115,820 00	4,070 00	2,110 00	700 00	122,700 00	5,603 36				5,603 36					Do.
C. H. Smith	89,850 00	1,900 00	1,250 00	700 00	93,700 00	4,297 45				4,297 45					September 1 and November 1.
A. A. Massias	46,400 00	1,300 00	300 00		48,000 00	6,228 04				6,228 04					September 1.
T. P. Andrews	164,350 00	6,950 00	2,200 00	1,500 00	175,000 00										November 1.
Edmund Kirby	141,772 00	12,120 00	4,420 00	4,188 00	162,500 00										Do.
L. G. De Russey	54,590 00	1,780 00	630 00		57,000 00	2,902 75				2,902 75					July 1 and September 1.
William Piatt§	71,010 00	5,130 00	1,860 00	1,000 00	79,000 00										
R. A. Forsyth	57,975 00	1,910 00	1,115 00		61,000 00						29,895 63	\$600 00	\$200 00	30,695 63	July 1.
A. D. Stewart	97,000 00	2,000 00	1,000 00		100,000 00	50,052 77				50,052 77					September 1.
W. S. Harney	41,900 00	1,300 00	800 00		44,000 00	5,001 09				5,001 09					July 1 and September 1.
J. S. Lytle	21,300 00	800 00	400 00		22,500 00	515 91				515 91					September 1.
T. J. Leslie	135,584 00	2,266 00	1,450 00	700 00	140,000 00	5,182 52	412 00	195 42		5,789 94					Do.
Unexpended balances of the third quarter of 1833, forming part of the estimates for fourth quarter of 1833	1,363,821 00	48,206 00	19,985 00	10,588 00	1,442,600 00	83,533 68	639 88	499 59		84,673 15	50,112 07	600 00	200 00	50,912 07	
Balances of 1833, remaining to be accounted for	68,399 75	324 78	1,429 64		70,154 17										
	22,653 18				22,653 18										
	1,454,873 93	48,530 78	21,414 64	10,588 00	1,535,407 35										
MILITIA.															
Thomas Wright	49,000 00				49,000 00										
B. F. Larned	200 00				200 00										
W. S. Harney	6,000 00				6,000 00	817 26				817 26					
	55,200 00				55,200 00	817 26				817 26					
Unexpended balances of third quarter of 1833	15,955 22				15,955 22										
	71,155 22				71,155 22	817 26				817 26					
Total army and militia	1,526,029 15	48,530 78	21,414 64	10,588 00	1,606,562 57	84,350 94	639 88	499 59		85,490 41	50,112 07	600 00	200 00	50,912 07	

* \$5,380 18 due Paymaster Wright.

† Resigned.

‡ \$1,530 59 due Paymaster Larned.

§ Dead.

No. 6.

REPORT OF THE COMMISSARY GENERAL OF SUBSISTENCE.

OFFICE OF THE COMMISSARY GENERAL OF SUBSISTENCE,
Washington, November 15, 1834.

SIR: In compliance with instructions from the Department of War of the 15th of August ultimo, I have the honor to submit a statement of the moneys remitted and charged to contractors and to the disbursing officers of the commissariat in the first, second, and third quarters of the year, together with the balances in possession of the latter on the 31st of December, 1833, amounting to..... \$359, 013 74 To which is to be added the amounts due them on the settlement of their accounts..... 1, 758 16

Aggregating	360, 771 90
The amount accounted for during the same period is	313, 153 35
Leaving a balance of	47, 618 55
From which is to be deducted this sum, charged to contractors as the difference in the price of provisions purchased to supply deficiencies	\$85 44
Amount expended at Indian treaty grounds, not brought to the credit of the officer, on account of subsistence.....	2, 300 86
Amount expended in the quartermaster's department, not credited to the officer, on account of subsistence	1, 000 00
Amount due by Lieutenant A. C. Fowler at his decease, and for which his sureties are liable.....	465 06
	<u>3, 851 36</u>

Leaving 43, 767 19 actually in the hands of the assistant and acting assistant commissaries applicable to the expenditures of the fourth quarter of the year.

Of one hundred and thirty-six officers who have disbursed the public moneys on account of subsistence for the period embraced in this statement the accounts of three only were not received at its completion; one of whom has rendered his account since; one has been absent some time from his station engaged in paying annuities to the Miami, Eel River, and Pottawatomie Indians; and the third has been so seriously indisposed since his return to Fort Gibson with the dragoons that the rendition of his accounts was totally impracticable; it is believed that the reception of these accounts would have reduced the balances about ten thousand dollars; but there is not the smallest doubt that they will reach the office in the course of this month, and that every cent in the hands of the disbursing officers of the department on the 30th of September last will be fully and promptly accounted for in the fourth quarter of the year.

Very respectfully, your most obedient servant, GEO. GIBSON, *Com. Gen. Subsistence.*
Hon. LEWIS CASS, *Secretary of War.*

Statement exhibiting the moneys remitted to contractors from January 1 to September 30, 1834; the sums charged to them on account of failures, and the moneys accounted for by them; the balances in the hands of the disbursing officers of the department December 31, 1833; the moneys remitted to them in the first, second, and third quarters of 1834; the sums charged as transfers from one officer to another; sales to officers on the frontier posts; sales of surplus provisions, empty barrels, boxes, &c.; and the amounts accounted for by them for the same period; together with the balances in their possession at the expiration of the third quarter of the year.

Names.	Balances on hand Dec. 31, 1833.	Remitted.	Charged on account of failures.	Charged as transfers, sales to officers on the frontier posts, sales of empty barrels, &c.	Total charged.	Accounted for.	Balances due to assistant commissaries September 30, 1834.	Balances due from assistant commissaries September 30, 1834.	Remarks.
Samuel & Isaac Bell.....contractor.		\$20,280 62			\$20,280 62	\$20,280 62			
D. & H. Cothrel.....do.....		1,947 82	\$22 25		1,970 07	1,970 07			
Hill & McGunngle.....do.....		2,169 70			2,169 70	2,169 70			
Alpheus Hyatt.....do.....		8,330 46	12 75		8,343 21	8,343 21			
Wm. & John James.....do.....		3,758 77	44 69		3,803 46	3,803 46			
Krepps & Sloan.....do.....		5,182 80			5,182 80	5,182 80			
George Lowry.....do.....		849 86			849 86	849 86			
Enoch C. March.....do.....		9,333 75			9,333 75	9,333 75			
Mervin, Gidings & Co.....do.....		718 66			718 66	718 66			
Mills & Beach.....do.....		572 30			572 30	572 30			
Charles Moody.....do.....		1,433 90			1,433 90	1,433 90			
Oliver Newberry.....do.....		6,859 95			6,859 95	6,859 95			
Joseph C. Noyes.....do.....		948 83			948 83	948 83			
Theodore E. Phelps.....do.....		10,256 49			10,256 49	10,256 49			
Joseph L. Sandford.....do.....		6,997 74			6,997 74	6,997 74			
Edward Simms.....do.....		1,334 36			1,334 36	1,334 36			
Joseph G. Sise.....do.....		1,195 33			1,195 33	1,195 33			
Standart, Hamilton & Co.....do.....		7,419 79			7,418 79	7,418 79			
William Stewart.....do.....		6,215 62			6,215 62	6,215 62			
Joel Turnham.....do.....		7,347 43			7,347 43	7,347 43			
G. B. Wilson.....do.....		4,277 52	5 75		4,283 27	4,283 27			
E. A. & W. Winchester.....do.....		473 59			473 59	473 59			

Statement exhibiting the moneys remitted to contractors, &c.—Continued.

Names.	Balances on hand Dec. 31, 1833.	Remitted.	Charged on account of failures.	Charged as transfers, sales to officers on the frontier posts, sales of empty barrels, &c.	Total charged.	Accounted for.	Balances due to assistant commissaries September 30, 1834.	Balances due from assistant commissaries September 30, 1834.	Remarks.
John Yeatman .....contractor.		\$11,390 54			\$11,390 54	\$11,390 54			
Joshua Yeaton .....do....		870 77			870 77	870 77			
J. W. Abrahams, special contractor for recruits .....do....		20 30			20 30	20 30			
Asa Ames, special contractor for recruits .....do....		437 80			437 80	437 80			
N. W. Baker, special contractor for recruits .....do....		287 91			287 91	287 91			
Robt. Bell .....contractor for recruits.		12 46			12 46	12 46			
Patrick Cassidy.....do....		377 60			377 60	377 60			
W. O. Chilton.....do....		41 00			41 00	41 00			
Thomas B. Coleman .....do....		181 58			181 58	181 58			
E. S. Comstock.....do....		463 36			463 36	463 36			
B. S. Cook.....do....		172 20			172 20	172 20			
B. Dana.....do....		275 01			275 01	275 01			
Samuel Davis.....do....		233 24			233 24	233 24			
C. C. Dockham.....do....		17 98			17 98	17 98			
John G. Eason.....do....		1,072 05			1,072 05	1,072 05			
Espy & Nisinger.....do....		8 75			8 75	8 75			
Patrick Foster.....do....		78 80			78 80	78 80			
R. Fulton & Co.....do....		94 80			94 80	94 80			
John K. Graham.....do....		150 25			150 25	150 25			
Hawkins & Hull.....do....		68 51			68 51	68 51			
Samuel Humes .....do....		257 00			257 00	257 00			
R. H. Hurlbert.....do....		334 03			334 03	334 03			
S. T. Jillson.....do....		441 40			441 40	441 40			
John Kenney.....do....		356 33			356 33	356 33			
R. Kirkpatrick.....do....		155 55			155 55	155 55			
Hoel Laurence .....do....		848 05			848 05	848 05			
John B. Lindsey.....do....		3,050 72			3,050 72	3,050 72			
Long & Johnson.....do....		155 23			155 23	155 23			
J. W. Lyons .....do....		358 73			358 73	358 73			
Paul Marshall .....do....		443 51			443 51	443 51			
Mayo, Follet & Co.....do....		227 74			227 74	227 74			
J. McCampbell.....do....		262 92			262 92	262 92			
H. K. Mitchell.....do....		191 70			191 70	191 70			
Robert Moulson.....do....		103 04			103 04	103 04			
Thornton Myers.....do....		101 28			101 28	101 28			
Simon Nelson.....do....		55 68			55 68	55 68			
Charles A. Newland.....do....		44 20			44 20	44 20			
Caswell Poe.....do....		387 49			387 49	387 49			
J. L. Rice.....do....		41 47			41 47	41 47			
F. C. Robinson.....do....		115 83			115 83	115 83			
Jacob Ruth.....do....		54 00			54 00	54 00			
John I. Salvage.....do....		352 95			352 95	352 95			
J. L. Sanford.....do....		212 70			212 70	212 70			
H. B. Sherman.....do....		301 89			301 89	301 89			
T. W. Smith.....do....		18 20			18 20	18 20			
Charles K. Snyder.....do....		92 61			92 61	92 61			
W. Todd.....do....		32 00			32 00	32 00			
John F. Truax.....do....		39 43			39 43	39 43			
W. T. Ward .....do....		159 27			159 27	159 27			
Louis Warner.....do....		35 25			35 25	35 25			
Webb, Smith & Co.....do....		17 12			17 12	17 12			
John Welsh.....do....		29 24			29 24	29 24			
Jacob Wiest.....do....		525 35			525 35	525 35			
Amos Wood.....do....		144 37			144 37	144 37			
Lieut. E. B. Alexander .....A. C. S.	\$1,949 56			\$948 84	2,898 40	1,975 68	\$922 72		Disbursing.
Lieut. S. R. Allston.....A. A. C. S.				1,545 44	1,545 44	1,177 67	367 77		Do.
Lieut. Jacob Ammen.....do....	348 47	850 00		107 07	1,305 54	1,305 54			Closed.
Lieut. R. Anderson.....do....	154 12	300 00			454 12	454 12			Do.
Lieut. R. H. Archer.....do....				20 00	20 00	20 00			Do.
Lieut. E. B. Babbitt.....do....	2,160 69			1,828 53	3,999 27	2,999 79	1,899 48		Disbursing.
Captain N. Baden.....do....	246 24				246 24	246 24			Closed.
Lieut. J. W. Bailey.....do....	252 05				252 05	252 05			Do.
Lieut. F. N. Barbarin.....do....	39 53	360 00		22 00	421 53	421 53			Do.
Captain E. K. Barnum.....do....				6 66	6 66	6 66			Do.
Lieut. J. W. Barry.....do....		350 00			350 00	247 14	102 86		Disbursing.
Lieut. E. S. Basinger.....do....		450 00		39 48	489 48	365 24	124 24		Do.
Lieut. A. G. Blanchard.....do....				100 00	100 00	100 00			Closed.
Lieut. John M. Berrien.....do....				50 00	50 00	50 00			Do.
Lieut. W. W. S. Bliss.....do....		2,550 00		1,363 77	3,913 77	3,913 77			Do.

Statement exhibiting the moneys remitted to contractors, &c.—Continued.

Names.	Balances on hand Dec. 31, 1833.	Remitted.	Charged on account of failures.	Charged as transfers, sales to officers on the frontier posts, sales of empty barrels, &c.	Total charged.	Accounted for.	Balances due to assistant commissaries September 30, 1834.	Balances due from assistant commissaries September 30, 1834.	Remarks.
Lieut. Harvey Brown.....A. A. C. S.	\$4,107 14	\$16,600 00		\$883 27	\$21,595 41	\$18,889 18		\$2,706 23	Disbursing.
Captain J. R. Butler	195 19	1,900 00		8 11	2,103 30	1,695 25		408 05	Do.
Lieut. William Bryant				3,413 16	3,413 16	3,207 68		205 48	Do.
Lieut. L. F. Carter	3,770 99	6,600 00		4,875 94	15,246 93	11,233 45		4,008 48	Disbursing expended, and \$2,300 86 Indian treaties.
Lieut. J. A. Chambers	255 60	400 00		38 44	694 04	322 70		371 34	Disbursing.
Lieut. W. S. Chandler				108 65	108 65	108 65			Closed.
Lieut. John Child	135 39	2,500 00			2,635 39	2,553 39		82 00	Due on settlement.
Lieut. Charles O. Collins.....	43 27	1,050 00		32 37	1,125 64	1,125 64			Closed.
Lieut. O. Cross.....				44 58	44 58				Do.
Major F. L. Dade.....	100 00				100 00	100 00			Do.
Lieut. F. L. Daney.....		1,450 00		26 66	1,476 66	1,116 11		360 55	Disbursing.
Lieut. John P. Davis.....	396 66			37 15	433 81	234 92		198 89	Disbursing; account 3d quarter not received.
Lieut. J. F. Davis.....	55 70				55 70	55 70			Closed.
Lieut. Justin Dimick.....	33 92	900 00			933 92	904 55		29 37	Disbursing.
Lieut. E. G. Eastman.....				100 00	100 00	100 00			Closed.
Lieut. A. B. Eaton.....	1,268 80	1,300 00		778 61	3,347 41	2,687 83		659 58	Disbursing.
Lieut. N. J. Eaton.....	2,059 97			941 19	3,001 16	2,085 79		915 37	Do.
Lieut. George Fetterman.....	2 73				2 73	2 73			Closed.
Lieut. A. C. Fowler.....	465 06				465 06			465 06	Deceased.
Lieut. Lemuel Gates.....	476 94			5,274 02	5,750 96	5,312 19		438 77	Disbursing.
Major William Gates.....		1,000 00		198 23	1,198 23	1,198 23			Closed.
Lieut. James Green.....	26 53	700 00		104 92	831 45	831 45			Do.
Lieut. George S. Greene.....	138 20	700 00		321 75	1,159 95	1,159 95			Do.
Captain Tim. Green.....		6,100 00		311 23	6,411 23	5,282 72		1,128 51	Disbursing.
Captain H. W. Fitzhugh.....		400 00			400 00	241 47		158 53	Do.
Captain Wm. M. Graham.....		950 00		86 92	1,036 92	1,022 38		14 54	Do.
Lieut. J. B. Grayson.....				390 02	390 02	97 95		292 07	Do.
Lieut. R. C. Gatlin.....				103 98	103 98	8 70		95 28	Do.
Major J. M. Glassell.....	4 57				4 57				Closed.
Lieut. J. S. Greenough.....	1,425 41			676 75	2,102 16	2,102 16			Do.
Lieut. D. E. Hale.....	20 50	350 00		16 01	386 51	386 51			Do.
Lieut. W. L. Harris.....	1,079 18			598 74	1,677 92	1,413 97		263 95	Disbursing.
Captain E. Harding.....		500 00			500 00	594 06	\$94 06		Do.
Lieut. D. S. Herring.....	172 07			28 05	200 12	200 12			Closed.
Lieut. R. Holmes.....						898 62	898 62		Deceased; due him on settlement.
Lieut. William Hoffman.....	1 36				1 36	1 36			Closed.
Lieut. J. L. Hooper.....				20 00	20 00	11 95		8 04	Disbursing.
Lieut. Joshua Howard.....		100 00		5 95	105 95	61 34		44 61	Do.
Captain Thomas Hunt.....		700 00			700 00	700 00			Closed.
Lieut. L. T. Jamison.....	1,245 87			2,032 33	3,278 20	535 96		2,742 24	Disbursing.
Lieut. J. R. Irwin.....		150 00		322 84	472 84	208 72		264 12	Do.
Lieut. J. F. Izard.....				200 00	200 00	200 00			Closed.
Lieut. Thomas Johns.....		100 00		42 26	142 26	142 26			Do.
Lieut. J. W. Kingsbury.....	3,970 70	14,500 00		1,450 45	19,921 15	18,928 42		992 73	Disbursing.
Lieut. J. J. B. Kingsbury.....		2,000 00		106 36	2,106 36	2,106 63	28		Due him on settlement.
Lieut. Samuel Kinney.....				211 98	211 98	119 40		92 58	Disbursing.
Lieut. E. M. Lacy.....	739 81			510 90	1,250 71	179 08		1,071 63	Do.
Lieut. J. A. D'Lagucl.....				439 66	439 66	435 21		3 45	Do.
Lieut. C. H. Larned.....	779 32				779 32	779 32			Closed.
Lieut. T. I. Lee.....		300 00		52 59	352 59	254 73		97 86	Disbursing.
Lieut. J. H. Leavenworth.....				552 92	552 92			552 92	Do.
Colonel William Lindsay.....	51 50				51 50	51 50			Closed.
Lieut. T. B. Linnard.....		200 00			200 00	200 00			Do.
Lieut. J. L. Locke.....		620 00		278 52	898 52	721 14		177 38	Disbursing.
Lieut. L. P. Lupton.....				73 74	73 74	66 50		7 24	Do.
Lieut. James McClure.....				1,356 62	1,356 62	256 83		1,099 79	Do.
Lieut. A. D. Mackay.....						531 05	531 05		Due him on settlement.
Lieut. J. Mackay.....				150 45	150 45	126 69		23 76	Disbursing.
Lieut. Samuel Mackenzie.....		1,464 00		3,058 10	4,522 10	4,126 99		395 11	Disbursing; account 3d quarter not received.
Lieut. J. B. Magruder.....		300 00		130 00	430 00	430 00			Closed.
Lieut. D. A. Manning.....		200 00		197 68	397 68	275 36		122 32	Disbursing.
Captain H. S. Mallory.....	10 00				10 00			10 00	Due U. S. on settlement.
Major Milo Mason.....		950 00			950 00	436 80		513 20	Disbursing.
Captain Charles Mellon.....	39 00				39 00	39 00			Closed.
Lieut. M. E. Merrill.....A. C. S.	156 27	300 00		730 48	1,186 75	1,186 75			Do.
Lieut. D. S. Miles.....A. A. C. S.	36				36	36			Do.
Lieut. Gouv. Morris.....	68	1400 00		2,448 16	3,848 84	2,134 62		1,714 22	Disbursing.

Statement exhibiting the moneys remitted to contractors, &c.—Continued.

Names.	Balances on hand Dec. 31, 1893.	Remitted.	Charged on account of failures.	Charged as transfers, sales to officers on the frontier posts, sales of empty barrels, &c.	Total charged.	Accounted for.	Balances due to assistant commissaries September 30, 1894.	Balances due from assistant commissaries September 30, 1894.	Remarks.
Lieut. Wm. W. Morris.... A. A. C. S.		\$700 00		\$83 30	\$783 30	\$783 30			Closed.
Lieut. P. Morrison.....do.....	\$1,571 70	10,397 47		810 94	12,780 11	12,527 09	\$253 02		Disbursing.
Lieut. R. R. Mudge.....do.....				489 98	489 98	71 45	418 53		Do.
Lieut. George Nauman.....do.....	70 93	1,150 00		97 17	1,318 10	763 42	554 68		Do.
Lieut. F. D. Newcomb.....do.....						1 12	\$1 12		Due him on settlement.
Lieut. L. B. Northop.....do.....				100 00	100 00	95 00	5 00		Disbursing.
Lieut. Tim. Paige.....do.....	886 60	500 00		28 01	1,414 61	724 70	689 91		Do.
Lieut. William Palmer.....do.....	61 28			29 66	90 94	90 94			Closed.
Lieut. J. L. Penrose.....do.....				792 51	792 51	792 51			Do.
Lieut. C. Pettigru.....do.....		400 00		1,205 61	1,605 61	1,438 22	167 39		Disbursing.
Lieut. R. H. Peyton.....do.....	8 54				8 54	8 54			Closed.
Lieut. J. A. Phillips.....do.....				127 60	127 60	18 30	109 30		Disbursing.
Capt. Owen Ransom.....do.....				25 00	25 00	25 00			Closed.
Capt. J. W. Ripley.....do.....		100 00		23 15	123 15	159 63	36 48		Disbursing.
Lieut. S. L. Russell.....do.....	746 64	250 00		645 49	1,642 13	1,170 72	471 41		Do.
Lieut. F. Searle.....do.....	172 91				172 91	172 91			Closed.
Lieut. A. F. Seaton.....do.....				100 00	100 00	100 00			Do.
Lieut. R. Sevier.....do.....	843 13			811 34	1,654 47	1,654 47			Do.
Lieut. E. Steen.....do.....				1,059 49	1,059 49		1,059 49		Disbursing; received September 30.
Lieut. C. C. Sibley.....do.....		300 00		557 10	857 10	683 90	173 20		Do.
Lieut. J. H. Simpson.....do.....				100 93	100 93	100 93			Closed.
Lieut. J. R. Smith.....do.....	56 57	1,937 81		368 92	2,363 30	1,760 56	602 74		Disbursing.
Lieut. F. H. Smith.....do.....		600 00			600 00	600 00			Closed.
Lieut. H. L. Scott.....do.....		500 00		110 98	610 98	138 70	472 28		Disbursing.
Lieut. Moses Scott.....do.....	291 72	400 00		89 25	780 97	667 04	113 93		Do.
Lieut. John B. Scott.....do.....	77 98	400 00			477 98	477 98			Closed.
Lieut. T. B. W. Stockton.. A. Q. M.				1,000 00	1,000 00		1,000 00		Disbursed on account of Quartermaster's department.
Capt. E. V. Sumner..... A. A. C. S.	87 19				87 19	87 19			Closed.
Lieut. C. Smyth.....do.....	53 50	1,350 00			1,403 50	1,403 50			Do.
Capt. J. P. Taylor..... commissary.	291 30	24,000 00			24,291 30	11,428 46	12,862 84		Disbursing; account 3d quarter not received; absent paying Indian annuities.
Lieut. F. Taylor..... A. A. C. S.	318 56				318 56	318 56			Closed.
Lieut. R. E. Temple.....do.....	104 42				104 42		104 42		Under stoppage.
Lieut. B. A. Terrett.....do.....				75 00	75 00	75 00			Closed.
Capt. Charles Thomas.....do.....	86 34			10 50	96 84	96 84			Do.
Lieut. A. W. Thornton.....do.....	51 79				51 79	13 93	37 86		Due United States on settlement.
Lieut. W. A. Thornton.....do.....		450 00			450 00	450 00			Closed.
Lieut. D. H. Tufts.....do.....	3 42	550 00		117 97	671 39	669 64	1 75		Disbursing.
Col. D. E. Twiggs.....do.....		6,700 00			6,700 00	6,700 00			Closed.
Lieut. J. S. Vanderveer.....do.....	4,159 99			396 64	4,556 63	3,355 51	1,201 12		Disbursing; account 3d quarter not received.
Lieut. D. Van Ness.....do.....	516 08	2,200 00			2,716 08	2,711 90	4 18		Disbursing.
Lieut. Francis Vinton.....do.....	227 19				227 19	227 19			Closed.
Lieut. J. R. Vinton.....do.....	579 44			9 97	589 41	570 58	18 83		Disbursing.
Lieut. R. D. A. Wade.....do.....	172 28	1,300 00		9 83	1,482 11	1,350 53	131 53		Do.
Maj. P. Wager.....do.....				500 00	500 00	500 00			Closed.
Lieut. W. Wall.....do.....	83 64	300 00		298 83	682 47	459 05	223 43		Disbursing.
Lieut. George Watson.....do.....	94 26	450 00			544 26	693 89	149 63		Do.
Lieut. L. B. Webster.....do.....	141 71			8 54	150 25	150 25			Closed.
Lieut. William Wells.....do.....						32 42	32 42		Due him on settlement.
Lieut. D. P. Whiting.....do.....				300 00	300 00	78 76	220 24		Disbursing.
Major H. Whiting.....do.....		5,000 00		100 00	5,100 00	5,114 50	14 50		Due him on settlement.
Lieut. T. F. J. Wilkinson.....do.....	74 58	250 00		160 71	485 29	470 57	14 72		Due United States on settlement.
Lieut. C. R. Williams.....do.....	1,457 58			471 83	1,929 41	1,440 82	488 59		Disbursing.
Lieut. John H. Winder.....do.....		300 00		71 01	371 01	295 16	75 85		Do.
Major R. A. Zantzingher.....do.....	3 25			124 57	127 82	127 82			Closed.
Total.....	41,673 87	266,124 97	\$85 44	51,129 46	359,013 74	313,153 35	1,758 16	47,618 55	

RECAPITULATION.

Total amount charged		\$359, 013 74
Balances due to assistant and acting assistant commissaries on the settlement of their accounts		1, 758 16
		<u>360, 771 90</u>
Accounted for		313, 153 35
		<u>47, 618 55</u>
Deduct this sum charged to contractors as the difference in the price of stores purchased to supply deficiencies	\$85 44	
Deduct amount expended at Indian treaty grounds, and not brought to the credit of the officer, on account of subsistence	2, 300 86	
Deduct amount expended on account of the Quartermaster's department, not credited to the officer on account of subsistence	1, 000 00	
Deduct amount due by Lieutenant A. C. Fowler at the period of his decease, and for which his sureties are liable	465 06	
		<u>3, 851 36</u>
Leaving the actual balance in the hands of the disbursing officers of the department to be accounted for in the fourth quarter of the year		<u>43, 767 19</u>

GEO. GIBSON, *C. G. S.*OFFICE OF THE COMMISSARY GENERAL OF SUBSISTENCE. *Washington, November 15, 1834.*

No. 7.

REPORT FROM THE ORDNANCE DEPARTMENT.

ORDNANCE OFFICE, *Washington, November 18, 1834.*

SIR: In obedience to your order of the 15th August last, I have the honor to transmit a report of the general result of the proceedings and operations of this department between the 1st of October, 1833, and the 30th September, 1834.

The papers marked A and B present a general view of these concerns during the last-mentioned period, as well in regard to the amounts of the expenditures under the several heads of appropriations as in reference to their objects, and to the various ordnance stations where they have been made.

The first of these (A) shows the whole amount of funds remitted from the treasury to disbursing officers and contractors in this department during the year 1833, to have been..... \$1, 028, 606 09
That the portion of that sum which was expended and accounted for during the same period amounted to..... 963, 222 79

And that at the close of that year there remained unexpended and in the hands of disbursing officers, the sum of..... 65, 383 30
A balance which, it may be proper to remark, was promptly liquidated by the responsible disbursing officers early in the first quarter of 1834.

Statement B exhibits the total amount of funds remaining in the hands of disbursing officers at the close of the year 1833, and which have been remitted to them and to contractors during the first, second, and third quarters of the year 1834. This amount will be seen to have been \$834, 825 79
And the portion of this sum expended, and for which accounts have been rendered during the same period, will be seen in the same statement to have amounted to 766, 701 36

The unexpended balance exhibited in the same statement as being in the hands of disbursing officers at the close of the third quarter of 1834, having been 67, 824 43

Statement C presents a view of the general result of the operations at the several arsenals and armories of the United States, in the manufacture, repair, and purchase of the principal articles of ordnance, ordnance stores, and building materials. It exhibits the result of these operations to the extent to which they have been completed during the year between the 1st of October, 1833, and the 30th of September, 1834, indicating, among other articles of ordnance and ordnance stores which have been fabricated or procured, the following, viz:

Of artillery, 213 32-pounder cannon, 3 12-pounder and 3 6-pounder cannon, 3 24-pounder and 3 12-pounder howitzers, 10 32-pounder and 6 24-pounder casemate carriages, 6 10-inch mortar beds, and 44 field artillery carriages.

Of small arms manufactured and procured, viz: 26,126 muskets and 2,120 (Hall's) rifles, made at the national armories; and at the private factories, 1,030 carbines, (Hall's,) 300 rifles, (Hall's,) 11,140 muskets, and 2,900 artillery swords.

Of accoutrements for small arms, about 1,440 sets for infantry, 1,050 sets for riflemen, and 1,320 sets for cavalry.

Statement D shows the extent of the operations during the year, between the 1st of October, 1833, and the 30th of September, 1834, which have occurred in procuring ordnance and ordnance stores, under

the act of 1808, for arming and equipping the militia of the States and Territories. This statement presents also a view of the expenditures under the act, which have resulted during the same period in procuring the stores, amounting, for all objects, to \$190,539 36.

It exhibits, among other articles of ordnance stores procured, 26 field-carriages, with their equipments complete; 11,140 muskets, 300 (Hall's) rifles, 2,900 artillery swords, 1,200 sets of infantry accoutrements, 800 sets of rifle accoutrements, 1,950 sabre and sword belts, and 1,141 (pair) holsters.

Statement E exhibits the amount of ordnance and ordnance stores, valued in muskets, which have been apportioned for the year 1833, to the several States and Territories, under the act of 1808, for arming and equipping the militia. This apportionment being founded on the recent returns of the strength of the militia, as made by the adjutant general of the militia of the several States, to the adjutant general of the army.

Statement F shows the several articles of ordnance and ordnance stores which have been distributed to the militia of the States and Territories during the year, between the 1st of October, 1833, and the 30th of September, 1834.

Statement G presents a view of the munitions of war issued by this department during the year, between the 1st of October, 1833, and the 30th of September, 1834, to the army. In this it will appear that 4 24-pounder cannon and carriages, 5 10-inch mortars, with their beds, 17 field cannon, with their carriages complete, 750 pistols, 750 carbines complete, 750 sets of accoutrements for the dragoons, 750 sabres, 695 swords, and 204 sets of infantry accoutrements, are among the principal articles issued.

Statement H exhibits the operations of the lead mines for the year ending the 30th September, 1834; and statement I, the amount of lead made at these mines in each year, from the year 1821 to the 30th of September, 1834.

By these statements it will appear that the lead made during the present year amounts

to	7, 971, 579 pounds.
Excess over the last year	29, 787 "
Total amount of lead made from 1821 to September 30, 1834.....	71, 817, 319 "
Total amount of rent lead accruing for the above period.....	5, 699, 631 "
Amount of rent lead due the United States September 30, 1834, yet to be collected.	322, 802 "

The mining operations have been successfully continued on the west bank of the Mississippi, in the country ceded to the United States by the Sac and Fox Indians, and should not the recent sales of lands in the mineral regions, and the locations made for the Indians there, materially interfere with the interests and operations of the mining establishments, the product of these mines may reasonably be expected to be greatly increased hereafter.

I take pleasure in being able to state that the most satisfactory results have been attained this year in the manufacturing operations at the national armories, and at the various arsenals of construction and repairs throughout the country.

The due execution of a just system of accountability for the immense material of war in the arsenals and magazines of the Union, and in the hands of the army, and the continual application of the most improved means of preservation to this material, have enabled the concerns of this department to attain an unusual degree of perfection. It is confidently expected that they will be still more benefited by the salutary operations of the new ordnance regulations adopted by the President on the 1st of May, 1834, but which could not be published to the army until the 19th of September last.

As regards the building operations progressing in this department at the St. Louis, Mount Vernon, Appalachicola, and Detroit arsenals, and at the New York depot, I have the honor to state that they have proceeded to the extent of the last annual appropriations for those objects, and have been conducted in the most efficient and satisfactory manner by the several superintending officers.

I have the honor to be, sir, respectfully, your obedient servant,

GEO. BOMFORD, *Colonel of Ordnance.*

Hon. LEWIS CASS, *Secretary of War.*

A.

Statement of the money expended through the Ordnance department in the year 1833.

Officers' names.	Stations.	AMOUNT OF SUMS REMITTED, INCLUDING THE BALANCES IN THE HANDS OF AGENTS JANUARY 1, 1833.														
		Appropriations.														
		National armories.	Current expenses of the ordnance service.	Arsenals.	For an arsenal in Florida.	Armament of fortifications.	Arming and equipping the militia.	For thirty-six double racks.	For additional machinery.	Building of workshop for grinding and polishing.	Erection of two dwelling houses.	Walls and embankments.	Erecting forging-shop.	Erection of dwelling houses.		
Charles Howard.....	Armory, Springfield, Massachusetts.....	\$162,806 98						\$4,413 11	\$4,500 00	\$3,500 00	\$6,000 00	\$7,000 00				
Daniel Bedinger.....	Armory, Harper's Ferry, Virginia.....	182,815 57						1,404 65					\$1,402 06	\$2,044 41	\$10,011 78	
Capt. C. Mellon and J. W. Ripley.....	Arsenal, Augusta, Maine.....		\$1,753 57	\$4,915 26												
Major H. K. Craig.....	Arsenal, Watertown, Massachusetts.....		1,838 25	263 46				8,837 00								
Captain B. Huger.....	Arsenal, Fort Monroe, Virginia.....		4,261 30	5,793 54		\$14,241 78										
Lieuts. D. H. Vinton and C. Ward.....	Arsenal, Vergennes, Vermont.....		365 00	560 00												
Lieut. Col. G. Talcott.....	Arsenal, Watervliet, New York.....		10,440 61	13,211 58		146 80		10,988 37								
Capt. James Abeel and Lieut. H. S. Mallory.....	Arsenal, Rome, New York.....		1,900 00													
Major R. L. Baker and Lieut. A. Beckley.....	Arsenal, Pittsburg, Pennsylvania.....		7,015 35	5,414 60				11,071 17								
Lieut. Col. W. J. Worth.....	Arsenal, Frankford, Pennsylvania.....		5,239 77	5,991 04		400 00		1,882 12								
Lieuts. R. D. A. Wade, D. Tyler, and W. Maynadier.....	Arsenal, Pikesville, Maryland.....		809 70			7,556 84										
Capt. J. Symington, A. Mordecai, and R. Bache.....	Arsenal, Washington, D. C.....	166 00	10,181 96	3,200 00				3,058 73								
Marcus C. Buck.....	Arsenal, near Richmond, Virginia.....		1,619 85													
Lieut. Col. A. O. W. Fanning and Lieut. D. S. Herring.....	Arsenal, Augusta, Georgia.....		626 61													
Capt. E. Harding.....	Arsenal, Mount Vernon, Alabama.....		300 00	15,746 35												
Capt. J. Hills.....	Arsenal, Apalachicola, Florida.....			24,443 00	\$18,438 56											
Lieut. F. L. Jones.....	Arsenal, Baton Rouge, Louisiana.....		1,890 52	825 49				30 90								
Lieut. R. Anderson and Capt. J. Symington.....	Arsenal, St. Louis, Missouri.....		4,857 86	15,270 46												
Lieut. J. Howard.....	Arsenal, Detroit, Michigan Territory.....		900 00	25,310 55												
Capt. S. Perkins and Capt. J. L. Smith.....	Depot, New York city.....		2,029 44	8,824 23				29,028 15								
Capt. R. Bache and Lieuts. James Allen and H. S. Mallory.....	Depot, Charleston, S. C.....		3,523 60													
Capt. T. C. Legate.....	Lead mines, Galena, Illinois.....		5,136 58													
Sundry persons, for cannon and small arms.....						116,662 16		153,218 72								
Statements on audited accounts.....			2,026 32	568 59				25 00								
Total.....		365,788 55	66,711 29	130,338 12	18,438 56	139,007 58	223,957 92	4,500 00	3,500 00	6,000 00	7,000 00	1,402 06	2,044 41	10,011 78		

A.—Statement of the money expended through the Ordnance department in the year 1833—Continued.

Officers' names.	Stations.	AMOUNT OF SUMS REMITTED, INCLUDING THE BALANCES IN THE HANDS OF AGENTS JANUARY 1, 1833.										Amounts expended and accounted for.	Balances remaining unexpended in the hands of the disbursing officers, December 31, 1833.	
		Appropriations.												
		Slating roofs of workshops.	Repair and extension of the Potomac dam.	Enlargem't of the canal.	Repairing the walls of four workshops.	Construction of new water-wheels and machinery.	Purchase of the right of water-power on the Shenandoah river.	Purchase of forty-five acres of land.	Purchase of one square acre of land.	More perfect defence of the frontiers.	Purchase of swords and accoutrements.			Total amount.
Charles Howard	Armory, Springfield, Massachusetts..	\$2,819 52	\$3,374 55	\$10,000 00	\$1,500 00							\$208,220 09	\$199,057 78	\$9,163 31
Daniel Bedinger	Armory, Harper's Ferry, Virginia ..					\$8,400 40	\$2,600 00					228,372 54	210,809 24	15,563 30
Captain C. Mellon and Capt. J. W. Ripley ..	Arsenal, Augusta, Maine											6,668 83	5,646 36	1,022 47
Major H. K. Craig	Arsenal, Watertown, Massachusetts.											10,928 71	8,547 81	2,380 90
Captain B. Huger	Arsenal, Fort Monroe, Virginia											24,296 62	22,470 11	1,826 51
Lieut. D. H. Vinton and Lieut. C. Ward	Arsenal, Vergennes, Vermont											925 00	353 58	571 42
Lieut. Colonel G. Talcott	Arsenal, Watervliet, New York							\$9,000 00				43,787 34	43,750 51	36 83
Capt. James Abeel and Lieut. H. S. Mallory ..	Arsenal, Rome, New York											1,900 00	1,876 05	23 95
Major R. L. Baker and Lieut. A. Beckley	Arsenal, Pittsburg, Pennsylvania									\$3,500 00		27,001 12	23,972 30	3,028 82
Lieut. Col. W. J. Worth	Arsenal, Frankford, Pennsylvania ..											13,512 93	12,245 19	1,267 74
Lieutenants R. D. A. Wade, D. Tyler, and W. Maynadier	Arsenal, Pikesville, Maryland											809 70	652 50	157 20
Capt. J. Symington, A. Mordecai, and R. Bache	Arsenal, Washington, D. C.											24,163 53	23,280 04	883 49
Marcus C. Buck	Arsenal, near Richmond, Virginia ..											1,619 85	1,491 25	128 60
Lt. Col. A. O. W. Fanning and Lt. D. S. Herring ..	Arsenal, Augusta, Georgia											626 61	626 61	
Capt. E. Harding	Arsenal, Mount Vernon, Alabama ..											16,046 35	9,634 04	6,412 31
Captain J. Hills	Arsenal, Apalachicola, Florida											42,881 56	32,094 26	10,787 30
Lieut. F. L. Jones	Arsenal, Baton Rouge, Louisiana ..											2,752 91	1,896 52	856 39
Lieut. R. Anderson and Capt. J. Symington ..	Arsenal, St. Louis, Missouri											20,128 32	12,737 96	7,390 36
Lieut. J. Howard	Arsenal, Detroit, Michigan Territory											26,210 55	26,210 55	
Captain S. Perkins and Capt. J. L. Smith ..	Depot, New York city									\$5,811 25		45,963 06	42,275 42	3,417 64
Capt. R. Bache, Lieuts. James Allen, and H. S. Mallory	Depot, Charleston, South Carolina ..											3,522 60	3,407 95	114 65
Captain T. C. Legate	Lead mines, Galena, Illinois											5,136 58	4,784 87	351 71
Sundry persons for cannon and small arms ..												269,880 88	269,880 88	
Settlements on audited accounts										\$2,800 50		5,520 41	5,520 41	
Total		2,819 52	3,374 55	10,000 00	1,500 00	8,400 00	2,600 00	9,000 00	3,500 00	5,811 25	2,000 50	1,028,606 09	963,222 79	65,383 30

B.

Statement of the money expended through the Ordnance department during the first, second, and third quarters of 1834.

Stations.	Amount transmitted in the first, second, and third quarters of 1833, and balances remaining in officers' hands at the close of the year 1833.	Amount of accounts rendered in the first, second, and third quarters of the year 1834.	Balances remaining in officers' hands October 1, 1834.
Armory, Springfield, Massachusetts.....	\$171,156 28	\$150,005 42	\$21,150 86
Armory, Harper's Ferry, Virginia.....	191,414 56	87,136 37	4,278 19
Arsenal, Augusta, Maine.....	12,382 47	9,037 72	3,344 75
Arsenal, Watertown, Massachusetts.....	21,130 68	14,547 23	6,583 45
Arsenal, Fort Monroe, Virginia.....	15,032 51	13,717 16	1,315 35
Arsenal, Vergennes, Vermont.....	1,206 42	1,206 42	.....
Arsenal, Watervliet, New York.....	39,574 58	35,486 55	4,088 03
Arsenal, Rome, New York.....	1,423 95	1,371 77	52 18
Arsenal, Pittsburg, Pennsylvania.....	18,973 32	12,725 26	6,248 06
Arsenal, Frankford, Pennsylvania.....	19,434 72	16,738 54	2,696 18
Arsenal, Pikesville, Maryland.....	1,392 20	1,041 64	350 56
Arsenal, Washington, D. C.....	17,707 89	14,759 80	2,948 09
Arsenal, near Richmond, Virginia.....	1,024 60	1,024 60	.....
Arsenal, Augusta, Georgia.....	214 47	75 43	139 04
Arsenal, Mount Vernon, Alabama.....	17,112 81	12,299 94	4,812 87
Arsenal, Apalachicola, Florida.....	36,187 30	33,950 10	3,237 20
Arsenal, Baton Rouge, Louisiana.....	1,805 71	1,447 62	358 09
Arsenal, St. Louis, Missouri.....	35,214 36	32,712 74	2,501 62
Arsenal, Detroit, Michigan Territory.....	26,368 45	26,368 45	.....
Depot, New York city.....	12,486 64	9,184 41	3,302 23
Depot, Charleston, South Carolina.....	540 65	404 26	136 39
Lead mines, Galena, Illinois.....	4,001 71	3,720 42	281 29
Sundry persons for cannon and small arms.....	188,551 14	188,551 14	.....
Settlements on audited accounts.....	188 37	188 37	.....
Total.....	834,825 79	766,701 36	67,824 43

ORDNANCE OFFICE, Washington, November 18, 1834.

GEO. BOMFORD, Colonel of Ordnance.

C.

Statement of work done, and articles procured and repaired at the arsenals and armories of the United States, and by contract, from the 1st October, 1833, to the 30th September, 1834, inclusive.

MADE AND PROCURED.			
<i>Class No. 1.</i>		Worms and staves.....	12
32-pounder cannon.....	213	Tompsons.....	78
12-pounder cannon.....	3	Lead aprons.....	19
6-pounder cannon.....	3	Tarpaulins.....	18
24-pounder howitzers.....	3	Priming wires.....	71
12-pounder howitzers.....	3	Priming horns.....	2
<i>Class No. 2.</i>		Sponges.....	315
12-pounder field carriages.....	1	Sponge covers.....	96
6-pounder field carriages.....	35	Sponge buckets.....	233
4-pounder field carriages.....	2	Tar buckets.....	2
4-pounder caissons.....	2	Garrison water-buckets.....	23
24-pounder howitzer carriages.....	1	Lintstocks.....	16
12-pounder howitzer carriages.....	1	Portfire stocks.....	32
32-pounder casemate carriages.....	10	Portfire cases.....	314
24-pounder casemate carriages.....	6	Portfire clippers.....	24
10-inch seacoast mortar beds.....	3	Prolonges.....	40
10-inch siege mortar beds.....	3	Bricoles.....	123
Elevating machines.....	26	Tube pouches.....	24
Pointing boards.....	9	Tube boxes.....	43
Traverse boards.....	20	Gunners' haversacks.....	18
Travelling forges.....	2	Artillery harness, sets.....	4
<i>Class No. 3.</i>		Artillery saddles.....	10
Sponges and rammers.....	187	Traversing handspikes.....	79
Sponges and staves.....	49	Trail handspikes.....	30
Ladles and worms.....	53	Implement straps.....	20
		Budge barrels.....	20
		Thumb stalls.....	178
		Cannon locks.....	16
		Cannon scrapers.....	9
		Fuse extractors.....	2
		Shot gauges.....	12
		Spirit levels.....	9

C.—Statement of the work done and articles procured and repaired, &c.—Continued.

Gunners' gimlets	142	Priming tubes, empty	19, 220
Gunners' pincers	7	Fuses, full	387
Gunners' punches	54	Fuses, empty	331
<i>Class No. 4.</i>			
42-pounder shot	47	Musket bullets, pounds	23, 171
32-pounder shot	4, 129	Rifle and pistol bullets, pounds	13, 762
12-pounder shot	15	Carbine, Hall's, bullets, pounds	5, 408
6-pounder shot	15	Buckshot, pounds	1, 485
4-pounder shot	200	Slow-match, pounds	15
24-pounder shells	1, 167	Cartridge-paper, cannon, pounds	1, 569
12-pounder shells	1, 158	Cartridge-paper, musket, pounds	850
<i>Class No. 5.</i>			
12-pounder shot, strapped, &c.	572	Wrapping paper, pounds	1, 377
Shells, strapped, &c.	900	<i>Class No. 9.</i>	
6-pounder strapped shot, fixed	602	Gun-carriage wheels, number	15
6-pounder canister shot, fixed	67	Limber wheels, number	13
Grape shot, fixed	5	Iron trucks for mortar beds	24
Rocket cases	75	Iron truck and traverse wheels	156
Shot blocks	359	Belt plates	5, 380
Cannon wads, assorted	2, 4 1	<i>Class No. 10.</i>	
<i>Class No. 6.</i>			
Muskets, armory and contract, new	37, 266	Wagon	1
Hall's rifles, complete	1, 500	Horse carts	4
Hall's rifles without bayonets	920	Hand carts	3
Hall's carbines	1, 030	Wheelbarrows	5
Bayonets for Hall's rifles	6, 535	Boat	1
Screw-drivers for Hall's rifles	2, 120	Scows	2
Wipers for Hall's rifles	2, 120	Cranes	7
Spring vices for Hall's rifles	190	Bell	1
Bullet moulds for Hall's rifles	220	Gin	1
Artillery swords	2, 800	Tierces	16
Screw-drivers, musket	16, 146	Cart saddles	6
Wipers, musket	35, 875	Horses	3
Ball-screws, musket	5, 255	Pumps	2
Spring vises, musket	1, 140	Mathematical instruments, sets	2
<i>Class No. 7.</i>			
Sets of infantry accoutrements	1, 200	PART 2.—CLOTHS, &C.	
Sets rifle accoutrements	1, 050	Flannel, yards	1, 407
Cartridge-boxes, infantry	241	Duck, linen, yards	338
Cartridge-box belts, infantry	5, 789	Duck, cotton, yards	545
Bayonet scabbards, infantry	430	Coarse linen, yards	308
Bayonet belts, infantry	6, 077	Coarse cotton, yards	243
Artillery sword belts	1, 153	Thread, assorted, pounds	154
Brushes and picks	1, 923	Twine, pounds	155
Bullet moulds	2	Oakum, pounds	62
Gun-slings, russet	1, 370	Junk, pounds	6, 690
Flint caps	1, 569	FORAGE.	
Rifle flasks	898	Corn, bushels	2, 359
Flasks and belts, Hall's	4, 734	Meal, bushels	215
Dragoon cartridge-boxes	1, 324	Oats, bushels	2, 218
Dragoon sabre belts	1, 250	Hay, pounds	200, 559
Dragoon holsters, pairs	1, 634	Straw, pounds	21, 411
Sealskin housings	404	Straw, cut, bushels	66
<i>Class No. 8.</i>			
Rifle powder, pounds	50	IRONMONGERY.	
Powder, mealed, pounds	105	Iron, bar, pounds	180, 585
Powder, percussion, pounds	20	Iron, assorted, pounds	528, 176
Cartridges, cannon, No., assorted	4, 013	Iron, cast, pounds	99, 453
Cannon cartridge-bags	6, 056	Iron, scrap, pounds	65, 175
Rockets, assorted	965	Steel, assorted, pounds	48, 771
Musket-ball cartridges	39, 900	Steel, scrap, pounds	120
Musket-ball blank	51, 620	Lead, pounds	21, 020
Pistol cartridges	116, 030	Tin, block, pounds	480
Carbine cartridges	100, 700	Tin, plates, number	2, 634
Portfires	2, 423	Wire, iron, pounds	497
Percussion caps	5, 000	Wire, brass, pounds	61
Priming tubes, full	1, 321	Nails, cut, pounds	19, 977
		Nails, wrought, pounds	955
		Brads, No.	92, 156
		Hinges, pairs	689
		Locks, door, number	225
		Locks, pad, number	44

C.—Statement of the work done and articles procured and repaired, &c.—Continued.

Stoves and pipes, number.....	21
Kettles, iron, number..	7
Kettles, brass, number.....	2
Pots, iron, number.....	8
Copper, pig, pounds.....	190
Copper, scrap, pounds.....	1, 100
Brass, pounds.....	9, 502
Brass and copper, sheet, pounds.....	3, 646
Nave boxes, number.....	118
Emory, pounds.....	1, 817
Sandpaper, quires.....	58
Chalk, pounds.....	293
Bristles, pounds.....	30
Glue, pounds.....	460

LABORATORY STORES.

Antimony, pounds.....	68
Alcohol, gallons.....	54
Whiskey, gallons.....	20
Acid, nitric, pounds.....	64
Beeswax, pounds.....	83
Borax, pounds.....	74
Camphor, pounds.....	2
Copperas, pounds.....	33
Flour, pounds.....	222
Gum arabic, pounds.....	19
Gum copal, pounds.....	45
Gum shellac, pounds.....	29
Gum seedlac, pounds.....	6
Rosin, pounds.....	471
Sal ammoniac, pounds.....	7
Spelter, pounds.....	370
Sulphuric acid, pounds.....	795
Tallow, pounds.....	964
Tar, barrels.....	10
Woollen rags, pounds.....	1, 889
Zinc, pounds.....	595

LUMBER AND BUILDING MATERIALS.

Caisson timber, sets.....	25
Cypress timber, cubic feet.....	1, 197
Oak timber, cubic feet.....	10, 509
Oak timber, logs.....	5
Pine timber, cubic feet.....	4, 291
Pine timber, board measure, feet.....	52, 436
Plank, assorted, feet.....	242, 956
Boards, assorted, feet.....	314, 677
Scantling, feet.....	88, 674
Joist, feet.....	164, 870
Shingles, number.....	339, 666
Laths, number.....	70, 780
Fence posts, number.....	1, 179
Naves, rough, number.....	28
Spokes, rough, number.....	200
Musket stocks, number.....	35, 920
Rifle stocks, number.....	2, 340
Fuses, rough, number.....	500
Mahogany, feet.....	83
Hoop poles, number.....	3, 802
Firewood, cords.....	1, 044
Coal, pit, bushels.....	12, 105
Charcoal, bushels.....	86, 778
Coal, anthracite, pounds.....	833, 520
Stone, cut and hewn, feet.....	75, 924
Stone, building, perches.....	1, 116
Brick, number.....	2,001,390
Lime, bushels.....	5, 846
Cement, bushels.....	83
Sand, bushels.....	3, 579
Hair, bushels.....	98
Slates, squares.....	3, 056

LEATHER AND SKINS.

Leather, assorted, pounds.....	5, 727
Leather, buff, hides.....	362

Skins, calf.....	79
Skins, sheep.....	35
Skins, seal.....	400
Skins, morocco.....	98
Skins, goat and hog.....	5

PAINTS, ETC.

Paint, mixed, pounds.....	4, 873
Lead, white, pounds.....	6, 251
Lead, red, pounds.....	283
Whiting, pounds.....	1, 698
Ochre, yellow, pounds.....	629
Verdigris, pounds.....	59
Spanish brown, pounds.....	192
Chromic yellow, pounds.....	57
Chromic green, pounds.....	86
Glass, feet.....	7, 595
Oil, assorted, gallons.....	3, 053
Varnish, gallons.....	53
Lacquer, gallons.....	21
Spirits of turpentine, gallons.....	181
Pit coal tar, gallons.....	394
Lithrage, pounds.....	53

STATIONERY.

Blank books, number.....	90
Blank accounts, &c., quires.....	228
Post and letter paper, quires.....	966
Cap paper, quires.....	435
Envelope paper, quires.....	157
Drawing paper, sheets.....	103
Quills, number.....	4, 922
Sealingwax, pounds.....	11
Pencils, number.....	204
Pens, steel, number.....	197
Inkstands, number.....	10
Ink, gallons.....	11

TOOLS, ASSORTED.—(MADE AND PROCURED.)

Saws, assorted, number.....	43
Adzes, number.....	4
Axes, number.....	21
Augers, number.....	63
Anvils, number.....	6
Bellows, pairs.....	4
Chisels, assorted, number.....	194
Crowbars, number.....	4
Crucibles, number.....	5
Drawing knives, number.....	6
Files, assorted, number.....	29, 027
Funnels, number.....	7
Gauges, assorted, number.....	24
Gimlets, assorted, number.....	233
Hammers, number.....	30
Hatchets, number.....	19
Knives, laboratory, number.....	32
Planes, assorted, number.....	94
Lathes, turning, number.....	79
Rasps, number.....	3
Rasps, number.....	19
Sledges, number.....	4
Scales and weights, sets.....	5
Scales, graduated, number.....	11
Grindstones, number.....	140
Rocket formers, number.....	27
Cartridge formers, number.....	5

MISCELLANEOUS.

Rope, pounds.....	1, 704
Gun boxes, number.....	210
Pistol boxes, number.....	36
Packing boxes, number.....	444
Ammunition kegs, number.....	82

C.—*Statement of the work done and articles procured and repaired, &c.*—Continued.

REPAIRED.			
Muskets	6, 594	Cannon scrapers, number	11
Rifles	506	Sponge buckets, number	16
Rifles, Hall's	40	Gun carriages, painted	29
Pistols	950	Limbers, painted	11
Muskets, cleaned, oiled, &c.	240	Caissons, painted	2
Muskets, rebrowned	26	Travelling forges, painted	3
Cannon, cleaned and lacquered	105	Wheels, painted	86
Shot and shells, cleaned and lacquered ..	3, 431	Powder, cleaned and aired, pounds	13, 281
Gun carriages	3	Powder barrels, repaired	30
Caissons	8	Old files, recut	2, 046
Cannon cartridges	20, 389	Musket screw-drivers	142
Musket cartridges	12, 500	Musket wipers	77
Rifle accoutrements, sets	26	Musket ball-screws	92
Packing boxes, number	20	Musket spring vices	25
Ammunition kegs, number	14	Gun slings	50
Polishing wheels, number	26	Brushes and picks	127
Carts, number	3	Belt plates	300
		Ladles and worms	11
		Worms and staves	9

GEO. BOMFORD, *Colonel of Ordnance.*ORDNANCE OFFICE, *Washington, November 18, 1834.*

D.

Statement of the arms, accoutrements, &c., procured, and of the expenditures made under the act of arming and equipping the militia, from October 1, 1833, to September 30, 1834, the same being also embraced in statement C.

Muskets, complete	11, 140
Rifles, Hall's, complete	300
Carbines, Hall's	2
Artillery swords	2, 900
Sets infantry accoutrements, complete	1, 200
Sets rifle accoutrements, complete	800
Cartridge-box belts	1, 004
Bayonet scabbards	430
Bayonet belts	968
Belt plates	5, 380
Cavalry cartridge-boxes	1, 050
Holsters, pairs	1, 141
Sabre belts (buff)	950
Sword belts (buff)	1, 000
Hides of buff leather	362
Six-pounder field carriages with implements, complete	26
Gun metal for the fabrication of brass field artillery, pounds	7, 718

EXPENDITURES.

Amount paid for arms, &c., procured	\$184, 278 65
Amount paid for inspection, packing boxes, storage, and distribution of the arms, &c., to the several States and Territories	6, 260 71
Total	190, 539 36

GEO. BOMFORD, *Colonel of Ordnance.*ORDNANCE OFFICE, *Washington, November 18, 1834.*

E.

Apportionment of arms to the militia for the year 1833, under the act of 1808, for arming and equipping the whole body of the militia.

States and Territories.	Date of return.	Number of militia.	No. of arms apportioned in muskets.
Maine	1833	39, 604	444
New Hampshire	1833	28, 025	315
Massachusetts	1833	44, 973	505
Connecticut	1834	24, 786	278
Rhode Island	1832	5, 950	67
Vermont	1824	25, 581	287
New York	1832	186, 223	2, 090
New Jersey	1829	39, 171	440
Pennsylvania	1834	202, 281	2, 270
Delaware	1827	9, 229	104
Maryland	1833	46, 899	526
Virginia	1833	102, 119	1, 146
North Carolina	1833	68, 498	769
South Carolina	1833	51, 112	573
Georgia	1831	42, 832	480
Kentucky	1833	65, 208	732
Tennessee	1832	72, 991	819
Ohio	1834	134, 164	1, 505
Louisiana	1830	14, 808	166
Indiana	1833	53, 913	605
Mississippi	1830	13, 724	154
Illinois	1831	27, 386	307
Alabama	1829	22, 446	252
Missouri	1830	5, 326	60
Michigan	1831	5, 476	60
Arkansas	1825	2, 028	23
Florida	1831	827	9
District of Columbia	1832	1, 249	14
Total		1, 336, 829	1, 500

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 18, 1834.*

F.

Statement of the ordnance and ordnance stores distributed to the militia under the act of April, 1808, from the 1st October, 1833, to the 30th September, 1834.

	Equal in value to muskets.
73 six-pounder iron cannon and carriages, with equipments, &c., complete	2, 246
70 percussion cannon locks	50
1, 010 muskets, complete	1, 010
300 rifles	369
1 Hall's patent carbine	1
1, 100 pistols	676
550 sabres	253
201 artillery swords	65
300 sets rifle accoutrements	70
450 sabre belts, white leather	33
400 sabre belts, black leather	21
1, 100 pair holsters	253
1, 310 sets infantry accoutrements, black leather	251
600 sets infantry accoutrements, white leather	131
500 artillery sword belts	48
1, 250 cavalry cartridge-boxes	60
Total	5, 544

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 18, 1834.*

G.

Statement of the artillery, small arms, accoutrements, and other ordnance stores, issued to the troops from October 1, 1833, to September 30, 1834.

CLASS 1.		CLASS 8.	
4-pounder brass cannon.....	2	Cannon powder.....pounds..	9,700
24-pounder iron cannon.....	4	Musket powder.....do....	2,930
12-pounder iron cannon.....	2	Rifle powder.....do....	829
6-pounder iron cannon.....	9	Mealed powder.....do....	100
24-pounder iron howitzers.....	2	Refined nitre.....do....	150
12-pounder iron howitzers.....	2	Crude sulphur.....do....	100
10-inch iron sea-coast mortars.....	3	Flannel cartridges.....	400
10-inch iron siege mortars.....	2	Cartridge bags.....	5,120
CLASS 2.		Musket ball cartridges.....	32,500
24-pounder casemate carriages, with im- plements complete.....	3	Musket blank cartridges.....	48,000
24-pounder barbette carriages, with im- plements complete.....	1	Musket ball and buckshot cartridges....	48,000
6-pounder field carriages, with imple- ments complete.....	10	Percussion carbine ball cartridges.....	112,500
4-pounder field carriages, with imple- ments complete.....	2	Pistol ball cartridges.....	112,500
10-inch sea-coast mortar beds, wood....	2	Cannon cartridge, musket cartridge, and wrapping paper.....	354
10-inch siege mortar beds, wood.....	2	Priming tubes, filled.....	5,140
6-pounder caissons.....	3	Percussion primers.....	200
4-pounder caissons.....	2	Portfires.....	490
Travelling forges, with implements com- plete.....	2	Slowmatch, pounds.....	197
CLASS 3.		CLASS 9.	
Sponges and rammers.....	12	Elevating handspikes.....	48
Sponges.....	179	Main springs.....	36
Ladles and worms.....	1	Hammer springs.....	26
Tompions.....	5	Battery springs.....	10
Aprons.....	1	Sear springs.....	10
Sponge covers.....	3	Tumbler screws.....	10
Tar buckets.....	1	Cock pins.....	16
Gunners' calipers.....	3	Small lock pins.....	10
Tarpaulings.....	14	Hammer pins.....	6
Sets of artillery harness.....	20	CLASS 10.	
Artillery saddles.....	4	Scales and weights.....	1
Sponge buckets.....	1	Hand cart.....	1
CLASS 4.		Casemate gin.....	1
24-pounder cannon balls.....	50	MISCELLANEOUS.	
12-pounder cannon balls.....	900	Cotton yarn.....pounds..	5
6-pounder cannon balls.....	1,700	Flannel.....yards..	500
24-pounder shells.....	900	Twine.....pounds..	38
12-pounder shells.....	800	Flax.....do....	20
CLASS 5.		Cartridge thread.....do....	10
4-pounder strapped shot.....	200	Chalk.....do....	5
6-pounder strapped shot, fixed.....	100	Glue.....do....	10
6-pounder canister shot, fixed.....	100	Lead, pig.....do....	1,500
4-pounder canister shot.....	12	Brass wire.....do....	6
CLASS 6.		Sandpaper.....quires...	1
Muskets, complete.....	16	Padlocks.....	4
Carbines, (Hall's).....	750	Antimony.....pounds..	50
Pistols.....	750	Beeswax.....do....	30
Cavalry sabres.....	750	Rosin.....do....	100
New artillery swords.....	645	Refined whiskey.....gallons..	10
Cadet swords.....	40	Lampblack.....pounds..	3
CLASS 7.		Lead, white, dry.....do....	28
Cartridge-box belts.....	14	Lead, white, ground in oil.....do....	100
Sets of infantry accoutrements.....	204	Black lead.....do....	10
Cartridge-boxes.....	1	Litharge.....do....	34
Bayonet scabbards.....	8	Lacquer.....gallons..	3½
Bayonet scabbards for cadet muskets....	100	Pit coal tar.....do....	2
Brushes and picks.....	32	Oil, linseed.....do....	12
New artillery sword belts.....	645	Putty.....pounds..	6
Sets accoutrements for the dragoons....	750	Paint, mixed.....gallons..	4
Wipers.....	7	Spirits of turpentine.....do....	5
Belt plates.....	14	Compasses.....	2
Musket flints.....	12,400	Files.....	24
		Iron pots.....	2
		Squares, iron.....	2
		Brushes.....	8
		Copper pans.....	3
		Crucibles.....	2
		Wooden and earthen pans.....	24
		Laboratory knives.....	12
		Rocket gimlets.....	1
		Tin funnels.....	3

H.

Statement, in abstract, of the operations of the United States lead mines in the vicinity of Fever river, from September 30, 1833, to September 30, 1834.

Pounds of lead made during the year.....	7, 971, 579
Pounds of lead which have accrued as rent the present year.....	452, 792
Pounds of rent lead remaining due September 30, 1833.....	211, 094
Total of rent lead due.....	663, 886
Pounds of rent lead received in the year ending September 30, 1834.....	335, 084
Pounds of lead remaining due September 30, 1834.....	328, 802

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 18, 1834.*

I.

Statement of the lead made annually at the United States lead mines from the year 1821, when their superintendence was transferred from the Treasury to the War Department, to September 30, 1834.

Periods.	Fever river.	Missouri.	Total.
Lead made from 1821 to September 30, 1823.....	335, 130		335, 130
Lead made in the year ending September 30, 1824.....	175, 220		175, 220
Do.....do.....do.....1825.....	664, 530	386, 590	1, 051, 120
Do.....do.....do.....1826.....	958, 842	1, 374, 962	2, 333, 804
Do.....do.....do.....1827.....	5, 182, 180	910, 380	6, 092, 560
Do.....do.....do.....1828.....	11, 105, 810	1, 205, 920	12, 311, 730
Do.....do.....do.....1829.....	13, 343, 150	1, 198, 160	14, 541, 310
Do.....do.....do.....1830.....	8, 323, 998	8, 060	8, 332, 058
Do.....do.....do.....1831.....	6, 381, 900	67, 180	6, 449, 080
Do.....do.....do.....1832.....	4, 281, 876		4, 281, 876
Do.....do.....do.....1833.....	7, 941, 792		7, 941, 792
Do.....do.....do.....1834.....	7, 971, 579		7, 971, 579
Total.....	66, 666, 067	5, 151, 252	71, 817, 319

NOTE.—The total amount of rent lead accruing for the above period is 5, 669, 631 pounds.

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 18, 1834.*

No. 8.

REPORT OF THE SURGEON GENERAL.

SURGEON GENERAL'S OFFICE, *November 20, 1834.*

SIR: In compliance with the instructions of the department of the 15th of August, I have to report that there has been transmitted to the acting apothecary at New York during the three first quarters of the current year \$9,600, and that the amount for which accounts have been rendered for settlement by him during that period is \$8,918 26. The whole amount of accounts rendered for settlement during this period was \$25,369 56; of which \$10,564 67 were for the payment of private physicians, and \$14,804 89 for medical supplies.

Very respectfully, your obedient servant,

JOS. LOVELL, *Surgeon General.*

Hon. LEWIS CASS, *Secretary of War.*

No. 9.

REPORT OF THE COMMISSARY GENERAL OF PURCHASES.

COMMISSARY GENERAL'S OFFICE, *Philadelphia, October 28, 1834.*

SIR: In obedience to instructions communicated in a letter dated on the 18th of October, from the Acting Secretary of War, I have prepared, and have now the honor of enclosing, my moneyed estimate for 1835, marked A and B, as follows, viz:

A. For clothing, camp equipage, &c., for one year, ending 31st October, 1836.....	\$162, 387 85
B. For the expenses of the Commissary General's office during the year 1835.....	7, 050 00
Total.....	169, 437 85

No. 3.

Statement of moneys received and disbursed during the first three quarters of 1834 on account of the appropriation for the regiment of United States dragoons, for clothing, equipments, &c.

To amount of moneys drawn from the Treasury Department, say warrant No. 2944, received January 20, 1834.....	\$8,000 00
By amount expended during the first quarter of 1834, passed to the credit of the commissary general of purchases on settlement by the Second Auditor of the Treasury Department..	12,494 08
Balance reported on settlement in favor of the commissary general of purchases April 1, 1834..	<u>4,494 08</u>

COMMISSARY GENERAL'S OFFICE, Philadelphia, October 28, 1834.

C. IRVINE, Commissary General of Purchases.

Hon. LEWIS CASS, Secretary of War.

No. 4.

Statement of moneys received and disbursed during the first three quarters of 1834 on account of contingencies of the War Department.

To amount of moneys drawn from the Treasury Department, say warrant No. 4571, received August 29, 1834.....	\$522 18
By amount paid the collector of Passyunk township, in full for taxes assessed on the United States arsenal for the year 1834.....	<u>522 18</u>

COMMISSARY GENERAL'S OFFICE, Philadelphia, October 28, 1834.

C. IRVINE, Commissary General of Purchases.

Hon. LEWIS CASS, Secretary of War.

No. 5.

Comparative statement of the cost of clothing, &c., for the United States army during the years 1833, 1834, and 1835.

Garments, &c.	Prices 1833.	Prices 1834.	Prices 1835.
Forage caps, artillery and infantry.....	\$0 75	\$0 75	\$0 80
Forage caps, dragoons.....	87½	87½	80
Uniform caps, artillery and infantry, with metal equipments.....	2 72	2 72	2 25
Uniform caps, dragoons, with metal equipments.....	2 78	3 56	2 40
Epaulets for non-commissioned staff, pair.....	2 37½	2 37½	2 37½
Epaulets for corporals, pair.....	1 10	1 10	1 00
Epaulets for sergeants, pair.....	1 30	1 30	1 00
Shoulder knots, pair.....	60	60	50
Aiguillettes, each.....	1 40	1 40	1 25
Sashes, each.....	2 25	2 25	2 12½
Pompons for non-commissioned staff.....	37½	37½	37½
Pompons for artillery.....	20	23	22
Pompons for infantry.....	20	20	20
Woollen overalls, sky-blue, sergeants'.....	3 07½	3 07½	3 20½
Woollen overalls, sky-blue, privates'.....	2 75½	2 75½	2 84¾
Drilling overalls, privates'.....	61½	61½	63¼
Drilling overalls, sergeants'.....	84½	84½	76¾
Infantry sergeants' drilling jackets, with sleeves.....	1 01	1 01	89
Infantry privates' drilling jackets, with sleeves.....	75	75	73½
Artillery privates' drilling jackets, with sleeves.....	80	80	78¾
Artillery sergeants' drilling jackets, with sleeves.....	1 06	1 06	94¼
Artillery sky-blue cloth jackets, with sleeves.....	3 12½	3 12½	3 23½
Infantry sky-blue cloth jackets, with sleeves.....	3 06¼	3 07½	3 15¾
Cotton shirts, privates'.....	51	51	43½
Cotton shirts, sergeants'.....	64½	64½	62½
Flannel shirts.....	1 29	1 29	1 15½
Canton flannel drawers.....	60	60	52¾
Laced bootees, pair.....	1 50	1 50	1 47
Stockings, pair.....	35½	35½	35½
Blankets.....	2 87½	3 00	3 00
Great coats, sky-blue cloth.....	7 93¾	7 93¾	8 17¾
Leather stocks.....	15	15	14
Knapsacks.....	1 60	1 60	1 55

No. 5.—*Comparative statement of the cost of clothing, &c., for the United States army during the years 1833, 1834, and 1835.*—Continued.

Garments, &c.	Prices 1833.	Prices 1834.	Prices 1835.
Haversacks	\$0 25 $\frac{3}{4}$	\$0 25 $\frac{3}{4}$	\$0 25 $\frac{3}{4}$
Infantry sergeants', corporals', and privates' coats.....	7 66	7 04	6 61
Infantry musicians' coats	8 50	7 80	8 13 $\frac{5}{8}$
Infantry principal musicians' coats	10 31	9 61	9 90 $\frac{5}{8}$
Infantry sergeant majors' and quartermaster sergeants' coats	9 30	8 68	8 37 $\frac{7}{8}$
Artillery sergeants', corporals', and privates' coats.....	7 82	7 20	6 92 $\frac{3}{8}$
Artillery musicians' coats	8 83	8 13	8 28 $\frac{3}{8}$
Artillery sergeant majors' and quartermaster sergeants' coats.....	10 13	9 51	9 08 $\frac{7}{8}$
Dragoon privates' cloth jackets .....	.....	4 99	4 79 $\frac{3}{4}$
Dragoon privates' woollen overalls.....	4 03	4 03	4 16 $\frac{1}{4}$
Dragoon sergeants' woollen overalls.....	4 20	4 20	4 41 $\frac{7}{8}$
Dragoon privates' cotton overalls.....	1 11	1 11	1 01 $\frac{7}{8}$
Dragoon sergeants' cotton overalls.....	1 40	1 40	1 23
Dragoon sergeants' cloth jackets .....	.....	4 99	4 37 $\frac{3}{4}$
Dragoon privates' cotton jackets.....	.....	89	86 $\frac{3}{4}$
Dragoon sergeants' cotton jackets .....	.....	1 15 $\frac{1}{2}$	1 02
Dragoon sergeant majors' coats.....	.....	8 44	7 27
Dragoon privates' and corporals' coats .....	.....	7 27 $\frac{1}{2}$	6 62
Dragoon musicians' coats .....	.....	7 80	8 14 $\frac{3}{8}$
Dragoon principal musicians' coats.....	.....	8 81	8 79 $\frac{3}{8}$
Dragoon great coats	9 44	9 44	10 22 $\frac{1}{2}$
Dragoon shoulder knots, brass	97	97	94
Dragoon sergeants' coats .....	.....	7 31	6 62

COMMISSARY GENERAL'S OFFICE, *Philadelphia, October 23, 1834.*

G. IRVINE, *Commissary General of Purchases.*

Hon. LEWIS CASS, *Secretary of War.*

No. 6.

Statement of the cost of clothing, &c., for the United States army during the year 1835.

Forage cap, artillery, and infantry	\$0 80
Forage cap, dragoons'	80
Uniform cap, artillery, and infantry, with metal equipments	2 25
Uniform cap, dragoons'	2 40
Epaulets for non-commissioned staff, pair	2 37 $\frac{1}{2}$
Epaulets for corporals, pair	1 00
Epaulets for sergeants, pair	1 00
Shoulder straps	50
Aiguillettes, each	1 25
Sashes, each	2 12 $\frac{1}{2}$
Pompons for non-commissioned staff	37 $\frac{1}{2}$
Pompons for artillery	22
Pompons for infantry	20
Woollen overalls, sky-blue, sergeants'	3 20 $\frac{1}{4}$
Woollen overalls, sky-blue, privates'	2 84
Drilling overalls, privates'	63 $\frac{1}{4}$
Drilling overalls, sergeants'	76 $\frac{3}{4}$
Infantry sergeants' drilling jackets, with sleeves	89
Infantry privates' drilling jackets, with sleeves	73 $\frac{1}{2}$
Artillery privates' drilling jackets, with sleeves	78 $\frac{3}{4}$
Artillery sergeants' drilling jackets, with sleeves	94
Artillery sky-blue cloth jackets, with sleeves	3 23 $\frac{1}{4}$
Infantry sky-blue cloth jackets, with sleeves	3 15 $\frac{3}{4}$
Cotton shirts, privates'	43 $\frac{1}{2}$
Cotton shirts, sergeants'	62 $\frac{1}{2}$
Flannel shirts	1 15 $\frac{1}{2}$
Canton flannel drawers	52 $\frac{3}{4}$
Laced bootees, pair	1 47
Stockings, pair	35 $\frac{1}{2}$
Blankets	3 00
Great coats, sky-blue cloth	8 17 $\frac{7}{8}$
Leather stock	14
Knapsack	1 55
Haversack	25 $\frac{3}{4}$
Infantry sergeants', corporals', and privates' coats.....	6 61
Infantry musicians' coats	8 13 $\frac{5}{8}$
Infantry principal musicians' coats	9 90 $\frac{5}{8}$

Infantry sergeant majors' and quartermaster sergeants' coats.....	\$8 37 ⁷ / ₈
Artillery sergeants', corporals', and privates' coats.....	6 92 ³ / ₄
Artillery musicians' coats.....	8 28 ³ / ₄
Artillery sergeant majors' and quartermaster sergeants' coats.....	9 08 ⁷ / ₈
Dragoon cloth jackets, privates'.....	4 79 ³ / ₄
Dragoon cloth jackets, sergeants'.....	4 87 ³ / ₄
Dragoon privates' woollen overalls.....	4 16 ¹ / ₄
Dragoon sergeants' woollen overalls.....	4 41 ⁷ / ₈
Dragoon privates' cotton overalls.....	1 01 ⁷ / ₈
Dragoon sergeants' cotton overalls.....	1 23
Dragoon privates' cotton jackets.....	86 ¹ / ₂
Dragoon sergeants' cotton jackets.....	1 02
Dragoon sergeant majors' coats.....	7 27
Dragoon privates' and corporals' coats.....	6 62
Dragoon musicians' coats.....	8 14 ³ / ₈
Dragoon principal musicians' coats.....	8 79 ³ / ₈
Dragoon greatcoat.....	10 22 ¹ / ₂
Dragoon shoulder knots, brass.....	94
Dragoon sergeants' coats.....	6 62

COMMISSARY GENERAL'S OFFICE, *Philadelphia*, October 28, 1834.

C. IRVINE, *Commissary General of Purchases*.

Hon. LEWIS CASS, *Secretary of War*.

No. 10.

REPORT FROM THE CLOTHING BUREAU.

CLOTHING BUREAU, *Washington*, November 28, 1834.

Sir: I have the honor to report that the clothing and equipage for the army has been procured at prices averaging two and one-half per cent. less than the last year, and have been forwarded to the several military posts in good season.

The clothing furnished for the army for this and the past year is of superior quality to any which has been supplied within the last twenty years; and, as far as information has reached this bureau, gives general satisfaction.

The commissary general of purchases has invited proposals for the supply of clothing and equipage for the ensuing year at a much earlier date than usual, and has allowed greater time for the fulfilment of contracts, thus opening a wider field for competition, which will undoubtedly have the effect still further to reduce the cost of supplies.

The issue of the old pattern clothing, in obedience to an order from the War Department, dated July 23, 1834, has had the effect to leave in the hands of company officers a partial supply of the new uniform, and in the possession of the commissary general of purchases a large supply of clothing materials, applicable to the issues of the ensuing year. Previously to the date of the order referred to, a portion of the old pattern clothing had been sold, and the amount, \$3,378 64, placed to the credit of the surplus fund.

Most respectfully, sir, your obedient servant,

JNO. GARLAND, *Major United States Army*.

Hon. LEWIS CASS, *Secretary of War*.

23D CONGRESS.]

No. 586.

[2D SESSION.]

ON GRANTING TO A RAILROAD COMPANY THE RIGHT OF WAY OVER THE GROUNDS OF THE ARMORY AT HARPER'S FERRY, VIRGINIA.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 12, 1834.

Mr. THOMSON, of Ohio, from the Committee on Military Affairs, to whom was referred the resolution of the House of Representatives of the 9th instant, embracing so much of the report of the Secretary of War as relates to the joint resolution of Congress, passed at the last session, providing for the construction of a railroad through the public grounds at Harper's Ferry, reported:

That the committee have examined the subject referred to them, and find that the Winchester and Potomac Railroad Company could not make the contemplated railroad without passing through the ground belonging to the United States, which had some small improvements erected thereon, and which, on an examination made by officers appointed by the proper authority for that purpose, may amount to about \$480; there are some other buildings on the line of the railroad, as now located, such as smoke-houses, sheds, &c., of little value, which can be removed with but little expense. The committee being of opinion that the completing of the Winchester and Potomac railroad, and forming a junction with the Baltimore and Ohio railroad at Harper's Ferry, is an affair in which the public feel a great interest, and that it is an undertaking which deserves every fair encouragement, recommend the passage of the accompanying joint resolution, as amendatory to the one passed at the last session.—(See antecedent document No. 581.)

23D CONGRESS.]

No. 587.

[2D SESSION.]

ON INCREASING THE NUMBER OF PAYMASTERS OF THE ARMY.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 16, 1834.

Mr. RICHARD M. JOHNSON, from the Committee on Military Affairs, to whom was referred so much of the President's message as relates to the report of the Secretary of War, and the public interest intrusted to the War Department, having had such of the documents accompanying the report of the Secretary of War as relate to the Pay department under consideration, reported:

That it appears, from the statement of the paymaster general, that when the military establishment was reduced in 1821, fourteen paymasters were retained, and were not more than sufficient to pay the army, as then organized and stationed, as often as the law requires. That, since the passage of the act of 1821, seven hundred additional troops have been added to the army; the military posts are more numerous and extended, and the disbursements of the Pay department increased half a million of dollars. That, at the time the law provided for fourteen paymasters, they were only required and expected to pay the regular troops, but, by a subsequent act, it is now made their duty to pay all the militia called into service; and that, in consequence of the great duty imposed on paymasters, it is impracticable for the present number to pay the troops as frequently as the law, the necessity of the troops, and the interest of the service require.

The committee have ascertained from the Secretary of War that he concurs fully in the statement and opinion of the paymaster general, and recommends that provision be made by law for the appointment of three additional paymasters, and that paymasters be authorized to employ citizens as clerks, with salaries not to exceed five hundred dollars per annum, when suitable non-commissioned officers or soldiers cannot be obtained from the line of the army.

After maturely considering the subject, the committee are of opinion that, under the present organization of the Pay department, it is impracticable to have the troops paid as frequently as the good of the service or the law requires, and report a bill to amend it.

23D CONGRESS.]

No. 588.

[2D SESSION.]

ON INCREASING THE NUMBER OF OFFICERS OF THE CORPS OF ENGINEERS OF THE ARMY.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 16, 1834.

Mr. RICHARD M. JOHNSON, from the Committee on Military Affairs, to whom was referred that part of the President's message relating to an increase of the corps of engineers, reported:

That, having given the subject due consideration, they recommend to the House a concurrence in the suggestions of the President and Secretary of War. This useful corps of officers was established on its present footing, as to numbers, more than twenty years ago, just at the commencement of a war, a time when its organization as a military corps for service in the field was, no doubt, chiefly regarded; and when the extended calls for its services, even in a strictly military character, in preparing the permanent means of defence of our frontiers, although they may have been in some measure anticipated, could not have influenced the government in establishing, at that time, the number of its officers. Hence, as might have been expected, that force of the corps, as then arranged, has been found quite inadequate to the discharge of the numerous duties which have devolved on it; and as the evils incident on this state of things increase with time, the committee are of opinion that no further delay should occur in applying the only remedy which the case admits of. The evils here alluded to have been repeatedly set forth in the executive communications to Congress, and the necessity of removing them often urged from the same quarter. It is therefore only necessary for the committee to recall, in a general way, the attention of the House to this subject.

The principal military duties which by law and usage devolve on the corps of engineers in time of peace relate to the construction and preservation of permanent fortifications, and to the care of the Military Academy. An examination of the subject has satisfied the committee that the corps, in its present force, is insufficient even for the discharge of the services required of them under the first of these heads alone, as their numbers would scarcely admit, without any allowance for casualties, of placing one officer at each post; this will be seen by a reference to the chief engineer's report at the commencement of the present session.

By the laws of 1802 and 1812 the corps of engineers constitutes the Military Academy, and its officers are therefore, in strictness, responsible under the law for the government and improvement of that institution on which, at present, the character of the whole military establishment greatly depends; but such have been, and are, the demands for their services in other places that, to meet this responsibility, it has not been possible for many years to devote to this important object the services of more than one or two junior officers in addition to the superintendent; in consequence of which, also, is the neglect of the object contemplated by the institution of the academy, that of allowing to the officers of engineers opportunities of improving themselves in the knowledge of a profession, a perfect acquaintance with which requires constant study and reflection.

But whilst the number of officers is inadequate, as has been shown, to the proper discharge of their

military duties, the measures of the general government in relation to national internal improvements have created a class of new and most important duties, most of which, for the want of an organized corps of civil engineers, fall to the lot of the same body of officers, the laws having, in some of the most important cases, assigned the charge of such works to officers of the corps of engineers. The chief engineer's report of this year contains a list of fifty-six works of this character, the execution of which, involving an expenditure, during the year, of nearly one million and a half of dollars, has been assigned to the Engineer department. The committee conceive that the statement of this fact alone is sufficient to show that the President's recommendation of an increase of this corps is sustained by a regard to the interests of the country generally, and by the considerations of justice to a body of officers who are held responsible for the performance of services which it is impossible for them to render.

In view of these facts, the committee have inquired into the manner in which these services have been performed for several years past; and the result of their inquiries has tended to strengthen the opinion in favor of increasing the corps of engineers. They find, for example, that, at the close of the last fiscal year, large sums of money, appropriated for works of internal improvement, remained undrawn from the treasury, and the public service was necessarily postponed on account of the difficulty of finding persons to whom the management of works might be safely intrusted; and in the direction of many works, which it was impossible to assign to officers of the corps of engineers, officers temporarily detailed from other arms of service, or, in most cases, persons unconnected with the military establishment, and unaccustomed both to military control and to scientific operations, have been employed; and although, in many instances, especially of works under the direction of officers detailed from the line of the army, favorable testimony is borne as to the manner in which the duties have been discharged, yet it is no disparagement to these officers, or to persons who have not, like them, enjoyed the advantages of a strictly professional education, to assert that such works would be conducted with much greater advantage to the public by men whose stations and duties had been of a nature to add the benefits of experience and reflection to those of a proper education; added to which is the consideration of the greater interest which will always be felt in the discharge of duty by men whose standing and professional reputation depend *solely* on the zeal and ability they may display.

Documents placed on the table of the House during the last and present session support this opinion by showing that, in a short time, the operations on that important work, the national road, which have been placed, in pursuance of law, under the directions of engineer officers, have been retrieved from the disorder into which they were thrown, and the further waste of public money averted; and many members of Congress can, it is believed, bear testimony to the improved results obtained under the new direction—an improvement which may be anticipated in other similar works, should the means be afforded of extending to them a like superintendence.

In another way, also, the committee are satisfied that economy will be consulted by adopting the proposed measure, for the rate of wages to persons temporarily engaged for any service is necessarily much higher than that of salaries paid to those who have a fixed profession and a prospect of gradual advancement.

The committee are of opinion that, notwithstanding the demand for officers of the class in question, more injury than benefit might result from an immediate increase of the corps to the strength proposed to be finally given to it, as it is by application in early life that the science necessary for an accomplished engineer can be best attained; and with a view to the formation of an efficient corps, it is proposed to make the increase gradual, extending it through several years.

The committee therefore recommend to the House the adoption of the accompanying bill, drawn up in accordance with the principles here stated. They refer to document marked A as a part of this report.

A.

Extracts of communications of the Secretaries of War, made to Congress at different periods, in reference to the increase of the corps of engineers, showing the necessity of the recommended increase, and the footing on which it should be placed in regard to pay and emolument. Also a statement of the duties which have devolved on each officer of the corps of engineers during the year 1834.

Extract from a communication from the Secretary of War to the chairman of the Committee on Military Affairs, dated December 24, 1828.

The communication from this department to the chairman of the Committee on Military Affairs of the House of Representatives, dated January 10, 1826, sets forth so fully and clearly the expediency of increasing the number and pay of the officers of the corps of engineers that it is deemed almost unnecessary to say anything further concerning these points; I therefore refer the committee to that communication, which will be found in document No. 36 of the 1st session of the 19th Congress. It may be proper here to remark that the increase in the number of objects, both for fortifications and works of internal improvement, which have been conducted under the direction of the Engineer department since the date of the communication alluded to, calls still more imperiously for an increase in the number of officers of the corps of engineers, in order that all public constructions of the above character may be placed under the superintendence of those who are competent to direct them, and personally responsible to the government for the proper conduct of their operations. And, in addition to the strong reasons set forth in the same communication for increasing the pay of the officers of that corps, it may not be improper to state to the committee that, although the nature of their duties assimilates them to staff officers in point of responsibility and expenses, they not only receive inferior pay to those officers, but are rendered, by the very nature of these duties, ineligible to staff appointments which are held by officers of other arms of the service.

In the second section of the bill reported by the committee, and which accompanied the document above referred to, I would recommend an amendment, the justice of which will immediately occur to the committee; it is to place the captains on the same footing with regard to rations as the other captains of the army under the act of the 2d of March, 1827; the bill, unless so amended, will, in its operation, entitle the lieutenants to receive a greater number of rations than the captains.

I beg also to renew the recommendation heretofore made by this department, that the privilege of franking should be extended to the chief engineer, by which means delays in the despatch of business would be avoided, and the expenses of the Engineer department diminished; as many of its correspondents, through ignorance or inadvertence, address their communications and packets to the chief engineer directly, thereby frequently charging the contingent fund of that department with a heavy postage.

Extract from a communication from the chief engineer to the Secretary of War, dated November 18, 1829.

The establishment of this corps dates from the year 1794, at which time it was, however, connected with the artillery, under the denomination of the "corps of artillerists and engineers." On fixing the peace establishment in 1802, a separate corps, consisting of sixteen officers, was organized, which, having been found insufficient for the service, was increased in 1812 to include six additional officers, making a force of twenty-two, which has constituted the corps up to this time. Whether this number is adequate to the present wants of the service, will appear by a reference to the annual report, in which nearly all the operations enumerated under the heads of fortifications and civil constructions, as well as several of the surveys, are conducted by the officers of the corps of engineers; this will more clearly be seen by an inspection of the accompanying statement, exhibiting the duties in which they were engaged during the past year. This want of officers is not now felt for the first time, but has for several years past been the subject of communications to the Secretary of War, and to the Military Committees of Congress, by both of whom the required increase has been several times recommended, though the subject has never yet been discussed in either branch of the national legislature. A reference to the proceedings of Congress since the 1st session of the 19th Congress, and especially to the Secretary of War's letter to the Military Committee of the 10th of January, 1826, (Doc. No. 153 of the House of Representatives, 1st session 19th Congress,) will show the views which have been entertained on this subject by the War Department, and the progressive increase of duties gives additional force to the arguments then advanced in favor of the proposed measure. The advantage of having these duties performed by officers educated for, and permanently attached to, the corps of engineers, instead of by those temporarily detailed from other corps, or by persons not attached to the military service, engaged under the pressure of the moment, is too obvious to require further illustration.

The organization proposed is that recommended by the Military Committee of the Senate in the bill reported by them last February, a copy of which accompanies this letter. The number of officers to be added is barely sufficient for the discharge of their duties. With regard to the increase of pay, which is also proposed in the bill referred to, the measure is founded on justice and the usage of other services. The duties of engineers in all armies are considered of the highest order of military service, and as such they are specially recognized by our 63d article of war; but in our army alone, I believe, is this acknowledgment unattended with that demonstration of it which leads government to attach a higher emolument to a more elevated branch of service, not with a view of rendering, by pecuniary considerations, that station more desirable, which is, by such acknowledgment, rendered highly so, but with a view to maintain the character of its officers by enabling men of suitable talent and acquirements to continue in the service, without disregarding what is due to themselves. That this remark is not without force, is proved by the fact that within three years the corps has lost, by resignation, four young officers, discouraged by the small prospect of promotion, or by the reflection that years of experience and service would still find them with emoluments even much inferior to those of officers who had entered the army at the same time with them in other corps. These considerations are further strengthened by the circumstances of additional expenses to which they are often exposed from the nature of their duties, and of their exclusion from the emolument attending staff appointments, which are mentioned in the letter above referred to.

The delay and expense which sometimes occur in conducting the correspondence of this department, for want of the franking privilege being extended to its chief, have caused the insertion of the last clause of the bill, which proposes such an extension.

Extract from a communication from the Secretary of War to Hon. A. Stevenson, Speaker of the House of Representatives, dated January 13, 1831.

In obedience to a resolution adopted by the House of Representatives on the 7th instant, calling on the Secretary of War "to inform the House whether any, and if any, what, additions are necessary to be made to the corps of military and topographical engineers, exclusively for military purposes," I have the honor to report:

With regard to the corps of engineers. In my report to the President, accompanying his message to Congress in 1829, I expressed a concurrence in the opinion which has been urged for years past by this department, of the necessity for increasing the number of officers in this corps. The advantages which might result from such an increase, in the construction of fortifications and other works of general improvement, were not lost sight of.

The recommendation, however, had reference mainly to such an organization as it was believed would tend to greater economy and efficiency in the discharge of the military duties of the corps in time of peace.

The necessity of an increase of their number is illustrated by the fact that whilst every officer of the corps is now on duty, and but three of them employed in other than military duties, there are only four of the fortifications under construction, in the direction of which the superintending engineer is assisted by any officer of the corps; the necessity for such assistance in preparing detailed plans, and in superintending their proper execution, must be obvious to any who reflect on the varied and often complicated nature of those works. This deficiency in officers is imperfectly supplied in a few cases by an occasional and temporary detail from other corps of the army, or by the employment of citizens at high rates of compensation.

The number of officers which should be added to the corps will be regulated by considering the number of fortifications that will probably be under construction at any one time, with other duties to which the officers are liable. The table of "works projected," which accompanies the annual report from this department, will show that, in addition to those already commenced, forty-three have been planned for the Atlantic and Gulf of Mexico frontier; besides which, it will be remembered that no defences are yet projected for the extensive frontier bordering on Canada.

Referring for the present to the works required for the defence of the seaboard alone, we may suppose that about twelve or fourteen of them will be under construction or repair at one and the same time, and the number of officers requisite for their superintendence may be estimated as follows:

On the eastern Atlantic frontier, say one field officer, two captains, and four lieutenants.

Middle Atlantic frontier, one field officer, four captains, and eight lieutenants.

Southern Atlantic frontier, one field officer, two captains, and three lieutenants.

Gulf of Mexico frontier, one field officer, two captains, and four lieutenants.

To which add, at the seat of government, one field officer and one lieutenant.

Military Academy, one field officer, one captain, and two lieutenants.

Board of engineers for fortifications to meet contingencies of the service, one field officer, two captains, and two lieutenants.

Making a total of seven field officers, thirteen captains, and twenty-four lieutenants.

By such an arrangement there would be in each great division of the maritime frontier one field officer, who, besides having the immediate charge of a particular work, could act as a general inspector, and whose experience would enable him, in cases of need, to aid by his advice other officers within his district.

It is in accordance with these views that the project for an increase of the corps, heretofore presented to Congress, has been prepared.

Extract from a communication from the chief engineer to the Secretary of War, dated January 19, 1832.

In compliance with your verbal instructions of yesterday, I have the honor to hand you herewith a statement, marked 1, showing the present distribution of the officers of the corps of engineers; and, as regards the wants of the service, for an increase of their numbers, I beg to refer you to the accompanying paper, marked 2, being a copy of a communication to the House of Representatives on the subject, made in conformity to a call of that House, in which is shown the distribution to be made of them, provided the additional number asked be authorized.

As to the increase of expense by the provisions of the 1st section of the bill reported in the House of Representatives at the last session, a copy of which is also herewith submitted, it will be—

For the first year.....	\$4, 004
For the second year.....	8, 009
For the third year.....	11, 822
For the fourth year.....	15, 635
For the fifth year.....	20, 678
For the sixth year.....	25, 702
For the seventh year, and thereafter.....	32, 700

This calculation is based on the supposition that cavalry pay will be granted; should the present pay be continued, then the increase will amount only to \$19,700.

In either case, it is firmly believed that true economy would result to the government, both in saving a great part of the sums now paid to persons employed in the superintendence of public works, and still more in the more efficient and judicious application of the public funds, which would result from the employment of none but well-instructed and experienced officers, in sufficient numbers to give the proper attention to all the details of construction, which, with the present force, is almost impracticable, and consequently the quality of the workmanship depends more than it should on the intelligence and faithfulness of the mechanics employed.

About \$20,000 a year is now actually paid as compensation to the civil agents superintending public works under this department.

The bill alluded to contemplates giving cavalry pay. The reason for this is, that, as the occupation of the engineer officer usually places him in isolated situations, where the expenses of messing cannot be divided with others, as is the case at all garrisons, it appears proper on that account, as well as others, that he should be better paid. He has to perform many of his duties on horseback, such as searching the country, in the neighborhood of his operations, to obtain materials, workmen, &c.; and as the nature of his profession requires the highest order of military attainment, besides being deprived, by the wants and usage of service, of participating in the benefits of staff appointments, as aides-de-camp, quartermasters, &c., it is but reasonable that he should be compensated, in part, for the loss of these by being designated on the statute-book for the small additional emoluments allowed.

Extract from the annual report of the Secretary of War, dated November 27, 1834.

I beg leave to ask your particular attention to that part of the report of the chief engineer which recommends an addition to the number of the officers of his corps. I believe the public service requires this measure. New duties have been imposed upon the engineer corps by express acts of Congress, while in other cases it has been found necessary, by executive regulation, to require from the officers services not originally contemplated in the organization of the department. The erection of fortifications, the construction of roads, the establishment of fixed points, by astronomical observations, in boundary lines, and the improvement of harbors and rivers, are among the objects committed to the engineer officers. And I feel bound to report to you that, as far as my observation or information has extended,

their duties have been performed in the most satisfactory and exemplary manner. In scientific acquirements, and in their practical application, these officers are deserving of high commendation; and it is very desirable that their numbers should be so far augmented as to insure their personal attention to all the objects within the control of the Engineer department. This cannot now be done, and the public service suffers in consequence of it.

Duties which have devolved on each officer of the corps of engineers, during the year 1834, viz :

Colonel C. Gratiot. Charged with the affairs of the Engineer department, to which was committed the care of the Military Academy, and supervision over the operations for constructing and repairing nineteen fortifications, seventeen roads, the improvement of thirty-nine harbors and rivers, the construction of nine light-houses and beacon lights, all of which have been worked on during the year; and making observations to establish the northern boundary of the State of Ohio.

Lieutenant Colonel J. G. Totten. This officer has personally superintended the operations for the construction of Fort Adams, Rhode Island; he has, as a member of the board of engineers, assisted in projecting plans and estimates for the fortifications at Foster's bank, Pensacola harbor, the Delaware river, Long Island sound, Boston bay, and Provincetown harbor, Cape Cod; and is now engaged in revising the project for improving the navigation of the Hudson river above Hudson. He has also made estimates for removing the light-house at the end of Goat island, and inspected and supervised, in a general way, the harbor improvements on the south shores of Massachusetts bay, Massachusetts and Connecticut.

Major S. Thayer has been charged with the immediate superintendence of the works of defence and harbor improvement in Boston harbor, the inspection and general supervision of the harbor improvements at the mouths of the Kennebunk and Merrimack rivers. In addition to these duties, he has assisted, as a member of the board of engineers, in projecting plans and preparing estimates for the works enumerated above.

Major R. E. De Russey has superintended the Military Academy.

Captain J. L. Smith has been charged with the operations for constructing Fort Schuyler, and with those for repairing Castle William, Forts Columbus, Hamilton, and Lafayette, New York harbor.

Captain George Blaney has been engaged in finishing Fort Caswell, and in prosecuting the operations for the improvement of Cape Fear river, North Carolina.

Captain W. H. Chase has superintended the works for the construction of forts at Santa Rosa island and Foster's bank, Pensacola harbor; besides which, he has been charged with the inspection and general supervision of the several river and harbor improvements in Florida, Alabama, and Mississippi.

Captain R. Delafeld has superintended the repairs of the Cumberland road east of the Ohio river, the operations for rebuilding Fort Delaware, and those for improving harbors on the Delaware river.

Captain A. Talcott superintended the construction of Forts Monroe and Calhoun till June, when he proceeded to Michigan to make observations for fixing the northern boundary of the State of Ohio. He returned to Hampton Roads in August, when he was relieved from duty there, and appointed the superintendent for improving the navigation of the Hudson, and is now engaged in revising the surveys and plans made for it.

Captain W. A. Eliason was in charge of the works at Charleston harbor, South Carolina, until April, when he was relieved for the recovery of his health, which was very bad, and in November he was put on duty at Fort Calhoun.

1st Lieutenant Thomas Leslie, paymaster to the Military Academy.

1st Lieutenant C. A. Ogden superintended the works for the construction of the fort at Mobile Point, and those for improving Mobile harbor, to their completion. In compliance with the act of the last session, he was transferred from the Gulf station to that of the Cumberland road in Indiana and Illinois, the operations on which he now superintends.

1st Lieutenant H. Brewerton has superintended during the whole year the construction of the Cumberland road in Ohio.

1st Lieutenant S. Tuttle. In arrest since May last.

1st Lieutenant George Dutton, employed on the improvements at Ocracoke inlet and in finishing Fort Macon, North Carolina.

1st Lieutenant Joseph Mansfield has superintended the construction of Fort Pulaski, and the works for improving the Savannah river, Georgia.

2d Lieutenant A. H. Bowman was assigned early in the year to duty at Fort Livingston, Louisiana, from which duty he was withdrawn in the month of July to superintend, under the act of Congress, the construction of the road from opposite Memphis to St. Francis, in Arkansas. To this duty is added that of inspecting the operations for improving the navigation of Red river, Mississippi, Ohio, and Cumberland rivers.

2d Lieutenant T. S. Brown has, since April, superintended the works in Charleston harbor, South Carolina.

2d Lieutenant W. H. C. Bartlett was the assistant in the Engineer department until November, when he received the appointment of professor of natural and experimental philosophy in the Military Academy.

2d Lieutenant R. E. Lee assisted, until November, Captain Talcott in the superintendence of the works at Forts Monroe and Calhoun. He is now the assistant in the Engineer department.

2d Lieutenant A. I. Swift, assistant to Colonel Totten, at Fort Adams.

2d Lieutenant R. Parke, assistant to Colonel Thayer, at Boston.

Brevet 2d Lieutenant F. A. Smith, assistant to Colonel Thayer, at Boston.

Brevet 2d Lieutenant J. G. Barnard, assistant to Captain Smith, at New York.

Brevet 2d Lieutenant G. W. Cullum, assistant to Colonel Totten, at Fort Adams, to the mouth of November. He is now second assistant in the Engineer department.

Brevet 2d Lieutenant R. King, assistant to Captain Talcott on the works at Hampton Roads; afterwards in establishing the northern boundary of Ohio, and now in improving the Hudson.

Brevet 2d Lieutenant W. Smith, a graduate of last June, assisting Captain Talcott.

Brevet 2d Lieutenant J. Saunders, a graduate of last June, assisting Lieutenant Ogden.

NOTE.—Neither of the eight last-named officers have much professional experience; they are for that reason kept where they can most readily acquire it.

DECEMBER 4, 1834.

23D CONGRESS.]

No. 589.

[2D SESSION.]

ON THE CLAIM OF COLONEL JOHN EUGENE LEITENS DORFER, ON ACCOUNT OF MILITARY SERVICES UNDER GENERAL WILLIAM EATON AGAINST TRIPOLI IN 1805.

COMMUNICATED TO THE SENATE DECEMBER 16, 1834.

Mr. BENTON, from the Committee on Military Affairs, to whom was referred the petition of Colonel John Eugene Leitensdorfer, reported:

That the services and sufferings of the petitioner in the American cause, as set forth in his petition, are well and sufficiently proved by the evidences adduced, and seem to have been amply proven to the Congress of 1811, by which body an act was passed for his relief.

The chief question which the committee have found themselves called upon to decide is as to the sufficiency of the relief then granted; and they are of opinion that it was not sufficient.

The three hundred and twenty acres of land then granted to him, to be located west of the Mississippi, where no land office was opened for seven years afterwards, could be but an inadequate compensation for the risk and trouble of a journey from Grand Cairo to Upper Egypt in search of the exiled bashaw, Hamet Caramalli, of Tripoli; an enterprise in which the petitioner had a double danger to encounter—of death from the Turks, as a deserter to the Mamelukes under Alfi Bey, then at war with the Sublime Porte, and death from the Mamelukes, as a spy from the Turks. It also bears no proportion to the value set by the American government on the co-operation, by land, of Hamet, the exiled bashaw, with the squadron of the United States in their maritime attack upon the reigning bashaw in Tripoli. From General Eaton's journal it appears that he advanced the petitioner but fifty dollars when he set out upon his perilous expedition; being most scantily supplied with funds by the American government, and entirely penniless before he had accomplished his enterprise. It is shown that the House of Representatives, in 1811, had proposed to raise the petitioner's compensation of land to 640 acres; and the committee now recommend this to be done, by granting him an additional quantity of 320 acres, as requested in his petition.

For his military services the act of 1811 allowed the petitioner the *pay*, without emoluments, of a captain of infantry, while the act itself, which made the allowance, recognized his true rank of adjutant and inspector general; and General Eaton attests that his rank was that of colonel, and his important services, both in the march from Alexandria to Derne and in the military operations at that place; a rank not to be considered extraordinary in an officer who had served in the finest armies of Austria: had been a colonel of chasseurs at the battle of Marengo; and was chief of the staff and director of artillery to the Turkish army in Egypt when he joined the enterprise of General Eaton, and placed all his hopes of rank and fortune upon the restoration of the true sovereign, Hamet Caramalli, to the throne of Tripoli. The committee, therefore, recommend that he be paid as colonel of cavalry during the seven months that he served, deducting therefrom the amount paid as captain of infantry.

The third item of compensation is the extra pay at the time of discharge. This was not given at all in the act of 1811, though always given in the American service, and fixed at three months' pay, without emoluments, and intended to defray travelling expenses from the place of discharge to the place of residence. It is believed that no case could occur in which the commutation for travelling expenses could be more properly allowed than that of the petitioner. Induced to quit the Turkish service to enter the American; discharged on a foreign shore in the midst of victory; compelled to abandon everything—horses, tents, and baggage, and to go on board a ship at midnight and by stealth—to escape massacre at the hands of those whom he was compelled to desert; a wanderer for four years before he could get to the United States; at one time sold into slavery; at another an enlisted soldier; and arriving at last, destitute and a foreigner, in the United States, which he had fixed upon as his last asylum and home. Under such circumstances the ordinary allowance for travelling expenses would seem to be an obligation of duty upon the government of the United States.

The application for a pension preferred by the petitioner, if the pension system of the United States stood as it did at the close of the late war, would not be favored by this committee; but since so many are receiving pensions who have done so little, no reason can be perceived upon which it should be denied to one who has done and suffered so much.

To complete the view of Colonel Leitensdorfer's case, the committee have to remark that he stands before Congress in a very different point of view now from what he did in 1811. He was then an alien, and might be taken for an adventurer; he is now a citizen of the United States; married to a native American; father of a family; for twenty-two years a cultivator of the ground, near St. Louis; and during all that time an honorable and industrious man.

The committee accordingly report a bill.

To the Senate and House of Representatives of the United States of America:

The petition of John Eugene Leitensdorfer, now and for twenty-two years past an inhabitant of the Territory and now State of Missouri, respectfully shows: That in February, 1811, he presented a petition to the two houses of Congress, which is hereto annexed and made part of this petition, and shows his case up to that time; that in pursuance of that petition the honorable House of Representatives passed a bill to grant him six hundred and forty acres of land and the pay of a captain of foot for seven months; which bill received the sanction of the Senate, except for the totality of the land, which was reduced to one-half; and your petitioner, under the law then passed, received the sum of two hundred and eighty dollars in money and a warrant for three hundred and twenty acres of land, to be located west of the river Mississippi.

In that petition your petitioner stated it to be his intention to become a citizen of the United States and to devote himself to agriculture, a statement which might well be considered at the time as so many

phrases to help out his case. But time has proved that they were not phrases; for the senators and representatives from Missouri now here, General Gratiot, of the engineers, and all St. Louis, if that people were here, might attest that since twenty-two years he is an inhabitant of the village of Carondelet, near St. Louis, married to a native, father of a family, and cultivator of the ground, an orchard, garden, and a vineyard; the fruits of which he sells in the market of St. Louis with the same hands which raised them.

But late years have not been favorable. Severe winters and late frosts have checked the produce of his garden and orchard and killed his bees; and some old wounds begin again, at the age of sixty-four, to be troublesome and to render him less able to work, when increased family and diminished income render work more necessary.

What he now has to propose to your honorable body is this:

1. That the original intention of the honorable the House of Representatives be made good by granting him the remaining half of the six hundred and forty acres of land.
2. That he be allowed pay and emolument according to his actual duties and rank of adjutant and inspector, and colonel; deducting therefrom the pay of captain of foot, which he actually received.
3. That he may be placed on the pension list of the United States.

JOHN EUGENE LEITENSORFER.

WASHINGTON CITY, December 12, 1834.

To the honorable the Senate and House of Representatives of the United States in Congress assembled:

The memorial and petition of Eugene de Leitensdorfer respectfully sheweth: That your petitioner is a native of the south part of Tyrol, in Europe, near the borders of Italy.

That, in the year 1804, he was engaged as chief engineer, chief of the staff, and director of the artillery of the Turks in Grand Cairo. In this honorable and lucrative situation he was found by General Eaton, when, in search of Mahmud Bacha, the expelled Pacha of Egypt, he arrived in Egypt. The views of General Eaton in this expedition are well known to your honorable body. But it is very evident that, without any acquaintance with the rulers of Egypt, without a knowledge of the language, and without any means of influence, he must have found insuperable difficulties in every attempt to accomplish his object. He applied to your memorialist. His plan appeared difficult but practicable; should it succeed, and the rightful Bacha be placed on the throne of Tripoli, all the objects of the war, carried on by the Americans against the usurper, would be secured, and the fortune of those to whom his restoration was due, amply provided for. General Eaton did not fail to place before the view of your petitioner all the advantages which he might derive from lending him his active aid, nor did he permit your memorialist in the smallest degree to doubt that, even in case of failure, he should find in the American people the most generous reward for the sacrifice of rank and fortune, the risks of life, and the hardships he might endure in their service. Your memorialist consented. At the peril of his life he quitted the Turkish army and went to the Mamelukes, where he found the expelled Bacha, and prevailed upon him to quit their service and to throw himself upon the protection of the American general. From that moment to the capture of Derne the life of your memorialist was in perpetual danger. For his house and establishment in Alexandria, for his safe and honorable military command in the Turkish army, and the certainty of promotion in their service, he received in exchange an appointment of inspector general and chief engineer in the army of General Eaton, and the hopes and prospects of future fortune in the capture of Tripoli, and the restoration of the Bacha whose cause he had espoused.

Your memorialist leaves it to General Eaton, and those brave officers who served with him, to point out how much the attack, the capture, and the defence of Derne owed to the military experience and knowledge of your memorialist as an engineer. This conquest had scarcely been achieved when the news of peace put an end to all his prospects, and left him in the most abject state of despondence. Having contributed to maintain himself in Derne until the embarkation could be accomplished, he arrived in Syracuse, and having sacrificed all his property and all his expectations in the American cause, he resolved to go in quest of his son and embark with him for America.

Your memorialist therefore departed for the Tyrol, his native country. Passing through Dalmatia, he was known and seized at Velona by the Turks, and made a slave. He had, however, the good fortune to escape on board an English schooner, and, totally destitute, he entered as a non-commissioned officer into the foreign corps raised at Malta, in which he served nearly six months. Having obtained his discharge he returned to Sicily, from whence he made another attempt to come to America in an imperial vessel. The ship was, however, captured by a French privateer, and your petitioner stripped of every thing. By the assistance of Mr. Appleton, American consul at Leghorn, your memorialist at last finds himself in this country, safe from the dangers to which his life has been exposed, but destitute of any regular means of subsistence, without employment, and without hopes, but such as he may be permitted to place on the generosity of the American people.

Unconnected now with any nation on earth but that to which he has sacrificed all other ties—his native country conquered, his estates confiscated—your memorialist solicits such reward as his actual services may appear to merit.

Should it appear to your honorable body, from the certificates and testimonials which accompany this memorial, and to which he refers, that he is deserving of your attention, and should you think proper to assign him a portion of land or any pecuniary compensation as a reward for his services, he hopes to become not a useless citizen of this happy and flourishing country; but, by the cultivation of the vine and olive, by the production of silk, and by those other arts of agriculture in which his youth has been spent, and which are here still in their infancy, to prove substantially his gratitude.

For the truth of the account which your petitioner has given of himself, he begs leave to refer to the certificates and testimonials which accompany this petition and memorial; and your petitioner will ever pray, &c.

GIOVANNI EUGENIO LEITENSORFER.

CITY OF WASHINGTON, January 15, 1811.

ORIGINAL PETITION OF 1811.

To the honorable the Senate and House of Representatives of the United States of America in Congress assembled :

The memorial and petition of Giovanni Eugenio Leitensdorfer respectfully represents: That your petitioner is a native of the south part of Tyrol, in Europe, near the borders of Italy. That, in the year 1804, he was engaged as chief engineer, chief of the staff, and director of the artillery of the Turks in Grand Cairo. In this honorable and lucrative situation he was found by General Eaton when, in search of Mahmud Bacha, the expelled Bacha of Tripoli, he arrived in Egypt. The views of General Eaton in this expedition are well known to your honorable body; but it is very evident that, without any acquaintance with the rulers of Egypt, without a knowledge of the language, and without any means of influence, he must have found insuperable difficulties in every attempt to accomplish his object. He applied to your memorialist; his plan appeared difficult but practicable; should it succeed, and the rightful Bacha be placed on the throne of Tripoli, all the objects of the war carried on against the usurper would be secured, and the fortune of those to whom his restoration was due be amply provided for. General Eaton did not fail to place before the view of your petitioner all the advantages which he might derive from lending him his active aid; nor did he permit your memorialist in the smallest degree to doubt that, even in case of failure, he should find in the American people the most generous reward for the sacrifice of rank and fortune, the risks of life, and the hardships he might endure in their service. Your memorialist consented. At the peril of his life, he left the Turkish army and went to the Mamalukes, where he found the expelled Bacha and prevailed upon him to quit their service and to throw himself upon the protection of the American general. From that moment to the capture of Derne the life of your memorialist was in perpetual danger. For his house and establishment in Alexandria, for his safe and honorable military command in the Turkish army and the certainty of promotion in their service, he received in exchange an appointment of inspector general and chief engineer in the army of General Eaton, and the hopes and prospects of future fortune in the capture of Tripoli, and in the restoration of the Bacha whose cause he had espoused.

Your memorialist leaves it to General Eaton and those brave officers who served with him to point out how much the attack, the capture, and the defence of Derne owed to the military experience and knowledge of your memorialist as an engineer. This conquest had scarcely been achieved when the news of peace put an end to all his prospects, and left him in the most abject state of despondence. Having contributed to maintain himself in Derne until the embarkation could be accomplished, he arrived in Syracuse; and, having sacrificed all his property and all his expectations in the American cause, he resolved to go in quest of his son and embark with him for America.

Your memorialist departed for the Tyrol—his native country. Passing through Dalmatia, he was known and seized at Velona by the Turks and made a slave. He had, however, the good fortune to escape on board an English schooner; and, being totally destitute, he entered as a non-commissioned officer into the foreign corps raised at Malta, in which he served nearly six months. Having obtained his discharge, he returned to Sicily, from whence he made another attempt to come to America in an imperial vessel. The ship was, however, captured by a French privateer, and your petitioner stripped of everything. By the assistance of Mr. Appleton, American consul at Leghorn, your memorialist at last finds himself in this country, safe from the dangers to which his life has been exposed, but destitute of any regular means of subsistence—without employment and without hopes, but such as he may be permitted to place on the generosity of the American people.

Unconnected now with any nation on earth but that to which he has sacrificed all other ties—his native country conquered, his estates confiscated—your memorialist solicits such reward as his actual services may appear to merit.

Should it appear to your honorable body, from the certificates and testimonials which accompany this memorial, and to which he refers, that he is deserving of your attention, and should you think proper to assign him a portion of land or grant him any pecuniary compensation as a reward for his services, he hopes to become not a useless citizen of this happy and flourishing country; but, by the cultivation of the vine and olive, by the production of silk, and by the exercise of those other arts of agriculture in which his youth was employed, and which are here still in their infancy, to prove *substantially* his gratitude.

For the truth of the account which your petitioner has given of himself, he begs leave to refer to the certificates and testimonials which accompanied a bill from the Senate granting compensation to John Eugene Leitensdorfer; and your memorialist will ever pray, &c.

JOHN EUGENE LEITENSORFER.

CITY OF WASHINGTON, *February 1, 1811.*

Letter from General William Eaton to President Madison.

BRIMFIELD, *December 23, 1809.*

The bearer, Colonel John Eugene, of Leitensdorfer, served with me very faithfully in character of adjutant and inspector general in my expedition on the coast of Barbary, in 1805. He exhibited talents, courage, and perseverance. Before the battle of Marengo he commanded a regiment of Tyrolese *chasseurs*, He was extremely useful to us in passing the desert, and at Derne. He seeks an asylum in this country, and I hope he will find patronage.

With profound respect, I have the honor to be, your excellency's very obedient servant,

WILLIAM EATON.

His excellency the PRESIDENT of the *United States.*

SYRACUSE, *July 15, 1805.*

I certify that Colonel Genié, of Leitensdorfer, has been seven months in the service of the United States of America, in capacity of inspector general and chief engineer, with the allied forces on the coast

of Africa; passed the deserts of Lybia with them, and was extremely useful and active in the defence of Derne while in our hands; for which he merits the respect and protection of the citizens and government of the United States.

WILLIAM EATON,
U. S. Navy Agent of the several Barbary regencies, and late Commander-in-Chief of the forces at Derne.

Countersigned,

GEO. DYSON, *United States Navy Agent, Syracuse.*

CONSULATE OF THE UNITED STATES OF AMERICA.

This may certify that the within is the real handwriting of William Eaton, late navy agent for the United States, and commander of their forces at Derne, &c. In testimony whereof I have hereunto set my hand, at Lisbon, this 31st October, 1806.

W. APPLETON, *Consul.*

UNITED STATES, *Brimfield, December 23, 1809.*

The bearer, Colonel Jean Eugene, of Leitensdorfer—5 feet 9½ inches, dark complexion, hazel eyes, brown hair, and well proportioned—is the same mentioned within, and is hereby recommended to the patronage of the government of our country.

WILLIAM EATON.

Extract from the Life of General William Eaton, page 419.

“In December, 1809, he was visited by Leitensdorfer, or Eugene, the man whom he sent to Upper Egypt in search of the ex-Bashaw, and who acted as a colonel in the battle of Derne. No man ever appeared to be more gratified than General Eaton by this unexpected visit. Leitensdorfer tarried several days, then took his departure for the City of Washington, having first received from Eaton certificates of his unrewarded services, and recommendations to General Bradley, of the Senate, and other members of Congress, to enable him to substantiate and obtain his dues.”

Extract from page 424.

“The generosity of the House of Representatives was manifested by the insertion of an amendment to give him a whole section of a mile square (six hundred and forty acres) of land, instead of three hundred and twenty; but the Senate disagreed to it, and the House receded, so that his grant remained as originally introduced.”

Extract from General Eaton's Journal.

ALEXANDRIA, *February 16, 1805.*

“We arrived with the Bashaw and suite at the English cut, between Aboukir bay and Lake Mareotis, a week ago last Wednesday. The Bashaw had before come to a resolution to march by land to Derne and Bengazi; and he now moved round the lake to form his camp at the Arab's tower, about thirty miles west of the old port of Alexandria. We shall, therefore, take up our line of march through the desert of Lybia towards Derne, next Wednesday. Our party consists of five hundred men, one hundred of whom are Christians (of all nations) recruited on the spot, and employed in our service. We shall make a stand at Beruba, and wait the return of Captain Hull with supplies and reinforcements, to seize the provinces of Derne and Bengazi; for which purpose he sails for that rendezvous day after to-morrow. How glorious to see our fellow-citizens in captivity in Tripoli march in triumph from a dungeon to their tyrant's palace, and display the flag of the United States.

“Here is a ketch from Tripoli, sent with an envoy to prevent Hamet, Bashaw, from leaving Egypt; but not having the only agent which carries everything, (money,) he must return to give Joseph, Bashaw, information of the fate that awaits him. If our measures are supported, he must fly his kingdom or die.”

The expedition marched with a caravan of one hundred camels and their owners and drivers, to carry their baggage; the distance six hundred miles—a desert all the way—and water extremely scarce. Almost every day the Arabs mutined; the Christians often stood to their arms to save themselves from being robbed and murdered. At the end of fifty-six days of painful and perilous marching, in the midst of every hardship and danger, they arrived at Derne, captured it, defeated the reigning Bashaw's troops, (1st of June,) and had every prospect of marching as conquerors upon Tripoli, but peace was made with the reigning Bashaw, (4th of June,) an article inserted in it to withdraw the American forces and give no aid to the rebels at Derne. On the 13th June the United States frigate Constellation anchored before Derne, sent information of the peace, and of the necessity of General Eaton, Hamet, and his chief followers to come on board; this was effected about midnight, and the greatest precautions were necessary to conceal the movement to prevent those who came on board from being massacred by the deserted and enraged multitude left behind. The following extract from General Eaton's letter to Commodore Rogers, commanding the squadron, will give some idea of it.

General Eaton to Commodore Rogers.

"I now communicated to Hamet Bashaw the news of peace with his brother. He said he had no safety but in leaving the country with us; and even this would be impossible with him, and hazardous for us, if the project should transpire before carried into effect; despair would drive his adherents to revenge, and we must all fall victims to it. I accordingly kept up the idea of an attack on the enemy, and sent ammunition and extra rations to Moorish and Arab troops. At eight in the evening I placed patrols of marines to stop intercourse between the town and our post. In the meantime all the Constellation's boats were laid alongside our wharf. I ordered the captain of cannoniers to embark his company, and after them the Greek company. This was done in silence. When the boats were seen returning I sent a message to Hamet Bashaw. Understanding the purport of this, he immediately repaired to the fort with his retinue, (about thirty persons, including Colonel Eugene Leitensdorfer,) dismounted, and embarked in the boats. The marines followed with the American officers. When all were securely off I stepped into a small boat, and had just time to save my distance, when the shore, our camp, and the battery, were crowded with the distracted soldiery and populace; some calling on the Bashaw Hamet, some on me, some uttering shrieks, some execrations."

(A massacre took place next day among those who did not save themselves by flying to the mountains and desert.)

Extract from the treaty of peace and amity between the United States and Joseph, Bashaw of Tripoli, June 4, 1805.

"ARTICLE 3 All the forces of the United States which have been, or may be, in hostility against the Bashaw of Tripoli, in the province of Derne, or elsewhere within the dominions of said Bashaw, shall be immediately withdrawn therefrom, and no supplies shall be given by, or in behalf of, the said United States during the continuance of this peace to any of the subjects of said Bashaw, who may be in hostility against him, in any part of his dominions; and the Americans will use all means in their power to persuade the brother of said Bashaw, who has co-operated with them at Derne, &c., to withdraw from the territory of the said Bashaw of Tripoli; but they will not use force, or improper means to effect that object; and, in case he should withdraw himself as aforesaid, the Bashaw engages to deliver up to him his wife and children now in his power."

It appears by a message of Mr. Jefferson to the Senate of the United States, November 11, 1807, that, by a declaration assigned by Mr. Lear, the negotiator of this treaty, *the day after it was made*, the Bashaw was allowed four years to deliver up the wife and children of his brother, and thereby got rid of the only clause in the treaty favorable to Hamet.

Hamet Caramalli to the people of the United States.

"SYRACUSE, September 1, 1805.

"It is known to the whole world that the reigning Bashaw at Tripoli, Jussuf, obtained the throne by the murder of our father and elder brother, and by my exile, who came next in succession. Driven by his impious and cruel usurpation, I took refuge in Egypt, where I was kindly received by the Mamaluke Beys, who gave me a distinguished rank in the military service. Reposing in the security of peace, I had ceased to repine for the loss of my throne, and regretted only the lot of my unhappy subjects, doomed to the yoke of my cruel and tyrannical brother.

"It was at this epoch that the arrival of General Eaton gave me hopes of better fortune; and, though I could not tell what were his powers, I trusted to the faith of a great people, of whom he was the ostensible representative, and threw myself into his arms. With our joint followers, we had already advanced six hundred miles into the kingdom of Tripoli, and a general defection had seized my brother's army, and all things prepared the *protected* of America to be hailed sovereign of his usurped throne. At this juncture a peace is concluded, in which a throne, acquired by rapine and murder, is guaranteed to its usurper; and I, the rightful sovereign, the friend and ally of America, am left unprovided for. No article in my favor; no provision for me and my family, and no remuneration for the advantages I had foregone in trusting to American honor, I am left at Syracuse, with thirty dependents, on the pittance of two hundred dollars a month.

"In this situation I appeal to the virtue, generosity, and candor of the people, and candor of America. I trust that a brave and free nation will interest itself in behalf of a fallen prince, who had trusted to its national honor and good faith. I trust the government will take my case into consideration, and at least send me back to Egypt, indemnified for those comforts lost by uniting my fortune to theirs."

An act for the temporary relief of Hamet Caramalli.

"That the sum of two thousand four hundred dollars be, and is hereby, appropriated, to be paid out of any moneys in the treasury not otherwise appropriated, to be applied, under the direction of the President of the United States, to the immediate and temporary relief of Hamet Caramalli, ex-Bashaw of Tripoli."—(April 21, 1806; vol. 4, p. 50, Laws U. S.)

Copy of a letter from Mr. Latrobe.

WASHINGTON, January 30, 1811.

SIR: In compliance with your desire, expressed in your letter of yesterday, I cheerfully add my testimony to that of others, respecting the character of Mr. E. Leitensdorfer. Mr. E. Leitensdorfer was brought to me for the purpose of enabling him to explain his situation and his wants to Congress. He was at that time without any means of providing the common necessaries of life. I employed him in my office, in drawing and writing; and in the field, in surveying and levelling, for the Washington Canal and Turnpike Road Companies. With his history, prior to my knowledge of him, I could only be acquainted from the written testimonies in his possession, which no doubt have been all before you, and from his own information. I never had reason to hesitate as to his strict adherence to truth in those points in which I could decide on his veracity, and therefore am willing to give him credit for the truth of his account of himself throughout.

During the time of my acquaintance with him his personal conduct has been most scrupulously honorable and virtuous. Far from having any habitual vices, he is abstemious in all his enjoyments. He submits without a murmur to perform any duty, however menial, by which he can secure an independent existence; and has rigidly and perseveringly refused all gifts and subscriptions for his support. He has actually maintained himself since his arrival. As to his knowledge, it is very evident that he has had a liberal education, and is a good field engineer. He speaks several living languages, and is a good Latin scholar; with the cultivation of the vine and the management of fruit trees he is so well acquainted as to have been of singular service in the gardens of many of the inhabitants of this district. He professes, also, to understand the business of raising silk worms, and of the culture of the olive, and, in general, to be master of those branches of culture which all the nobility of Tyrol and the nobles of Italy depend upon for their incomes. To his virtuous and peaceable demeanor the inhabitants of the part of the city near the Capitol can bear unanimous testimony. I have now known him and narrowly observed him for more than a year. His conduct has been uniform, and I have no hesitation in declaring him to be a man whose principles and actions would honor any country, and whose knowledge, industry, and talents may be exceedingly serviceable to our own.

Yours, very respectfully,

HENRY LATROBE.

Hon. General BRADLEY.

"An act making compensation to John Eugene Leitensdorfer for services rendered the United States in the war with Tripoli.

"That the Secretary of War be, and he is hereby, directed to issue a land warrant to John Eugene Leitensdorfer for three hundred and twenty acres; which said warrant may, at the option of the holder or possessor, be located with any register or registers of the land offices on any of the public lands of the United States lying on the west side of the Mississippi then and there offered for sale, or may be received at the rate of two dollars per acre in payment of any such lands.

"SEC. 2. That the proper accounting officers of the treasury be, and they are hereby, directed to settle the account of John Eugene Leitensdorfer, and to allow him the pay of a captain from the 15th day of December, 1804, to the 15th day of July, 1805, being the time he served as adjutant and inspector of the forces of the United States in Egypt and on the coast of Barbary."—(*February 13, 1811. Vol. 4, page 321 of the Laws of the United States.*)

Letter from General Clark, of Missouri.

St. Louis, November 19, 1834.

The bearer hereof, Colonel Eugene Lietensdorfer, has been settled in the village of Carondelet, and in the neighborhood of the city of St. Louis, for the last twenty years; I have known him during that period, and believe him to be a high-minded, honorable man. It is known that he performed a conspicuous part in the attack upon Derne, under General Eaton, in 1805. As a cultivator of the soil he has been industrious, having necessarily to labor hard to raise and educate his children. Of late years the sickness in his family by cholera, and the entire destruction of his fruit trees by the repeated frosts for the last three years, have entirely destroyed his means of supporting himself and children.

As this gentleman has been wounded severely in the knee in the attack on Derne, it is believed that he has a just claim to assistance from the government.

WM. CLARK.

Discharge of Sergeant Eugenius Leitensdorfer from Count Froberg's regiment.

COUNT FROBERG'S REGIMENT.

Know all whom this may concern, that the bearer, Eugenius Leitensdorfer, born at Roita, in the Tyrol, aged thirty-eight years, five feet nine and a half inches high, brown complexion, dark hair and brown eyes, served in the above-mentioned regiment from December 1, 1805, to May 27, 1806, in the several capacities of corporal and sergeant, during which time he fully has deserved the esteem of his officers by his good conduct; and, on account of his procuring a substitute for himself, and in regard to his aforesaid good behaviour, is discharged from the above-mentioned regiment, and at full liberty to engage or render himself wherever he pleases.

Given under my hand and seal at Fort Recasoli, in the island of Malta, this twenty-eighth day of May, in the year of our Lord one thousand eight hundred and six.

A. SCHUMMELKETEL, *Commanding Officer.*

23D CONGRESS.]

No. 590.

[2D SESSION.]

ON MAKING FURTHER PROVISION FOR THE REPAIR OF FORT MARION AND THE SEA-WALL IN FRONT OF ST. AUGUSTINE, FLORIDA.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JANUARY 7, 1835.

Mr. THOMSON, from the Committee on Military Affairs, who were instructed to inquire into the expediency of making a further provision for repairing Fort Marion, near St. Augustine, reported:

It appears from the papers submitted to the committee that Fort Marion, sometimes called Fort St. Mark's by the Spaniards, was erected at very great expense by the Spanish government according to the most approved modern plans of fortification. That it is situated near the town of St. Augustine, and commands the entrance into the harbor from the Atlantic ocean as well as the passage through the North river from the direction of St. Mary's. It is erected upon elevated ground, and from its position commands the gate and passage over the circumvallations which surround the ancient city of St. Augustine.

This fortification was in good repair, and garrisoned with Spanish troops, at the cession of Florida to the United States. Connected with it, and extending from it to the barracks of St. Francis, was erected a sea-wall of stone to preserve the town and fort from the encroachments of the sea. Soon after the transfer of the Floridas to the United States, some subordinate officers of the government, having occasion to use stone in the construction of a wharf leading to the barracks, removed a portion for that purpose of this sea-wall, erected at great expense by the Spanish government for the preservation of the town.

In consequence of this removal of a part of this sea-wall, and the encroachments of the sea, the fortification, which stands immediately on the bank, is about to have the foundation washed from under it, and the magnificent castle precipitated into the sea.

Upon the representations of the city council, and officers, civil and military, of the United States, Congress appropriated \$20,000 to repair the fort and reconstruct the sea-wall.

A portion of this sum, it appears, has been expended by the officer in charge of the work, without any beneficial result or satisfactory report. The officer is under arrest. It is represented that this fort cost \$2,000,000, and it is also stated that the city of St. Augustine, in consequence of the breach in the sea-wall, was nearly submerged upon one occasion of a very high tide. The repairs of this fort have been commenced after a careful consideration of all these facts and circumstances by Congress, without any report of engineers, and the committee are of opinion that it does not require such report to inform the representatives of the nation that such a work ought to be repaired and preserved. Justice, too, to the inhabitants of St. Augustine, as well as the interest of the people of the United States, requires that this sea-wall shall be repaired, reconstructed, and placed in the situation that it was when Spain surrendered it to the United States. This fort may not occupy a very favorable position in the plans of maritime defence as at present presented by the United States engineers, in consequence of the depth of water on the bar of the harbor. This, in the opinion of the committee, does not constitute a sufficient reason for abandoning a work commenced under the authority of a law of the United States, especially when we see that, by the reports of the engineers, a communication is contemplated from St. John's into the head of the North river, which will make the navigation continuous for steamboats from Charleston to St. Augustine.

A proposition is also before another committee, upon the report of the engineers, to deepen the bar of St. Augustine, or cut through an island, and make that the finest harbor on the southern coast.

While these projects are in contemplation, and whilst St. Augustine continues, and will long continue, from its healthy climate, a military post, the committee conceive that this work ought to be repaired and preserved. It appears by a report of the officer, and the various papers submitted, that it can be effectually done for \$44,181 94. They therefore recommend that the chairman move to insert the following clause in the appropriation bill for fortifications:

"For the repair of Fort Marion, and the reconstruction of the sea-wall between it and the St. Francis barracks, forty-four thousand one hundred and eighty-one dollars and ninety-four cents."

WAR DEPARTMENT, *December 30, 1834.*

SIR: In compliance with the requisitions of a resolution of the House of Representatives of the 11th instant respecting the fort and sea-wall at St. Augustine, Florida, I have the honor to transmit herewith a report from the chief engineer, with sundry accompanying papers, which contain the information called for.

Very respectfully, your most obedient servant,

LEWIS CASS.

Hon. JOHN BELL, *Speaker of the House of Representatives.*

ENGINEER DEPARTMENT, *Washington, December 30, 1834.*

SIR: In compliance with the resolution of the House of Representatives of the 11th instant, I have the honor to enclose you a copy of the report of the officer charged with the repairs of Fort Marion and the construction of the sea-wall at St. Augustine, Florida, together with his estimate for the completion of the same.

This report has only been received within a few days, which will explain the delay that has occurred in complying with the directions of the House.

I am, sir, very respectfully, your obedient servant,

C. GRATIOT.

Hon. LEWIS CASS, *Secretary of War.*

Fort Marion, St. Augustine, Florida, December 8, 1834.

SIR: At the request of some of the most influential citizens of this city, I have made, and have now the honor to transmit for your consideration, estimates for the necessary repairs of Fort Marion, and plans and estimates for the completion of that part of the sea-wall commenced under an appropriation made by Congress during the session of 1832-'33, which remains unfinished, and is entirely useless until it is completed; also an estimate for its continuance in front of the city of St. Augustine, as far as the wharf in front of the public barracks, beyond which the shores of the bay of St. Augustine are not affected by the violence of the waves of the Atlantic ocean during the prevalence of the severe northerly and northeasterly gales, which occasionally elevate the tide to the height of from six to ten feet above common low water, and overflowing a greater part of the city, and in many instances have caused great damage to both public and private property.

The repairs of Fort Marion estimated for are only such as are *absolutely necessary* for the preservation of the work, and do not extend to what would be necessary for putting the fort in a state of complete repair, for which purpose an estimate to cover all the expense of all the wood-work necessary in fitting up casemates either for quarters or storehouses would be required, there having been but three out of twenty-three fitted up under the appropriation above referred to. There would also be required an estimate for a new terrace, entire, for turning off the water from the terreplein, the present having been broken up in many places, and allowing the water to pass freely through to the arches.

The part estimated for is rendered absolutely necessary, for the following reasons: On an examination of the plan herewith it will be found that one bastion front of the work rests immediately on the bay shore, the sea-wall or water-battery of which has been completely undermined by the constant attrition of the waters of the bay, and the masonry is now daily tumbling to ruins, and in two different parts the water passes freely through into the ditch of the fort, and has commenced the same destruction on the body of the fort that has been effected with the sea-wall; and should some step not be taken soon to check the encroachments of the sea the whole structure must speedily and prematurely become a pile of ruins. On the other hand, should the government cause a few thousand dollars to be judiciously expended on it, it would remain for ages a monument, and not an unworthy one, of the Spanish nation, by whom it was erected, and a memento of events ever memorable in the history of our country. And should the government at any time find it necessary for the defence of this coast, it could in a short time, and at a moderate expense, be put in a state of perfect repair and defence. All of which I have the honor to submit, with the hope that the object may meet with your favorable consideration.

I, am, sir, very respectfully, your obedient servant,

F. L. DANCY, *First Lieutenant and Agent, &c.*

General CHARLES GRATIOT.

Estimate of funds required for the repairs of Fort Marion and the re-construction of the sea-wall near the same, and its extension in front of the city of St. Augustine, Florida.

For reconstructing the sea-wall or water-battery of the fort, in length 590 feet, and a section of 45 cubic feet per running foot.....	265.50 squares of stone.	
Deduct the old stone at present in the wall which may be used in re-building 200 square of stone (of 100 cubic feet)	200.00	"
Quantity required.....		65.50 squares.
For completing that part of the wall (commenced under a former appropriation) from its junction with the wall of Fort Marion, 870 feet south, to its termination at point A, (see plan) on an average height of 8 feet, and section of 40½ cubic feet per running foot.....	350.17 squares of stone.	
Deduct stone already laid on the wall, being.....	251.67	"
Number of squares required.....		98.50 squares.
From point A to point B the old wall is in good preservation with the exception of an interval of 40 feet which will require 16.10 squares of stone.....		16.10 squares.
From point B to point C, distance 610 feet, section 40½ cubic feet is:.....		245.52 squares.
From point C to point D, distance 314 feet, section 40½ cubic feet.....		126.38 squares.
From point D to point E at the barrack wharf, distance 1,128 feet, section 40½ cubic feet		454.00 squares.
For constructing two breakwaters 200 feet each in length, and section 192 cubic feet (see plan).....		768.00 squares.
Total quantity of stone required for reconstructing the water-battery and the sea-wall in front of the city of St. Augustine to the wharf in front of St. Francis' barracks		<u>1,773.80 squares.</u>
Cost of quarrying, hauling, and transporting the stone, at \$14 per square of 100 cubic feet is.....	\$14 10	
Cost of laying the masonry of the wall per square.....	4 00	
Total cost per square of 100 feet.....	<u>18 00</u>	
Amount required 1,773.80 squares at \$18 per square.....		\$31, 938 40
For filling with earth and shells in rear of the wall a width of 50 feet and average height 3 feet, whole length 2,962 feet, will make 16,455 cubic yards at 50 cents per cubic yard.....		<u>8, 227 00</u>
Amount required.....		40, 165 40
Contingencies 10 per cent.....		<u>4, 016 54</u>
Total amount of funds required.....		<u><u>44, 181 94</u></u>

F. L. DANCY, *1st Lieutenant and Agent.*

23D CONGRESS.]

No. 591.

[2D SESSION.]

THE CONSTRUCTION OF FORT SUMTER, CHARLESTON HARBOR, SOUTH CAROLINA,
SUSPENDED BY A LAND PATENT COVERING ITS SITE GRANTED BY THAT STATE TO
AN INDIVIDUAL.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JANUARY 7, 1835.

DEPARTMENT OF WAR, *January 6, 1835.*

SIR: In answer to the call of the House of Representatives of the 30th ultimo, in reference to the causes which led to the suspension of operations at Fort Sumter, in Charleston harbor, and, if any, what measures have been taken by the department in relation thereto, I have the honor to state that, on the 3d of November last the officer superintending the construction of that work was notified, by W. Laval, esq., that he had taken out, from under the seal of the State, a grant for all those shoals opposite and below Fort Johnson, on one of which Fort Sumter is erecting, and that he must consider that communication as a notice of his right to the same. On the 4th of the same month, the officer thus notified advised the department of the circumstance, and requested instructions in the case. In answer, he was directed to procure, through the district attorney, a copy of the ordinance upon which the grant in question was taken out, together with a copy of the grant, and all laws of a general nature relating to the subject, to be laid before the Attorney General for his opinion, and until this opinion was had to suspend all operations at that fort. All the information required has reached the department, a copy of which is sent for the further information of the House, and the originals will be submitted to the Attorney General for the purpose above stated.

I am, very respectfully, sir, your obedient servant,

LEW. CASS.

Hon. JOHN BELL, *Speaker of the House of Representatives.*

ENGINEER DEPARTMENT, *Washington, January 2, 1835.*

SIR: I have the honor to hand you copies of sundry papers relating to the claim advanced by W. Laval, esq., to that portion of Charleston harbor proposed to be occupied by Fort Sumter, which have been furnished by the officer of engineers in charge of that work, in compliance with your directions.

I am, very respectfully, sir, your obedient servant,

C. GRATIOT, *Chief Engineer.*

Hon. LEWIS CASS, *Secretary of War.*

FORT JOHNSON, *Charleston Harbor, November 4, 1834.*

SIR: I have the honor to forward to you a copy of a notice to this office from Major W. Laval, notifying the department of his right to the shoal on which the foundation of Fort Sumter has been commenced.

Lieutenant Brown not having yet arrived at this post, and from the advice rendered me by the district attorney not to wait his arrival, but to communicate the fact to you immediately, I have, in compliance with that advice, enclosed you a copy of the notice.

I am, sir, very respectfully, your obedient servant,

ROBERT LEBLY, *M. D., Superintending fortifications Charleston harbor.*

Brigadier General CHARLES GRATIOT.

CHARLESTON, *November 3, 1834.*

SIR: You are hereby notified that I have taken out, from under the seal of the State, a grant of all those shoals opposite and below Fort Johnson, on one of which the new work, called Fort Sumter, is now erecting. You will consider this as notice of my right to the same; the grant is recorded in the office of the secretary of state of this State, and can be seen by reference to the records of that office.

W. LAVAL.

The UNITED STATES ENGINEER *resident at Fort Johnson.*

ENGINEER DEPARTMENT, *Washington, November 19, 1834.*

SIR: The copy of the notice to you from W. Laval, esq., stating his right to the shoal on which the foundation of Fort Sumter has been commenced, is at hand. It is the wish of the department that you obtain from the district attorney in Charleston a copy of the ordinance of the State upon which the grant to the shoals mentioned was taken out, and a copy of the grant, as well as all laws of a general nature relating to this subject; and that you prepare, with as little delay as practicable, a drawing showing the situation and condition of the shoal prior to the commencement of Fort Sumter, with a full report upon its present state, and showing whether, at any time, it ever appeared above water.

I have the honor, &c.,

C. GRATIOT, *Brigadier General.*

Lieutenant T. S. BROWN, *Corps of Engineers, Fort Johnson, Charleston Harbor, S. C.*

ENGINEER OFFICE, FORT JOHNSON, *Charleston Harbor, December 8, 1234.*

SIR: In obedience to the requirements of your letter of the 19th ultimo, I have the honor to submit the following report in relation to the foundation of Fort Sumter, and to the claim advanced by W. Laval, esq., to that portion of Charleston harbor which the fort occupies. The accompanying papers, numbered 1 and 2, were handed me by the district attorney for South Carolina, and consist, 1st, of a copy of the grant taken out by W. Laval, esq., for 870 acres of *low land*.

2d. Of copies of the law under which the grant was made, and of various other laws of South Carolina relating to land, and which are supposed to have some bearing upon the question, and to be embraced by the general clause in your letter requiring copies of "all laws of a general nature relating to the subject."

The following charts also accompany this communication, viz:

No. 1. A map of Charleston harbor, intended to exhibit the situation of Fort Sumter with relation to the channel, the other works for the defence of the harbor, &c.

No. 2. A chart exhibiting the situation of the shoal on which Fort Sumter is placed, before the work was commenced.

No. 3. A drawing intended to show the actual condition of the foundation of Fort Sumter.

An inspection of map No. 1 will show that Fort Sumter, which is supposed to be embraced within the limits claimed by W. Laval, is nearly in the centre of the lower part of Charleston harbor, by which, however, the tract is said to be *bounded* on the north and west. What is designated as "Morris's island creek," must refer to a small blind channel on the northwest side of Morris's island; and as to James's island creek, which is said to form part of the southern boundary, nothing can be discovered, either on the map or on the ground, to which the name can, by any degree of latitude of construction, be applied. No boundary is designated on the eastern side from which it may be reasonable to infer that if found at some future period to be convenient, the limits in that direction may be extended quite across the channel.

That part of your letter which requires a full report upon the present state of Fort Sumter, is supposed to be answered by drawing No. 3. The following observations, however, may be added as coming within your meaning:

The report of the board of engineers for fortifications, submitting the plan of the fort, since directed to be called Fort Sumter, is dated December 1, 1827. The general position and character of the work were, it is believed, decided upon several years previous, during the administration of the Department of War by Mr. Calhoun, and the laborious and accurate survey of Major Bache, which intervened, was necessary to enable the board to determine the precise situation and details of the structure. The first appropriation for the "fortifications in Charleston harbor" was made in 1828, and active operations on Fort Sumter began in 1829. Since that period the work has been steadily progressing, as rapidly as the tedious and difficult operation of procuring stone from the north for the formation of the foundation, and the attention and expense bestowed upon other important objects connected with the defence of Charleston harbor would admit.

Up to this period about \$220,000 have been expended on the foundations of Fort Sumter, and, as the drawing No. 3 indicates, they are now raised to a general level of about two feet above low water, and have reached the point at which it is proper to commence the regular masonry of the work.

The mole which has been formed appears, as far as it has yet been in the power of the superintending engineer to make observations, to have undergone no material change from settling; and nothing has occurred to suggest a doubt whether the work will possess the permanence of those which have been or which may be erected on the sandy margin of the harbor, above the level of the tide.

An idea has been thrown out that the formation of the mole for Fort Sumter is connected in some way with the rapid encroachments of the sea upon Sullivan's island, and that it has had an injurious influence; but it is impossible for me to perceive, from an attentive study of the chart of the harbor, and of all the circumstances which have a bearing upon the question, that there is a shadow of foundation for such an opinion.

With reference to the question whether the position occupied by Fort Sumter has ever, at any time, appeared above water, I have made diligent inquiries, and the conclusion to which I have arrived is, that it would be easy to prove, by testimony as direct as the nature of the question admits, that that spot was never left dry previous to the commencement of the work. The following gentlemen, who have had the most favorable opportunities for observation, express, in unequivocal terms, such to be their belief, viz: T. H. Jervey, surveyor of the port of Charleston, Doctor Johnson, president of the United States Branch Bank, Mr. Josiah Taylor, Captain Butler, Captain Fuller, Mr. Lee, pilot, William Smith, jun., Samuel Webber, &c. The list could be increased to any desired extent. Since the circuit formed by the stones has been rendered complete, with the exception of one gap left for the admittance of vessels at high tide, the sand has accumulated within, and a few square yards are now occasionally left bare at low water.

The plat accompanying the grant to William Laval bears, as will be perceived, no resemblance to the actual shape of the shoal which it purports to represent. It resembles, however, a delineation of the shoal on a chart of Charleston harbor, which is drawn on a large scale on the corner of "a map of South Carolina, constructed and drawn from the district surveys ordered by the legislature, by John Wilson, late civil and military engineer of South Carolina," from which it was probably copied. An actual survey, with chain and compass, of the 870 acres of low land which W. Laval claims was of course impracticable, as over much of it the water is at all times 8 or 10 feet deep; and it is even doubted whether the ceremony was gone through with of carrying surveyors' instruments to the nearest sandbank to the "plantation" in question.

This report would have been forwarded some days earlier but for the delay in procuring the necessary copies of laws.

I have the honor to be, very respectfully, your obedient servant,

T. S. BROWN, *Lieut. U. S. Engineers.*

Brig. Gen. C. GRANT, *Chief Engineer, Washington City.*

No. 1.

STATE OF SOUTH CAROLINA.

To all to whom these presents shall come, greeting:

Know ye that, in pursuance of an act of the legislature entitled "An act for establishing the mode of granting the lands now vacant in this State, and for allowing a commutation to be received for some lands that have been granted," passed the 19th day of February, 1791, we have granted, and by these presents do grant, unto William Laval, his heirs and assigns, a plantation or tract of land, containing eight hundred and seventy acres, surveyed for him the 24th March, 1834, situate in the district of Charleston, bounded on the north and west by Charleston harbor, on the south by James's Island creek and Morris's Island creek, having such shape, form, and marks, as are represented by a plat hereunto annexed, together with all woods, trees, waters, water-courses, profits, commodities, appurtenances, and hereditaments whatsoever, thereunto belonging; to have and to hold the said tract of eight hundred and seventy acres of land, and all and singular other the premises thereby granted unto the said William Laval, his heirs and assigns, forever, in free and common soccage.

Given under the seal of the State.

Witness, his excellency Robert Y. Hayne, esquire, governor and commander-in-chief in and over the said State, at Charleston, this fifth day of May, anno Domini one thousand eight hundred and thirty-four, and in the fifty-eighth year of the independence of the United States of America.

R. Y. HAYNE, [L. M. S.]

And hath thereunto a plat thereof annexed representing the same, certified by

SAMUEL KINGMAN, *Deputy Surveyor General.*

MARCH 25, 1834.

SECRETARY OF STATE'S OFFICE, *Charleston, November 26, 1834.*

A true copy, taken from Grant Book O, No. 6, page 9, examined and certified by

SAMUEL KINGMAN, *Deputy Secretary of State.*

No. 2.

AN ACT for establishing the mode of *granting lands now vacant* in this State, and for allowing a commutation to be received for some lands that have been granted.

Whereas all the vailable lands in this State have already been granted, and such as are now vacant will remain so, if the sum of ten dollars, in indents, be required by the public for every hundred acres thereof, and no taxes will be paid for the same:

Be it therefore enacted by the honorable the senate and house of representatives now met and sitting in general assembly, and by the authority of the same, That so much of the first and second sections of an act entitled "An act for establishing the mode and conditions of surveying and granting the vacant lands within this State," passed the 21st March, 1784; and that so much of the first section of an act entitled "An act to alter and amend an act entitled 'An act for establishing the mode and conditions of surveying and granting the vacant lands within this State,' and for other purposes therein mentioned," passed the 24th March, 1785, as relates to the granting and selling such lands within this State as are now vacant, at the rate of ten dollars for every hundred acres, be, and the same is hereby, repealed; and that such vacant lands be granted to any citizens applying for the same on paying the fees of office.

And whereas grants for many thousand acres of land within this State have been obtained, at the rate of ten dollars, in indents, for every hundred acres, and some of the grantees have suffered their grants to remain in the secretary's office without applying for them; and where such lands have been put up for sale by the treasurers on account of the non-payment of the said ten dollars per hundred acres, the sums produced by such sales were very trifling:

Be it therefore enacted, by the authority aforesaid, That where lands have been so granted, and have not been resold by the treasurers aforesaid, it shall and may be lawful for the treasurers, and they are hereby required, on receiving four shillings and eight pence, specie or paper medium, from the grantees of the said land, for every hundred acres thereof, in lieu of ten dollars in indents, to give the grantee paying such commutation a discharge for the same, and an order on the secretary of state to receive his grant on paying the fees; and the said secretary is hereby required, on receiving such order and payment, to deliver the grants to the grantees, respectively, who shall be so entitled to them.

And be it further enacted by the authority aforesaid, That all grants of lands in the secretary's office, and which shall not be taken out within twelve months from the passing of this act, be then sold to the highest bidder by the commissioners of the treasury.

And be it further enacted by the authority aforesaid, That where any person or persons have paid aggregate sums into the treasury as a portion or part of the purchase money due to the State for divers tracts of land without ascertaining the particular tract or tracts which they would be understood so to have paid for; that in all such cases the commissioners of the treasury may sell such tract or tracts, or as much thereof as may be sufficient to make up the balance due to the State as have been granted to such persons and are not paid for as they may think proper, at public sale, under and by virtue of this act.

And be it further enacted by the authority aforesaid, That the governor, for the time being, be, and he is hereby, authorized and empowered to appoint a proper person as commissioner of locations in each of the location districts in this State, which commissioner shall observe all such regulations and restrictions as are by law established for regulating the mode and conditions of surveying and granting the vacant lands in the State.

And be it further enacted by the authority aforesaid, That this act shall not be considered to be of force so as to enable any survey whereon to found a grant under and by virtue of this act, nor any application to relapse any survey already made, to be effectual till after the 1st day of April next; but that all and every

person or persons who have already made surveys of any lands, or who shall make surveys of any land before the 1st day of April, may be at liberty to carry the same into a grant, on the payment of one dollar a hundred acres, as prescribed in the second enacting clause of this act.

DAVID RAMSAY, *President of the Senate.*

JACOB READ, *Speaker of the House of Representatives.*

IN THE SENATE, February 19, 1791.

AN ACT to extend the time for taking out of the secretary's office such grants of land as now lie in the said office.

Whereas by a clause of the act entitled "An act for establishing the mode of granting the lands now vacant in this State, and for allowing a commutation to be received for some lands that have been granted," passed on the nineteenth of February, in the year of our Lord one thousand seven hundred and ninety-one, it is enacted "that all grants of land in the secretary's office, and which should not be taken out within twelve months from the passing of that act, should be then sold to the highest bidder by the commissioners of the treasury;" and such lands have not yet been sold, and it is thought expedient to extend the time of sale still longer:

Be it therefore enacted by the honorable the senate and house of representatives, now met and sitting in general assembly, and by the authority of the same, That the sale of the said lands shall be postponed for twelve months and no longer; and that if any person shall, within that time, pay up the money due for the land, agreeably to the act for establishing the mode of granting lands now vacant in this State, and for allowing a commutation to be received for some lands that have been granted, together with the fees due on his grant, and the expenses incurred thereon, he shall be entitled to the said grant and the land thereby granted him, anything in the said clause of the said act to the contrary thereof in anywise notwithstanding.

DAVID RAMSAY, *President of the Senate.*

JACOB READ, *Speaker of the House of Representatives.*

DECEMBER 21, 1792.

AN ACT to close the land office for and during the term of four years, under certain limitations, and for other purposes therein mentioned.

Whereas a spirit of speculation and land jobbing hath gone forth, and many persons, greedy of gain, have embarked in such schemes, and have obtained, and still continue to obtain, large and excessive grants of land without any regard to their being granted, and even settled, and without distinguishing in the plats the numerous surveys included within the boundaries of their plats and grants, with a view to impose upon and deceive unwary foreigners by sales of such pretended vacant lands: and whereas no plan can be devised so effectually to check and defeat these iniquitous schemes as to shut up the land office, except for grants not exceeding five hundred acres, for a reasonable time:

Be it therefore enacted by the honorable the senate and house of representatives, now met and sitting in general assembly, and by the authority of the same, That from and immediately after the passing of this act the land office be and the same shall be so far closed for the term of four years that within that period no one person shall obtain more than one grant for land to be hereafter surveyed, which shall in no case exceed five hundred acres; and that no warrant of survey shall be issued by any commissioners of locations in this State for any number of acres exceeding five hundred acres, and not more than one such warrant to any one person during the aforementioned period of four years: *Provided always,* That nothing herein mentioned shall prevent any person from actually settling on vacant land; but bona fide settlers shall have liberty actually to survey, mark out, settle, and reside on any tract of vacant land not exceeding five hundred acres, and shall have a preference for a twelvemonth after the land office shall be opened to obtain a grant for the said survey.

And be it further enacted by the authority aforesaid, That where any warrants have been issued previous to the passing of this act, if any deputy surveyor, in locating them, shall knowingly and wilfully comprehend within the limits of any such location any plantation or tract of land before granted without noting the same; and if the said warrant shall be hereafter carried into grants, or where there are any grants for land now actually out, signed, and ready to be delivered; or where any plats are returned to the office of surveyor general, or secretary of the State, and shall be hereafter carried into grants, which plats or grants comprehend within their respective limits any plantation or tract of land before granted without the form being marked and noted, it shall be lawful for any of the proprietors of the plantations or tracts so before granted, or any other person interested therein, to bring his action of trespass against the grantee of the subsequent grant which comprehends the prior one, or any part thereof, his heirs or assigns, or any or all of them; and on his substantiating, by proof, to any district court and jury within whose jurisdiction the land lies, that his land or part thereof is actually comprehended in the subsequent grant a verdict shall be found in his favor, and the court shall declare the subsequent grant and every part thereof to be fraudulent and void to all intents and purposes, and the plaintiff shall recover such damages as the jury shall assess and treble costs of suit.

And whereas, since the passing an act entitled "An act for establishing the mode of granting the lands now vacant in this State, and for allowing a commutation to be received for some lands that have been granted," passed on the 19th day of February, 1791, divers grants of large tracts of land have been obtained, which included one or more surveys which have not been elapsed, the property of others, without taking notice of or designating the same in their plats, and without obtaining the consent of the said proprietors, and without their knowledge:

And whereas the lands in this State are so generally granted that no person could suppose that there were in this State such large bodies of vacant land, from which it appears that the intention of the aforementioned persons must have been to oblige the inhabitants who are settled within the boundaries and limits of the aforesaid plats to produce their titles, or, if they had lost them in the war, or by other accidents, to seize their lands as vacant, and, by producing such grants to unwary foreigners, may deceive them by the appearances of regularity and authority on the face thereof, and may involve them in pur-

chases ruinous to themselves and prejudicial to the credit and reputation of the State; in order, therefore, to prevent the alarm of the people, and the great litigation and numerous suits that may arise from the said unreasonable, excessive, and unlawful surveys and grant, and to prevent imposition on foreigners and citizens of this State:

Be it enacted and declared by the authority aforesaid, That the said surveys were made in violation of the instructions given to the deputy surveyors in this State; that the said grants have been obtained contrary to the intention of the legislature in establishing the mode of granting the lands now vacant in this State; that the governor must have been deceived when he signed the same; and that on its being proved, in the manner before enacted, to the satisfaction of any district court and jury within whose jurisdiction the land lies that such grants actually contained within their limits one or more settlements, the property of others under former surveys, without taking notice of or designating the same in their plats, and obtaining the consent (where such consent could have been obtained) to run the same, the court shall declare the said grants to be fraudulent, and the same shall be void to all intents and purposes.

And be it further enacted by the authority aforesaid, That every surveyor who shall have wilfully and knowingly violated the instructions of the surveyor general in not making out the boundary of all lands formerly granted, and which are within the survey by him or them made, shall be prosecuted by the attorney general and circuit solicitor of the respective districts, on proper application being made to either of them.

Whereas John Sloan and the Rev. John Monk and William Hill, junior, by their petitions to the legislature, have set forth that they had, at a considerable expense, erected a bloomery on South Edisto, in Edgefield county, for manufacturing of iron ore into bar iron: And whereas, under the existing laws of the State, and the regulations of this act, it is impossible for the said petitioners to run a sufficient quantity of vacant land to enable them to conduct and prosecute the said bloomery with advantage or effect, and it being an object of great national importance to encourage the manufacture of raw materials:

Be it therefore enacted by the authority aforesaid, That the commissioner of locations for the district of ninety-six be, and he is hereby, required and authorized to issue his warrants, one in behalf of John Sloan, for six thousand acres of land, and another in the joint behalf of said John Sloan, the Rev. John Monk, and William Hill, junior, for ten thousand acres of vacant land, the nearest to the said iron works, and that the said lands, so to be located, be granted to the said persons, anything in this act contained, or any law to the contrary thereof, in anywise, notwithstanding.

DAVID RAMSAY, *President of the Senate.*

JACOB READ, *Speaker of the House of Representatives.*

MAY 10, 1794.

AN ACT to extend the time of taking out of the secretary's office such grants of land as now lie in the said office, and for other purposes therein mentioned.

Whereas, by a clause of an act entitled "An act for establishing the mode of granting the lands now vacant in this State, and for allowing a commutation to be received for some lands that have been granted," passed on the nineteenth day of February, in the year of our Lord one thousand seven hundred and ninety-one, it is enacted "that all grants of land in the secretary's office, and which should not be taken out within twelve months from the passing of this act, should be then sold to the highest bidder by the commissioners of the treasury," and such lands have not been sold, and it is thought expedient to extend the time of sale still longer:

Be it therefore enacted by the honorable the senate and house of representatives, now met and sitting in general assembly, and by the authority of the same, That the sale of the said lands shall be postponed to the 15th day of December next, and no longer; and that if any person shall, before that time, pay up the money due for the land, agreeably to the act for establishing the mode for granting lands now vacant in this State, and for allowing a commutation to be received for some lands that have been granted, and the expenses incurred thereon, which expenses it is hereby declared shall not exceed five shillings for any one tract of land, he shall be entitled to the said grant, and the land hereby granted to him, anything in the said clause of the said act, or any such act or resolution of the legislature of this State to the contrary thereof, in anywise, notwithstanding: *Provided, however,* That nothing in this act shall be construed to authorize the taking out of grants for the excessive surveys of land which have been made since the first day of April, 1791.

And be it further enacted by the authority aforesaid, That ten commissioners be appointed by the governor in each circuit court district, who shall be required to return to the legislature, at their next meeting, an account of all such lands as have escheated to the State, agreeably to an act entitled "An act to appoint escheators and to regulate escheats," passed the 28th day of March, 1787, and that the reasonable expenses incurred by the commissioners appointed as aforesaid, in making the returns, be paid by the State.

DAVID RAMSAY, *President of the Senate.*

JACOB READ, *Speaker of the House of Representatives.*

MAY 10, 1794.

AN ACT to enable the United States to purchase a quantity of land in this State, not exceeding two thousand acres, for arsenals and magazines.

Whereas the late Secretary of State of the United States, in his letter to the late governor of this State, did request that he would take proper measures for obtaining the consent of the legislature of this State that the United States should purchase a quantity of land in this State whereupon arsenals and magazines might be erected:

Be it therefore enacted by the honorable the senate and house of representatives, now met and sitting in general assembly, and by the authority of the same, That the United States, or such person or persons as may

be by them authorized, shall have a right to purchase in any part of this State that may be thought most eligible, the fee simple of any quantity of land not exceeding two thousand acres, for the purpose of erecting arsenals and magazines thereon, agreeably to the act of Congress entitled "An act to provide for the erecting and repairing of arsenals and magazines, and for other purposes," passed on the 2d of April, 1794.

And be it further enacted by the authority aforesaid, That if the person or persons whose land may be chosen for the above-mentioned purpose shall not be disposed to sell the same, or if the persons appointed to make the purchase should not be able to agree upon terms with such owner or owners of the said land, the same shall be valued upon oath by a majority of five persons, to be appointed by the court of equity or court of common pleas of this State for that purpose; and the land shall be vested in the United States upon their paying the amount of such valuation to the owner or owners of such land.

And be it further enacted by the authority aforesaid, That the said land, when purchased, and every person and officer residing or employed thereon, whether in the service of the United States or not, shall be subject and liable to the government of this State, and the jurisdiction, laws, and authority thereof, in the same manner as if this act had never been passed; and that the United States shall exercise no more authority or power within the limits of the said land than they might have done previous to the passing of this act, or than may be necessary for the building, repairing, or internal government of the arsenals and magazines thereon to be erected, and the regulation and management of the same, and of the officers and persons by them to be employed in or about the same: *Provided, always, that the said land shall forever be exempt from any taxes to be paid to this State.*

DAVID RAMSAY, *President of the Senate.*

ROBERT BARNWELL, *Speaker of the House of Representatives.*

DECEMBER 12, 1795.

AN ACT to authorize the secretary of this State to deliver out *grants of land* surveyed previously to the year one thousand seven hundred and ninety-two.

Whereas sundry inhabitants of this State have petitioned the legislature, setting forth that they are entitled to certain lands surveyed previously to the year one thousand seven hundred and ninety-two subject to the payment of a bounty, but for which the Secretary of State does not conceive himself at liberty to deliver out grants, and praying relief:

Be it therefore enacted by the honorable the senate and house of representatives, now met and sitting in general assembly, and by the authority of the same, That the secretary of this State be, and he is hereby, authorized and required to deliver out to the persons, their heirs or assigns, for whom surveys of land were made and duly returned previously to the 1st day of January, 1792, for any number of acres not exceeding six hundred and forty acres, grants of land so surveyed and returned as aforesaid, upon receiving from such persons, their heirs or assigns, the legal bounty and fees due for the same.

Provided, nevertheless, That this State shall in no wise be held to warrant to such grantees the lands so granted against the claims of others, or to refund any sum or sums of money which may be paid upon receiving such grants.

Provided, nevertheless, That whenever any grant, not exceeding six hundred and forty acres, shall be applied for previously to its being taken out, the person or persons who shall receive and take out the same shall, before the delivery thereof, declare on oath that the lands specified in the said grant or grants are truly and in reality applied for by the person or persons in whose favor the same is to be granted, or that the said land has been in part cultivated for one year, and that no person's name has been borrowed for obtaining the said lands.

And be it further enacted by the authority aforesaid, That the secretary of this State is hereby authorized to convey to Christian Faust a grant of six hundred and forty acres, being part of a grant to Thomas Cargill for nine hundred and twenty acres in Winton county, on payment of the bounty money and fees.

DAVID RAMSAY, *President of the Senate.*

ROBERT BARNWELL, *Speaker of the House of Representatives.*

DECEMBER 16, 1797.

AN ACT to alter and amend an "Act entitled 'An act for establishing the mode and conditions of surveying and granting the vacant lands within this State,' and for other purposes therein mentioned."

Whereas the act entitled "An act for establishing the mode and conditions of surveying and granting the vacant lands within this State" requires several alterations and amendments:

I. *Be it therefore enacted,* That all the lands mentioned and described in the first clause of the said act, which shall be surveyed by virtue of warrants hereafter to be issued, shall be granted and sold for ten dollars (instead of ten pounds) for every one hundred acres of the said lands, payable in indents.

II. Warrants for lands in Charleston district shall be granted by, and returned to, the surveyor general, in like manner as warrants for land in the other districts are granted by, and returned to, the commissioners of location in the said districts, respectively.

III. Grants shall be signed by the governor on the first Monday in every month. That the surveyor general may appoint as many deputy surveyors as he shall think proper, in each district, and which said deputy surveyors shall be confined to locate any warrant of survey to the respective districts of which they are or may be appointed, and no other; and that the 9th clause of said act be, and it is hereby, repealed.

IV. The first part of this clause repealed by act of assembly, October 12, 1785. That where any grant has been already, or shall hereafter be signed, without payment of the purchase money of the land granted, the land so granted shall not be subject to the debts, alienation, or disposition of the grantee, until the purchase money for the same shall have been actually paid; and that if the same shall not be paid within twelve months next after the date of the grant, the land shall be sold by the treasurer at public auction, after ninety days' notice in the State gazette of such sale, for the most money it will pro-

duce in indents. That the treasurers are hereby empowered to convey the said land to the highest bidder in fee simple, on the immediate payment of the price for which it shall be sold, and that the surplus of the money, if any, arising from such sale, shall be paid in indents (after satisfaction of the original price of the said lands, and interest thereon, with the expenses attending such sale from the date of the grant) to the grantee, his heirs or assigns, on applying to the treasurers for the same: *Provided*, That if, at the expiration of twelve months from the date of this grant, the person shall have an account in the auditor's office equal to the amount of the purchase money of the land, for a grant of which he applies, on his producing the auditor's certificate of such account, the governor may order the treasurer to suspend such sale for such time as to his excellency may appear reasonable; and that if no grant has been or shall be obtained for land within six months after the return of a plat of it into the surveyor general's office, the surveyor general shall certify the plat, and the governor shall sign a grant for the said land to any person who will apply for the same, and comply with the terms and conditions which the person for whom the said land was surveyed should have fulfilled, previous to the obtaining a grant for such land; that the secretary shall, at the end of every month, deliver to the treasurer a list of all grants which shall have been signed in the said month.

V. The surveyor general's office shall be kept in some convenient part of the State-house, and the surveyor general shall be entitled to the same fees for business done by him, with respect to land in Charleston district, as the commissioners of locations are entitled to for business done by them, with respect to lands in other districts; and the same allowance of land be given to the cavalry as was given to the infantry of this State.

VI. And whereas doubts have arisen concerning the fees allowed to officers upon the opening of the land office,

Be it therefore enacted, That it is not lawful for any other fees to be taken than such as are inserted in the act entitled "An act for establishing the mode and conditions of surveying and granting the vacant lands within this State," any law, usage, or custom to the contrary thereof, in anywise, notwithstanding.

VII. Caveats shall be determinable by the governor, or any two or more of the privy council. That witnesses being required by summons from the clerk of the privy council, by order of the governor, to attend on the hearing of caveats, shall attend accordingly, under the same penalties, and be entitled to the same allowance for attendance as witnesses in the court of common pleas, the said penalties and allowance to be recoverable in a summary way before a magistrate; and that the expense of the attendance of witnesses be paid by such of the parties as the governor, and any two or more of the privy council, in their discretion, shall think fit: *Provided*, That three commissioners for hearing caveats for lands, in each of the respective circuit court districts, shall be elected by ballot of the senate and house of representatives; the caveats for lands within the said district shall be heard by the said commissioners, respectively, or any two of them; and which said commissioners are hereby authorized and empowered finally to determine upon the said caveats; and before entering on their said offices the said commissioners shall take the following oath before some one justice of the quorum, to wit: I, A B, do swear (or affirm) that I will faithfully and impartially execute the office of justice of the court of caveats, so help me God. And the said commissioners shall hold a court of caveats on the first Tuesday in every month, in some convenient part within the district, at which time and place they shall cite the parties, with their witnesses, to appear; and in case of the non-attendance of either party, or the want of evidence, the cause shall be postponed for three successive hearings, and the same shall be determined at the third court after such citation hath been issued, and the said commissioners shall hear the parties by themselves, or by their attorneys; and when the case is finally determined the commissioners shall certify the same to the governor, or commander-in-chief for the time being, who shall sign the grant accordingly; and the said commissioners shall be entitled to receive a fee of nine shillings and four pence, and which fee shall be divided among them for their determination on each caveat, to be paid by the person who shall be cast.

VIII. Whereas disputes have arisen with respect to the boundaries of the 96th district,

Be it enacted, That from and immediately after the passing of this act the south branch of the Saluda river shall be deemed and taken as the division line between the said districts.

IX. Expired.

JOHN LLOYD, *President of the Senate.*

JOHN F. GRIMKE, *Speaker of the House of Representatives.*

MARCH 24, 1785.

AN ACT to alter and amend an act entitled "An act for establishing the mode and conditions of surveying and granting the vacant lands within this State." And another act entitled "An act to alter and amend an act entitled 'An act for establishing the mode and conditions of surveying and granting the vacant lands within this State,' and for other purposes therein mentioned."

Whereas an act of the general assembly, entitled "An act for establishing the mode and conditions of granting and surveying the vacant lands within this State," and an act entitled "An act to alter and amend an act entitled 'An act for establishing the mode and conditions of surveying and granting the vacant lands within this State,' and for other purposes therein mentioned," require alteration and amendment,

I. *Be it therefore enacted*, That the 10th, 11th, and 15th clauses of the act first above-mentioned shall be, and they are hereby, repealed. And whereas by the act last above-mentioned it is enacted in the words following, viz: that no grant for land shall in future be presented by the secretary to the governor to be signed until the grantee or some person in his behalf shall have produced to the secretary (who shall file and keep the same in his office) a certificate from one of the treasurers that the purchase money for the said land has been paid, or a certificate from the auditor general that the person in whose behalf application is made for the said grant has an account in the auditor's office, not passed, equal to the amount of the purchase money of the said land.

II. *Be it enacted by the authority aforesaid*, That as much of the said act as is above recited shall be, and the same is hereby, repealed.

And whereas several persons to whom lands have been granted have not as yet obtained indents from the treasurer to pay for such land, although some of them have accounts in the auditor's office not passed and others have accounts passed by the auditors and lying in the treasury equal to the amount of the

purchase money for the said land, and it is reasonable to allow a further time to the said grantees to pay for the said land,

III. *Be it therefore enacted*, That no land which has been granted since the passing of the act first above mentioned shall be sold by the treasurer for non-payment of the purchase money of such land until the first day of June next, anything in the act last above-mentioned to the contrary hereof, in anywise, notwithstanding.

IV. *And be it further enacted*, That a person making a survey of land shall be allowed six months from the time of making such survey to obtain a grant for the said land, and in default of obtaining a grant within that time, any person may at the expiration thereof apply for, and shall obtain, a grant for the said land on paying for it; and any grant obtained for land within six months from the time of its being surveyed, except by the person for whom it was surveyed, shall be, *ipso facto*, null and void.

JOHN LLOYD, *President of the Senate.*

JOHN F. GRIMKE, *Speaker of the House of Representatives.*

OCTOBER 12, 1785.

AN ACT for establishing the mode and condition of *surveying and granting the vacant lands within the State.*

I. Whereas the granting of the vacant lands of this State will be greatly conducive to its strength and prosperity by increasing the agriculture and population thereof,

Be it enacted, That all the lands lying and being to the northwest of the ancient boundary line heretofore established between the Cherokee nation of Indians and this State, running from Savannah river north 50° east to Reedy river and then due north until it intersects the North Carolina boundary, shall be granted and sold for the sum of £10 sterling for every 100 acres, in the manner and form and under the several regulations and restrictions hereinafter mentioned.

II. Any person or persons who have located lands within the ancient limits of this State on or before the 1st day of January, 1775, on warrants of survey legally obtained, and were prevented from procuring grants of the same by the abolition of the British government, or other good and sufficient causes which shall appear upon oath to be made before the commissioner of locations of the district where such lands were located, within six months after the passing of this act, shall be, and they are hereby, entitled to grants for the said lands; and that any persons who have settled vacant lands within the ancient limits of this State, and have been prevented by the aforesaid reasons from surveying and obtaining grants for the same, shall be, and they are hereby, entitled for the term of six months to the preference of the said settled land; and that all lands coming within the above description, and also all other vacant lands within the limits of this State, shall be granted and sold for the sum of \$10 per hundred acres.

III. A commissioner of locations shall be appointed in each circuit court district who shall take and receive the original entry of all vacant lands lying and being within the ancient boundaries of such districts (except for the district of 96, where two commissioners shall be appointed, one to reside on the north side of Saluda river and the other to reside on the south side of the same river, and which said river shall be the division line between the said two commissioners,) for which a warrant of survey shall be demanded, and shall thereupon issue such warrant of survey directed to some deputy surveyor authorizing and requiring him within two calendar months from the date of such warrant to lay off and locate the lands directed to be surveyed; which said warrant when executed, together with a true and correct plat of the survey, shall be received by the said commissioner, who shall make a fair record of the same, and within three months after such return shall transmit the original plat to the office of the surveyor general of the State for the time being, where the same shall be delivered.

IV. Each and every of the said commissioners of locations shall be appointed in the same manner as the surveyor general is by law to be appointed, and shall enter into bond for the faithful discharge of his duty, together with two good and sufficient securities, in the full and just sum of £10,000 sterling, payable to the treasurer of this State for the time being, in trust, and to and for the use of this State; and shall, also, at the same time, before some magistrate, take and subscribe the following oath: I, A B, do solemnly swear (or affirm) that I will well and faithfully execute the office of commissioner of locations for the district of ———, without giving a preference to any through favor, fear, or reward, according to the best of my skill and ability: so help me God.

V. The surveyor general of this State, on the return of the entry and plat of survey to this office from the office of commissioner of locations, shall make out a plat of the lands surveyed as aforesaid, and record and transmit the same, certified, to the office of the secretary of the State, who shall cause a grant to be prepared for the same, and the great seal affixed thereto; and shall, within three months thereafter, cause a fair record of all such grants to be made and kept in his said office, with alphabetical indexes; and on every third Friday in the months of January, April, July, and October, the said secretary of the State, on the said days respectively, shall lay before his excellency the governor for the time being all such grants by him prepared as aforesaid, who is hereby empowered and directed to sign the same, and thereupon to deliver them to the secretary of the State, to be delivered to the respective grantees or to their order: *Provided*, That, in all cases previous to signing of the said grants, where there shall appear to be any fraud or collusion in the progress of the said entry, warrant, and survey, the governor and commander-in-chief for the time being, and five members of the privy council, shall have full power and authority to cause all parties to appear before them, and without delay, in a summary manner, decide in such as to justice and equity shall pertain.

VI. The said surveyor general shall enter into bond for the faithful discharge of his duty, with two good and sufficient securities in the same sum, payable in the same manner, and shall also take and subscribe the same oath or affirmation before the secretary of this State, in the presence of his excellency the governor, as is hereinbefore prescribed to be entered into and taken by the several commissioners of locations to be appointed as aforesaid; which bond and oath or affirmation shall be thenceforth recorded in the secretary's office.

VII. The surveyor general shall have full power and authority to appoint such and so many deputy surveyors in each of the said districts as he may judge sufficient, not exceeding six for each district, for executing all such warrants of survey as shall be to them directed by the respective commissioners of

locations, for whose conduct in office the said surveyor general shall be responsible both to the State and the party aggrieved, anything herein contained to the contrary notwithstanding.

VIII. The said deputy surveyors of the respective districts shall take the same oath or affirmation of office on their appointment, and in the same manner as is hereinbefore prescribed to be taken by the commissioners of locations, before they shall be qualified to locate any warrant of survey, under the penalty of being forever disabled to act in the said office; and shall, also, within three calendar months from the date and delivery of all warrants of survey to them directed, well and faithfully locate and survey the same, and return a fair and correct plat thereof to the office of commissioners of locations, from whence the same had issued; and the said deputy surveyors are hereby required, authorized, and empowered, to administer the following oath to the chain carriers, to wit: I, A B, do solemnly swear (or affirm) that I will well and faithfully execute the employment of chain carrier, without favor or affection.

IX. Repealed by act of assembly, 24th March, 1785.

X. and XI. Repealed by act of assembly, 12th October, 1785.

XII. *On all creeks or rivers navigable for shipping or boats, whereon any vacant lands shall lie, the deputy surveyors shall be, and they are hereby, directed to lay off the same, by measuring four chains back from such river or creek, for every one fronting on and bounded by the same; and all surveys not made and regulated by this rule, and any grants which may be obtained thereupon, are hereby declared to be null and void, to all intents and purposes.*

XIII. All treasury indents of money due and payable by this State to individuals shall be, and they are hereby, declared to be a lawful tender at the treasury for so much money, in payment of all moneys accruing and to become due to this State for lands hereby directed to be sold, anything herein contained to the contrary notwithstanding.

XIV. The following fees, and no other, shall be demanded or taken by the secretary of the State, surveyor general, commissioners of locations, and deputy surveyors, who shall make out a table of the same, and keep posted up in some conspicuous place in their said offices; and each and every of the said respective officers, who shall demand or receive any greater or other fees than are allowed by this act, each and every such person shall be liable to an indictment for extortion, and, on conviction thereof, shall pay a fine of £100 sterling, one half to be paid to the prosecutor, and the other to the treasurer for the time being, for the use of the State.

Secretary of State's fee.

For making out the grant, recording the same, and fixing the great seal thereto, 10s. sterling.

Surveyor General's fee.

For every search, 1s. 2d. sterling.

Copy plat, 4s. 8d. sterling.

Recording and sending the same to the secretary's office, 7s. 6d. sterling.

Commissioners of Locations' fees.

For receiving applications, making entries, and granting warrants of survey, under hand and seal of office, 4s. 8d. sterling.

Receiving returns and recording plats, and transmitting the same to the surveyor general's office, 7s. sterling.

Deputy Surveyor's fees.

For surveying every acre, $\frac{1}{2}$ d. sterling.

Platting and returning the same, 11s. 8d. sterling.

For running of old lines for any person, or between parties, 14s. sterling per day.

XV. Repealed by act of assembly, October 12, 1785.

XVI. The said surveyor general hereby to be appointed shall not, during the time he is in office, on any pretence whatever, hold any other place or office of emolument under the United States in Congress assembled, or under the legislature of this State.

XVII. And whereas many persons have caused surveys of land lying beyond the Indian boundary to be made, which practice is not only founded in deception but contrary to the regulations heretofore established for taking up vacant lands:

Be it therefore enacted, That all grants and surveys passed or made for lands lying beyond the Indian boundary hereinbefore mentioned before the passing of this act shall be and are hereby declared to be null and void.

XVIII. The commissioners of locations in the several districts shall keep their respective offices at or near the centre of the district wherein he is commissioner, and shall give regular attendance every day, (Sundays excepted;) and no entry shall be made, or warrant given to survey any lands, until two months after the passing of this act, in which time the surveyor general shall appoint and qualify the several deputy surveyors respectively hereinbefore mentioned to be appointed: *Provided,* That nothing in this act contained shall extend to entitle any person or persons to lay warrants of survey, or receiving grants of land appropriated by the resolution of the legislature as a provision for the officers and soldiers of the continental line of this State, except such persons as are entitled thereto under the said resolution.

JOHN LLOYD, *President of the Senate.*

HUGH RUTLEDGE, *Speaker of the House of Reps.*

MARCH 21, 1784.

South Carolina.

I do hereby certify, for Major William Laval, a tract of low land, containing eight hundred and seventy acres, surveyed for him the 24th of March, 1834, situate in Charleston district, bounded on the north and

west by Charleston harbor, on the south by James Island creek and Morris Island creek; and hath such form and marks as the above plat represents.

EDWIN R. DOWILL, *Deputy Surveyor.*

Given under my hand this 25th March, 1834.

SAMUEL KINGMAN, *Deputy Surveyor General.*

SURVEYOR GENERAL'S OFFICE, *Charleston, November 26, 1834.*

A true copy from State records, vol. 41, page 9.

Examined and certified by—

SAMUEL KINGMAN, *Deputy Surveyor General.*

23D CONGRESS.]

No. 592.

[2D SESSION.]

ON THE INEXPEDIENCY OF ABOLISHING THE OFFICE OF MAJOR GENERAL OF THE
ARMY OF THE UNITED STATES.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JANUARY 13, 1835.

Mr. R. M. JOHNSON, from the Committee on Military Affairs, to whom was referred the resolution of the House of the 9th of December, directing them to inquire and report upon the expediency of abolishing the office of major general commanding in chief, and of providing for a fixed allowance, and for a reduction and more equitable distribution of the pay, rations, and emoluments of the general and staff officers of the army, reported:

That, in the year 1815, the army was reduced from a war to a peace establishment of ten thousand men, with two major generals and four brigadier generals, and other staff officers suitable to the establishment. In 1821 a further reduction took place, when one major general and two brigadier generals were retained, and a suitable staff. The number of regiments composing the present peace establishment is four of artillery, seven of infantry, and one of dragoons, exclusive of engineers and ordnance; making, in the whole, an aggregate of seven thousand one hundred and ninety-eight officers and men; and these regiments are at present only the skeleton of what they would be in case of war, when the number of men would be doubled. The proportion of general officers seems to be as few as is consistent with the greatest economy, and the organization is as perfect as could be desired for a peace establishment. There is one major general to command the whole army, and one brigadier general to each division of it. It does not appear to the committee that a less number of general officers could be assigned to such a force without endangering the military spirit of the army, as well as its discipline, which at present appears, from the reports of the President and the Secretary of War, to be highly satisfactory. The committee are, therefore, of opinion that the office of major general ought not to be abolished.

With regard to the equitable distribution of the pay, rations, and emoluments of the general and staff officers of the army, the committee do not see any objection to the present distribution of them. They have been settled by repeated legislation on the subject, and with a view to the circumstances connected with the duties required to be performed by the officers. The committee therefore beg leave to be discharged from the further consideration of the subject.

Pay and emoluments of the Major General of the Army.

The act of the 11th of January, 1812, section 6, fixes the pay of the major general at two hundred dollars a month, and fifteen rations a day; and the act of the 12th of April, 1808, section 6, estimates the ration at twenty cents.

The act of the 24th of April, 1816, section 12, fixes the allowance of forage for each horse, when forage is not drawn in kind, at eight dollars a month, the number of horses not to exceed the number authorized by existing regulations, which give to a major general seven.

The act of the 24th of April, 1816, section 12, provides that all officers be allowed for each private servant actually kept in service, not exceeding the number authorized by existing regulations, the pay, rations, and clothing of a private soldier, or money in lieu thereof. The regulations referred to fix the number of private servants for a major general at four.

The regulation of the 25th of August, 1812, gives the generals commanding separate armies double rations, founded, it is presumed, on the act of the 3d of March, 1797, section 4, which gives to the brigadier general while commander-in-chief, and to each officer while commanding a separate post, twice the number of rations to which they would otherwise be entitled; and on the act of the 16th of March, 1812, section 5, the regulations of the department allow to a major general six rooms as his quarters, one of which as a kitchen; and, when not furnished in kind, an allowance in lieu thereof of six dollars a room a month while on duty.

The same regulations allow, under the same circumstances, during five months of the year, one cord of wood per month to the major general, and two feet eight inches to his four servants; and, during the other seven months of the year, six cords of wood a month for the major general, and five feet four inches a month for his four servants; making in all fifty-two cords two feet and eight inches of wood a year, at five dollars a cord.

The pay and emoluments, then, of a major general per year are as follows:

Pay	\$2,400 00
Subsistence	1,095 00
He is, besides this, allowed as follows:	
For four servants, provided he actually keeps them, and does not employ soldiers from the line, each the pay and emoluments of a private soldier.....	\$700 00
Forage for seven horses, provided he actually keeps them in service, at eight dollars a horse per month.....	672 00
Quarters and fuel, provided he is on duty, and they are not furnished in kind....	698 66
	2,070 66
Double rations while in command of the army.....	1,095 00
	6,660 66

It will be seen by the foregoing statement that the items of servants, forage, fuel, quarters, and double rations, are contingent allowances, and that there is no emolument derived from them; that a general cannot do his duty without horses and servants. The horses are purchased at his own expense, and eight dollars a month a horse will not pay the expense of his keeping.

WAR DEPARTMENT, *December 24, 1834.*

SIR: In conformity with your request, I have the honor to transmit a report showing the pay and emoluments of all descriptions appertaining to the office of major general commanding the army by the laws and regulations now in force.

You request me to submit to you any views concerning that office which may occur to me. I am not aware that anything which I can say on the subject will be useful to the committee; but I still think it proper that I should lay before you the ideas which have occurred to me.

In 1815 the army was reduced from the war to a peace establishment, and two major generals were retained. In 1821 it was still further reduced, and only one major general retained. In that condition it has remained until the present period.

Two great objects were held in view in these reductions. One was to preserve such a force as might be necessary to garrison our seaboard, and to afford adequate security to our inland frontier. The other was to continue such an organization as would readily admit of a proper extension in the event of the occurrence of any difficulties rendering an increase necessary. The present organization seems to have attained these objects. The army is efficient without being too numerous, and the military arrangements are such that new troops may be engrafted upon it, and the benefit of experience preserved, without those losses and delays which inevitably occur where new forces are suddenly embodied.

I consider the office of major general essential to the unity of command. He is stationed at this city to superintend and direct those parts of the administration of the army which are strictly military in their character, and which, to be properly conducted, require not only the advantage of military experience, but of a military connexion with the army. If the office of major general should be abolished, and but two brigadier generals retained, they must either remain in command of separate districts, and this department thus be deprived of the assistance and advice of an officer of high rank in the management of those concerns which peculiarly affect the army, or one of them must be stationed here exercising an authority over the whole service. The latter arrangement would certainly be liable to objection, and would be inconsistent with the established principles of the military service. These principles look to the union of separate bodies or corps under one individual. Companies are united into battalions, battalions into regiments, regiments into brigades, and brigades into divisions, and an officer is placed at the head of each of these bodies charged with its general concerns, and responsible for them. This point of union I consider proper, if not essential. The principle has heretofore been preserved, and I should regret to see it departed from.

Very respectfully, your most obedient servant,

LEW. CASS.

Hon. R. M. JOHNSON, *Chairman Committee on Military Affairs, H. R.*

P. S.—The resolution enclosed by you is herewith returned.

23D CONGRESS.]

No. 593.

[2D SESSION.]

ON THE EXPEDIENCY OF REPAIRING THE FORTIFICATIONS IN THE HARBOR OF BOSTON,
MASSACHUSETTS.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JANUARY 13, 1835.

WAR DEPARTMENT, *January 12, 1835.*

SIR: In conformity with the resolution of the House of Representatives of the 8th instant, I have the honor to transmit a report from the chief engineer, communicating the information called for.

The resolution requiring my opinion upon the expediency of executing the repairs proposed in the report of the board of engineers, I beg leave to remark that that document, together with the first report of the board, furnishes all the information in my possession upon this subject. Looking at these, I am satisfied that the defences of the harbor of Boston cannot be rendered complete without the repairs contemplated. But the proper time for doing this is a subject exclusively for the consideration of Congress.

The security of Castle island from the effects of the sea is highly important; and should Congress think proper to restrict the operations to that object, the sum of eight thousand dollars, which is asked for, in addition to the amount now on hand, will be sufficient. Should they, however, decide that the reconstruction of the fort is now necessary, then an appropriation of about one-third of the sum estimated for by the engineer board will be necessary.

Very respectfully, your most obedient servant,

LEW. CASS.

Hon. JOHN BEIL, *Speaker of the House of Representatives.*

ENGINEER DEPARTMENT, *January 10, 1835.*

SIR: In compliance with the resolution of the House of Representatives of the 8th instant, I have the honor to hand you herewith the report and estimate of the board of engineers for repairing Fort Independence, in the harbor of Boston.

The report and estimate contain all the information on the subject which can at this time be furnished. It may, however, be proper to state that Fort Independence is an important part of the defensive system adopted by the board of engineers for the protection of Boston harbor. The work is old and in a dilapidated condition. To repair it properly would amount almost to a reconstruction, as all its masonry requires to be rebuilt; its parapets, ramps, and slopes to be reformed, and its gateways, posterns, and traverses renewed. The island on which it is situated is much exposed to the easterly storms which prevail on that section of the coast, and is liable to great injury from the encroachments of the water upon it. It is covered on the southeast by a stone wall, and was formerly protected on the northeast by a wharfing of timber; the latter, however, having decayed, that part of the island is again exposed, and it is proposed to cover it by the construction of a permanent wall. An estimate of the repairs required upon the island was made by a board of officers in 1831; but, owing to the impossibility of commanding the services of an officer of engineers to execute them until within the year 1833, this estimate was found to be insufficient, owing principally to the rise in the prices of the materials to be used. Another estimate was made within 1833, based upon what was supposed would be the average prices during the continuance of the work, and on the supposition, as in the former estimate, that the present plan of the work, in all its parts, would be retained. The first was \$36, 173 06, and the latter \$56, 094 80. It having been determined to convene the board of engineers in the fall of 1833 for the revision of several new works, it was deemed advisable to bring before it the condition of Fort Independence; and the report on that work, herewith submitted, is the result of their deliberations on the subject. It will be perceived that the board recommend certain additions and improvements to the work as originally designed. These additions the position of the fort in reference to the other points to be occupied for the defence of the harbor and city of Boston renders necessary, especially as it must be occupied in time of war, not only for the purposes of general defence, but also as a general depot for stores and recruits, and for the establishment of military hospitals.

I am, sir, very respectfully, your obedient servant,

C. GRATIOT, *Chief Engineer.*

Hon. LEWIS CASS, *Secretary of War.*

(For other documents and estimates, see antecedent No. 573.)

23D CONGRESS.]

No. 594

[2D SESSION.]

ON THE SUBJECT OF A COMPROMISE OF TITLE WITH THE CLAIMANT TO PEA PATCH ISLAND, IN DELAWARE RIVER, ON WHICH FORT DELAWARE STANDS.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JANUARY 23, 1835.

Mr. THOMSON, of Ohio, from the Committee on Military Affairs, to whom were referred the messages of the President of the United States of the 19th of February, 1831, and the 20th of January, 1832, recommending that provision be made by Congress to carry into effect a compromise of the title of the claimant of the island in the river Delaware, called "The Pea Patch," on which Fort Delaware is constructed, reported:

That Doctor Henry Gale, of the city of New York, many years since, claimed title to the said island, and instituted judicial proceedings to establish his claim against the United States. These proceedings had been long depending in the courts, when, on the 18th February, 1831, an agreement in writing was entered into between the agent and attorney of Doctor Gale and the Secretary of War, by which Doctor Gale was to surrender up all title to said island to the United States for the sum of seventeen thousand dollars, which was to be paid when the government was satisfied that the title of said Gale was valid.

The President of the United States immediately transmitted the agreement to Congress, in order that an appropriation might be made to enable the Department of War to carry it into effect. On the 21st February, 1831, a bill was reported to the House which provided that when it should be ascertained that the title to the Pea Patch was not in the United States, the Secretary of War was directed to enter into a contract with the person in whom the title should be found to be vested, to pay the value of said island, with the damages for its occupation by the United States, as found and assessed by the verdict of a jury. This bill was not acted upon during the session, which closed in a little more than a week after it was reported.

At the succeeding session of Congress, on the 20th January, 1832, the President of the United States again brought the subject before the House by special message, and urged that provision be made to give effect to the compromise agreed upon on the 18th February, 1831. On the 1st of February following a bill was reported to carry the compromise into effect, but the bill was not acted upon during the session, and the subject has not been touched in the House since that time.

Congress having failed, for two sessions, to make any provision for giving effect to the proposed compromise, the parties conceived the stipulations which had been entered into between the Secretary of War and the agent of Doctor Gale, the claimant, as no longer binding, and the proceedings in the judicial tribunals were resumed.

By letter dated March 2, 1833, from the attorney of the claimant, addressed to the Secretary of War, it appears that the Secretary contemplated carrying into effect the original agreement, out of the appropriation then about to be made for the repairs of Fort Delaware, and the agent makes inquiries as to the course which it was the wish of the government to pursue.

On the 26th of March, 1833, General Gratiot, the chief of the Engineer department, answered the attorney that the government had determined to purchase the title of the claimant if the Attorney General should be of opinion it was valid, and requested the claimant to come to Washington prepared to execute the original agreement. The agent came to Washington, but as Congress provided no funds for the purchase, he declined to renew the agreement of February 18, 1831, and returned to New York.

On the 23d November, 1833, the claimant proposed to the Secretary of War that if he would undertake to procure, during the then approaching session of Congress, the original sum offered, (\$17,000,) *with interest* from the date of the agreement, he was still willing to carry into effect the said agreement.

The Secretary of War immediately transmitted to the United States attorney for the State of New Jersey all the papers in the case, together with the last offer of the claimant, and requested the advice of the attorney as to whether it would be advisable to accept the compromise offered, or to let the case pursue its course to a legal termination.

On the 2d December, 1833, the district attorney of New Jersey answered the Secretary of War that it was his opinion that the title of the claimant was valid, and that he would ultimately recover against the United States, and he advises that the compromise offered by Doctor Gale be accepted by the United States. He promises to make a full brief of the case, and to transmit it to the Secretary thereafter, to enable the Attorney General of the United States to determine the propriety of executing the agreement of compromise.

The Attorney General, having examined the brief and papers in the case, informed the Secretary of War, on the 31st December, 1833, that there would seem to be much reason for contending that the title to the island in question was in Doctor Gale, the claimant, but declined, from the documents then before him, to give a decisive opinion; he also says that the documents, however, sufficiently show that the title of the United States is a doubtful one.

On the 9th June, 1834, the attorney of the United States for the district of New Jersey transmitted to the Secretary of War the brief in the case promised in his letter of the 2d December, 1833. This brief was immediately handed over to the Attorney General, who, on the 16th June, 1834, again reports to the Secretary of War that, upon the facts disclosed, and the opinion of the district attorney, he should have little difficulty in coming to the conclusion that the title to the island in question was, in 1831, in the State of New Jersey, and that by the act of the legislature of that State, of the 24th November, 1831, it was vested in Henry Gale, the claimant. The Attorney General again declined to give a *positive* opinion, but said he had no doubt as to the expediency of extinguishing the claim of Mr. Gale, if it could be done on reasonable terms.

The Secretary of War, on the 17th June, 1834, immediately upon receiving the last communication from the Attorney General, addressed a letter to the chairman of the Committee of Ways and Means of the Senate, expressive of his opinion of the propriety of forthwith extinguishing the title of Doctor Gale, and requested that an appropriation of \$20,000 for that object should be inserted in the bill then pending making appropriations for fortifications for 1834.

It thus appears, from the official documents which accompany this report, that it has been the constant desire, since February, 1831, to extinguish the claim of the present claimant to this island, which it is so vitally important that the United States should possess; and the only obstacle which has interposed to prevent it has been the want of an appropriation for that purpose. Congress have not acted upon the subject further than to report bills which have remained upon the files unacted upon. Every year's delay adds to the amount to be paid, as the claimant insists that if he now executes the original agreement, interest must be paid for the delay; and the papers which accompany this report show that the *claimant himself* contemplated a much larger sum, but was compromised by the *unadvised act* of his *agent*.

Under all the circumstances of the case, the committee believe that the interest of the public will seriously suffer by further delay; they therefore report a bill conformably to the agreements of the parties as expressed in the documents in the case.

(For message of the President of February 19, 1831, see antecedent No. 478.)

(For message of the President of January 20, 1832, see antecedent No. 501.)

(For message of the President of March 27, 1822, see Vol. II on Military Affairs, No. 224, page 376.)

(For message of the President of February 24, 1824, see same volume, No. 253, page 624.)

Agreement, dated February 18, 1831, for	\$17, 000 00
Interest, according to subsequent agreements between the Secretary of War and the claimant, four years, at six per cent.	4, 080 00
	<hr/>
Amount due on February 18, 1835.	21, 080 00
	<hr/> <hr/>

NEW YORK, *March 2, 1833.*

SIR: I had the honor a few weeks since of an interview with you on the subject of the claim of Dr. Gale on the island on which Fort Delaware is now situated. You then informed me that, in case the bill then pending in Congress on that subject should not pass this session, the claim would be extinguished out of the appropriation to be made for rebuilding the fort.

As Congress has now adjourned, I take the liberty of addressing you for instructions as to what preliminary steps will be required of the claimant. To whom shall he present the documents establishing his title? Will it be necessary for him or his agent to visit Washington to make the conveyance? By so doing, can the whole arrangement be concluded?

The justice of the claim, and the great solicitude of the claimant to terminate in some way a matter which he has been urging nearly twenty years without success, will, I trust, be a sufficient apology for pressing it upon your early attention.

With the highest respect, I have the honor to be your most obedient servant,

WILLIS HALL.

His Excellency LEWIS CASS, *Secretary of the War Department, Washington.*

ENGINEER DEPARTMENT, *Washington, March 26, 1833.*

SIR: In answer to your communication of the 2d instant, addressed to the Secretary of War, on the subject of Dr. Gale's claim to the Pea Patch island, on which Fort Delaware is situated, I am instructed to inform you that the government has determined to purchase that island from Dr. Gale, provided his title to the same shall prove, on examination by the Attorney General of the United States, to be good. Should the views, therefore, of the claimant as to the compromise heretofore offered by him remain unchanged, he is requested to come to this place in person, or to send an agent duly authorized to sell his title to the island, subject to the approval of Congress at its next session.

I am, sir, very, &c.,

C. GRATIOT, *Brigadier General.*

WILLIS WALL, Esq., (or HALL,) *Agent of Dr. Gale, New York.*

NEW YORK, *November 23, 1833.*

SIR: I am instructed by my constituents to say that if the Secretary of War will undertake to procure during the next session of Congress the original sum offered (\$17,000) for the Pea Patch island, *with interest* from the date of said original offer, an arrangement to that effect may be made.

Should the Secretary be disposed to make such an arrangement, I will visit Washington immediately for the purpose of making it, if necessary.

The parties hope for an early reply, which, if in favor of the above proposition, I shall immediately direct the legal proceedings heretofore instituted to recover the island to be suspended until the result of another application to Congress is known.

With great respect, I have the honor to be your obedient servant,

WILLIS HALL, *Agent for the Claimants.*

HON. LEWIS CASS, *Secretary of War.*

DEPARTMENT OF WAR, *November 26, 1833.*

SIR: I have the honor to enclose herewith the following papers, to wit:

A letter from the Secretary of War to the President of the United States, relating to the Pea Patch island, dated February 18, 1831.

The agreement between the agent of H. Gale and the Secretary of War, referred to in the preceding, and of the same date.

A letter from Willis Hall to the Secretary of War, dated March 2, 1833.

A letter from the Engineer department to Willis Hall, dated March 26, 1833.

A letter from Willis Hall to the Secretary of War, dated November 23, 1833.

You will perceive, by the last named, that the attorney for the claimants of the Pea Patch proposes to suspend the legal proceedings heretofore instituted to recover the island in the event of the arrangement proposed by him in the same communication be acceded to. The object in addressing you now is to obtain your advice in the matter as to whether it would be advisable to accept the compromise offered, or to let the case pursue its present course to a legal termination. The other papers are sent that you may be advised of the course pursued by this department. In accordance with the suggestion in the letter from the Engineer department of the 26th of March last, the agent visited Washington, but finding that Congress had made no provision of funds for the purchase, declined to renew the agreement made with Mr. Eaton when Secretary of War. Since the visit of that gentleman, you are aware of the course pursued by the claimants.

I am, sir, respectfully, your obedient servant,

LEWIS CASS.

G. D. WALL, Esq., *United States District Attorney, Burlington, New Jersey.*

BURLINGTON, December 2, 1833.

SIR: I had the honor of receiving your favor of the 26th ultimo, with the enclosures therein referred to.

I have heretofore had the honor of submitting my opinion in respect to the title of Dr. Gale to the Pea Patch. I think that his title is valid, and that he must ultimately recover against the United States. As far as I have been able to investigate the title, that held by the United States under the grant of Delaware is invalid. Delaware at the time of the grant had neither possession, right of possession, title, nor jurisdiction over the island. It lies within the jurisdiction of New Jersey. It is my opinion that the United States had better accept the compromise offered. I will, as soon as I can collect the materials, send you a brief of the titles to the island under the State of Delaware and under the State of New Jersey. This brief will enable the Attorney General at once to determine the propriety of compromising. I shall be able to forward the brief before the 1st of January.

I have the honor to be, sir, with great respect, your obedient servant,

GARRET D. WALL, *Attorney of United States, New Jersey District.*

Hon. LEWIS CASS, *Secretary of War, Washington.*

ATTORNEY GENERAL'S OFFICE, December 31, 1833.

SIR: I have perused the brief, and examined the accompanying papers, referred to in your communication of the 28th instant, on the subject of the title to the Pea Patch island, in the Delaware river. From the documents cited and the facts alleged in these papers, there would seem to be much reason for contending that the title to this island is in the claimant under the colony and State of New Jersey; but I find it impossible, in the present state of the case, and on the evidence before me, to give a decisive opinion on this point. It seems that when the government took possession of the island it was claimed by the State of Delaware, and that the United States entered under a grant from that State, whose title to it was then, and has been since, strongly supported by the opinions of several eminent jurists. The documents submitted to me are sufficient to show that the title derived from the State of Delaware is a doubtful one, but this is all that I now feel myself authorized to say.

I have the honor to be, very respectfully, your obedient servant,

B. F. BUTLER.

Hon. LEWIS CASS, *Secretary of War.*

The papers are herewith returned.

NEW YORK, January 16, 1834.

SIR: I have the honor to enclose you a letter from James La Tourette, former agent of Dr. Gale, in reply to some inquiries respecting his contract with the late Secretary of War for the sale of the Pea Patch island. I submit it for the purpose of showing the propriety of the offer made by me in my communication of the 23d November last. In my letter of that date I offered to dismiss the suit now pending, and make satisfactory conveyances of the island for \$17,000, the original offer, and interest from the date of the offer, equal to \$20,000. My object was to make an offer as favorable to the government as the one originally made by Mr. La Tourette.

On the 17th of December last I received a letter from General Gratiot, of date of 13th, informing me that G. D. Wall, esq., to whom my letter had been referred, had reported favorably of the title of Dr. Gale, and promised "to submit the facts on which his opinion is founded for the examination of the Attorney General." The letter concludes as follows: "I am, in consequence, directed by the Secretary of War to say to you that the proposition made in your letter above referred to will be acceded to, provided the opinion of the Attorney General shall be in accordance with that of Mr. Wall."

In consequence of this letter, I repaired to Washington with the documents requisite to establish Dr. Gale's title. I should not have incurred the expense and loss of time, but for the letter from General Gratiot, in which I am informed that "my proposition will be acceded to in case the title is approved by the Attorney General." With this impression, I was much surprised, the morning I left Washington, by being informed by General Gratiot that everything could be arranged at once, provided I would take \$17,000. I had supposed everything was arranged but the title, that the terms were settled, and had so informed my principals. I could not accept this new proposition without again referring to my principals for instructions. One of them, most interested, lives in Illinois, and some weeks must elapse before he can be heard from.

Let me again urge the proposition contained in substance in my letter of the 23d of November, which is to convey the title for \$20,000. The moderation of this offer will commend it to your sense of justice; it is the same, in effect, as the one accepted by your predecessor; it is less in fact to the claimants, for heavy expenses incurred in prosecuting the claim, and in procuring the title of the *State of New Jersey*, (which was not in Dr. Gale when the contract was made with Major Eaton,) are now to be deducted from the sum received. It is true that \$17,000 would not pay the sum expended by Dr. Gale since 1815 in prosecuting this claim. It is not the interest of the government to deprive any citizen of his just rights, and such a result, I am confident, would be deprecated by no one more than by yourself. I only ask for the claimants your frank, unbiassed consideration of their claim.

If you have doubts as to the propriety of giving a larger sum than \$17,000, I am willing to make a conveyance of the title for that sum, and appeal to Congress for a further compensation for *mesne profits*. After the title is conveyed, it will, of course, be optional with Congress to give anything in the name of *mesne profits* or not. Perhaps this course will obviate all difficulties. It is one which my principals formerly intimated their readiness to adopt. I respectfully suggest it for your consideration.

With great respect, I have the honor to be your obedient servant,

WILLIS HALL.

Hon. LEWIS CASS, *Secretary of War*.

NEW YORK, *January 16, 1834.*

DEAR SIR: Relative to the inquiries concerning my contract with Major Eaton, late Secretary of War, I will answer—

1st. The demand I was to make was \$30,000, allowing but \$10,000 for insulting Doctor Gale and his people, in driving them unceremoniously from the island, tearing down their fishing houses, &c.

2d. From Major Eaton's own suggestion, I was induced to say what I would take from an individual, *cash paid in hand*, rather than the delay of a probable lawsuit.

I reflected, the long time, and the cares attending a lawsuit, I would take \$17,000 *cash, and be at peace with government*. Honorable to Major Eaton, he instantly made the contract the next day. The President of the United States sent a message to the Senate, and it was approved, and passed unto a committee, and there it has remained.

3d. I would not have taken \$17,000 had I expected it would have been delayed until now, nor \$25,000.

I am your friend and obedient servant,

JAMES LA TOURRETTE.

WILLIS HALL, Esq.

BURLINGTON, *June 9, 1834.*

SIR: I have the honor of sending herewith the papers which were furnished to me by the War Department, in relation to the Pea Patch. I also send a brief of the title of Dr. Gale to the Pea Patch, and of the State of Delaware to the same.

I am under the necessity of throwing myself on the indulgence of the department for not sending these papers at an earlier day. I had given the papers confided to me by the department to a young gentleman in my office to copy, and he went off to Alabama without making the copies, and without returning them to me; and it became necessary for me to write to him, and wait for his answer. He had placed them in the office out of the appropriate place, and, in order to find them, it became necessary to make a search through papers which had accumulated for upwards of thirty years' extensive practice. I was fortunate enough to find them last week, and immediately entered upon the duty of preparing the enclosed brief. This was a work of some labor, and more research; and I hope will enable the Attorney General to make up an opinion without much labor.

I have the honor to be, sir, with great respect, your obedient servant,

GARRET D. WALL, *Attorney United States, New Jersey District.*

Hon. LEWIS CASS, *Secretary of War, Washington.*

In the third circuit court of the United States for the New Jersey district.

<p>JOHN DEN, EODEM HENRY GALE, vs. HENRY BEALING, BENJAMIN COOPER, JOHN JEFFERSON, JOHN GARNER, JOHN CORKRIN, and WILLIAM LONG.</p>	}	<p>In ejectment for three hundred acres of land situate in the township of Lower Penn's Neck, in the county of Salem and district of New Jersey, commonly called the Pea Patch.</p>
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The ejectment in this case was returned to the term of October, 1833, and issue is joined.

The title of the plaintiff (with which I am familiar) is as follows:

* King Charles II, by patent dated March 12, 1664, for the consideration therein mentioned, did give and grant unto his brother James, Duke of York, his heirs and assigns, "all that part of the main land of New England, beginning at a certain place known by the name of St. Croix, next adjoining to New Scotland, in America, and from thence extending along the sea-coast unto a certain place called *Pettuaquine*, or *Pemaquid*, and so up the river thereof to the furthest head of the same as it tendeth northward, and extending from thence to the river of Kenebeque, and so upward by the shortest course to the river of Canada northward. And also all that island or islands commonly called by the several name or names of

⁹ Paterson's Laws of New Jersey, Appendix 1. Grants and concessions, and original constitutions of New Jersey, by Aaron Leaming and Jacob Spicer, pages 3 and 4.

Matowacks, or Long Island, situate, lying, and being towards the west of Cape Cod, and the narrow Higansetts, abutting upon the main land between the two rivers there, called or known by the several names of Connecticut and Hudson's river, together also with the said river called Hudson's river, and all the lands from the west side of the Connecticut to the east side of Delaware bay. And also all those several islands called or known by the names of Martin's Vineyard and *Nantukes*, or otherwise *Nantubett*. Together with all the lands, islands, soils, rivers, harbors, mines, minerals, quarries, woods, marshes, waters, lakes, fishings, hawkings, huntings, and fowlings, and all other royalties, profits, commodities, and hereditaments to the said several islands, lands, and premises belonging and appertaining, with their and every of their appurtenances; and all our estate, right, title, interest, benefit, advantage, claim, and demand of, in, and to the said lands and premises, or any part or parcel thereof; and the reversion and reversions, remainder and remainders, together with the yearly and other the rents, revenues, and profits of all and singular the premises, and of every part and parcel thereof. To have and to hold all and singular the said lands, islands, hereditaments, and premises, with their and every of their appurtenances, hereby given or granted, or hereinbefore mentioned to be given and granted unto our dearest brother James, Duke of York, his heirs and assigns, forever."

This patent also grants the powers of government, &c., *in extenso*, over the premises granted.

* James, Duke of York, by deeds of lease bearing date June 23, 1664, and release bearing date the 24th June, 1664, for the consideration therein mentioned, did grant, bargain, sell, release, and confirm unto *John Lord Berkeley* and Sir George Carteret, their heirs and assigns, forever, "all that tract of land adjacent to New England, and lying and being to the westward of Long Island and *Manhitas* island, and bounded on the east part by the main sea and part by Hudson's river, and back upon the west Delaware bay or river, and extending southward to the main ocean as far as Cape May, at the mouth of Delaware bay; and to the northward as far as the northernmost branch of the said bay or river of Delaware, which is forty-one degrees and forty minutes of latitude, and crosseth over thence in a straight line to Hudson's river, in forty-one degrees of latitude, which said tract of land is hereafter to be called by the name or names of New Cesarea, or New Jersey. And also all rivers, mines, minerals, woods, fishings, hawkings, huntings, and fowlings, and all other royalties, profits, commodities, and hereditaments whatsoever to the said lands and premises belonging, or in anywise appertaining, with their and every of their appurtenances, in as full and ample manner as the same is granted to the said Duke of York by the before-recited letters patent; and all the estate, right, title, interest, benefit, advantage, claim, and demand of the said James, Duke of York, of, in, and to the same, or any part and parcel thereof, and reversion and reversions, remainder and remainders thereof."

Under this deed John Lord Berkeley and Sir George Carteret entered into possession of the premises, and colonized the State.

Up to the time of the grant, and for some time after, New Jersey was in possession of the Dutch, who held New York and New Jersey under the title of *New Netherland*.

† Colonel Richard Nicolls, Sir Robert Carr, and Samuel Maverick were sent out with a fleet to put the Duke of York in possession. Nicolls's commission bears date April 2, 1664.

In September, 1664, the Dutch surrendered New York to Nicolls, and on October 1, 1664, Newcastle, and all the possessions of the Dutch and Swedes on Delaware bay and river, to Sir Robert Carr, who entered the Delaware with his ships.

In the summer of 1665 Captain Philip Carteret, who was the first proprietary governor of New Jersey, arrived with several settlers, who received grants under Berkeley and Carteret, and began the first English settlement of New Jersey.

In 1672 New York surrendered to the Dutch, who, under Commodores Cornelius Evere and Jacob Benkes, conquered the fort at New York.

‡ The people of New Jersey sent deputies to New York, and swore allegiance to the States General and the Prince of Orange, and the governor of the Duke of York returned to England.

On the 9th of February, 1674, the treaty of peace between England and the States General was signed at Westminster, by which New York and New Jersey were restored to the English.

In order to remove all doubts as to the will of the Duke of York and his grantees, by reason of the conquest from and by the Dutch, and cession made by the Dutch to the English by the treaty of the 9th of February, 1674, § King Charles II, by letters patent dated June 29, 1674, granted to the Duke of York the State of New Jersey in the same manner and by the same description as he had previously granted the same. ¶ Previous, however, to this patent, King Charles II, by letters patent dated June 13, 1674, acknowledged the rights of the proprietors of New Jersey and their powers of government.

On the 29th July, 1674, the Duke of York, by deed of that granted, &c., to Sir George Carteret, East New Jersey, in the same manner as before granted to John Lord Berkeley and Sir George Carteret. ¶ On the 18th of March, 1673, John Lord Berkeley conveyed his moiety of New Jersey to John Fenwick.

** By deeds dated February 9, 1674, and February 10, 1674, Edward Byllynge, William Penn, Gawn Lawry, and Nicholas Lucas, became seized of John Fenwick's moiety.

By deed of division, bearing date July 1, 1676, New Jersey was divided into East and West New Jersey; East New Jersey being allotted to Sir George Carteret, and West New Jersey to Edward Byllynge, William Penn, Gawn Lawry, and Nicholas Lucas.

On 7th November, 1743, the council of proprietors of West New Jersey, by warrant of that date, directed their surveyor general to survey to Samuel Atkinson and wife six hundred acres of unappropriated land anywhere in the western division of New Jersey, below the falls at Trenton.

April 6, 1744, Samuel Atkinson and wife conveyed the whole of the said warrant to John Robbins, by deed of that date.

October 6, 1784, Elias Robbins, eldest son and heir-at-law of John Robbins, conveyed to Edward Hall fifty-two and a half acres, and half a tenth of said warrant.

August 7, 1782, the council of proprietors of West New Jersey, by warrant of that date, directed their surveyor general to survey to Daniel Ellis 5,000 acres of unappropriated land anywhere in the western division of New Jersey.

° Paterson's New Jersey Laws, Appendix 3. Leaming and Spicer, 8, 9, &c.

† Proud's History of Pennsylvania, and Smith's History of New York, and Smith's History of New Jersey, *passim*.

‡ Leaming and Spicer, 50.

§ *Ibid.*, 41.

¶ *Ibid.*, 49.

¶ *Ibid.*, 64.

¶ *Ibid.*, 65.

Daniel Ellis, by deed dated August 8, 1783, conveyed to John Lawrence 600 acres of said warrant. September 1, 1784, John Lawrence conveyed to Clement Hall and Edward Hall 126 acres of said warrant

By virtue of the above warrants, on the 8th October, 1784, Edward Hall and Clement Hall caused a survey to be made on the island in the river Delaware, in the county of Salem, in New Jersey, called the Pea Patch, thus described:

An island in the river Delaware, called the Pea Patch, situate in the county of Salem, about one mile west from Ferr's Point, in Penn's Neck, and is about west of the mouth of Salem creek, and a little above Reedy Point; also nearly southeast and by east from Hamburg about two and a half miles, and about south one and a half point west from the Tile house at Newcastel, distant about four and a quarter miles, and bounded, &c., containing 178 acres of marsh land, bank, and mud flats, and allowance for roads.

The survey was made by Elnathan Davis, a deputy surveyor of the surveyor general, and the return is dated October 27, 1784.

On the 3d November, 1784, it was approved by the board of proprietors, and ordered to be recorded, and recorded accordingly.

This deduction of title is perfect according to the laws of New Jersey, and vests in the said Edward Hall and Clement Hall all the title derived from the grant made by the King to the Duke of York in the premises in question.

Edward Hall and Clement Hall entered on the island at the time of the survey, and it was staked out, and they took possession as far as it was capable of possession.

The Pea Patch is an island which has arisen within memory. It appeared first about sixty or seventy years ago, and arose from the sinking of a vessel loaded with peas, and thus acquired its name. By gradual alluvions and deposits it has assumed its present state.

Shortly after the survey the Halls rented the island to one John Mugway for twelve dollars and fifty cents, or fifty muskrat skins, per annum, and he paid the rent for two years.

The Halls possessed the island during the lifetime of Clement Hall.

In December term, 1811, the administrators of Clement Hall applied to the orphans' court of the county of Salem for the sale of his real estate, and the said court decreed the Pea Patch to be sold.

The moiety of Clement Hall was sold accordingly, and purchased by Henry Gale for \$500, and on the 27th February, 1813, the administrators of Clement Hall conveyed, by deed, to the said Henry Gale, the one moiety of the Pea patch.

On 27th February, 1813, Edward Hall and wife conveyed the other moiety of the Pea Patch to the said Henry Gale by deed of that date.

Doctor Henry Gale went immediately into possession, cleared a fishery on the island, and occupied it during the fishing season for two years, and until he was expelled by force by the United States, who took possession under a grant from the State of Delaware.

No possession had ever been taken of this island until the United States forcibly entered, except by Doctor Gale and those under whom he claimed. Neither the State of Delaware nor any other claiming under it, or adverse to the New Jersey claim, had any possession of the island from its first formation until the United States entered.

This island lies ten or twelve chains nearer to the Jersey shore than to the Delaware shore; and the ship channel, or main channel, runs between the Pea Patch and the Delaware shore.

* The State of New Jersey, by an act passed on the 24th November, 1831, entitled "An act vesting in Henry Gale, his heirs and assigns, all the right and title of the State of New Jersey of, in, and to an island called the Pea Patch, in the river Delaware, in the county of Salem and State of New Jersey," for the consideration therein mentioned, granted and conveyed all the right and title of the said State to the said Henry Gale, his heirs and assigns, forever, in as full and ample manner as the said State hath right and title to grant and convey the same, reserving the right of jurisdiction and sovereignty.

From the above deduction of title, it is obvious that if the grant made by the King to the Duke of York passed any interest in the river Delaware, it is now vested in Doctor Henry Gale. It may be justly argued that it passes by the terms of the grant, which are as comprehensive as can be well imagined.

The grant made by the King to the Duke of York was for the purpose of colonization. It is true that the western boundary is thus limited, "halting upon the west Delaware bay or river;" yet it is manifest that this is not designed to limit anything more than the extent of land, for the grant goes on to pass "all rivers, mines, fishings, royalties, commodities, and profits whatsoever to the said lands and premises belonging, or in anywise appertaining."

† August 6, 1860, the Duke of York, by deed of confirmation, reciting the different grants hereinbefore stated, confirms the moiety of John Lord Berkeley and others, to William Penn and others, with all islands, bays, rivers, forts, waters, royalties, franchises, and appurtenances whatsoever to the same belonging, or in anywise appertaining: as also the free use of all bays, rivers, and waters leading into, or lying between, the said premises, or any of them, in the said parts of America, for navigation, free trade, fishing, or otherwise; and also all the powers of government as fully as they were granted by the King to the Duke of York; and also it is declared that the said several powers and authorities were given and granted to the Duke of York, and his assigns, by the King, for the "planting, peopling, and improving" of the lands, places, and territories, thereby granted, and for transporting thither subjects, &c., as also for the defending, guarding, and keeping the same.‡ The Duke of York, also, by deed of confirmation, dated March 14, 1682, confirmed to the grantee of Sir George Carteret East Jersey in a similar manner.

§ On November 23, 1683, King Charles II confirmed these deeds.

New Jersey has always claimed and exercised jurisdiction over the Delaware bay and river.

|| In 1679 and 1680 Sir Edmund Andros, the governor of the Duke of York, of the colony of New York, which was conveyed (*inter alia* with New Jersey) to the Duke by King Charles II, imposed a duty of 10 per cent upon all European goods imported in the Delaware, which was collected at the Hoar kills, or Lewistown; it was discontinued at the instance of the proprietors of New Jersey, who, in their remonstrance, insist that they have a right to land anywhere in the Delaware bay, as the bounds of the country they bought; that the right of colonizing was part of their bargain; that they bought the soil and right of government together; and that the powers of government limited them to erect no polity contrary to the laws of England; and that with this restriction they had the right of making laws for the good of the

* Harrison's Compilation N. J. Laws, 366.

† Leaming and Spicer, 412.

‡ Ibid., 141.

§ Ibid, 151.

|| Smith's History of New Jersey, 116, &c.

adventurer and *planter*; that if the Duke claims it by the *jure regale*, that power over the Territory constituting New Jersey is vested in his *alienees*.

* In 1682 the legislature of New Jersey resolved that the land and government of New Jersey were purchased together.

† In 1676, in the concessions and agreements of the proprietors, freeholders, and inhabitants of West New Jersey, convenient portions of lands are granted for wharves, quays, and harbors; and it is declared that all the inhabitants of West New Jersey have the liberty of fishing in Delaware river.

‡ In 1681 the commissioners chosen for settling and regulating lands within the province prescribe that the surveyor shall measure the lands from St. Pink creek, (Assinpink creek, at Trenton,) and from thence down to Cape May, and that each proprietary should have their proportion of front to the river Delaware.

§ In 1683 the assembly of New Jersey resolved that the proprietary of Pennsylvania be treated with in reference to the rights and privileges of this province *to* or *in* the river Delaware.

|| On April 15, 1702, the proprietors of East and West New Jersey surrendered the powers of government to Queen Anne, which was accepted by the Queen on April 17, 1702.

¶ In the proposals made by the proprietors of New Jersey to the lords of the council of trade and foreign plantations, (which is always considered part of the surrender,) the proprietors** stipulate for the confirmation of the soil and lands of the province to the proprietors, and it is acceded to without objection.

†† That the proprietors may be lords of the soil; and it is acceded to.

‡‡ And the council say that the rights accruing to the proprietors from the seas adjacent cannot be well circumscribed.

§§ As early as 1765 the legislature of New Jersey passed an act regulating the fisheries in the river Delaware, and have continued to do so ever since.

||| In April, 1783, New Jersey and Pennsylvania entered into an agreement respecting the islands and jurisdiction of the Delaware from the station point to the circular boundary of the State of Delaware, adopting, as the general principle, that the islands should belong to that State to which they lay nearest.

From a very early period the proprietors have passed surveys of islands in the river Delaware, and all the islands in the Delaware are held under surveys approved by the council of proprietors of West New Jersey.

There are few islands in the Delaware below the circular boundary of the State of Delaware.

Egg island and Stipson's island are the only ones now recollected which lie nearest the Jersey shore, and they are both held under surveys on warrants issued by the proprietors of New Jersey.

The several sand flats which have arisen are also now held where they lie nearest to the Jersey shore under surveys on like warrants.

¶¶ In 1693 the assembly of New Jersey passed an act reciting that "the whalery in Delaware bay has been in so great a measure invaded by strangers and foreigners, &c.; and enacting that all persons not residing within the precincts of this province, or within the province of Pennsylvania, who shall kill or bring on shore any whale or whales *within Delaware bay, or elsewhere within the boundaries of this government, to pay one-tenth of the oyl to the governor,*" &c.

On November 28, 1822, the legislature of New Jersey declared the *ship channel* to be the Delaware boundary of Salem, Cumberland, and Cape May counties.

*** On November 7, 1820, the legislature of New Jersey passed an act to appoint commissioners to meet commissioners to be appointed on the part of Delaware to meet and conclude an agreement between New Jersey and Delaware "defining their respective boundaries, jurisdiction, rights to islands, subaqueous soil, fisheries, and products of the river and bay of Delaware southeastwardly of the circular boundary between the States of Delaware and Pennsylvania."

No commissioners were ever appointed by Delaware.

New Jersey made repeated efforts to induce Delaware to pass similar laws regulating the fisheries in the river Delaware, but without success.

The State of New Jersey has, and for near fifty years has had, laws regulating the fisheries in the Delaware, which assert her jurisdiction, and regulate the exercise of the right of fishing in the whole extent of the Delaware river and bay.

The right of the State of New Jersey to the island in question, it is supposed, may be defended upon the following principles; and if the island is within the jurisdiction of New Jersey the claim of Dr. Gale cannot be well questioned.

1st. By the grant to the Duke of York the islands in the Delaware nearest the shore did or did not pass.

If they did pass, then there is an end of the question, for the Pea Patch lies on the Jersey side of the channel, and is twelve chains nearer to the shore of Jersey than Delaware.

It may be contended that it did pass, by the express terms "all the islands," &c.

1. The best expounder of the rights under those ancient and public grants for colonization and government, is the occupation and enjoyment. For more than sixty years New Jersey has exercised an adverse dominion, under a claim of right, over the waters of the Delaware. This will bind nations as well as individuals.—Vattel, 182, s. 266-4.

2. By the terms of the grant the Delaware is made the western boundary; it was granted expressly for colonization, and the powers of government were granted with the soil. Upon the purchase of so large a tract as New Jersey, bounded on its whole western border by the Delaware, it would be difficult to presume that any right in that river was excluded. It was essential to the purposes of the grant, and all presumption must be in its favor.

3. The claim and holding have always been to the middle of the Delaware. Usurpation and prescription are much more necessarily used between sovereign States than individuals.—Vattel, 254, s. 147.

Prescription composes a title as firm and just as that of property itself, established and supported by the same reasons.—Vattel, 253, s. 141-2.

* Smith's History of New Jersey, 163

† Leaming and Spicer, 390.

‡ Ibid., 436.

§ Ibid., 480.

|| Ibid., 614, &c.

¶ Leaming and Spicer, 617.

** Ibid., 589, 594.

‡‡ Ibid., 590, 595.

‡‡ Ibid., 596.

§§ Allenson's N. J. Laws, 279.

||| Patterson's N. J. Laws, 57.

¶¶ Leaming and Spicer, 519.

*** Revised Laws, 794.

The State of New Jersey always permitted the proprietors to grant the islands and subaqueous soil of the Delaware. Her courts sanctioned the right, and it has always been acquiesced in. Penn, while proprietor, and the State of Pennsylvania, recognized that right.

2d. If the right to the Delaware did not pass to the proprietors, then it has never been granted. This is undoubtedly the better opinion.

* In 1721 the attorney and solicitor general, Robert Raymond and Philip York, gave an official opinion to the lords commissioners of trade and plantations on the question whether, by the grants of Pennsylvania and New Jersey, the river Delaware passed; that by the said grants "no part of the river Delaware, or the islands lying therein, passed, but the right remained to the crown."

† This is also the opinion of Judge Washington, an opinion entitled to very great respect.

If it remained in the crown until the treaty of peace it was extinguished by that treaty, in which the King acknowledges the several States to be sovereign and independent, not only as to government, but as to the propriety and territorial rights of the same. The effect of the revolution and treaty of peace was to extend the limits of New Jersey to the middle of the bay, from its mouth upwards.

‡ By the general law of nations, where a river lies between two States, and is not included within the bounds of either, each holds to the middle of the stream; and the island existing or rising in the river must be allotted to that State to which it is nearest.

I think the right of New Jersey is undeniable if no adverse grant can be shown; none such can be shown which has or ever had validity.

Delaware never was granted by the King, the only rightful grantor. If the question was *de novo* I think that no doubt would exist that the grant under which the three lower counties of Delaware are held would be invalid. If it is good at all it is because possession has ripened it into a title. But it can go no further than the possession goes.

Delaware is not claimed under the grant made by King Charles II to William Penn, on March 4, 1681; it is not included within the boundaries.

The only grants pretended are: 1. A deed of feoffment, August 24, 1682, by the Duke of York to William Penn, for "all that the town of Newcastle, otherwise called Delaware, and all that tract of land lying within the compass or circle of twelve miles about the same, situate, lying, and being upon the river Delaware, in America; and all islands in the said river Delaware, and the said river and soil thereof lying north of the southernmost part of said circle of twelve miles about the said town, together with all rents, services, royalties, franchises, duties, jurisdictions, liberties, and privileges thereunto belonging." And the Duke of York, by deed of feoffment, dated August 24, 1682, granted to William Penn "all that tract of land upon Delaware river and bay beginning 12° south from the town of Newcastle, otherwise called Delaware, and entering so to the Hoar kills, otherwise called Cape Henlopen, together with the rivers, &c., situate in or belonging unto the limits and bounds aforesaid."

There is no doubt but the terms of these grants include the river Delaware. The objection is that the Duke of York had no title whatever to the premises granted. That could only be acquired by a grant from the King; none such was ever made, or can be produced.

It is true that Colonel Nicolls, the governor of New York under the Duke of York, conquered Delaware from the Dutch; but that gave no title to the conquered lands to the Duke; he was then a subject, and no principle is better settled than that all conquests made by a subject enure for the benefit of the crown.

This title by conquest would seem to be the one relied on by the Duke. This is confirmed by the mode of conveyance, by deed of feoffment, an extraordinary mode of conveying wild lands, &c., and best adapted to convey a possessory right.

It may be well doubted whether *subaqueous soil*, incapable of possession, as well as rights of jurisdiction and other rights, incapable of delivery, would pass by a deed of feoffment.

§ In October, 1717, Edward Northey and W. Thompson, attorney and solicitor general, in their opinion to the lords commissioners of trade and plantations, deduce the title of William Penn to Delaware. It is manifest that they are not aware of any valid grant from the King.

|| Also, in 1721, Robert Raymond and Philip York are manifestly ignorant of any valid grant of the Delaware river; and it is hardly to be supposed that not only the law officers of the Crown, but the lords commissioners of trade, &c., should be ignorant of so important a conveyance from the Crown. It is sufficient, however, to say that no such grant can be produced.

These opinions of the law officers, before referred, render it certain that none was ever made.

Then there is no valid grant from the King to any person for the river Delaware; and the right arising from the revolution and the treaty of peace, as well as the general law of nations, allots to the contiguous States, respectively, the jurisdiction and propriety in the river to the middle of Delaware, from its mouth upwards.

In looking at the grant made by the Duke of York to William Penn of Newcastle and the twelve-mile circle, it is obvious that it would include a considerable portion of the county of Salem, the whole of the town of Salem, and several other places then actually settled and inhabited under former grants made by the Duke of York, under title derived from the King. The several deeds of feoffment made by the duke to William Penn being *void*, cannot be extended beyond what was actually possessed under it; and it must now be limited by that possession.

I am not aware that Delaware has ever asserted her claim to the waters of the Delaware, even to the channel, except in the cession made to the United States.

Even if there were doubts about the validity of the Delaware title, which I do not think is the case, yet I think the United States ought to compensate Doctor Gale.

When Delaware ceded the island to the United States, Doctor Gale was in possession, under a title valid if within New Jersey. The United States received a conveyance from the State of Delaware when out of possession, and upon that title forcibly ejected and dispossessed Doctor Gale, who was in possession under title derived from those who had been in possession, peaceable and undisturbed, for thirty years at least.

GARRET D. WALL, Attorney United States for the district of New Jersey.

BURLINGTON, June 9 1834.

* 1 Chalmers's Opinions, p. 61.

† 4 Peters's Circuit Court Reports, page 385-6, &c. Corfield vs. Coryell.

‡ 5 Wheat., page 359, &c.

§ Chalmers's Opinions, pp. 40 to 57.

|| Ibid., p. 61.

ATTORNEY GENERAL'S OFFICE, June 16, 1834.

SIR: In answer to your inquiry concerning the title of the United States to the Pea Patch island, upon which you have again requested my opinion by your letter of the 14th instant, I have the honor to state that upon the facts disclosed in the statement and opinion of the district attorney, Mr. Wall, I should have little difficulty in coming to the conclusion that the title to this island was in 1831 in the State of New Jersey, and that by the act of her legislature, passed on the 24th of November in that year, it was vested in Henry Gale, the present claimant. Mr. Wall, however, differs from Messrs. Rodney and Read in regard to several material facts, and especially in respect to the title and jurisdiction heretofore claimed and exercised by their respective States in and over the waters of the Delaware. Mr. Wall states that "for more than sixty years New Jersey has exercised an adverse dominion, under a claim of right, over the waters of the Delaware," and that "the claim and holding have always been to the middle of the Delaware." On the other hand, Mr. Read, in his opinion of the 7th of September, 1818, affirms that the State of Delaware, according to the limits defined in the deed of feoffment from William Penn, (which includes the island in question and the whole river,) "has uniformly asserted and exercised jurisdiction over the river to the low-water mark of the State of New Jersey." And the same fact is substantially stated in the joint opinion of Messrs. Rodney and Read, enclosed in their letter to the Secretary of War of the 2d of July, 1820. With this point unsettled and debated, it would be difficult and unsafe to say more than was expressed in my communication to you of the 31st of December last, to which, therefore, I must yet adhere; though I have no doubt as to the expediency of extinguishing the claim of Mr. Gale, provided it can be done upon reasonable terms.

I am, sir, with great respect, your obedient servant,

B. F. BUTLER.

The papers are herewith returned.

Hon. LEWIS CASS, *Secretary of War.*

WAR DEPARTMENT, January 20, 1835.

SIR: From the enclosed copy of a letter of the 17th of June last to the Hon. Daniel Webster, which I have the honor to transmit to you, you will perceive that the papers asked for in your letter of the 17th instant, in relation to the island on which Fort Delaware stood, were transmitted during the last session of Congress to the Finance Committee of the Senate, to whom I must refer you for them, as they have not yet been returned to the department.

Very respectfully, your most obedient servant,

MAHLON DICKERSON, *Acting Secretary of War.*

Hon. R. M. JOHNSON, *Chairman of the Committee of Military Affairs, House of Representatives.*

DEPARTMENT OF WAR, June 17, 1834.

SIR: I have the honor to enclose herewith certain papers mentioned in the accompanying list. They have just been received from General Wall, the United States district attorney for the State of New Jersey, to whom they were referred for his opinion in the case to which they relate. This opinion, with the papers, has been submitted to the Attorney General, whose opinion you will also find enclosed.

On the whole it is deemed advisable to extinguish the title of Mr. Gale, by the payment of the sum proposed, to wit: \$20,000, and with this view I have the honor to request you to propose the necessary provision, when the bill making appropriation for certain fortifications, now before the House, shall reach the Senate.

When you shall have no further use for the papers will you have the goodness to return them to the files of this department?

With great respect, I am, sir, your obedient servant,

LEWIS CASS.

Hon. DANIEL WEBSTER, *Chairman of the Committee on Finance, United States Senate.*

BURLINGTON, New Jersey, January 24, 1820.

SIR: As measures are taking to bring on the trial of the action of ejectment brought by Henry Gale for recovering the Pea Patch at the circuit court of the United States to be held at Trenton on the 1st day of April next, I think it proper to call your attention to that subject. Mr. Read, of Delaware, will, I understand, attend the trial on the part of the United States, and I have no reason to doubt but that they will be ably defended. In a case, however, of so much importance, to be tried by a jury of New Jersey, and involving a question as to the territorial limits of the State, in which its citizens are deeply interested, I would respectfully ask whether it would not be prudent to engage on the part of the government the most influential and able counsellor at our bar—I mean Richard Stockton, esq., of Princeton. Should you be of that opinion, it cannot be done too soon, as he would not only require time to investigate the adverse claims, but his advice might be useful in preparing the cause for trial.

I am, very respectfully, your obedient servant,

J. McILVAINE, *Attorney of United States for New Jersey District.*

Hon. JOHN C. CALHOUN, *Secretary of War.*

NEWCASTLE, *September 7, 1818.*

Captain Babcock of the United States engineers has submitted to my consideration a communication addressed to him from the Engineer department, instructing him to institute an inquiry as to the title to the island in the river Delaware commonly called the Pea Patch, and has requested me to give him my views in relation to the matter.

My opinion is that any claim of title not derived from the State of Delaware is entirely groundless. By the deed of feoffment of the Duke of York to William Penn, anno Domini 1682, "of Newcastle and the twelve miles circle," there is granted "all that the town of Newcastle, otherwise called Delaware, and all that tract of land lying within the compass or circle of twelve miles about the same, situate, lying, and being upon the river Delaware, in America; and all islands in the said river Delaware, and the *said river and the soil thereof* lying north of the southernmost part of the said circle of twelve miles about the said town." By this deed are defined the boundaries by which are limited the sovereignty and jurisdiction of the State of Delaware, and according to such limits the State has uniformly asserted and exercised jurisdiction over the river to the low-water mark of the State of Jersey. In conformity to this established right the State of Delaware, by an act of assembly passed May 27, 1813, ceded to the United States the jurisdiction and soil of the island called the Pea Patch, which is about six miles below Newcastle, and nearly equidistant from the shores of Delaware and Jersey. No title other than that of the United States is known of, derived from the State of Delaware. A warrant, it is said, was taken out of the land office of the last-mentioned State to survey the island in question, about twenty-five years since, but no return was ever made or any location effected that is believed, and the land office was soon after closed, and has ever since so remained. It may be remarked that no cession was asked for except from the State of Delaware previously to the proposed erection of fortifications by the general government, although the commanding general of the military district of which Delaware formed a part was a distinguished citizen of New Jersey, and from the place he occupied in her councils and at her bar, must have been well aware of all her rights.

It is not intended to discuss elaborately the validity of a title the grounds of which are not stated, but, as it is presumed to be derived under and from a New Jersey patent, it may not be out of place to take a brief view of the grants, &c., under which, if at all, New Jersey could give a title to the island in question.

In 1664 King Charles II made a grant to the Duke of York of a large territory, which included New Jersey, the western boundary of which is made the river Delaware: "all the lands from, &c., to the east side of the Delaware bay." In the same year the Duke granted to Berkely and Carteret the part of the said territory now called New Jersey, and thus describes its western boundary: "and hath upon the west Delaware bay and river."

In 1702 a surrender was made of their rights of government by the then proprietors of East and West Jersey to Queen Anne. This instrument recites the two last-mentioned grants, and surrenders the territorial government according to the boundaries therein mentioned, thus acknowledging those limits to the jurisdiction of Jersey as having been heretofore accepted, and this acknowledgment made, too, at a period subsequent to that which fixed those of the neighboring government. And what is remarkable, too, the above-mentioned grant of Charles, recited in the surrender, grants the river Hudson by name, "together also with the said river, called the Hudson river," while it merely mentions the Connecticut in marking the eastern, and the Delaware in defining the western boundary.

There was, then, nothing to prevent the Duke of York granting the river and soil thereof to William Penn, and such a grant entitled the State of Delaware to that complete title which, by cession, is now in the United States of America.

GEORGE READ, Jr., *Attorney of United States for Delaware District.*

OFFICE OF THE ATTORNEY GENERAL, *January 8, 1820.*

SIR: It is only within a few days back that I have been put in possession of copies of all the documents that can be found relative to the title to the island in Delaware river, called the Pea Patch. Even yet the grant from the crown, on which the title of the State of Delaware to that island is founded, has not been procured and forwarded.

If such a grant ever existed, (which the district attorney for Delaware doubts,) and its production should hereafter become necessary, it may be, I presume, obtained through our minister at London. But I apprehend it will not be necessary on the trial of the suit which Dr. Gale has instituted against the officers of the United States, because the plaintiff must show a title in himself before the defendant in possession can be required to produce any proof of title; and Dr. Gale, according to the evidence before me, can show no title himself, and because if he could exhibit proof which would call upon us to show our title, we can rest, I think, securely on our length of possession under the title derived from the Duke of York, afterwards King of England.

The territorial title of the State of Jersey, under which Dr. Gale claims, takes for its western boundary, in the most express terms, the east side of the Delaware bay and river. Such is the language of the grant of the Duke of York; and such the language of that Duke's deed to John Lord Berkely and Sir George Carteret. Dr. Gale, by stopping at the east side of the Delaware, will never get to the Pea Patch, and consequently cannot show such a title in himself as to authorize a judgment in his favor.

The State of Delaware (whose title we hold) claims under a deed from the Duke of York to William Penn, conveying to him the town of Newcastle, and all that tract of land lying within the compass or circle of twelve miles about the same, situate, &c., upon the river Delaware, and all the islands in the said river, and the said river and soil thereof, *lying north of the southernmost part of the said circle of twelve miles about the said town.* If any question could exist whether the *twelve miles about the town* here mentioned indicated a circle whose radius (and not whose diameter) was twelve miles, it would be removed by reference to the next or supplemental deed from the Duke of York to William Penn, which, designing to cover the residue of the present State of Delaware, takes for its beginning a point on the Delaware river, *twelve miles south of the town of Newcastle*, clearly manifesting that the former deed was considered as covering the title to that point. All that part of the river, with all the islands in it, which lies to the north of this

point, having then been conveyed to William Penn, and the Pea Patch being an island in the river to the north of that point, it seems clear to me that it is included in this deed, and consequently that the United States, who claim under it, have the best, and, indeed, the only valid title.

I have the honor to be, sir, very respectfully, your obedient servant,

WILLIAM WIRT.

Hon. JOHN-C. CALHOUN, *Department of War.*

WILMINGTON, July 2, 1820.

SIR: In compliance with instructions received from the Department of War, and from Major Babcock, of the corps of engineers, charged with the erection of works on the island in the Delaware called the Pea Patch, we attended the late term in April, of the circuit court of the United States for the district of New Jersey, at Trenton, to contribute our aid in the defence of an ejection brought to recover possession of that island.

On our arrival we found there were several suits on the list of trials prior to that in which the United States were concerned, which would occupy the court during the whole term. The case of the Pea Patch was, of course, continued until the ensuing term, in October next. This, however, enabled us to obtain a rule for the trial of the cause by a special jury, and it afforded us an opportunity of collecting more testimony.

After our return it occurred to us that it might not be unacceptable to yourself, or the Attorney General, who has been consulted, if we were to prepare a report on the subject of the case, so interesting and important to the United States. This we concluded to do as soon as all our courts were over, and they terminated but a few days since.

We have now the honor to present you with a paper on the subject,* drawn up with some attention, though not with all the care and deliberation, perhaps, which the magnitude of the case required.

We regret that separated as we are from the able and eminent counsel concerned for the United States in New Jersey, we could not have the benefit of their aid in the execution of this task. But we acknowledge ourselves indebted to them for important information, communicated when we were at Trenton.

We have the honor to be, very respectfully, your obedient servants,

C. A. RODNEY,
GEORGE READ, JR.

BURLINGTON, N. J., April 20, 1822.

SIR: I have the honor to inform you that, at the last session of the circuit court of the United States, held in New Jersey, the action of ejection, prosecuted by Doctor Henry Gale against Major Babcock, to obtain possession of an island in the Delaware river, commonly called the Pea Patch, was discontinued by the plaintiff. It would seem that his counsel have at last become convinced, either that he has no pretence of title or that, such as it is, it can only be maintained by the weight of the State. Some weeks ago, a notice was served on me, stating that a motion would be made in the circuit court to include the State of New Jersey in the controversy, by making it one of the lessors of the plaintiff. The motion, founded on an act of our legislature, passed some months ago, appropriating \$2,000 to defend the *jurisdiction* of the State, and on the assent of the governor to make the State a party to the suit, was made accordingly; but the judges being of opinion that the act was not intended to embrace the case presented to them, and if it was that it would be improper to let the State into the dispute in the manner proposed, refused the application. The plaintiff immediately discontinued his action, declaring his intention to bring another in the supreme court of the State, in which the State would be made a party. Believing that such an action will be instituted, Mr. Stockton unites with me in recommending an application by the government of the United States to the legislature of New Jersey to pass an act corresponding with that passed by the State of Delaware. There can be no doubt, considering the benefits which New Jersey may at some future period derive from the fortifications erecting on the Pea Patch, that the legislature would receive and act on the application in the most friendly manner, not, however, impairing the rights of individuals, but leaving them to stand as they now do.

For your information, and to prevent too much confidence in the title derived from the State of Delaware, and to satisfy you that the application to the legislature of New Jersey, above recommended, would at least be a prudent measure, I take this occasion to mention, within a very narrow compass, the title of Gale, of New Jersey, and of the State of Delaware, to the Pea Patch.

1. *Gale's title.*

In 1664 Charles the Second granted to James, Duke of York, "all the land from the *west* side of Connecticut to the *east* side of Delaware bay;" and in the same year the Duke of York conveyed to Lord Berkley and Sir George Carteret all the (now) State of New Jersey "*in as full and ample a manner as the same was granted to him.*" From these persons Gale derives his title. Now as the island in question lies *west* of the *east* side of Delaware bay, it is manifest that it was not included in the grant from the King to the Duke of York, and that the Duke, and those claiming under him, never had any title to it.

2. *The title of New Jersey.*

The advocates of the title of New Jersey insist: 1st. That the island has been formed within sixty years, and being nearer to New Jersey than to the State of Delaware, belongs to New Jersey. 2d. That whether of ancient or modern formation the title remained in Charles the Second and his successors until New Jersey became a sovereign and independent State, when it vested and still is in the State.

3. *The title of the State of Delaware, or of those claiming under William Penn.*

1st. It is said that Charles the Second granted to James, Duke of York, all the land that forms the present State of Delaware, with all the river, and all the islands in the river, opposite the shores of that

*This statement of the case by C. A. Rodney and George Read, jr., will be found in vol. 2 on Military Affairs, No. 224, page 376.

State. 2d. That in 1682 the Duke of York made a grant to William Penn, the terms of which are extensive enough to include the Pea Patch, and that Delaware derives title from Penn.

It is true that the grant to William Penn extends to the *east* side of Delaware bay, and includes the river and all the islands, but on the part of New Jersey it is objected that the Duke was not authorized to make such a grant, never having received one himself from the King. I have examined all the books and records that can be found relating to the subject, and am satisfied that a grant from Charles to the Duke of York for the property conveyed by the Duke to William Penn cannot be found, and in all probability was never made. There is some ground for believing that, in 1683, (one year after the grant from the Duke to William Penn,) the Duke obtained from his brother a warrant for *passing a patent*, but there is no evidence that it ever was done, or even of the *contents* of that warrant.

On the whole, it will be found that the islands in the Delaware have never been granted by the sovereign; that in regard to the Pea Patch, Delaware, to say the least, has no better title to it than New Jersey; and that it is a fair subject of negotiation and settlement between the two States. With respect to the islands lying between New Jersey and Pennsylvania, it has always been conceded that they belonged to the two States as sovereigns, and were not transferred by any of the grants of Charles the Second.

At the request of Mr. Stockton, I enclose the account for his services in the controversy with Gale. He will be obliged to you to remit the amount as early as convenient. Considering that he has been principally relied on, that he has attended at two or three terms, when the cause has been noticed for trial, and that he argued in opposition to the motion before mentioned, his charge appears to me reasonable. As the *title* of the State of Delaware was not likely to be called in question, I did not think it necessary, on that occasion, to request the assistance of Messrs. Rodney and Read.

I have the honor to be, very respectfully, your obedient servant,

J. McILVAINE, *Attorney for New Jersey District.*

Hon. JOHN C. CALHOUN, *Secretary of War.*

WILMINGTON, *March 4, 1823.*

MY DEAR SIR: I understand that new proceedings have been instituted for the recovery of the Pea Patch. Ever since the claim under a title from New Jersey was set up, I have naturally felt anxious on the subject, because I believe that I was the first person to direct the attention of government to this spot as the most eligible site for a fortification to defend the passage of the Delaware. This was many years since, when a member of Mr. Jefferson's administration. I beg leave, therefore, respectfully to recommend the immediate employment of Mr. Van Dyke to defend the title of the United States to the Pea Patch. There can be no objection, as the term of his senatorship has expired. Of his character, knowledge, and talents, it is unnecessary for me to say a single word. He is every way qualified for the important task.

I shall be very glad to receive a cadet's letter for Gustavus Binny, of Philadelphia, whom I have so warmly recommended.

Yours, very respectfully and sincerely,

C. A. RODNEY.

BURLINGTON, *New Jersey, July 24, 1823.*

SIR: In my last communication relative to the Pea Patch I had the honor to state, that although Judge Washington at the term of October, 1822, on the application of the counsel of the United States, suffered the action of ejectment brought by Henry Gale against Major Babcock, in the supreme court of this State, to be entered for trial in the circuit court of the United States; yet that I had apprehensions, arising from information lately received, that he had altered his opinion as to the jurisdiction of the latter court in a case in which the State of New Jersey is a party; and that at the ensuing April term he would probably direct the cause to be sent back to be tried in the court in which it originated. He did so, and the trial will take place either in the county of Salem, before *one* of the justices of our supreme court, or at Trenton, before *all* of them. Which course the counsel for the plaintiff intend to take is uncertain; but considering the importance of the points of law to be decided, and the present value of the property, I conclude they will prefer to have the opinion of *all* the justices; and that the cause will be tried at Trenton, either on the first Tuesday of September, or the second Tuesday of November next. If, therefore, it is your intention to employ counsel from Delaware to assist in the argument of the cause, it cannot be done too soon. You will recollect that Mr. Rodney was associated with Mr. Reed; and much reliance was placed on his knowledge of the rights of the State of Delaware.

I have the honor to be, very respectfully, your obedient servant

J. McILVAINE.

Hon. J. C. CALHOUN, *Secretary of War.*

NEWCASTLE, *August 24, 1823.*

SIR: In conversation with my friend, Mr. Rodney, on the subject of the suit relative to Fort Delaware, shortly before he sailed, I was informed that he and the other counsel for the United States had some time ago prepared a statement of the case, embracing the facts within their knowledge, for your view, but he had no copy of the paper. Will you be so good as to order a copy of that statement, if in your possession, to be made for me?

Very respectfully, sir, your most obedient,

N. VAN DYKE.

Hon. J. C. CALHOUN.

BURLINGTON, *New Jersey*, November 26, 1822.

SIR: I have the honor to enclose to you a copy of the report of the committee appointed by the house of assembly of this State, on the application of the United States for a cession of the Pea Patch, from which you will learn the reasons which have prevented a cession at this time. The legislature met on the 22d of October. From the tenor of Governor Williamson's letter to you, I presumed that, without further solicitation, he would, at an early period, present the subject to the legislature for consideration; and under this impression, I waited until the first of this month, when I thought it best, as nothing appeared to have been done, to call on his excellency, and request that the business might be placed in a course for decision. He assured me it should be done immediately, and that he had only delayed it that he might have some previous conversation with me relative to objections to a cession at the present time, and under existing circumstances, which, on a deliberate consideration of the subject, had arisen in his mind, (the same stated in the report,) and which he wished to have removed if possible. This I was unable to do satisfactorily to his mind, and I left him after receiving an assurance that a communication should be made to the house of assembly the ensuing week. On the 12th of November I again went to Trenton, to remind him of his promise. He mentioned that he had been continually engaged since our last interview, but that on the following day he would send a message, with all the papers relating to the subject—which he did accordingly. In this message he recommended a cession, provided it could be made without prejudicing New Jersey in her controversy with Delaware. A committee was appointed to investigate the subject, before whom I was heard at full length in support of the application, and from whom I received an assurance that, as they could perceive no reasonable objection to the measure, they would make a favorable report. I remained at Trenton until the 18th, expecting their report, and for the purpose of furnishing such further explanations as might be required. On that day the dangerous illness of one of my family obliged me to go home. On the 22d I returned to Trenton, and was surprised to find that the committee, instead of reporting as I expected, had reported against a cession for the present. Upon inquiry, it appeared possible to have the report rejected, and to procure the passage of a bill granting the island to the United States, in the lower house; but, at the same time, I was convinced that it would be negatived in council, where the governor, who is opposed to any such measure at present, presided, and whose opinion upon the important questions involved in the dispute with Delaware would be received, and justly too, with great respect and confidence. Under this conviction, I declined troubling the legislature further. Neither on the part of the legislature nor of the governor could I discover the least hostility to the measure, except as above stated; and whenever the obstacles stated in the report shall have been removed, the cession can be obtained without the smallest difficulty.

In my last communication to you, respecting the Pea Patch, I mentioned that in consequence of a refusal by the circuit court of the United States to suffer the State of New Jersey to become a party to the first action of ejectment which Gale commenced against Major Babcock, Gale discontinued it, and commenced another in the supreme court of this State, in which New Jersey is made one of the lessors of the plaintiff. With a view to a more impartial decision, I took measures for carrying this action into the circuit court of the United States, and, after much opposition, on the ground that that court has not jurisdiction of such a case, succeeded in getting the action regularly removed. I am, however, informed that the judges, after a more deliberate view of the subject, have changed their opinions, and will, at the next April term, remand the cause to the supreme court of the State. In this event it will be tried either at the bar of the court, before all the judges at Trenton, in May, or before a single judge, at *nisi prius*, in June next, in the county of Salem. I shall prefer the former.

I have the honor to be, very respectfully, your obedient servant,

J. McILVAINE.

Hon. J. C. CALHOUN, *Secretary of War*.

The committee to whom was referred a communication from his excellency the governor, covering a correspondence with the Secretary of War respecting an island in the Delaware bay called the Pea Patch, respectfully report:

That it appears by the documents submitted to them, and from other information upon which your committee rely, that in the year 1813 the United States having determined to erect fortifications for the defence of the Delaware bay and river, selected the Pea Patch as a position suitable for that purpose. This island lies within the jurisdictional limits of New Jersey, and was at that time in the peaceable occupation of one of our citizens, claiming under a grant of the West Jersey proprietors, made in 1784. No application was, however, made to the authorities of this State on the subject, but military possession was taken by the United States officers, and the occupant dispossessed. The district attorney of the State of Delaware and other legal characters in that State and Pennsylvania, it seems, were consulted, who were of opinion that the title to the soil and territory was with the State of Delaware.

The legislature of Delaware made a cession, and under that title the United States took possession and commenced constructing a fort. The individual dispossessed instituted a suit against the engineer, which is now pending before the circuit court of the United States. A difference unhappily subsists between New Jersey and Delaware relative to their boundary and their respective rights in the river and bay of Delaware; and this difference is not limited to the Pea Patch, but embraces other subjects of dispute. In 1820 the legislature of this State having been made acquainted with the facts above stated, and with the circumstance that a suit was pending, actuated by a desire to a speedy and amicable settlement of the controversy, as well in relation to this particular subject as to all other questions growing out of the disputed boundary, passed an act for the appointment of commissioners to meet commissioners to be appointed on the part of Delaware, with full power to make and conclude an agreement between the two States, defining their respective boundaries, jurisdictions, rights to land, &c., in the river and bay of Delaware. To this overture the State of Delaware did not think proper to concede, nor was any answer ever returned to the proposal.

In the year 1821 the legislature of this State passed an act (among other things) to authorize and empower the governor to appropriate a sum of money, at his discretion, to prosecute or defend to final

issue or judgment any suit or suits which he might deem necessary for trying and finally determining the jurisdictional line between the two States. The attempt to effect an amicable settlement having failed, it was believed that the pending suit afforded a favorable opportunity of obtaining the decision of an impartial and enlightened judicial tribunal. The United States claiming under Delaware, and the former occupant under this State, the jurisdictional line will fairly come in question. This must inevitably happen unless the plaintiff should fail on account of some technical defect in his title. It would therefore be manifestly unsafe to leave the question of jurisdiction to be tried and determined by an action brought solely by an individual free from all control and interference of the State. Though the State could not be concluded by such a trial and decision, yet its rights might be greatly injured by the action being brought to trial without the advantages which might arise from a direct interference by employing counsel and taking the management and control of the suit.

The Secretary of War, under the direction of the President, now asks for a cession from the State for the purpose of further strengthening the title of the United States, and enabling them the better to resist the claim of our citizen. Your committee are decidedly of opinion that were the subject freed from the danger of affecting as well the rights of our citizen who has been deprived in the manner stated of his possession, as the question of boundary between this State and Delaware, the required cession ought to be unhesitatingly made. The position is deemed by the Secretary of War a very valuable one, not only as it regards the defence of the State of New Jersey, but the country bordering on the Delaware. Whatever opinion we might be disposed to entertain on this point as individuals, it would certainly be yielded to the decision of the distinguished officers composing the board of engineers, approved, as that has been, by the able and enlightened officer at the head of the War Department.

New Jersey has at all times evinced a sincere desire to afford every facility to the measures of the general government, and your committee are well aware that the present is a time when we are particularly called on to encourage by all proper means the laudable effort to arrange and complete a well digested system of defence. Your committee, however, are of opinion that, taking into view all the circumstances, it will be most prudent, and consist better with the dignity and interest of the State to delay a cession of the island in question. No injury can result from such a course. The works commenced will not be interrupted in their progress, and in the meantime the controversy existing between this State and Delaware may be settled by a judicial decision, and the claim of our citizen decided in the same manner. The general government will duly appreciate the motives by which we have been governed, and cannot impute to this State any desire to obstruct or delay the completion of the fortifications now erecting. In the event of a determination adverse to our claim, no cession will be necessary; and should the contrary, as we confidently believe, be the result, we can then with more propriety transfer our right in the manner requested, and, at the same time, protect the interests of the individual claimant. Your committee therefore respectfully propose that the documents referred to them be recommended to the consideration of the next legislature.

By order of the committee.

LUCIUS Q. C. ELMER, *Chairman.*

BURLINGTON, N. J., *November 11, 1824.*

SIR: I have the honor to inform you that yesterday the supreme court of this State, on the deposition of Major Babcock, ordered that the Pea Patch case shall be tried by a foreign jury, to be taken from the county of Middlesex. This is what I have wished from the commencement of the action, and would have been ordered last September had not a packet made up by my direction, addressed to Richard Stockton, of Princeton, and put in the post office of Newcastle by Major Babcock, been totally lost. It is of great importance to the United States that the cause should come before a jury taken from a county not bordering on the river Delaware, and wholly disinterested, as we believe the people of Middlesex are. The only inconvenience resulting from this proceeding on our part will be a delay of the trial till May next, when the cause will be brought before all the judges of our supreme court, at Trenton.

Mr. Stockton advises the employing of Mr. Wood as assistant counsel on the part of the United States; residing in the county of Middlesex, he is personally acquainted with every person who will probably be selected as a juror, and will be very useful in striking the jury; besides he is a gentleman of great influence in that county, and not inferior in talents to any one at the New Jersey bar. Should you think proper to employ Mr. Wood, a remittance of fifty dollars, as a retaining fee, will be necessary. He resides at New Brunswick, in this State.

I am, very respectfully, your obedient servant,

J. McILVAINE.

Hon. JOHN C. CALHOUN, *Secretary of War.*

BURLINGTON, N. J., *November 8, 1825.*

SIR: I have the honor to state, for your information, that the action of ejectment brought by the State of New Jersey, Dr. Gale, and others, against Major Babcock, of the engineer corps, to obtain possession of the island in the Delaware river, commonly called the Pea Patch, was noticed for trial at the present term before the supreme court of New Jersey, at Trenton. Of this, early notice was given to Mr. Van Dyke and Mr. Read, of the State of Delaware, and every requisite preparation made on the part of the counsel residing in the State of New Jersey, who were anxious to bring the cause to a termination. Letters, however, have been received from Mr. Van Dyke, stating that he is confined with sickness, which totally incapacitates him from attending to his professional business, and from Mr. Reed, who states that he cannot attend our court without great inconvenience; both requesting that the trial might be postponed. Considering that the attendance of these gentlemen at the present term was not to be expected, and knowing that great reliance was placed on their exertions in behalf of the United States, although the counsel employed in New Jersey were prepared and desirous of proceeding in the business, they thought it right to yield to the request for a postponement. A proper application was therefore made and granted, and

the cause now stands adjourned to the second Tuesday in May next. Major Babcock, I understand, is removed from his former station, and it did appear to me that the cause could not have been fairly tried without his aid. He is in possession of charts and maps which will be much wanted; besides, he is acquainted with some important facts which he has derived from persons residing near the Pea Patch, whose names are known only to himself; Mr. Stockton joins me therefore in requesting that he may be directed to be here by the 15th of April next. The witnesses summoned on the part of the United States were such as I had accidentally discovered some time ago.

Herewith I send a bill for fees due me at this time in the present action of ejection, the amount of which I will be glad to receive as soon as you can find time to give an order to that effect; I would merely remark, that my accounts in the two preceding actions have been paid, and that the charge relates solely to the last action, in which neither Mr. Stockton nor myself have received one cent, although the business on the part of the United States has been transacted by us alone.

I have the honor to be, very respectfully, your obedient servant,

J. McILVAINE.

HON. JAMES BARBOUR, *Secretary of War.*

23D CONGRESS.]

No. 595.

[2D SESSION.]

ON THE CLAIM OF DANIEL PARKER, AS ADJUTANT AND INSPECTOR GENERAL OF THE ARMY, TO THE PAY AND EMOLUMENTS OF A BRIGADIER GENERAL, AND OTHER ALLOWANCES.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 2, 1835.

Mr. BANKS, from the Committee on Claims, to whom was referred the claim of General Daniel Parker, reported:

That the claimant sets forth in his memorial that, under the act entitled "An act for the better organization of the general staff of the army of the United States," passed the 3d day of March, 1813, he was appointed adjutant and inspector general, with the rank, pay, and emoluments of a brigadier general; that he was the only incumbent of that office from the passage of said law until the last reduction of the army, by the "Act to reduce and fix the military peace establishment of the United States," passed the 2d of March, 1821; that in the settlement of his accounts he has not received all the emoluments allowed to other brigadier generals of the army; that while the accounting officers of the treasury have acknowledged the justice and equity of his claim, they have not felt themselves authorized to make such further allowance for forage, fuel, quarters, and rations as have been paid to others. He further states that when his services as adjutant and inspector general ceased under said law he was assigned to the office of paymaster general in the army; that he discharged the duties of said office until the completion of the organization under the act of the 2d of March, 1821, when his public services terminated; that he is justly and equitably entitled to such pay and allowances for fuel and quarters as have since been allowed and paid to his successors in that office. He also claims the three months' pay provided by the 13th section of the act of the 2d of March, 1821. He asks that a law may be passed authorizing the settlement of his account upon just and equitable principles.

The petitioner's claim may be classed under three separate heads:

1st. He claims the right to receive, for and during the term that he held the office of adjutant and inspector general, all the emoluments which were allowed and paid to brigadier generals by Executive regulation.

2d. That he has a right to receive, for the term during which he held and discharged the duties of the office of paymaster general of the army, the same pay and allowance for fuel and quarters as have been since allowed and paid to his successor in that office.

3d. That he is entitled to three months' pay under the thirteenth section of the act of 2d of March, 1821, as a supernumerary officer, discharged from the service of the United States.

This claim has been long contested in the department before the proper accounting officers, and is rendered somewhat complicated by the different opinions which have been expressed by different officers in regard to it, as well as by the confused mass of papers which have been laid before the committee.

The committee have examined the case with much care and attention, and will take up and present the claim in the order in which they have above stated it.

The claimant was appointed to the office of adjutant and inspector general of the army on the 22d of November, 1814.

The office was created by the act of the 3d of March, 1813, which in its first section provides "that the Adjutant General's, Inspector General's, and Quartermaster General's department shall consist of the following officers; that is to say, an adjutant and inspector general, with the rank, pay, and emoluments of a brigadier general."

It is provided by the fourth section of an act entitled "An act fixing the military peace establishment of the United States," passed the 16th of March, 1802, that there shall be paid "to the brigadier general two hundred and twenty-five dollars per month, which shall be his full and entire compensation, without a right to demand or receive any rations, forage, travelling expenses, or other perquisite or emolument whatsoever, except such stationery as shall be requisite for his department."

It is further provided by the fifth section of said act that there shall be allowed "to the commanding officer of each separate post such additional number of rations as the President of the United States shall from time to time direct, having respect to the special circumstances of each post."

By the act of the 12th of April, 1808, it is provided "that each brigadier general shall receive one hundred and four dollars per month, twelve rations per day, or an equivalent in money, and sixteen dollars per month for forage, when not furnished by the public."

It appears that the claimant received the pay and emolument allowed by law to a brigadier general, and now claims the additional allowances made by the order of the Executive, at different times, in favor of brigadier generals, by virtue of the discretionary power vested in him by the act of the 16th of March, 1802.

On the 25th of August, 1812, the President made the following order: "that generals commanding separate armies should receive double rations."

In the month of February, 1814, the War Department issued the following order: "It is ordered that general or other officers commanding districts shall, while so doing, receive double rations, which shall supersede all other grants of double rations at posts within the district."

On the 6th of March, 1816, a general order was issued, as follows: "Generals commanding divisions, officers commanding military departments, and all officers while in the command of permanent posts and garrisons separate from the stations of commandants of departments, which subject them to the additional expense of independent commands, are allowed double rations. No more than one officer can be entitled to double rations at the same station."

On March 6, 1816, the Secretary of War made the following order: "A commutation of double rations is allowed to the adjutant and inspector general, in lieu of fuel and quarters."

On October 10, 1818, an order was made by the Secretary of War to the following effect: "The reason for the allowance to the chief of the engineers and to the adjutant and inspector general, in lieu of fuel and quarters, no longer existing since the establishment of the Quartermaster's department, at the termination of this quarter such allowance will cease; and the quartermaster general will, on requisition, furnish them with fuel and quarters, agreeably to their respective ranks."

The petitioner's claim, it is confidently believed, rests upon the acts of Congress and Executive regulations just cited.

By the provisions of the 5th section of the act of March 16, 1802, there is vested in the President of the United States a discretionary power to allow to the officers commanding separate posts such additional number of rations, from time to time, as he may deem just; he having due regard, in cases of such allowance, to the special circumstances of each post. The President is not enjoined to make this allowance. He has a full discretion given to grant or withhold it, according to his sense of justice and propriety. He may grant it to one and deny it to another of the same rank. The power is altogether discretionary, and ought to be guided by a due regard to the circumstances of each case. This is the plain letter and obvious meaning of the law; and we are bound to believe that the power was so exercised.

The reason of this grant of discretionary power to the President is very apparent. The expense of a separate command might very properly and justly require it. Of this necessity the President is made the sole judge. Where he has made the allowance, there can be no controversy about it; the person in whose favor it was made would be entitled to it. Where he has not made the allowance, the case would be equally free from difficulty; and, in such case, there could be no right to it. It rests altogether in Executive discretion. The language of the law is very clear and explicit. The officer must command a separate post, and the allowance must be made by the Executive. The Executive may make the order of allowance himself, or it may be made by the Secretary of War, under his authority, and as his official organ.

The single question would appear to be this: Did the President of the United States, or the Secretary of War, under his authority, make the allowance in favor of the petitioner which he now claims?

It appears that the claimant discharged the duties of the office of adjutant and inspector general from November, 1814; that up to March 6, 1816, he had charged and received the pay and emoluments to which he was entitled by law; that at this time there was no disbursing officer in the Quartermaster's department at the seat of government; and that, by reason of the regulation of the War Department then in force, prohibiting an allowance in money to be made to officers in lieu of their emoluments, a difficulty arose on the subject of fuel and quarters, when the Secretary of War issued the following order: "A commutation of double rations is allowed to the adjutant and inspector general, in lieu of fuel and quarters." Under this order the claimant received his double rations, in lieu of fuel and quarters, from November, 1814, up to the date of the order. He also gave credit to the government for the allowances he had received during all this time for fuel and quarters. This shows very conclusively that neither the government nor the claimant, at that time, considered that he was then entitled to that allowance which he now claims. He continued to make out his accounts according to this order, and to receive the same up to August 10, 1818, when the Secretary of War made the order of that date above recited, by which the commutation of double rations in lieu of fuel and quarters was prohibited, and the quartermaster general directed to furnish him with fuel and quarters, agreeably to his respective rank. From the termination of the first quarter, after the date of this order, he drew his pay and emoluments according to his rank, up to May 31, 1821, when the office was abolished, as appears by the letter of the Second Comptroller, dated June 10, 1831, which is made part of this report.

It has already been shown that, by the provisions of the law creating the office of adjutant and inspector general, that officer was given the rank, pay, and emoluments of brigadier general. He did receive this pay and emolument so far as the same was provided by law. The emoluments which were given to brigadier generals by Executive regulation were denied to the claimant because he was not embraced in them, and that they were not given him by those regulations; and whether those regulations did provide for him must depend for ultimate decision upon their terms and true construction.

The order of August 25, 1812, is, that generals commanding separate armies shall receive double rations. This order most obviously does not embrace the claimant's case. He at no time had the command of a separate army.

The order of February, 1814, is, "that general or other officers commanding districts shall, while so doing, receive double rations, which will supersede all other grants of double rations at posts within the district." There has been no evidence furnished us by which it is made to appear that the claimant was at any time ordered to take the command of a district, nor that he ever did take command of a district; so that he has failed to bring his claim within the range of this order.

The general order of March 6, 1816, is, that "generals commanding divisions, officers commanding military departments, and all officers while commanding permanent posts and garrisons separate from the

stations of commandants of departments, which subject them to the additional expense of independent commands, are allowed double rations. No more than one officer can be entitled to double rations at the same station." It does not appear that the claimant, at any time while he held the office of adjutant and inspector general, had the command of a division or military department, nor that he had the command of a permanent post or garrison which was separate from the station of the commandant of a department, and which subjected him to the additional expense of an independent command. He has failed to bring his claim within any one of the classes provided for in this order. It was necessary that he should bring himself within one of the description of officers provided for by the order itself, to entitle him to the benefits of its provisions. Having failed to do this, the provisions of the order were rightfully denied him.

The duties of the adjutant and inspector general do not consist in active military command, but in mere details of service. He should have shown that he had been ordered to take the command of a division, department, or permanent post or garrison, separate from the commandant of a department, which subjected him to the additional expense of an independent command. If this had been done he could have shown it, and no doubt would have shown it. The War Department would necessarily have known it, and the allowance would have been made him at the time, without objection. It was because this had not been done that his claim was at first disallowed by the accounting officers at the time, who must have known all the facts of his case. The department which made the several orders must have understood them. Those who made them were the best judges of their meaning, extent, and import; and their decision and construction ought, of right, to be decisive of the question.

The petitioner's claim is not, in our opinion, embraced by any of the Executive orders which have been placed in our hands. It would have been satisfactory to us, and saved a great deal of time and labor, if he had pointed out to us the particular order on which he placed his claim. This he did not do, which imposed on us the necessity of examining all the orders of the Executive on the subject. This examination has resulted in a full and perfect conviction that his claim has no existence either in law or Executive regulation.

In this opinion the committee are supported by the highest authority known to the laws and legislation of the country. The claimant did receive his double rations from the paymaster, Mr. Leslie, which he now claims, from the 30th of September, 1818, to the 31st of May, 1821. When he presented his account for final settlement at the department this part of it was disallowed to the claimant, and charged to his private account. Suit was brought against the claimant in the circuit court for the District of Columbia, to recover back from him the value of this part of his account, which had been thus received by him, and disallowed by the accounting officers of the department. The circuit court rendered judgment against him for the amount. He, by writ of error, removed the cause to the Supreme Court of the United States, where the judgment of the circuit court was affirmed. His right, under the laws and Executive regulations, was fully contested, examined, tried, and finally adjudicated. That he had no right to double rations was determined by the highest judicial tribunal of the country. This trial and judgment alone ought to be held as final, and conclusive of the claim. It was to have been expected, after this solemn and final judgment, that the claim would have been put to rest.

We might close our inquiry and examination here, but that the claimant puts his case upon other grounds. He contends that he is entitled to compensation upon principles of justice and equity. In placing it on this basis he tacitly yields the point that he is not entitled, by law or Executive regulation, to what he claims of the government. We have not been able to discover any very strong equity in his case. He received property of the government, to which he had no right. He was held to account for the same as any and every other citizen would and ought to have been. Justice and equity entitled him to his own and no more. He was, in justice and equity, entitled to receive the compensation which was allowed him by law. If he received more than this justice and equity required that he should refund it to the government. It was upon this principle that judgment was rendered against him. So far from his having a claim against the government, founded on justice and equity, the government have a claim against him, not only founded on principles of justice and equity, but in strict law. The President thought that the compensation allowed him by law was an adequate one. He was vested with a discretionary power. If the claimant had been entitled to more no doubt it would have been awarded to him. The President knew what his services were, and did not make any allowance. We can know but little, if any thing, of his services. He has shown us no equity, except we can see it in the fact that this allowance was made to others, and not to him. This gives him no equity. We are bound to believe that the allowance was made in all proper cases.

We might release the debt due by him; but we do not feel at liberty to bestow the public money in any such way. We think that the money is justly due by him, and that we might, with equal propriety, give the same sum to any other individual, as to give this sum to the claimant. He has, in our opinion, no foundation of claim in law or Executive regulation; much less has he a claim on principles of justice and equity.

The claimant insists that the Secretary of War has, since the first disallowance, and since the judgment of the court, admitted his claim, and that it should, on this ground, be paid him.

On the 9th of February, 1829, the petitioner's claim was presented to the accounting officer for adjustment, when the following indorsement was made on the vouchers by General Porter, then Secretary of war: "This account being for personal allowances to General Parker, as an officer of the army in the regular course of service, it should be settled upon the principles observed in the settlement of other parallel cases at that time." The claim was again rejected by the accounting officer, because there were no parallel cases which would warrant its allowance.

General Porter, by this indorsement, settled no new principle; he decided nothing by it. The settlement was to be made in conformity to the principles which had regulated the department in the settlement of accounts which were of a similar character. This is the full extent of his order. It appears that no case could be found which would, as a precedent, justify the allowance of this account. The accounting officer very properly rejected it. General Porter did not intend to make him any allowance, to which he was not entitled, either by law or Executive regulation. If such was his intention he failed so to express himself. It may very well be doubted whether the department could legally make an additional allowance to any officer nine years after he had quit the service. General Porter did not make any additional allowance. His indorsement confirms the decisions which had been made by the accounting officer, rather than reverses them. The case was left just where the Secretary of War found it. Its character or condition was in no degree changed by this order, if it can be called an order.

The claim was again laid before the War Department on the 8th of October, 1830, when the following indorsement was made on the account by Mr. Randolph, the acting Secretary of War at that time: "The principle of allowing a commutation for double rations, as well as for fuel and quarters, was established by regulation of the 12th of May, 1818, issued by Mr. Calhoun, the Secretary of War. This regulation was made applicable to General Parker's case by the decision of General Porter in January, 1829; and the late Second Comptroller admitted the claim to the amount of \$2,416, which was confirmed by his successor, Mr. Hill. There is no disposition to arrest these decisions, and the item which is allowed will pass to the credit of General Parker."

On the 14th of the following December it was again submitted to the Secretary of War, General Eaton, who indorsed on the account as follows: "General Parker's case having been decided by the acting Secretary of War, no further action appears necessary than for the Comptroller to pass the item to the credit of General Parker."

On the 31st of the same month General Parker's account was reported by the Second Auditor to the Second Comptroller, for \$742 83, an allowance in lieu of fuel and quarters, from the 6th of March, 1816, to the 31st of December following, which was disallowed by the Second Comptroller.

On the 21st of June, 1831, an account was reported by the Second Auditor in favor of General Parker for \$2,337 60, being for double rations paid him by Paymaster Leslie, and charged to his private account, and for which judgment had been rendered against him by the Supreme Court of the United States. This account was disallowed by the Second Comptroller.

The regulation of the 12th May, 1818, which Mr. Randolph, the acting Secretary of War, decides was made applicable to the claim of General Parker, is as follows: "Until otherwise ordered, the chief engineer, while resident at Washington, will be allowed at the rate of \$912 a year, in lieu of fuel and quarters. He will also receive double rations."

"The officers who compose the board of engineers will be allowed \$4 50 per day, in lieu of fuel, quarters, transportation, and per diem allowance for reconnoitering, while engaged in the duties assigned to the board."

"The officer whom General Swift may detail to aid in performing the duties of the Engineer department will be allowed \$1 50 per day, in lieu of quarters and fuel."

This regulation does not embrace the petitioner's claim. The committee cannot perceive that General Porter made this regulation applicable to it. He did not refer to it by name, date, provision, or in any other way. It is difficult to conceive how this regulation could be said to have been applied to this claim by anything that appears to have been done by General Porter. It very clearly appears that Mr. Randolph mistook the purport of General Porter's order altogether. He merely directed that General Parker's account should be settled on the same principles on which other parallel cases had been settled at the time. He merely directed as to the manner of making the settlement, and not with a view to make any new and additional allowance to him; nor did he direct that the account should be settled by conforming to any regulation not before applicable to his case. The regulation of the 12th of May, 1818, was not applicable to his case, nor did General Porter make it applicable to it; nor do the committee think that he could have made it, for the first time, applicable, after he had been nine years out of office. All that was done afterwards in regard to the settlement of this account was founded on this mistake, and was most clearly erroneous, and ought not, and could not, affect the rights of the government. We are called upon to provide for the settlement of the claim on principles of justice and equity. This brings the merits of the whole case before us, and we cannot entertain a doubt on the subject. The petitioner's claim for double rations cannot be allowed. This was the opinion of the officers of the department at the time of the transaction. Their opinion on their own orders and regulations is entitled to the highest respect. It was the opinion of the circuit court and also of the Supreme Court of the United States. If any question can be settled this one ought to be considered as settled. It has been judicially determined. This committee acquiesces in that decision as being in strict conformity to the facts of the case and the well-established principles of law and equity. The first point is thus disposed of by the committee.

As to the second point it is not deemed necessary to say much. The petitioner received all the emoluments and pay which were attached to the office of paymaster general of the army while he held and discharged the duties appertaining to it. He has shown no reason why any further allowance should be made him.

As to the third point, General Parker was arranged to the office of paymaster general, in the general order of May 17, 1821, announcing the new organization of the army. He entered upon the duties of this office and continued to discharge them until the close of the next session of Congress. His nomination, it is understood, was not laid before the Senate, or was withdrawn from the final action of that body, so that his public services terminated with the close of that session of Congress, in May, 1822. Was he disbanded under the act of the 2d of March, 1821? If he was, he is entitled to the three months' pay, as is provided in such cases by the 13th section of said act.

By the 12th section of this act the President of the United States is authorized to cause to be arranged the officers, &c., so as to form and complete out of the same the force authorized by the act, and to cause the supernumerary officers, &c., to be discharged from the service of the United States.

By the 13th section it is provided that there shall be allowed and paid to each commissioned officer who shall be discharged from the service of the United States in pursuance of this act, three months' pay in addition to the pay and emoluments to which he may be entitled at the time of his discharge.

The petitioner was not discharged from the service of the United States when he ceased to do the duties of adjutant and inspector general. If he had been he would have been within the provisions of the law. He was continued in the service for a year afterwards. He performed a year's service under the new law and received the pay. He does not come within either the letter or spirit of the law, and is not entitled to the three months' pay claimed by him.

The report of the Second Comptroller, under date of the 5th of June, 1834, is made part of this report. The committee submit the following resolution and recommend it for adoption:

Resolved, That the claim of the petitioner ought not to be allowed.

TREASURY DEPARTMENT, *Second Comptroller's Office, December 22, 1834.*

SIR: I comply with your request of the 20th instant by transmitting herewith all the information in my possession relating to the claim of Daniel Parker, esq., late adjutant and inspector general of the army of the United States. The claim of General Parker has been repeatedly considered by the War Department and the accounting officers; and I have thought proper that the committee might be in possession of the entire history of the claim from its origin to the present time, to furnish them with a copy of a detailed report on the subject of the claim, made by this office to the Secretary of War on June 5, 1843. That the committee may understand the present situation of the claim, I transmit also copies of the President's letter to the Secretary of War of July 8, 1834, suspending for a time further consideration of the claim, and of the letter of the Secretary of War to this office of the same date on the same subject. No action of the Attorney General in the case has been communicated to this office subsequent to the date of the Secretary's letter.

It is proper to remark that the views I have taken of General Parker's claim have been with reference to the laws and regulations then existing. Of the justice and equity of the claim, as presented for the action of Congress, I have not felt at liberty to express an opinion.

I have the honor to be, sir, very respectfully, your obedient servant,

J. B. THORNTON.

Hon. JOHN BANKS, *of the Committee of Claims of the House of Representatives.*

WAR DEPARTMENT, *July 8, 1834.*

SIR: I have the honor to transmit for your government a copy of an order made this day in the case of the claim of General Parker.

Very respectfully, your obedient servant,

LEWIS CASS.

J. B. THORNTON, Esq., *Second Comptroller of the Treasury.*

The Secretary of War will suspend further proceedings on the claim of General Parker until I return. In the meantime he will call upon the Attorney General for a full consideration of the whole case.

ANDREW JACKSON.

JULY 8, 1834.

TREASURY DEPARTMENT, *Second Comptroller's Office, June 5, 1834.*

SIR: In pursuance of an opinion of the Attorney General given in the case of Daniel Parker, late adjutant and inspector general, dated May 17, 1834, I have the honor to report the claim with the facts in the case, and also my views touching the equity and legality of the demand.

The Attorney General is of opinion that the final adjudication, so far as the Executive action is concerned, of all claims arising in the War Department is vested by law in the Secretary of War, acting under the authority of the President; that the allowance of any such claim by the Secretary of War makes it *imperative* and *obligatory* on the proper accounting officers to pass the same to the credit of the claimant; and also that it is competent for the Secretary of War to *reverse* and *countermand* the decision of the proper Comptroller when the balance comes before him on the report of that officer.

The source from which this opinion emanated entitles it to high consideration; and though militating against all my preconceived opinions of the relative duties and powers of the Secretary of War and the accounting officers, I should feel bound to consider it as settling the law on this point, were I not sustained by the opinions of former Attorneys General, Messrs. Wirt and Taney. But differing as I do in opinion from the Attorney General, and sustained in this difference of opinion by Messrs. Wirt and Taney, and believing, after a careful and attentive investigation, that the claim set up by General Parker is sustainable neither in law nor equity, I feel constrained, under a sense of my official responsibility, respectfully to report adversely to the claim, leaving it for you, should you coincide in opinion with the Attorney General as to the powers of the Secretary of War over accounts, and believe the demand of General Parker founded in law or equity, to reverse and countermand my decision. In taking this course I am governed by a sense of duty, not opinionated nor stubborn, but desirous that the law may be deliberately and definitively settled; and when so settled by your decision, if against my present convictions, I shall readily and cheerfully surrender my opinion and conform my actions to such construction of the law.

The following is the claim presented by General Parker:

DR.

The United States to Brigadier General D. Parker.

For allowance in lieu of quarters and fuel from March 6, 1816, (previous to which they had been paid by commutation,) to September 30, 1818, two years seven months and twenty-four days, at \$912 per annum, being the allowance made to Brigadier General Swift, chief engineer, while resident at Washington previous to the last date..... \$2, 416 00

In order to come to a correct understanding as to the merits of this claim it will be necessary to take a view of the facts on which it is predicated.

The office of adjutant and inspector general of the army of the United States was created by the act of the 3d of March, 1813. By this act it is provided that the adjutant and inspector general shall have the rank, pay, and emoluments of a brigadier general. To this office Daniel Parker was appointed, with the rank of brigadier general, from the 22d of November, 1814. The pay and emoluments of the officers

of the army are fixed by the act of 16th of March, 1802, and the act of the 12th of April, 1808. By the 4th section of the first mentioned act it is provided that the monthly pay of a brigadier general should be two hundred and twenty-five dollars, "which shall be his full and entire compensation, without a right to demand or receive any rations, forage, travelling expenses, or other perquisite or emolument whatsoever, except such stationery as may be requisite for the use of his department." By the 5th section of the same act it is provided "that the commanding officer of each separate post shall be entitled to such additional number of rations as the President of the United States shall from time to time direct, having respect to the special circumstances of each post." The act of the 12th of April, 1808, is an act "to raise, for a limited time, an additional military force." By this act it is provided "that each brigadier general shall receive one hundred and four dollars per month, twelve rations per day, or an equivalent in money; sixteen dollars per month for forage when not furnished by the public, and the rations to be twenty cents each." On the 25th of August, 1812, the President of the United States, under the authority of the 5th section of the act of 1802, issued an order "that generals commanding separate posts should receive double rations." In February, 1814, the following order was issued by the War Department: "It is ordered that general or other officers commanding districts shall, while so doing, receive double rations, which will supersede all other grants of double rations at forts within the district." On the 6th of March, 1816, the following general order was issued: "Generals commanding divisions, officers commanding military departments, and all officers while in the command of permanent posts and garrisons separate from the stations of commandants of departments, which subject them to the additional expense of independent commands, are allowed double rations; but no more than one officer can be entitled to double rations at the same station." General Parker performed the duties of adjutant and inspector general from November, 1814, and charged and received the compensation established by law for those duties until the year 1816, when a difficulty arose in regard to his fuel and quarters, upon which the then Secretary of War issued the following order: "A commutation of double rations is allowed to the adjutant and inspector general in lieu of fuel and quarters." Under this order General Parker claimed, and was allowed, double rations until the 30th of September, 1818. On the 10th of August, 1818, the Secretary of War issued an order to the following effect: "The reason of the allowance to the chief of the engineers and to the adjutant and inspector general in lieu of fuel and quarters no longer existing since the establishment of the Quartermaster's department, at the termination of the present quarter such allowance shall cease; and the quartermaster general will, on requisition, furnish them with fuel and quarters, agreeably to their respective ranks." After this, it appears, by the papers, that General Parker charged and received of Paymaster Leslie a commutation of double rations from the 30th of September, 1818, to the 31st of May, 1821, amounting to two thousand three hundred and thirty-seven dollars and sixty cents. This sum was allowed to Paymaster Leslie on the settlement of his accounts, and was charged to the personal account of General Parker. Some time after the settlement of Paymaster Leslie's account General Parker's account was reported for suit; an action was brought against him, and judgment was rendered in favor of the United States both in the circuit and Supreme Courts. The judge who presided at the trial in the Supreme Court took the following view of the case:

"The claim of the plaintiff in error to double rations rests altogether upon a correct construction of the 5th section of the act of 16th of March, 1802, and of the regulations and orders of the executive departments issued in pursuance of that section. The President of the United States has a discretionary power to allow such additional number of rations to officers commanding at separate posts as he may think just, having respect to the special circumstances of each post. The law granting this authority is not imperative, and, in the exercise of his discretion, the President may allow, or refuse to allow, additional rations, as, in his opinion, he may deem just. There can be no controversy about double rations if the President makes the allowance. He may issue the order himself, or it may be done by the Secretary of War with his approbation. No officer is entitled to the additional allowance unless he be commandant at a separate post, and then the claim must be sanctioned by the Executive. It is not contended, in the case under consideration, that the grant was made by the President. Double rations form no part of the regular and legal emoluments of a brigadier general, and can only be claimed under circumstances before enumerated. The record contains no evidence that the adjutant and inspector general was ever ordered to an independent or separate command. In the discharge of his ordinary duties he has no distinct command; his duties consist in details of service, and not in active military command. The order of the 16th of March, 1816, directing double rations to be allowed to officers commanding military departments is construed to relate to the geographical sections of the country into which the two divisions of the army are divided, which are denominated departments, and does not relate to the law of the 13th of March, 1813, for the better organization of the general staff of the army.

"It is therefore the opinion of the court that the claim of the plaintiff in error is not sanctioned by the act of the 16th of March, 1802, nor by the regulations and orders of the executive department issued in pursuance of that law." Judgment in the circuit court affirmed.

After the decision of the Supreme Court, General Parker changed his claim from *double rations to fuel and quarters*, and retrospectively back to the year 1816, although he had charged and been allowed double rations from November, 1814, to September, 1818, as a commutation in lieu of fuel and quarters, under an order of the Secretary of War passed expressly for that purpose.

This claim was presented to the accounting officers on the 30th of April, 1825, and disallowed by them on the ground that he had received fuel and quarters by commutation under the regulation of the 6th of March, 1816, for the whole period embraced by his claim.

On the 9th of February, 1829, General Parker again presented his claim to the accounting officers, with the following indorsement on the voucher by General Porter, Secretary of War: "This account being for personal allowances to General Parker as an officer of the army in the regular course of service, it should be settled upon the principles observed in the settlement of other parallel cases at that time." The claim was again disallowed by the Auditor on the ground that there were no parallel cases to warrant its allowance. The Second Comptroller, Mr. Cutts, seems to have entertained a different opinion from the Auditor, and a correspondence took place on the subject of that difference, but no final action seems to have been had, for the account remained in the Second Comptroller's office in June, 1829, after Mr. Cutts had retired from the office and Mr. Hill had succeeded him.

On the 12th of October, 1829, Mr. Hill addressed a letter to the Third Auditor, stating, in substance, that a decision once made in this office was binding, unless predicated on error in fact, and requesting the amount of General Parker's account for fuel and quarters, \$2,416, to be passed to his (General Parker's) credit. No answer to Mr. Hill's letter seems to have been returned from the Third Auditor's office.

On the 4th of December, 1829, the Attorney General, Mr. Berrien, gave an opinion in the case, intimating that the decision of Second Comptroller Cutts was not final, inasmuch as the account remained in the office after he had retired. His opinion was adverse to the merits of the claim. On the 30th of the same month Mr. Hill informed the Auditor of the decision of the Attorney General, and remarked: "This information is given that you may be apprised of the fact that General Parker's claim is no longer under consideration in this office."

The case was subsequently referred to the War Department, and on the 8th of October, 1830, the following indorsement was made on the account by Mr. Randolph, acting Secretary of War: "The principle of allowing a commutation for double rations, as well as for fuel and quarters, was established by regulation of 12th May, 1818, issued by Mr. Calhoun, the Secretary of War. This regulation was made applicable to General Parker's case by a decision of General Porter in January, 1829, and the late Second Comptroller admitted the amount in the case of \$2,416, which was confirmed by his successor, Mr. Hill. There is now no disposition to arrest these decisions, and the item, which is allowed, will pass to the credit of General Parker."

On the 14th of the following December Mr. Eaton, the Secretary of War, indorsed on the account as follows: "General Parker's case having been decided by the acting Secretary of War, no further action appears necessary than for the Comptroller to pass the item to the credit of General Parker."

On the 31st of the same month a statement of General Parker's account was reported by the Second Auditor to the Second Comptroller for \$742 83—an allowance in lieu of fuel and quarters from the 6th March, 1816, to the 31st of the following December—and was disallowed by the Comptroller.

On the 21st of June, 1831, an account was reported by the Second Auditor in favor of General Parker for \$2,337 60, being for double rations paid him by Paymaster Leslie, and charged to his personal account, and for which judgment had been rendered against him. This account was disallowed in the office of the Second Comptroller; and here the matter rested until the 17th of May, 1834, when the opinion of the present Attorney General was taken in the case; and on the 22d of the same month an account was reported by the Second Auditor in favor of General Parker for \$747 61, being an allowance in lieu of fuel and quarters from the 6th of March, 1816, to the 31st of December following. The residue of General Parker's claim refers itself to the Third Auditor.

According to my view of General Parker's claim, it is inadmissible, because he has received, under a regulation of the War Department, double rations in lieu of *fuel and quarters* for the same period he now claims "an allowance in lieu of fuel and quarters," to wit: from the 6th of March, 1816, to the 30th of September, 1818. To admit his present claim would be to give him a double allowance in lieu of fuel and quarters, which was not intended by the regulation of 6th of March, 1816; and not only not intended, but, to my understanding, expressly denied by the terms of the regulation. That the allowance of "double rations in lieu of fuel and quarters," granted to General Parker by the order of 6th of March, 1816, was intended by Mr. Crawford to be in accord and satisfaction for fuel and quarters, is evident from the terms of the order itself; that it was so considered by General Parker and accepted by him as such, is evident from his certificate accompanying his first account for double rations, in which he says, "*the charge of double rations includes the only allowance I expect in lieu of fuel and quarters,*" and from the fact of his having deducted from his charge for double rations the amount received by him on account of fuel and quarters in 1815; and that such was the understanding of Mr. Calhoun in 1818, is evident from the terms of his order rescinding the "double-ration order" of Mr. Crawford, for he says, "the reason of the allowance (double rations in lieu of fuel and quarters) no longer existing since the establishment of the Quartermaster's department, at the termination of the present quarter such allowance will cease."

It was inadmissible under the order of Mr. Porter, because no parallel case existed to justify the allowance, and because the order was retrospective. The case of General Swift, relied upon by General Parker, was not parallel to his, because General Swift received his allowance under and by virtue of a contemporaneous regulation of the War Department, while there was no such regulation in favor of General Parker, but one forbidding it in express terms.

It was inadmissible under the order of acting Secretary Randolph, and the sanction of that order by Major Eaton, because the order is altogether retrospective in its operation, so far as it relates to any action of mine, and not only repeals the order of Mr. Crawford, but renders it inoperative in one of its essential provisions from the period of its date, and extends to General Parker a second allowance for fuel and quarters, which is expressly denied to him by the terms of the order. I am not aware of any principle or law which authorizes the Secretary of War to extend by regulation double *fuel and quarters* to any officer of the army; but, supposing he were authorized to do it, as in the case of double rations, yet the regulation must, as I conceive, be prospective, not retrospective, in its operation. In the case of Major Belton, President Jackson observes, in relation to the authority of the Executive to make allowances by regulation: "Under this authority, the President and the War Department may, in their discretion, attach to the command of particular posts an allowance of extra rations; but this measure must be prospective, not retrospective. Viewed in its true light, it is an act of subordinate legislative authority, the exercise of which should be regulated by the same principles that govern in ordinary legislation. No right to the allowance exists but from the date of the order establishing it, any more than the right to an increase of salary exists except after the date of the law which makes that addition. The circumstances that require the addition may have existed for some time previously; but the alteration is not, on that account, made retrospective, even by the legislature, whose power is plenary; still less should it be made so by the Executive, whose power is restricted. The idea that, if the circumstances justify the allowance at the date of the order, a claim to the same allowance, under the same circumstances, for a previous period cannot be denied, is particularly fallacious when applied to the authority to which Major Belton now appeals. When Congress authorized the President to increase some of the allowances they were then in the act of establishing, they cannot have intended that he should, at a future day, alter those allowances retrospectively, and make compensation for such as he might deem to have been insufficient. The rule established by them was to be the rule until modified by him, and was to be in force up to the date of the alteration. Such is the general principle on which Congress themselves act in changing the compensation of officers. It must be supposed to have been their intention that the President should conform to that principle in exercising the same power under their authorization. Even if the authority of the President were unlimited on this subject, it would still be necessary for him to adopt the principle as indispensable to the security of the government against endless contradiction, favoritism, and injustice in its action."

This appears to me to be the only legitimate doctrine in relation to the legal effect of Executive regulations, and emanating from that high source, I have felt safe in adopting it as the rule of my official action.

It is inadmissible on the principles recognized by the present Attorney General, because, according to his views of the powers of the Secretary he can reverse and countermand the decisions of the proper accounting officers only "when the balance is before him on the report of the proper Comptroller."

The claim of General Parker was disallowed by the accounting officers of the treasury in 1825, and the balance reported to the then Secretary of War, General Porter; and no further action seems to have been had on it till 1829, nearly three years subsequent to its disallowance by the Second Comptroller. It will not be contended, I think, much less presumed, that the balance was then before the Secretary, on the report of the Comptroller, within the meaning of the Attorney General, for the account had been returned to the Auditor, agreeably to a provision of the 5th section of the act of 1817, which provides "that it shall be the duty of the Auditors charged with the examination of the accounts of the War Department," to receive from the Second Comptroller the accounts which shall have been *finally adjusted*, and preserve such accounts, &c., where it had remained on file more than three years. It was therefore *finally adjusted*, and the decision of the Comptroller not subject to revision and reversal by the Secretary of War, even on the principle laid down by the present Attorney General; for if I rightly understand the Attorney General, he is of opinion that the Secretary can reverse the decision of the proper accounting officers only when the balance is before him on the report of the Comptroller, and upon the principle that there has not been a final adjudication of the claim.

Of the subsequent action of Second Comptrollers Cutts and Hill on General Parker's claim, I have to observe that it seems to have been the opinion of Mr. Attorney General Berrien that the action of the former was not final; and the latter revoked his opinion informally given. But I am bound to presume that the action of neither was final; for had it been, the amount of General Parker's claim would have been carried to his credit on the books of the treasury, and no further action of this office would have been necessary or required. Had the claim been finally settled and allowed by either of my predecessors, as it is supposed to have been by the acting Secretary of War, (Mr. Randolph,) by both, there would have been no duty left for me to perform in relation to it; but as it is brought before me for revision, I have considered it unsettled, *in transitu*, and have endeavored to decide upon its merits, agreeably to the laws and regulations then in force, according to the best of my understanding.

There is another point presented in this case by the opinion of Mr. Attorney General Butler that is worthy of consideration. I refer to the relative powers of the Secretaries, and the proper accounting officers of the treasury, over the final adjustment of claims wherein the United States are party. Mr. Butler is of opinion that the decisions of the Comptrollers, though final so far as the action of the accounting officers is concerned, are subject to be revised, reversed, and countermanded by the Secretary in whose department the claim may have arisen, when the balance comes before him on the report of the proper Comptroller; thus making the Secretaries the final and responsible accounting officers in the settlement of all claims originating in their respective departments. The opinion of Mr. Butler is predicated on that given by Mr. Berrien in the case of General Parker, or rather, he seems to have adopted the opinion of Mr. Berrien, instead of giving his own, for, in conclusion, he remarks, "this is a plain consequence of the principles established by my predecessor in the case before referred to."

Impressed as I am with a sense of the great importance of a correct decision on this subject, and believing that if the opinion of the Attorney General be considered as settling the law on this point, great inconvenience must inevitably result to the executive department and the whole accounting system of the government, and that the avowed object in creating the offices of the Second Comptroller and three additional Auditors, to wit: "the prompt settlement of public accounts," will be measurably defeated, I feel constrained to present the subject for your consideration. In doing this, I will first recite the opinions of Attorneys General Butler and Berrien, in support of the powers of the Secretaries to reverse the decisions of the accounting officers under the direction of the President; and also the opinions of Attorneys General Wirt and Taney, opposed to such powers. I will also advert to the report of the Secretaries of all the executive departments made to Congress in pursuance of a resolution of the Senate of the United States in 1816, to report a plan to insure the annual settlement of public accounts, and to the laws establishing the present organization of the accounting department.

Opinion of Mr. Attorney General Butler.

MAY 17, 1834.

"SIR: I have received the documents relating to the case of General Parker, referred to me by your letter of yesterday for the purpose of answering the question "Whether the acts and decisions of the former Secretaries and Comptrollers are sufficient to authorize and require the accounting officers to settle and allow the amount of General Parker's claim according to those decisions?"

"The opinion of the Attorney General, dated December 4, 1829, which is considered as settling the law in this case, so far as it was then before him, was intended to meet the two following questions: 1st, whether the decision of Comptroller Cutts was final, or might be opened for consideration? and, 2d, if it could be reconsidered, then whether General Parker was entitled to fuel and quarters claimed by him? On the first question that opinion was not quite definitive, because the real state of facts did not explicitly appear; but the general principle by which it was to be governed when the facts should be accurately ascertained were clearly stated. They are substantially as follows:

"1st. When the Comptroller has examined an account transmitted to him by the Auditor, and has certified the balance to the Secretary of the proper department, such decision of the Comptroller is final so far as the accounting officers are concerned. But, 2d, that decision may be reviewed and reversed by the Secretary of the proper department, acting under the authority of the President. And, 3d, although a prior Secretary of War has prescribed the principles upon which a settlement is to be made, it is competent to his successor when the amount is reported to him by the Comptroller [with] the proceedings.

"On the second question the opinion was explicit and decisive that the claim could not, with propriety, be allowed. After this opinion had been transmitted to the War Department, the following action appears to have been had: 1st. On the 30th December, 1829, the then Second Comptroller, Mr. Hill, communicated

the opinion of the Attorney General to the Third Auditor, for the purpose (as is stated in the letter of the Second Comptroller) 'of apprising the Auditor that General Parker's claim was no longer under consideration in that office.' 2d. On the 8th of October, 1830, the Acting Secretary of War, to whom the case seems to have been referred, made an indorsement on the account, allowing the charge of \$2,416 for quarters and fuel, in accordance with the decision of the former Comptroller, Mr. Cutts, whose decision he affirmed, and directing the item to be passed to the credit of General Parker. 3d. On the 14th December, 1830, the Secretary of War confirmed this decision of the Acting Secretary by a further indorsement, in which he remarks 'that no further action appears to be necessary than for the Comptroller to pass the item to the credit of General Parker.' 4th. The Second Auditor accordingly allowed General Parker \$742 83 on account of this item, the residue belonging to the accounts kept by the Third Auditor, and on the 31st December, 1830, reported it to the then Second Comptroller, who disallowed it on the ground 'that he knew of no principle of law or equity to justify the claim;' and to this opinion it would seem he still adheres. On this state of facts, I am of opinion that the acts and decisions of the former Secretaries of War are sufficient, until reversed and countermanded, to authorize and require the accounting officers to settle and audit the claim of General Parker for an allowance to the amount of \$2,416, in lieu of fuel and quarters. The decisions made by the Acting Secretary on the 8th October, 1830, and by the Secretary on the 14th December, 1830, having both of them been made after the opinion of the Attorney General had been received by the department, must be considered as proceeding upon the ground either that the decision of the Second Comptroller, Cutts, was final, within the principle of that opinion, or, if not so, that the claim was just in itself, and one that ought to be allowed, notwithstanding the opinion of the law officer to the contrary, or on both of these grounds. And on recurring to the indorsement of the Acting Secretary, it will accordingly be seen that he places his decision on the double ground that the claim was a proper one, and that it had been admitted by the Comptrollers, Cutts and Hill. But whatever may have been the ground of these decisions of the Secretaries, and whether they are right upon the merits of the case or not, they are, undoubtedly, so long as they remain in force, imperative and obligatory on the accounting officers. As the matter is yet unfinished, the Secretary of War has still the power to arrest the allowance by reversing and countermanding those decisions, or he may do so when the balance comes before him on the report of the Comptroller; but until such reversal takes place, they are to be followed by the accounting officers. This is a plain consequence of the principles established by my predecessor in the opinion before referred to."

Extract from the opinion of Mr. Attorney General Berrien.

"I should believe that the decision of the Second Comptroller was final, not liable to question by any other than the Secretary, acting under the authority of the President. But the Secretary must possess this power, or Congress would have placed him at the head of the Department of War to be subjected to the control of a subordinate officer of the treasury. When an account has been settled and certified by the Secretary, he is then to issue his requisition for the amount; and unless he is a mere machine, or liable to the control of his own or the subordinates of another department, he must be entitled, before he does so, to review, and, if need be, to reverse the decision of the Comptroller. If this were not so in the case under consideration, a subordinate officer of the Treasury Department might regulate the military allowances of the army contrary to the will of the Secretary of War and of the President of the United States."

Opinion of Mr. Attorney General Wirt.

"In the original organization of the Treasury Department the duties of the officers were designated specifically. There was one Auditor and one Comptroller. The duty of the Auditor is declared to be to receive all public accounts, and, after examination, to certify the balance, and transmit the accounts to the Comptroller for his decision thereon, with this proviso, that if any person be dissatisfied therewith, he may, within six months, appeal to the *Comptroller* against such settlement. *Here the right of appeal stops.* Here is no proviso to appeal to the President. With regard to the Comptroller, it directs that it shall be his duty to superintend the adjustment and preservation of all public accounts; to examine all accounts settled by the Auditor, and certify the balance arising thereon. No right of appeal from his decision to the President. The act of the 3d of March, 1809, makes it the duty of the Comptroller to direct the Auditor and accountants forthwith to audit and settle any particular account, and report such settlement for his revision and *final decision.* The act of the 3d of March, 1817, which introduces the present organization of the Treasury Department, assigns to the Third Auditor the duty of receiving all the accounts relative to the subsistence of the army, the Quartermaster's department, and generally all the accounts of the War Department other than those provided for by the act. It makes it the duty of the Second Comptroller to examine all the accounts settled by the Third Auditor; and it makes it the duty of the Third Auditor to keep the accounts which shall have been *finally* adjusted, and to preserve such accounts. Thus, *in every instance, the decision of the Comptroller is declared to be final;* and it is manifest that the law contemplates no further examination by any officer after such decision.

"Were it the intention of Congress to subject these accounts to the further revision and decision of the President, that intention would have been expressed. The truth of this position is illustrated by the act of the last session to provide for the settlement of the accounts of Daniel D. Tompkins, late governor of the State of New York. This act expressly provides that the proper accounting officers of the treasury be authorized to adjust and settle the accounts and claims of Daniel D. Tompkins on the principles of equity and justice, *subject to the revision and final decision of the President of the United States.* Where was the necessity of this express provision if all the accounts settled by those officers were already subject to the revision and final settlement of the President? Whether you look to the particular law alluded to, or to the general organization of the accounting department, it is, in my judgment, equally clear that the power ends with the accounting officers, and the President has no authority to interfere. It would be strange, indeed, were it otherwise. The office of President is ordained for very different purposes from that of settling individual accounts. The Constitution has committed to him the care of the great interests of the nation in all its foreign and domestic relations. He is commander-in-chief of the army and navy of the United States. He is to exercise the important power of reprieve and pardon throughout all our States and Territories. The great power of selecting ambassadors and making treaties is committed to him. The selection of consuls, judges of the Supreme Court, and all other officers whose

appointment is not otherwise provided for, and the filling himself all vacancies in the recess of the Senate, are among his great duties. He is required to watch over the state of the Union; to give Congress the information upon the subject; to recommend such public measures as he shall deem necessary and expedient; to convene Congress on extraordinary occasions; to receive ambassadors and other public ministers; to take care that the laws generally be faithfully executed, &c. How will it be possible for the President to perform these great duties if he is also to exercise the appellate power of revising and correcting the settlement of all the individual accounts which pass through the hands of the accounting officers? My opinion is, that the settlement made of the public accounts by the accounting officers appointed by law is *final and conclusive*, so far as the executive departments of government are concerned. If an individual conceives himself injured by such settlement, his recourse must be to one of the other two branches of the government—the legislative or judicial. If a balance be found against him by the disallowance of credits which he deems just, he may refuse payment and abide a suit, in which case he will have the benefit of the opinion of a court and jury. If a balance be found in his favor, but smaller than he thinks himself entitled to, his appeal is to Congress, where the representatives of the people will pass upon his claim."

Opinion of Mr. Attorney General Taney.

"None of the acts of Congress prescribing the mode of settling accounts and ascertaining balances look to a revision of the accounts by the President, except, perhaps, some laws passed for the relief of particular individuals, in which the power is expressly given. The general laws on that subject all seem to regard the decision of the Comptroller as final, and require the executive branch of the government to act upon it accordingly. The act of March 3, 1817, which established the present mode of settling accounts, directs the Third Auditor to certify the balances, and transmit the account with the vouchers to the Second Comptroller for his decision thereon. In the fifth section of this law the Auditor is directed to receive from the Comptroller the accounts which have been *finally adjusted*, and to preserve them with the vouchers and certificates. This law, as well indeed as those which preceded it on the same subject, appear to me not to contemplate any appeal to the President; and I think, therefore, that the decision of the Comptroller is conclusive upon the executive branch of the government, and that the President does not possess the power to enter into an examination of the correctness of the account for the purpose of taking any measures to repair the errors which the accounting officers, appointed by law, may have committed. The party that supposes that justice has not been done to him must seek relief in court when a suit is brought against him, or may bring his claim to the consideration of Congress; and these, in my opinion, are the only means of redress left to the party if the accounting officers have erred in their decision."

In April, 1816, the Senate of the United States passed a resolution requiring the Secretaries of departments to report jointly to that body a plan to insure the annual settlement of the public accounts. In their report, made in obedience to this resolution, the Secretaries, among other things, observe: "The laws organizing the Treasury Department specifically refer to that department the settlement of all public accounts. The power of revision, both as to accounts of the War and Navy Departments, was, and still is, reserved to the accounting officers of the treasury. The referring the settlement of all public accounts immediately to the Treasury Department has the recommendation of unity and simplicity in theory; while, were the settlement of public accounts to be made in the departments to which they respectively appertain, it might lead to the establishment of different principles in the settlement. In contemplation of law the Comptroller of the Treasury revises all the accounts of the government. By this organization money is paid upon the settlement of an account only after it has been revised by the Comptroller. Under judicious regulations the prompt and final settlement of public accounts may, upon these principles, be effectually secured; and there is peculiar force in the idea that the department charged with the *replenishment* of the treasury should have a direct control over the public expenditures." The committee recommended a new organization of the departments, and upon this recommendation the law of the 3d of March, 1817, was predicated and passed. The act of the 2d of September, 1789, creating the Treasury Department, specifically designates the duties of the officers thereby created.

It makes it the duty of the Auditor "to receive all public accounts, and, after examination, to certify the balance, and transmit the accounts, with the vouchers and certificate, to the Comptroller for his decision thereon; provided, that if any person whose accounts shall be so audited be dissatisfied therewith, he may, within six months, appeal to the Comptroller against such settlement."

The act of the 3d of March, 1809, provides "that it shall be the duty of the Comptroller of the Treasury, in every case where, in his opinion, further delays would be injurious to the United States, and he is hereby authorized, to direct the Auditor of the Treasury, and the accountants of the War and Navy Departments, at any time, forthwith to audit and settle any particular account which the said officers may be respectively authorized to audit and settle, and to report such settlement for his revision and *final decision*."

The act of the 3d of March, 1817, provides "that from and after the third day of March next all claims and demands whatsoever, in which the United States are concerned, either as debtors or creditors, shall be adjusted in the *Treasury Department*." The fourth section of this act provides that "the Second, Third, and Fourth Auditors shall examine the accounts, and certify the balance, and transmit the accounts, with the vouchers and certificate, to the Second Comptroller, for his decision thereon." The ninth section of the said act provides "that the Second Comptroller shall examine all accounts settled by the Second, Third, and Fourth Auditors, and certify the *balances* arising thereon to the Secretary of the department in which the expenditure has been incurred."

By reference to the opinions of the law officers of the government, who have been consulted upon subjects involving the relative powers and duties of the Executive Department and the accounting officers of the Treasury, it will be perceived that the opinions of Messrs. Wirt and Taney are, throughout, in accordance with each other, and altogether opposed to the opinion of Mr. Berrien, and the opinion of Mr. Butler, so far as he may have concurred with Mr. Berrien. It appears that Mr. Berrien was first consulted in the case of General Parker; and Mr. Butler, assuming as a fact that the opinion of Mr. Berrien settled the law in the case, seems rather to have adopted the opinion of Mr. Berrien than to have given his own upon that part of the subject regarding the powers and duties of the executive department and the accounting officers. The opinions of Messrs. Wirt and Taney are full on that point, and demonstrate, in

a clear and intelligent manner, by facts and arguments, to my present understanding unanswerable, that the decision of the Comptrollers, in all things appertaining to the public accounts, is final; and that from *such decision* there is no appeal to any executive officer.

This opinion, in my mind, is sanctioned and confirmed by all the laws which have been enacted upon the subject, and by the reasoning and views of the Secretaries of the departments, who, in 1816, in obedience to a resolution of the Senate of the United States, reported to that honorable body "a plan to insure the annual settlement of the public accounts." In this report three things seem to be conceded by the Secretaries: 1st, that by law all the public accounts were to be settled at the Treasury Department; 2d, that the decision of the Comptroller in regard to public accounts was final; and, 3d, that, for reasons which by reference to their report will appear, it was, in their opinion, expedient that such should continue to be the case.

In conformity with the report of this highly respectable committee, Congress passed the law before alluded to, of the 3d of March, 1817, "for the prompt settlement of public accounts."

Thus it appears that the laws establishing the accounting department of the government have committed to the Comptrollers the final settlement, so far as the executive action is concerned, of all claims wherein the United States are party, providing no appeal to the President, or Secretaries of the departments; that, by the cotemporaneous construction of the laws, the responsibility of finally deciding on all such claims is made to rest with them; and that such was the opinion of Attorney General Wirt in 1823, and Attorney General Taney in 1832.

If the contrary opinion prevail, it will be the duty of the Comptrollers to get the sanction of the Secretaries to all accounts before transmitting them to the proper Auditor, because he is required to receive them for preservation only after they have been *finally* adjusted; and because, otherwise, as in the present case, one great object of the law of 1817, "the prompt settlement of public accounts," will be defeated. But the law of 1817 requires "*that all claims and demands whatever in which the United States are concerned, either as debtors or creditors, shall be settled and adjusted in the Treasury Department.*" The great object of referring the settlement of public accounts to the Treasury Department was to preserve a uniformity of principle in their adjustment; for the Secretaries in their report observe in relation to the subject, "were the settlement of accounts to be made in the departments to which they respectively appertain, it might lead to different principles in their settlement." What is the effect of the principles advocated by Mr. Berrien? To take from the treasury the settlement of accounts, and transfer their settlement to the Secretaries of the departments to which they respectively appertain, and thus defeat the law in its letter and intention. Such appears to me to be the plain and inevitable consequence of the principles laid down in the opinion of Mr. Berrien, and adopted in part by Mr. Butler.

But Mr. Berrien thinks the Secretary of War must possess the power to revise and reverse the decision of the Second Comptroller, otherwise a subordinate officer of the Treasury Department might regulate the military allowance of the army contrary to the will of the Secretary of War and of the President of the United States. I do not understand him to contend that the Secretary derives this power from the laws, but that it is a power necessarily resulting from the nature of his high executive duties. This doctrine appears to me to be fully and successfully controverted in the opinion given by Mr. Wirt. The accounting officers are *quasi judicial*, that is, their duties are of a judicial character, but their tenure of office is at the will of the President; they are removable by him at pleasure. The Secretary of War is the executive officer of the President. Under the Constitution and laws, he directs all the military allowances of the army; establishes, by regulations, where the laws have given him discretionary power, the allowances and compensation of the officers of the army; appoints his disbursing agents, advances to them the public money, and directs its disbursement. These duties and powers are purely executive in their character, except, perhaps, that of regulating the military allowances, which is confided to the Executive by law, and may well be considered a kind of subordinate legislation. At any rate, they belong exclusively to the Executive, and the accounting officers have no right to interfere with them. But when the money has been disbursed, it becomes the duty of the disbursing agents to render their accounts to the Treasury Department for settlement. The duty of the Secretary has now ceased, and that of the accounting officers commences. It is the duty of the accounting officers to examine the accounts; to see if the expenditures have been made in accordance with the laws and the regulations of the Secretary; and if so, to pass the amount to the credit of the disbursing agents. The duties and powers of the Secretaries are ministerial in their character, with the exception of regulating the military allowances by regulation in certain cases, which is legislative; those of the accounting officers are judicial; and each, in my judgment, is made, by the laws, *separate, distinct, and independent* of the other. Nor can I perceive any danger of the one interfering with the other. It is fair to presume that every public officer will discharge the duties confided to him honestly and faithfully, "not with unerring judgment, but honestly;" and if so, where is the danger of the accounting officers interfering with the high and legitimate powers of the Secretary, to control the military allowances of the army, contrary to his will and that of the President. It is as much their duty to carry into effect the regulations of the Secretary as the laws of Congress; but, until further advised, I think it my duty to adopt the principle laid down by the President in the case of Major Belton, and give to them only a prospective operation. But the accounting officers are responsible to the President of the United States; and should any one of them, from a misconception of his duties, so act as to embarrass the administration of the executive departments, and persist in such action, the President has the power, and it would be his duty, to remove him from office. My view of the subject is that the accounting officers, so far as relates to the specific duties committed to them by law, to wit, the settlement of public accounts, are *independent* of the Secretaries; are *alone responsible* for the faithful performance of the trust; and that from their decision there is no appeal but to the judicial or legislative departments of the government.

There is a class of claims arising in the War Department over which, under the laws, the Secretary has all control. I refer to the contingencies of the service; but all other allowances must be fixed by regulations, which, according to the decision of the President, are prospective in their operation.

In consideration of the antagonist opinions of the law officers of the government, I have thought proper to take this view of General Parker's case, which I now respectfully submit for your consideration; and I repeat, that I shall feel authorized, and will cheerfully conform my official action to your construction of the law. It is important that the law in this regard should be definitively and finally settled, that the accounting officers may clearly understand their duties.

I am, sir, very respectfully, your obedient servant,

J. B. THORNTON.

HON. LEWIS CASS, *Secretary of War.*

23D CONGRESS.]

No. 596.

[2D SESSION.]

ON THE EXPEDIENCY OF PROVIDING IMMEDIATELY FOR THE RECONSTRUCTION OF
FORT INDEPENDENCE, ON CASTLE ISLAND, BOSTON HARBOR, MASSACHUSETTS.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 3, 1835.

Mr. RICHARD M. JOHNSON, from the Committee on Military Affairs, who have had under consideration a letter from the mayor of Boston, acting by authority of the city councils, and a report of the Secretary of War, with accompanying documents, relative to the repair of the fortifications on Castle island, Boston harbor, reported:

This subject was referred to your committee at the last session of Congress, in connexion with a similar report of the War Department. Having had an opportunity at that time to give the subject a due examination, with a distinguished officer of engineers (Lieutenant Colonel Thayer) attending them in their room, by their direction, to explain the plan and estimates of the work, the committee are the better enabled to report promptly upon it at the present time.

The letter of the mayor of Boston represents the exposed and defenceless state of the city of Boston, its harbor, the navy yard at Charlestown, the immense amount of public property there deposited, and the private property of all kinds accumulated in Boston and the populous environs.

Owing to the decayed and dilapidated condition of the fort on Castle island, all this public and private property is in a most exposed condition, and liable to be destroyed by a *coup de main* of any hostile power.

There are two points on which the defences of Boston harbor depend, viz: George's island and Castle island. George's island is so situated as to command the outer harbor and main channel. Castle island, four miles nearer the town, commands the inner harbor, the immediate approach to the city and the navy yard, and Broad sound, so called, one of the outlets from the inner harbor to the sea.

Of these two points, Castle island, as being nearer the city, and in fact directly covering its approach, has been deemed the most important. It was selected as the site of a military work more than two hundred years ago, and from that time to this has been relied upon as the main defence of the harbor.

The present fortification was constructed in the early period of our government on the old foundation; but, like all the works of that period, it was built in a defective manner both as respects science and practical execution.

In the plan of fortifications for the defence of the most vulnerable and important points of the coast, it was always understood and laid down by the engineers of the United States that first-rate works were required for Castle island and George's island.

It has been for some time known that a thorough repair, amounting substantially to a reconstruction, was necessary to give Castle island the character of a substantial work, adequate to the defence of an important and an exposed point. It has been for two or three years admitted and stated by the most competent engineers of the government, that partial repairs were but a waste of money, and nothing has accordingly been asked but small sums to protect the edges of the island from washing away, and some local repairs alike necessary whether the renewal of the fortress be ordered or not.

But the board of engineers directed to examine the defences of Boston harbor, in the autumn of 1833, with a view to a final disposition of the subject, have reported the entire inadequacy of the present works; and their statements on this subject were orally confirmed to your committee by one of the members of the board, Colonel Thayer, by additional statements which it is not deemed expedient more fully to make public. The chief engineer, in his report of the 10th ultimo, communicating to the Secretary of War "the additions and improvements" recommended by the board, declares them to be "necessary;" and the Secretary of War, in his letter to the Speaker of the House of the 12th ultimo, observes, "that, judging from these documents, he is satisfied that without the repairs proposed the defences of the harbor of Boston cannot be rendered complete."

But after the inspection given by them to the chart of the harbor last winter, and from the representations of Colonel Thayer, in addition to the documents referred to them, the committee are constrained to say that the repairs proposed are not merely necessary to render the defences of Boston harbor complete, but that without them there will be for a considerable time no defences at all. The fort on George's island is but begun; five or six years must elapse before it is finished; and when it is done, it can command but one entrance. The fort on Castle island, which lies at the head of the other entrance, and commands the inner harbor, is in a state of decay which defies a partial repair.

The committee cannot hesitate, therefore, in the conclusion, that the thorough repairs recommended ought immediately to be commenced on the plan submitted by the board of engineers on the 13th of March, 1834, approved by the chief engineer, and communicated to the House by the Secretary of War on the 12th ultimo.

The harbor of Boston is unquestionably one of the points on our coast most requiring artificial works of defence. The water is bold; the approach comparatively easy; the roadsteads too far from the mainland to be commanded. The inner harbor contains at all times a great amount of shipping, being second in that respect to New York alone. Without dilating on the great amount of private property at risk, the committee would observe that there are now at the navy yard, in ordinary or on the stocks, four ships-of-the-line, two frigates, some smaller vessels, valuable deposits of timber, barracks, and all the expensive appurtenances of the newly completed dry dock and a naval establishment of the first order. It is presumed that the public property of all kinds collected there cannot be of less than from six to seven millions of dollars in value.

That the defences which guard the approach to such an establishment and a city so important as Boston should have been almost wholly neglected is matter of just surprise; and deeming it necessary to take immediate measures to supply the omission, the committee report a bill in conformity with the suggestions of the department.

Boston, January 27, 1835.

SIR: The people here have learned with an extreme degree of concern and surprise that a proposition recommending an appropriation for the purpose of continuing repairs and improvements on the works on Castle island, in the harbor of Boston, had been rejected in one of the houses of Congress. The attention of the local authorities has also been especially drawn to this subject by a formal communication from two of the representatives of the State of Massachusetts now at Washington. I have therefore been instructed and authorized, by a unanimous vote of the city council of this city, to make to Congress such statements and representations as the exceedingly grave and pressing nature of this business may seem to require and demand.

In point of navigation Boston is now the second city of the Union. On the north and east side, and within rifle shot of the city, the government some years ago built a navy yard, now very extensive, valuable, and important; and so true is it that the town itself virtually lies on the ocean, that a frigate coming from sea can, with a fair wind and other favorable circumstances, (easily selected,) pass in front of the shipping of the place and anchor off this navy yard in one hour after a signal has been made for her. At the present time there is not a single gun of any calibre whatever mounted on any of the works intended to defend either the anchorage grounds or the approaches to the harbor. So that, in fact, the smallest cruiser of any enemy would have it in her power, immediately after making the land, to sail directly into the harbor and along the heads of the wharves, and in so doing, not receive a shot except from the field-pieces of the militia.

This, sir, is our situation; and certainly it is easy to conceive that a state of things may arise in this country that would awaken some feeling of uneasiness for the amount of public property now so deplorably exposed, and which would also probably lead to a hasty and profuse, if not improvident, expenditure of money.

The defence and protection of the shores can be left to the people; but I need not say that batteries constructed by scientific men, and provided with an appropriate description of artillery, furnish, in fact, the only means of assailing heavy armed vessels while under weigh with any tolerable prospect of success.

I beg also to add that the works on Castle island form a material part of the system of defence intended for these waters. They are indispensable for the protection of the inner anchorage, and as long as the northern entrance to the harbor remains open are equally so for the protection of the town and navy yard. The works are already in progress; but if an appropriation for the present year should be withheld, not only a delay, at this time peculiarly unfortunate, will take place, but the government will unavoidably sustain some loss from injury to materials and the interruption of arrangements. It is proper and necessary to add that the project of the repairs and improvements on this island has been recommended by the chief engineer and sustained by the Secretary of War.

Castle island is the gate of the harbor and the town, and within plain and easy sight of nearly all the wharves and three-quarters of the warehouses of the city. From about the year 1640 it has borne some kind of military work, adapted either to the wants of the day or the best that the science or the means of the period could produce. At the present hour there is not a single gun mounted on the island. This, I am inclined to believe, is a state of things which has not before occurred for a century and a half.

I beg to assure you, sir, that I have considered it my duty, on account of the vital importance and exceedingly urgent nature of this matter, to give you the trouble of this letter. I pray further to add that I shall feel extremely obliged to you to communicate its contents to the honorable the House of Representatives of the United States.

I have the honor, sir, to remain, with great respect, your most obedient and very faithful servant,
THEODORE LYMAN, Jr., *Mayor*.

The Hon. SPEAKER of the *House of Representatives*.

23D CONGRESS.]

No. 597.

[2D SESSION.]

ANNUAL RETURNS OF THE MILITIA OF THE UNITED STATES FOR THE YEAR 1834.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 3, 1835.

WAR DEPARTMENT, *February 2, 1835.*

SIR: In obedience to the requisitions of the first section of the act of Congress of March 2, 1803, entitled "An act in addition to an act entitled an act more effectually to provide for the national defence, by establishing a uniform militia throughout the United States," I have the honor to transmit herewith abstracts of the general return of the militia of the United States, and of their arms, accoutrements, and ammunition for the year 1834.

Very respectfully, sir, I have the honor to be your most obedient servant,

LEWIS CASS.

Hon. JOHN BELL, *Speaker of the House of Representatives.*

Abstract of the general annual returns of the militia of the United States, by States and Territories, according to the act of March, 1803, for the year 1834.

States and Territories.	Returns.		Infantry, &c.							Cavalry.							Artillery.						
	For what year received.	Date.	Number of divisions.	Number of brigades.	Number of regiments.	Number of battalions.	Number of companies.	Commissioned officers, including general division, brigade, &c.	Non-commissioned officers, musicians, privates, &c.	Total.	Number of divisions.	Number of brigades.	Number of regiments.	Number of battalions.	Number of companies.	Commission'd officers.	Non-commissioned officers, musicians, privates, &c.	Total.	Number of divisions.	Number of brigades.	Number of regiments.	Number of battalions.	Number of companies.
Maine	1834	Dec. 31	8	16	55	.....	516	1,997	33,970	35,967	.....	.....	2	10	31	160	1,488	1,648	.....	.....	2	7	28
New Hampshire	1834	Nov. 19	3	6	39	78	357	1,286	23,301	24,587	.....	.....	.....	33	123	1,285	1,408	.....	.....	.....	.....	.....	39
Massachusetts	1834	Jan. 3, 1835	7	16	55	.....	553	1,949	39,326	41,275	.....	.....	2	14	70	643	713	.....	.....	3	3	46	
Vermont	1833	Mar. 20, 1834	4	10	35	.....	.....	1,330	21,790	23,120	.....	.....	.....	.....	123	1,302	1,425	.....	.....	.....	.....	.....	22
Rhode Island	1832	Dec. 31	.....	2	.....	.....	21	101	992	1,093	.....	.....	.....	1	4	54	58	.....	.....	.....	.....	.....	4
Connecticut	1833	Jan. 22, 1834	3	6	25	25	260	953	18,533	19,486	.....	.....	5	21	111	824	935	.....	1	7	.....	.....	44
New York	1834	Jan. 1, 1835	30	60	254	8	2,208	8,756	144,109	152,865	3	7	27	2	112	628	5,449	6,077	4	11	38	4	273
New Jersey	1829	Dec. 2	4	13	49	105	437	1,681	31,983	33,664	.....	.....	4	8	33	137	1,617	1,754	.....	.....	.....	.....	33
Pennsylvania	1833	Feb. 26, 1834	16	33	160	416	1,850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Delaware	1837	.....	1	3	10	.....	.....	371	7,861	8,232	.....	.....	.....	.....	32	234	266	.....	.....	.....	.....	.....	.....
Maryland	1834	Dec. 30	4	14	50	106	480	1,902	40,037	41,939	.....	.....	14	28	60	323	2,266	2,594	.....	1	2	3	33
Virginia	1834	Nov. 10	5	22	143	.....	1,003	3,486	86,251	89,737	.....	.....	5	.....	111	366	7,280	7,646	.....	.....	5	.....	81
North Carolina	1834	Jan. 10, 1835	9	19	95	190	690	1,942	61,306	63,248	.....	.....	4	8	16	76	671	747	.....	.....	.....	1	2
South Carolina	1832	Jan. 25, 1833	5	10	42	84	484	1,946	45,102	47,048	.....	.....	7	15	35	193	1,433	1,626	.....	.....	1	2	18
Georgia	1834	Dec. 3	12	24	84	.....	671	2,732	44,769	47,501	.....	.....	.....	16	55	784	839	.....	.....	.....	.....	.....	2
Alabama	1829	Dec. 20	3	5	22	44	206	720	13,990	14,710	.....	.....	.....	.....	12	170	182	.....	.....	.....	.....	.....	.....
Louisiana	1829	Jan. 1, 1830	3	7	23	49	163	659	12,375	13,034	.....	.....	.....	14	7	149	156	.....	.....	.....	.....	1	2
Mississippi	1830	Dec. 6	2	6	26	.....	.....	613	12,989	13,602	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tennessee	1830	Dec. 31	6	.....	.....	.....	.....	3,570	56,637	60,207	.....	.....	.....	.....	.....	.....	775	.....	.....	.....	.....	.....	.....
Kentucky	1834	Dec. 10	14	29	118	236	938	3,475	59,800	63,275	.....	.....	.....	26	83	2,416	2,499	.....	.....	.....	.....	.....	9
Ohio	1834	Jan. 12, 1835	17	55	141	8	1,178	4,327	105,892	110,219	.....	.....	3	16	68	363	4,014	4,377	.....	.....	.....	6	29
Indiana	1832	Jan. 4, 1833	9	22	79	158	734	2,573	46,159	48,732	.....	.....	.....	.....	106	1,681	1,787	.....	.....	.....	.....	.....	.....
Illinois	1830	Jan. 1, 1831	2	5	28	70	204	856	.....	.....	.....	.....	.....	4	12	.....	.....	.....	.....	.....	.....	.....	.....
Missouri	1832	Feb. 13, 1833	4	12	37	.....	.....	197	2,618	2,815	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Michigan Territory	1831	Nov. 28	.....	.....	8	18	64	259	4,821	5,080	.....	.....	.....	3	12	194	146	1	3	.....	.....	.....	1
Arkansas Territory	1825	Dec. 16	.....	.....	9	.....	.....	145	1,740	1,885	.....	.....	.....	.....	12	131	143	.....	.....	.....	.....	.....	.....
Florida Territory	1831	Nov. 8	.....	.....	.....	.....	.....	43	784	827	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
District of Columbia	1832	Nov. 20	.....	1	3	6	22	90	1,098	1,188	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Abstract of the general annual returns of the militia of the United States, &c—Continued.

States and Territories.	Returns.		Artillery.			Riflemen.							Aggregate.	Remarks.	
	For what year received.	Date.	Commission'd officers.	Non-commission'd officers, musicians, privates, &c.	Total.	Number of divisions.	Number of brigades.	Number of regiments.	Number of battalions.	Number of companies.	Commission'd officers.	Non-commission'd officers, musicians, privates, &c.			Total.
Maine.....	1834	Dec. 31.....	113	1,604	1,717	29	85	1,433	1,517	40,849	The adjutant general says there are in the State 15 regiments—91 companies of infantry, and 17 companies of light infantry; the whole number of militia enrolled is probably about 9,600.
New Hampshire.....	1834	Nov. 19.....	108	1,589	1,697	.....	.....	.....	.....	28	81	939	1,020	28,712
Massachusetts.....	1834	Jan. 3, 1835	224	2,761	2,985	.....	.....	.....	.....	.....	.....	.....	.....	44,973
Vermont.....	1823	Mar. 20, 1824	83	953	1,036	.....	.....	.....	.....	.....	.....	.....	.....	25,581
Rhode Island.....	1832	Dec. 31.....	19	207	226	.....	.....	.....	.....	.....	.....	.....	.....	1,377
Connecticut.....	1833	Jan. 22, 1834	224	2,771	2,995	.....	.....	.....	.....	25	76	1,294	1,370	24,786
New York.....	1834	Jan. 1, 1835	1,037	12,393	13,430	2	5	30	3	145	668	8,905	9,573	181,945	
New Jersey.....	1829	Dec. 2.....	89	1,836	1,925	.....	.....	.....	.....	24	81	1,747	1,828	39,171
Pennsylvania.....	1833	Feb. 26, 1834	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	202,281
Delaware.....	1827	.....	12	176	188	.....	.....	.....	.....	.....	32	511	543	9,229
Maryland.....	1834	Dec. 30.....	107	1,536	1,643	.....	.....	2	4	75	50	673	723	46,899
Virginia.....	1834	Nov. 10.....	200	5,014	5,214	.....	.....	.....	.....	131	.....	.....	.....	102,597
North Carolina.....	1834	Jan. 10, 1835	13	135	148	.....	.....	.....	.....	33	132	1,318	1,450	65,593
South Carolina.....	1832	Jan. 25, 1833	94	859	953	.....	.....	.....	.....	21	124	1,361	1,485	51,112
Georgia.....	1834	Dec. 3.....	6	115	121	.....	.....	.....	.....	1	.....	.....	.....	48,461
Alabama.....	1829	Dec. 20.....	14,892	The adjutant general reports the aggregate greatly below the real strength of the militia of the State.
Louisiana.....	1829	Jan. 1, 1830	55	719	774	.....	.....	.....	.....	.....	60	784	844	14,808
Mississippi.....	1830	Dec. 6.....	.....	.....	.....	.....	.....	.....	.....	.....	6	116	122	13,724
Tennessee.....	1830	Dec. 31.....	60,982	The governor reports no returns from several regiments, and says: "If a complete return could be had our militia would be at least 85,000."
Kentucky.....	1834	Dec. 10.....	30	458	488	.....	.....	.....	.....	16	47	881	938	67,190
Ohio.....	1834	Jan. 12, 1835	121	1,963	2,084	.....	.....	27	21	242	913	15,120	16,033	132,713
Indiana.....	1832	Jan. 4, 1833	60	620	680	.....	.....	.....	.....	.....	122	2,592	2,714	53,913
Illinois.....	1830	Jan. 1, 1831	.....	.....	.....	.....	.....	.....	.....	11	33	.....	.....	27,386
Missouri.....	1832	Feb. 13, 1833	2,815	The adjutant general reports the strength of but 2 brigades in the 1st division, which is not more than the 8th part of the strength of the State.
Michigan Territory.....	1831	Nov. 28.....	3	38	41	.....	.....	.....	.....	.....	11	198	209	5,476
Arkansas Territory.....	1825	Dec. 16.....	2,028	The governor reports the 1st regiment of infantry imperfect; the 2d only two companies returned; the 5th and 9th no returns received.
Florida Territory.....	1831	Nov. 8.....	827	The adjutant general reports the militia about 4,000 effective men.
District of Columbia.....	1832	Nov. 20.....	2	23	25	4	32	36	1,249	The first and second brigades not heard from.
														1,311,569	

Abstract of the annual return of arms, accoutrements, and ammunition, &c.—Continued.

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States and Territories.	Muskets.	Bayonets.	Cartridge-boxes and belts.	Bayonets, scabbards, and belts.	Brushes and picks.	Spare flints.	Ball cartridges.	Rifles.	Powder-horns.	Pouches.	Loose balls.	Pounds of rifle powder.	Horsemen's pistols.	Swords.	Sword scabbards and belts.	Knapsacks.	Haversacks.	Drums.	Fifes.	Bugles and trumpets.
Maine.....	25,360	25,135	19,747	17,324	16,698	83,367	23,868	1,536	1,055	1,016	112,855	214	1,280	2,223	2,152	16,034	72	540	466	56
New Hampshire.....	22,795	22,498	15,245	15,210	15,225	32,304	69 boxes.	1,190	468	3,350	.....	.....	1,758	2,174	2,181	16,399	47	518	401	24
Massachusetts.....	13,713	13,743	14,681	13,910	15,045	46,815	213,369	2,274	1,791	1,736	28,569	531	570	307	294	12,642	129	426	290	55
Vermont.....	15,986	15,081	17,696	11,910	15,436	23,110	.....	265	116	275	.....	.....	2,778	2,624	1,994	.....	13,598	422	469	7
Rhode Island.....	823	818	872	821	807	2,136	.....	.....	.....	.....	.....	.....	51	190	190	258	.....	36	23	.....
Connecticut.....	19,958	19,952	16,098	16,096	12,878	110,612	208,110	1,707	537	578	16,947 lbs.	256 lbs.	3,969	5,365	5,330	9,640	74	545	532	56
New York.....	29,324	27,748	31,549	26,699	17,882	43,422	0,397	28,372	23,493	21,405	51,728	3,163	8,888	14,550	26,699	2,573	.....	3,339	2,151	571
New Jersey.....	12,968	2,932	1,060	2,932	.....	.....	.....	764	117	94	.....	.....	1,308	2,339	2,339	.....	.....	387	349	51
Pennsylvania.....	16,871	16,871	6,471	6,471	.....	.....	.....	2,848	700	700	10 kegs.	.....	2,183 pairs	2,448	2,448	8,312	6,700	1,063	739	128
Delaware.....	840	818	384	.....	.....	.....	.....	79	.....	.....	.....	.....	164	374	.....	.....	.....	.....	.....	.....
Maryland.....	17,366	12,733	12,516	3,905	577	9,520	66,814	2,158	1,116	1,922	11,658	160	480	1,264	1,115	2,219	2 ^c	120	.....	*114
Virginia.....	36,702	36,490	6,819	.....	410	.....	2 boxes.	2,324	420	420	.....	.....	2,030	1,940	1,266	.....	.....	181	182	10
North Carolina.....	3,926	3,926	.....	3,926	.....	.....	.....	13,312	13,312	.....	.....	.....	838	2,600	2,526	.....	.....	623	635	33
South Carolina.....	12,535	700	1,922	1,538	1,440	7,085	3,315	10,802	4,419	3,597	26,097	841	526	1,770	1,770	3,276	75	161	143	36
Georgia.....	6,431	1,088	671	691	241	535	3,912	8,054	2,512	1,327	989	.....	341	1,210	1,066	240	.....	132	128	5
Alabama.....	2,087	.....	.....	.....	.....	1,006	.....	367	725	395	2,165	229	121	375	124	.....	.....	49	51	4
Louisiana.....	1,000	1,000	550	550	550	2,000	2,000	206	6	.....	.....	.....	.....	100	100	500	.....	11	11	29
Mississippi †.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tennessee.....	1,617	763	.....	763	.....	.....	.....	14,741	.....	10,828	.....	.....	.....	1,441	.....	.....	.....	412	373	.....
Kentucky.....	5,293	5,053	4,472	4,068	363	11,826	8,360	2,999	3,595	2,216	26,535	1,052	1,233	2,048	1,933	4,342	52	244	225	19
Ohio.....	15,444	5,625	2,258	1,849	415	1,039	308	11,975	4,423	3,188	9,264	128	2,012	2,820	2,579	169	.....	.....	.....	.....
Indiana.....	577	232	189	15	.....	10,000	.....	8,200	6,500	.....	48,000	1,200	350	780	.....	.....	.....	288	400	20
Illinois †.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Missouri †.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Michigan Territory.....	98	.....	13	3	89	132	60	1732	447	534	936	38	76	112	16	.....	.....	29	24	2
Arkansas Territory †.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Florida Territory †.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
District of Columbia.....	144	144	144	144	.....	.....	.....	66	.....	.....	.....	.....	.....	18	.....	.....	76	.....	.....	.....

* Fifes included.

† Shot guns included.

‡ No returns of arms, &c., from these States.

§ Horns included.

|| Fuses included.

NOTE.—This return of arms, &c., is taken from the returns corresponding in date with those which furnish the strength of the militia.

23D CONGRESS.]

No. 598.

[2D SESSION.]

ON CLAIM OF AN OFFICER OF THE ARMY FOR REIMBURSEMENT OF EXPENSES OF DEFENDING SUITS AGAINST HIM FOR ACTS DONE IN OBEDIENCE TO ORDERS.

COMMUNICATED TO THE SENATE FEBRUARY 3, 1835.

WAR DEPARTMENT, *February 3, 1835.*

SIR: I have the honor to transmit herewith certain documents showing the expenses incurred by Captain Jouett, of the army, in defending suits instituted against him for acts performed under the direction of this department. Should the Committee on Military Affairs deem it proper that remuneration should be made, I have to request that the necessary appropriation may be made in some of the bills pending before the Senate.

Very respectfully, your obedient servant,

LEW. CASS.

Hon. THOMAS H. BENTON, *Chairman Committee on Military Affairs, Senate.*

DEPARTMENT OF WAR, *Office Indian Affairs, January 28, 1835.*

SIR: The enclosed papers have been presented by Captain William R. Jouett, of the United States army, with an account for moneys paid by him for counsel fees and costs in two suits in which he was defendant, instituted against him for the seizure of whiskey introduced into the Indian country. The papers show that he was sustained by the instructions of this department, the law, and the judgment of the court. The account is, therefore, submitted, with a recommendation that an appropriation be asked of Congress for its payment.

I am, sir, very respectfully, your obedient servant,

ELBERT HERRING.

Hon. LEWIS CASS, *Secretary of War.*

FORT CRAWFORD, *October 30, 1833.*

SIR: The suits brought against me by the American Fur Company and Joseph Renville, in 1832, were removed from the Crawford county court to the United States circuit court for the counties of Crawford and Iowa, at the term of that court which commenced on the first Monday in this month. In the Fur Company's suit I obtained a judgment, and Renville's suit was continued until the next term of the court. The agent of the Fur Company is determined to take the case that has been decided up to the supreme court by a writ of error.

I employed Benjamin Mills, esq., of Galena, to defend the suits, and gave him \$300 in each case for his fee, amounting to the sum of \$600, for which I have taken his receipt, and forward it with the enclosures. I have also paid the clerk of the Crawford county court \$11 87 for his fees in the cases, the receipt for which is likewise forwarded with the enclosures sent herewith. The sums thus paid out amount together to the sum of \$611 87. I have to ask of you the favor to lay the enclosed papers upon the subject of those suits before the honorable Secretary of War, and to request him, if it can be done without a special act of appropriation, to have my expenses, already incurred, reimbursed to me; if that cannot be done, then I hope he will have the enclosed petition, with the papers accompanying it, laid before Congress at the opening of the approaching session, with his recommendation for the necessary appropriation. I think that, if the money can be reimbursed to me out of the contingent fund, it would be but an act of sheer justice to have it done; for it is a hard case for me to be harassed with vexatious suits for my official acts performed in obedience to orders, and have to advance my own money to defend the suits; and it will be still more oppressive if I shall have to wait for my remuneration until a bill for my relief can be passed through Congress.

The Fur Company will, most likely, take out their writ of error this winter, and I would be glad, inasmuch as I am wholly unacquainted in Detroit, for the United States district attorney for the Territory of Michigan to be directed to attend to the case before the supreme court if it shall be carried up; and I would acknowledge it as a favor if you would request the proper authority to have the necessary directions given for that purpose.

Please to do me the favor to acknowledge the receipt of this communication and the papers enclosed, and to inform me of the decision of the Secretary of War upon my application.

Respectfully, sir, your obedient servant,

W. R. JOUETT, *Captain 1st Infantry.*

Colonel R. JONES, *Adjutant General.*

P. S.—I send you the letter of Mr. Mills on the subject of engaging his services in the suits, which I forgot to mention in the former part of this letter. It will show the reasonableness of the fee, and that it is what he has charged private individuals in similar cases, and you will do me a favor by laying it, with the other papers on the same subject, before the Secretary of War.

To the honorable the Senate and House of Representatives of the United States in Congress assembled:

Your petitioner, William R. Jouett, a captain in the army of the United States, would respectfully represent: That, in the month of July, 1832, while your petitioner had the command of Fort Snelling, on the Mississippi river, he did, in obedience to instructions, (copies of which accompany this petition,) cause the stores and packages of goods in two Mackinac boats then ascending the Mississippi—one the

property of the American Fur Company, and the other the property of Joseph Renville, one of the said company's traders, and both loaded with merchandise for the Indian trade—to be searched, on suspicion that ardent spirits were concealed among the stores in said boats contrary to law; that, upon such search being made, there were found in one of said boats eleven kegs of alcohol or high wines, and in the other five kegs; that he had the said sixteen kegs of alcohol or high wines taken out of said boats and stored away in Fort Snelling until further orders from the War Department should be given upon the subject; that, in doing this, he acted, as he conceived, and still conceives, in strict obedience to his instructions and in conformity to the laws of the United States; that the situation of the country on the northwestern frontier, at the time that the said searches and seizures were made, required extraordinary vigilance and exertion on the part of every public officer in the country to resist the hostile operations of the Indian tribes then at war with our government, and to preserve peace with those who had not yet engaged in hostilities; that the war with the Sacs and Foxes was then at its height on the frontier below where your petitioner was stationed in command, the excitement of which was felt and manifested among all the neighboring tribes; that the Sioux and Chippewas, with hostile intentions towards each other, were then in considerable force in the vicinity of Fort Snelling, menacing the tranquillity of that portion of the country; that your petitioner had long witnessed and deplored the deleterious influence of introducing ardent spirits among the Indians, and believed, at the time that he made the searches and seizures aforesaid, that if ardent spirits should then be introduced among them in any considerable quantity, the effect would, in all probability, prove seriously prejudicial to the interests of the country and the safety of the post which he commanded; that he was far removed from every possible source of relief or support in case of any sudden disaster, and without a sufficient force under his command to control the movements of the Indians in his neighborhood, should acts of violence and aggression once commence among them; that, under the then existing circumstances, he considered his situation as one of critical importance, and made every possible exertion to preserve the peace of that part of the country, and to be ready to act decisively upon the shortest notice in any emergency that might occur; and he warned the traders and agents of the Fur Company and other traders in the country of the danger of taking ardent spirits among the Indians, and of his orders, and his determination to execute them, to prevent a practice so prejudicial to the interests of the government and the peace and happiness of the Indians themselves; that when he found that neither warnings nor persuasions could influence, nor dangers deter the traders from violating the laws of the country at so critical a period, there was but one course left for him to pursue relative to the subject, and that was, faithfully to execute the orders and instructions he had received.

Your petitioner would further represent that, soon after the said searches and seizures were made as aforesaid, the said American Fur Company and Joseph Renville brought their several actions of trespass therefor against your petitioner, and held him to bail for his appearance in court to answer to the said actions; that at the late term of the United States circuit court for the counties of Crawford and Iowa, held at Mineral Point on the first Monday in October, 1833, one of the said suits, to wit, the suit brought by the American Fur Company, was called for trial, when your petitioner filed two special pleas of justification, to which the plaintiffs replied, and your petitioner demurred to their replications, upon which an issue of law was made up to the court, upon the trial of which the court gave judgment for your petitioner, to which decision the plaintiffs have excepted, and say that they will prosecute a writ of error from the supreme court of the Territory of Michigan; that at the same term the said suit, brought by said Renville as aforesaid, was continued until the next term of said court, to be holden on the first Monday in October next, when your petitioner will again have to attend for his defence of that suit; that from the importance of the suits, the situation of the country, the distance to travel to attend the court, and the great labor consequently attending the practice of the bar, your petitioner was compelled to pay liberal fees to secure the services of able counsel to aid him in his defence, for which he engaged Benjamin Mills, esq., of Galena, to whom he gave a fee of \$300 in each suit, amounting together to the sum of \$600, the receipt for which given by the said Mills accompanies this petition; that he had to pay to the clerk of the Crawford county court, where the said suits were originally commenced, for fees therein, the sum of \$11 87, the receipt for which also accompanies this petition; that if the American Fur Company shall prosecute their writ of error to reverse the decision given in their suit, your petitioner shall again have to employ counsel at Detroit, and incur a heavy expense in defence of the suit in the supreme court; and should the suit brought by said Renville ultimately be decided against your petitioner, he will have to pay the damages and costs recovered, which will probably not be less than \$1,200.

Your petitioner would further represent that the government ought not, in justice, to allow him to suffer pecuniary losses on account of acts performed by him under orders from his supervisors and the high responsibility of his duty as an officer of the army and the peculiar circumstances under which he is situated, nor suffer him to be harassed with troublesome and vexatious suits for faithfully discharging his official duty, without providing him with the necessary means to enable him to sustain his defence.

Your petitioner, therefore, most earnestly prays that a law may be passed appropriating the sum of \$611 87 for his relief, to remunerate him for the sums already paid out in the defence of the said suits; and that the further sum of \$2,000 be appropriated and placed at the disposal of the honorable Secretary of War, to be disbursed by him to defray such expenses and damages as your petitioner may hereafter incur by reason of the said suits, upon the proper vouchers being furnished by your petitioner. The last-mentioned sum your petitioner thinks necessary in order to provide against the possibility of a recovery being had against him in the suit brought by said Renville, and for the defence of the writ of error, should the Fur Company prosecute one, and the possibility of an ultimate recovery in that case should the decision of the circuit court be reversed. The prayer of your petitioner will be, he trusts, deemed just and reasonable, and the relief asked for granted; and, as in duty bound, he will ever pray, &c.

WM. R. JOUETT, *Captain 1st Infantry.*

FORT CRAWFORD, *October 30, 1833.*

DEPARTMENT OF WAR, *May 28, 1822.*

SIR: I enclose copies of an act passed at the late session of Congress, by the second section of which it is made the duty of military officers to cause the stores and packages of goods of all Indian traders, upon suspicion or information that ardent spirits are carried into the Indian country by said traders, to be searched, and prescribes the penalty if any such spirits be found.

You will enclose a copy of the act to each of the officers commanding military posts in and adjacent to the Indian country, and order them to attend strictly to the execution of the duty thereby imposed upon them.

I have the honor to be your most obedient servant,

J. C. CALHOUN.

Major General E. P. GAINES, *Louisville, Kentucky.*

True copy.

GEO. A. McCALL, *Aide-de-camp, Acting Assistant Adjutant General.*

True copy from that in this office.

E. K. WILLIAMS, *Lieutenant and Assistant Adjutant.*

FORT SNELLING, *September 23, 1832.*

HEADQUARTERS WESTERN DEPARTMENT, *Louisville, Kentucky, June 12, 1822.*

SIR: I enclose herewith, for your information and government, an act of Congress approved 6th of May, 1822.

You will, upon the receipt of this instruction, and in future until otherwise directed, cause the stores and packages of all Indian traders, in Indian towns and on the frontier within the limits or vicinity of your command, upon suspicion or information that ardent spirits are carried into the Indian country by said traders, to be searched; and should ardent spirits be found in any such stores or packages of goods, you will cause such goods to be secured, libelled, and proceeded against, in strict conformity to the second section of the enclosed act of Congress; and you will attend strictly to the execution of the duty enjoined upon military officers by the above-mentioned act of Congress, as well by the act entitled an act to regulate trade and intercourse with Indian tribes, and to preserve peace on the frontiers.

I have the honor to be, &c.,

EDMUND P. GAINES, *Major General by Brevet, Commanding.*

COMMANDANTS of posts in and adjacent to the Indian country.

True copy.

GEO. A. McCALL, *Aide-de-camp, Acting Adjutant General.*

True copy from that on file in this office.

E. K. WILLIAMS, *Lieutenant, and Assistant Adjutant.*

FORT SNELLING, *September 23, 1832.*

ASSISTANT ADJUTANT GENERAL'S OFFICE, WESTERN DEPARTMENT,
Memphis, Tennessee, March 14, 1832.

SIR: You will receive herewith copies of a letter from the Secretary of War to Major General E. P. Gaines, of the 28th May, 1822, and of a letter from Major General E. P. Gaines to the commandants of posts in and adjacent to the Indian country, of the 12th June, 1822.

The commanding general considers the instructions therein contained ample and sufficient, and does not deem any further orders requisite to insure the strict execution of the duty enjoined upon officers of the army in their proceedings against Indian traders, in conformity to the acts therein cited.

The power with which you are vested by the enclosed letters should be made known to all persons concerned.

I am, very respectfully, sir, your obedient servant,

GEO. A. McCALL, *Aide-de-camp, Acting Assistant Adjutant General.*

The OFFICER OF THE UNITED STATES ARMY *commanding Fort Snelling.*

True copy from that on file in this office.

E. K. WILLIAMS, *Lieutenant and Assistant Adjutant.*

FORT SNELLING, *September 23, 1832.*

ADJUTANT GENERAL'S OFFICE, *Washington, September 15, 1832.*

SIR: Your communication of the 3d ultimo, addressed to the Secretary of War, in relation to ardent spirits found by you on board the boats of some Indian traders, which they were transporting to their trading establishments to vend among the Indians, contrary to law, and which you had seized upon, has been duly received; and, in reply, I have to inform you the general-in-chief directs that you will retain the ardent spirits until you are instructed by the War Department as to its final disposition.

I am, sir, very respectfully, your obedient servant,

R. JONES, *Adjutant General.*

Captain W. R. JOWETT, *1st Infantry, Commanding Fort Snelling, Upper Mississippi.*

GALENA, *September 20, 1832.*

DEAR SIR: I have just returned from my journey, and found your letter, upon the subject of the suits against you, in the post office at my return. In consequence of the pressing demands made upon my time, and the utter impossibility of my attending to the removal of the case by *habeas corpus*, I shall be obliged to have assistant counsel, for which you will only be charged, in addition to my own fee, what I

have to pay him. We shall then (both of us) only charge the same fee which I received from Mr. Brunet in his case against Strat & Kearney. Indeed, I do not imagine any one would complain of paying \$300 in each suit when their importance is considered.

Yours, respectfully,

Captain Wm. R. JOUETT.

B. MILLS.

MINERAL POINT, October 12, 1833.

Captain Wm. R. Jouett to Benjamin Mills, Dr.

To defence of suit in the United States circuit court for the district of Iowa, M. T., American Fur Company vs. yourself, (trespass).....	\$300 00
To defence of suit in same court—Joseph Renville vs. yourself, (trespass).....	300 00
	600 00
	600 00

Received payment October 12, 1833.

B. MILLS.

OCTOBER, 1833.

I hereby certify that I was necessarily engaged for the period of fourteen days in attending the district court of the United States, at Mineral Point, in defending the suit of American Fur Company against myself, in a case for trespass, and that the sum charged to cover my expenses is reasonable.

W. R. JOUETT, Captain 1st Infantry.

OCTOBER, 1833.

I hereby certify that I was necessarily engaged for the period of eight days in attending the district court of the United States, at Mineral Point, in defending the suit of Joseph Renville against myself in a case for trespass, and that the sum charged to cover my expenses is reasonable.

W. R. JOUETT, Captain 1st Infantry.

CRAWFORD COUNTY COURT, November Term, 1833.

AMERICAN FUR COMPANY,	}	Trespass.
vs.		
W. R. JOUETT & J. VAIL.	}	Trespass.
JOSEPH RENVILLE,		
vs.	}	Trespass.
W. R. JOUETT & J. K. GREENOUGH.		

Defendants' costs.

To copy of all the papers filed in my office in the above cases, to send to Mineral Point, \$11 87.

PRAIRIE DU CHIEN, October 5, 1833.

Received of W. R. Jouett \$11 87, being the amount of the above account.

J. BRISBOIS, Clerk C. C. C.

TERRITORY OF MICHIGAN, Counties of Crawford and Iowa, ss:

I, the undersigned, do certify that William R. Jouett paid \$3, the jury fee in the case of Joseph Renville against yourself.

ROBERT DOUGHERTY, Clerk I. C. C. pro tem.

FORT WINNEBAGO, August 1, 1833.

SIR: By a letter from Mr. Rolette, which I have just received, I am advised by him, as his counsel, to agree to the admission of Mr. Vail and Mr. Greenough, as witnesses in the cases in which they now stand as parties with yourself; for which purpose I will discontinue the actions as against them. But as Mr. Rolette's object is to obtain an immediate trial, which will be final, I am instructed that this arrangement cannot be made unless you cause the suits to be removed into the circuit court for trial in October next. This can be done by your counsel by application to the judge for a writ of habeas corpus C. C.; and I hope this proposition will be satisfactory.

With much respect, your obedient servant,

Captain W. R. JOUETT.

J. D. DOTY.

HEADQUARTERS 1ST INFANTRY, *Fort Crawford, July 15, 1834.*

SIR: Accompanying this you will receive a communication from Captain Jouett, of the 1st infantry, (forwarded through me,) in relation to several suits now pending against him for damages to a large amount in the United States district and circuit courts for the counties of Crawford and Iowa, held in the latter at Mineral Point, Michigan Territory, instituted against him by the American Fur Company on account of certain seizures made of a quantity of whiskey in 1832 which the agents of said company had introduced into the Indian country; the defending of which has already been the cause of involving him in considerable pecuniary losses, and asking permission to visit Washington in October next, with the view of trying to get relieved from the same, and, if necessary, to petition Congress for relief. Of the propriety and necessity of granting the permission asked for, the general-in-chief must be the proper judge.

It is very much to be regretted that when suits are instituted against subordinate officers of the army by wealthy and influential companies, (as in the present instance,) or by individuals, for a large amount of damages for the proper executing of orders emanating from the highest authorities known to our laws as regard military matters, that they are not properly sustained by those with whom such orders originate; instead of permitting them not only to be harassed by sheriffs and dragged from place to place to defend them in the best way they may, but to defray all the expenses attending to the same, which, in many instances, they are illy able to do; and as a last resort, should damages be recovered from them, they are compelled to petition Congress to relieve them from the same, as well as the expenses which they are necessarily compelled to be at, which in many instances are very great.

Very respectfully, sir, your obedient servant,

Z. TAYLOR, *Colonel 1st Regiment U. S. Infantry, Commanding.*

Col. R. JONES, *Adjutant Gen'l U. S. A., Washington City, D. C.*

FORT CRAWFORD, *July 15, 1834.*

SIR: I wrote you some time in November last on the subject of the suits which had been brought against me by the American Fur Company, and the expenses that I had necessarily incurred in their defence; in which communication I requested you to use your endeavors to get me remunerated either through the Quartermaster's department or by an application to Congress for relief.

I enclosed you a petition to Congress for that purpose, to be presented in case you should find that my accounts could not be paid without a special appropriation for the purpose. I have not been apprised that this communication was received by you, and am left in suspense as to the intention of the department to sustain me in the acts which I performed under orders and instructions from my superiors, and which have involved me in a course of vexatious litigation.

In one of the suits at the last October term of the court I obtained judgment on demurrer. Since that time the plaintiffs have prosecuted a writ of error to take the case to the supreme court of the Territory. Should the judgment be reversed, and the other case ultimately go against me, I shall be much harassed to liquidate the damages and costs which will be recovered; and I cannot expect the least indulgence from my adversaries, as there is no doubt that the agent for the company at this place, who manages the cases, will push them to the utmost extremity.

If I shall, in the end, be enabled to succeed in defence of both the suits, they will still, so long as they remain pending, be a continual source of expense to me, in addition to the amount that I have already paid out. I have already expended upwards of \$600, and I hope that the commanding general will use his exertions to prevent the burden from resting upon me.

In the depositions which I had taken in October last, to be read as evidences in the cases, it was clearly proven that the acts for which they were brought were performed by me in conformity to instructions of the late Secretary of War, Mr. Calhoun, and orders from the general commanding the western department; these instructions and orders made it my duty to carry the laws of Congress into effect for the prevention of introducing ardent spirits into the Indian country. My acts were done, as I conceived them, and as I still think, in strict accordance with the law.

I was at the time in command of the extreme frontier post; and it was then, if ever, necessary to be prompt and vigilant in watching over the intercourse with the Indians, and in making every exertion to preserve peace in that quarter.

I flatter myself that my exertions were not without some salutary effect upon the tribes in my vicinity, while those below were so extensively engaged in hostility with our people. I hope, therefore, that the department will see the justice of my claim to indemnity, and will relieve me from the pecuniary embarrassments which these suits have brought upon me.

In order to a proper adjustment of the business, I have to request that permission may be given me to visit Washington city after the next October term of the court, for the purpose of settling my accounts against the government. I desire this, inasmuch as I have heard nothing of the disposition that was made of my application last fall, or of the petition to Congress which was enclosed in my communication to you. I believe that it has been usual to grant such permission to officers similarly situated, and I hope that the same indulgence will be allowed to me.

I also sent you last fall a commission and interrogatories to take the deposition of Mr. Calhoun, to be read as evidence in the trials of the cases stated. I have not yet been informed whether the deposition has been taken. As it will be of the utmost importance to have his testimony on trial, as one of the cases brought by Renville stands for trial at next October term, I hope, should the deposition not have been taken, it may be done without delay, and transmitted, under cover, to me here, and that I may be advised as to what has been done with that part of the business.

I am of opinion, and am advised by counsel, that the testimony of Major Teliaferro, Indian agent at St. Peter's, will be material for my defence of the aforementioned suits. I understand that he intends leaving St. Peter's this fall, from his anxiety to visit his family. It will hardly be practicable to get him to attend the court, unless he should be directed to do so by the War Department. I hope, therefore, that you will do me the favor to call on the honorable Secretary of War, and request him to instruct Major Teliaferro to attend the next October term of the court at Mineral Point as a witness in my behalf.

I will acknowledge it as a favor if you will answer this communication at the earliest day.

Respectfully, sir, your obedient servant,

W. R. JOUETT, *Captain 1st Infantry.*

Col. R. JONES, *Adjutant Gen'l U. S. A., Washington.*

WASHINGTON CITY, *January 26, 1835.*

SIR: I have the honor to enclose an account of \$642 37 for defending two suits brought against me, one by the American Fur Company, and the other by Joseph Renville, Indian trader on the Upper Mississippi. The suit of the American Fur Company was tried in October, 1833, which I got judgment for cost; the suit brought by Renville was tried in October, 1834. I also obtained judgment for cost, and only claim what I have actually paid out.

These suits were brought for seizure of whiskey made by me when in command of Fort Snelling, in July, 1832.

I herewith enclose all the papers and documents in relation to the suits.

I have the honor to be, very respectfully, sir, your obedient servant,

W. R. JOUETT, *Captain 1st Infantry.*

Hon. LEWIS CASS, *Secretary of War, Washington City.*

The United States to Captain William R. Jouett, United States Army, Dr.

October 5, 1833.—For clerk's fees, copying papers to be sent to the United States district court at Mineral point, Michigan Territory, voucher 1.....	\$11 87
October 12.—For attorney's fees in defending two suits in the district court of the United States for Iowa county, Michigan Territory, at \$300 each, per voucher No. 2, herewith.....	600 00
For this sum paid jury fee, per certificate No. 3.....	3 00
1833.—For per diem allowance to cover expenses of attending the court at Mineral Point in October term of 1833, 14 days, at \$1 25 per day, certificate No. 4.....	17 50
1834.—For per diem allowance in attending the court at October term of 1834, 8 days, at \$1 25 per day, certificate No. 5.....	10 00
	642 37

I hereby certify that the account is accurate and just.

W. R. JOUETT, *Captain 1st Infantry.*

JANUARY 30, 1835.

I hereby certify that the suits of the American Fur Company *vs.* W. R. Jouett and J. Vail, and Joseph Renville *vs.* W. R. Jouett and J. R. Greenough, were removed in 1833 from the county court of Crawford county, Michigan Territory, into the circuit court for the counties of Iowa and Crawford, (the style of which, I think, is as above stated,) to which several suits the defendant filed special pleas of justification, justifying the alleged trespass under the several acts of Congress regulating trade and intercourse with the Indian tribes, and the several orders directed to him from the Secretary of War, as the commanding officer at Fort Snelling; the first of which suits was, at the October term of 1833, decided in favor of the defendant upon an issue of law under a general demurrer tendered, in the course of pleading, by said defendant, to which opinion of the court exception was taken, with how much seriousness, however, I know not. The second came for trial at the October term of 1834, in which the jury found a verdict of not guilty for the defendant. Given under my hand, &c.

D. IRVIN, *Additional Judge for Michigan Territory.*

WASHINGTON CITY, *February 18, 1835.*

I am requested to state that suits were brought against Captain W. R. Jouett in the circuit court of the United States for the county of Iowa, Territory of Michigan, for the seizure of certain boats with a small quantity of whiskey on board, bound for Fort Snelling, owned by the American Fur Company; in which suits the said Jouett has recovered judgment in the said court.

JAMES DUANE DOTY, *Attorney for the American Fur Company.*

23^d CONGRESS.]

No. 599.

[2^d SESSION.]

RECOMMENDATION OF MILITARY ROADS FROM GREEN BAY TO PRAIRIE DU CHIEN, AND FROM SAGINAW TO MACKINAC, IN THE TERRITORY OF MICHIGAN.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 6, 1835.

WAR DEPARTMENT, *February 5, 1835.*

SIR: In answer to the resolution of the House of Representatives of the 26th ultimo, respecting certain roads in the Territory of Michigan, I have the honor to transmit herewith a report from the quartermaster general, which contains the information called for.

Very respectfully, your most obedient servant,

LEW. CASS.

Hon. JOHN BELL, *Speaker of the House of Representatives.*

QUARTERMASTER GENERAL'S OFFICE, *Washington City, February 4, 1835.*

SIR: In obedience to your order requiring an estimate, under a resolution of the House of Representatives of the 26th ultimo, "of the expense necessary to complete the opening of the military road from Green Bay to Prairie du Chien, in the Territory of Michigan, so as to allow the transportation of troops and military stores thereon when necessary; also the expense required to open a road from Saginaw to Mackinac, in the said Territory, for similar purposes," I have the honor to submit, in reply to the first clause of the resolution, a copy of the report of the commissioners who surveyed the route from Green Bay to Prairie du Chien, and to state that they did not furnish a detailed estimate, but in the concluding paragraph of their report express the opinion that the amount estimated by this department in 1833, (ten thousand dollars,) in addition to the balance of an appropriation remaining unexpended, would be sufficient to finish the work on the plan proposed.

In reply to the last clause of the resolution, I have the honor to state that a survey of the route of a road from Saginaw to Mackinac was commenced during the last season, but was not completed. Until the survey be finished, and the nature of the country known, it will not be possible to estimate with any degree of certainty the amount required to open the road. The work will be highly important in a military point of view, as there is now no direct communication by land between Detroit and Mackinac.

I respectfully recommend that an appropriation of ten thousand dollars be asked for, to be applied, should the Secretary of War consider it advisable, to commence the work during the ensuing season.

I return the resolution, and I am, sir, respectfully, your obedient servant,

TH. S. JESUP, *Quartermaster General.*

HON. LEWIS CASS, *Secretary of War, Washington City.*

SIR: The commissioners appointed by direction of the Secretary of War to locate and survey the route for a military road from Fort Howard to Fort Crawford, *via* Fort Winnebago, have the honor to report that they have completed the duties assigned to them, and herewith transmit a map of the route selected.

Owing to the very limited knowledge of the country through which the route passes, a general examination has been necessary, especially between Fort Howard and Fort Winnebago. The little travelling has been blindly confined to the old Indian trails, which frequently lead by very circuitous and unfavorable routes, from point to point, visiting in their course villages and other points out of the general course of the line.

With such imperfect knowledge, nothing could have been taken as granted; and it became necessary to give a personal examination to the several routes thought the most practicable.

After due consideration the commissioners have not hesitated in giving the most decided preference to the route selected over all others named.

The other routes had under examination lie, for a considerable portion of their distance, on the left bank of the Fox river. The country generally is of a very inferior quality, and the labor and expense of opening the road would be much greater than on the route selected, owing to the marshy nature of the country through which it would pass. It is, moreover, still in possession of the Indian tribes, and will probably remain so for many years; and the numerous crossings of Fox river would at certain seasons of the year present serious obstacles.

On the other hand, the route by the head of the lake passes, in its whole extent, through lands of a very superior quality, soon to be in market, and destined in a few years to be occupied by settlers; the facility of construction is far greater than on either of the other routes, and the necessity of crossing the Fox entirely avoided.

Regarded in a military light as the means of communication between three distant military posts, its superiority is manifest; for it runs almost parallel to the natural boundary between the United States and the Menomonee and Winnebago tribes of Indians, entirely within lands possessed by the United States, with all the white settlements in its rear, and the country behind of such an open nature that communications can be established from either of the settlements to any point on the route.

The country upon the line admits of two general divisions: the wooded, extending from Green Bay to the head of Lake Winnebago; and the rolling prairie, extending from the latter point, with but few interruptions, to Fort Crawford.

Upon the first division the labor of construction will be considerable; where the road runs parallel to the river it has been found necessary to locate it upon its bank, to avoid an almost continuous swamp, commencing generally a few hundred yards from its bank, and running parallel to it.

This has made it necessary that a number of ravines, which perform the offices of drains to the swamps behind, should be crossed, requiring more labor in construction than any other equal portion of the route.

From the point where the route leaves the river to the head of Lake Winnebago, although quite heavily timbered, the ground is favorable, and more than half the labor on this portion has been already performed by the New York Indians in opening a communication between their old settlements and the reservation to which they are shortly to remove.

On the second division the labor and expense of construction is very small; with the exception of some causeways in the vicinity of Fort Winnebago, the labor is limited to cutting and grubbing through the groves and belts of woods upon borders of streams; the bridging is but trifling.

The commissioners would recommend that upon the prairies two parallel plough-furrows be run, to indicate the direction and width of the road, as the crosses put up must soon be destroyed, as many of them have already been, through the mere wantonness of the Indians.

On the prairies no other labor would be necessary than that of running the furrows; and the woods are nearly all open and clear of underbrush; and by inspection of the map it will be seen that a large proportion is prairie.

The prairie which is passed over at the distance of eighty-five miles from Green Bay is, without doubt, the continuation of the high prairie ridge extending without interruption from the head of Lake Winnebago to the Mississippi, and would furnish a more direct and open communication between Fort Howard and the Mississippi, should it be thought unnecessary to pass by Fort Winnebago.

From Fort Winnebago to the Blue Mounds a few obstructions exist in the immediate neighborhood of Fort Winnebago; but these form the only ones between that point and Fort Crawford.

At the Blue Mounds, distant about twelve miles from the Wisconsin, commences the elevated ridge, extending uninterruptedly to within a few miles of the point where the line crosses the Wisconsin. This ridge is the most remarkable feature in the country; it varies from a few yards to several miles in width, and separates the waters of the Wisconsin from those of the Platte, Grault, Peektano, and other tributaries of the Mississippi.

On either side of this ridge the country is extremely broken, especially towards the Wisconsin, where it is only passable on the ridges that run from the prairie ridge to various points on the river. On the other side is the rolling prairie, extending throughout what is called the "mining country," and affording on its ridges, both towards the Mississippi and in other directions, good natural roads.

From this to Fort Crawford as favorable ground has been chosen as the broken nature of the country will admit of.

It is thought that the present appropriation, with what has been estimated for, will be sufficient to finish the work on the plan proposed; but it is supposed that if a greater width than twenty feet was given to the road in the timbered land between Fort Howard and the head of lake Winnebago, much advantage would result, as the surface of the earth would be exposed to the action of the sun.

Very respectfully, your obedient servants,

A. J. GENTER, *Second Lieutenant Fifth Infantry and Commissioner.*
T. D. DOTY, *Commissioner.*

23D CONGRESS.]

No. 600.

[2D SESSION.]

ON THE EXPEDIENCY OF MAKING ADDITIONAL APPROPRIATIONS FOR THE ARMAMENT
OF FORTIFICATIONS.

COMMUNICATED TO THE SENATE FEBRUARY 7, 1835.

The Committee on Military Affairs, to whom was referred the resolution directing them to inquire into the expediency of increasing the appropriation for arming the fortifications of the United States, reported:

A letter from the Secretary of War, covering a communication from the colonel of ordnance, recommending that the additional sum of one hundred thousand dollars be appropriated for the object mentioned in the resolution; and the committee, concurring in that recommendation, have directed their chairman to move that the said additional sum of one hundred thousand dollars be inserted in the appropriation bill for the ordnance of fortifications.

IN THE SENATE OF THE UNITED STATES, *January 29, 1835.*

On motion by Mr. Benton,

Resolved, That the Committee on Military Affairs be instructed to inquire into the expediency of increasing the appropriation for arming the fortifications of the United States.

Attest:

WALTER LOWRIE, *Secretary,*
By W. HICKEY, *Clerk.*

WAR DEPARTMENT, *February 6, 1835.*

SIR: In answer to the inquiries contained in your letter of the 2d instant, I have the honor to transmit a report from the Ordnance department.

With a view to provide sooner than it could otherwise be done the necessary armament for the fortifications, and more particularly the gun-carriages, I think it would be expedient to make an additional appropriation of \$100,000 for the present year, to be applied to the armament of the fortifications.

Very respectfully, your most obedient servant,

LEW. GASS.

P. S. The resolution enclosed by you is herewith returned.

HON. THOMAS H. BENTON, *Chairman Military Committee, United States Senate.*

ORDNANCE OFFICE, *Washington, February 4, 1835.*

SIR: In answer to the letter of the Hon. Thomas H. Benton, enclosing the resolution of the Senate, instructing the Committee on Military Affairs to "inquire into the expediency of increasing the appropriation for arming the fortifications of the United States," I have the honor to report that to enable this

department to provide with greater promptitude the armament and supplies for the works on the seacoast, it is respectfully suggested that the appropriation for the present year be increased \$100,000.

On the propriety of this measure (vide reports and estimates of this department, duly recommended and approved by the proper authorities, in State Papers, volume 1, 1829-1830, document 2, pages 25 and 130, and the enclosed extract from a report made to the War Department on this subject.)

Although, with this additional aid, ten years will be required to complete the armament of the seacoast, yet unless, in the opinion of the proper authorities, circumstances may warrant a greater appropriation, the sum recommended under the present arrangements of this department is as large as can well be applied with a due regard to an economical and proper expenditure, particularly in the construction of gun-carriages.

I have the honor to be, very respectfully, your obedient servant,

GEORGE BOMFORD, *Colonel of Ordnance.*

Hon. LEWIS CASS, *Secretary of War.*

Extract from a report from the colonel of ordnance to the honorable Secretary of War, dated November 22, 1830, which accompanied a special estimate for the service of the Ordnance department for the year 1831.

“Armament of new fortifications.—In the estimates of last year it was proposed to add \$150,000 per annum to the usual appropriation for this object, in order to proceed with less tardiness in arming and equipping new fortifications. In the report which accompanied that estimate (which may be found at page 129 of document No. 2 of the last session) all the details connected with the proposition were fully stated. And I beg leave to refer to that document instead of repeating the statements here. It may, however, be proper to remark that the fortifications which will be completed in 1832 will require an armament which cannot be furnished complete before the year 1850 without an increased appropriation. If the additional sum now proposed of \$100,000 per annum be granted, the armaments may be completed in the year 1840. These remarks refer only to such of the fortifications as have been recently constructed, or are now building, and do not include any of the contemplated works which are yet to be commenced. The proposition for an increased appropriation does not contemplate any extension of the fortifications. It is designed merely to provide the cannon, mortars, balls, shells, and their appendages, which are necessary for equipping those which have already been constructed, or which are now nearly completed. Fifteen years have been employed in the construction of these works; two years more, it is estimated, will complete them. The sums expended in the construction of them already amount to near nine millions of dollars, and when the works shall be completed will exceed ten millions. These works will remain useless for all the purposes of defence or protection until they are armed. With the present provision for arming them a period of twenty years will be occupied in equipping them. The proposition for an increased appropriation may therefore be regarded as presenting the single question whether it is expedient or inexpedient to hasten the equipments of the new fortresses, in order that they may be plaed in a condition to fulfil the purpose of their construction within a period more or less short of twenty years.

“I will barely suggest, in addition, that a reference to the present aspect of public affairs abroad may present considerations worthy of notice when deliberating on the measure here proposed”

23D CONGRESS.]

No. 601.

[2D SESSION.]

APPLICATION OF KENTUCKY FOR THE ERECTION OF AN ARMORY IN SAID STATE.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 16, 1835.

EXECUTIVE DEPARTMENT, KENTUCKY, *Frankfort, February 5, 1835.*

SIR: I have the honor of transmitting to you the subjoined copy of resolutions of the general assembly of this Commonwealth, expressive of the opinions of that body in reference to the matter therein alluded to.

Very respectfully, &c.,

J. T. MOREHEAD.

RESOLUTION in relation to erecting an armory in the State of Kentucky.

Resolved by the senate and house of representatives, That our senators in Congress be instructed, and our representatives be requested, to use their exertions to procure an armory to be erected by the general government at some suitable point in Kentucky.

Resolved, That the acting governor be requested to send a copy of the above resolution to each of our senators and representatives in the Congress of the United States.

23D CONGRESS.]

No. 602.

[2D SESSION.]

APPLICATION OF KENTUCKY FOR THE ESTABLISHMENT OF A MILITARY SCHOOL IN THAT STATE.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 18, 1835.

EXECUTIVE DEPARTMENT, KENTUCKY, *Frankfort, February 5, 1835.*

SIR: I have the honor of transmitting to you the subjoined copy of resolutions of the general assembly of this Commonwealth, expressive of the opinions of that body in reference to the matter therein alluded to.

Very respectfully, &c.,

J. T. MOREHEAD.

RESOLUTION in relation to establishing a military school in Kentucky.

Resolved by the general assembly of the Commonwealth of Kentucky, That our senators be instructed, and our representatives in Congress be requested, to use their best exertions for the purpose of getting a military school established in the State of Kentucky.

Resolved, That the acting governor be requested to send a copy of the above resolution to each of our senators and representatives in the Congress of the United States.

23D CONGRESS.]

No. 603.

[2D SESSION.]

APPLICATION OF MASSACHUSETTS FOR THE REBUILDING OR REPAIRING OF FORT INDEPENDENCE, ON CASTLE ISLAND, IN BOSTON HARBOR.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 16, 1835.

COMMONWEALTH OF MASSACHUSETTS.

EXECUTIVE DEPARTMENT, *February 13, 1835.*

SIR: In compliance with the request of the legislature of this Commonwealth, I transmit to you a copy of "resolves respecting the present state of the fortifications on Castle island."

Very respectfully, your obedient servant,

J. DAVIS.

HON. BENJAMIN GOREHAM.

Whereas Fort Independence, on Castle island, in the harbor of Boston, has been heretofore chiefly relied upon for the defence of the said harbor and of the city of Boston, and is still considered indispensable to their security; and—

Whereas the fortifications upon said island are at present in a dilapidated and ruinous condition: Therefore—

Resolved, That the senators of this commonwealth in Congress be instructed, and the representatives requested, to urge upon the proper department of the government of the United States the importance and necessity of rebuilding or otherwise repairing the aforesaid works; and to use their exertions in Congress to obtain the appropriation that may be required for this purpose.

Resolved, That his excellency the governor be, and he is hereby, requested to transmit a copy of these resolves to each of the senators and representatives of this Commonwealth in the Congress of the United States.

HOUSE OF REPRESENTATIVES, *February 11, 1835.*

Passed—sent up for concurrence.

JULIUS ROCKWELL, *Speaker.*IN SENATE, *February 11, 1835.*

Passed in concurrence.

BENJ. T. PICKMAN, *President.*

Approved February 12, 1835.

JOHN DAVIS.

23d CONGRESS.]

No. 604.

[2d SESSION.

ON CLAIM OF AN ASSISTANT SURGEON OF THE ARMY FOR REIMBURSEMENT OF RENT PAID FOR PRIVATE QUARTERS AT TROY, NEW YORK, THERE BEING NO PUBLIC QUARTERS FOR HIM.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 16, 1835.

Mr. ANTHONY, from the Committee on Military Affairs, to whom was referred the petition of Sylvester Day, assistant surgeon in the United States army, reported:

That the petitioner was stationed as assistant surgeon in the army of the United States at Watervliet, in the State of New York, from May 1, A. D. 1822, till May 1, A. D. 1824; and that, owing to the occupancy of all the public quarters by other officers at that post, the petitioner was obliged to rent private quarters at Troy, for which he paid \$130 for the first year, and \$140 for the second; that he applied to the quartermaster general for the usual allowance of ten dollars per month for the above period of two years, but the charge was not admitted by the department, because he omitted to make a requisition for public quarters on the acting quartermaster, under the regulation of the army that "on the arrival of an officer at a post, if he be entitled to quarters, he shall immediately make a written requisition on the quartermaster, who shall in all cases furnish public quarters where there are any vacant." The petitioner, however, states that he did apply to Major Dalliba, the commanding officer of the post, on his arrival, but that the public quarters were all occupied; and he is corroborated as to their occupancy by Captain Crawford.

The committee would here observe, that although the account for rent was rejected by the quartermaster general for the reason above-mentioned, yet he concurs with the Secretary of War in stating "that there is as strong equity in his case as in that of Doctor Eaton, for whom an appropriation was made by Congress for rent of quarters on the 14th of January, 1833;" and the Secretary of War further remarks that "as the principal is already established that such an allowance is just, he sees no reason why it should not be extended to Doctor Day, who has long been in service, and is a meritorious officer."

Believing, therefore, that the petitioner is justly entitled to the usual allowance of ten dollars per month for quarters, the committee accordingly report a bill in his favor.

23d CONGRESS.]

No. 605.

[2d SESSION.

STATEMENT OF THE COST OF TRANSPORTATION OF ARMS AND OTHER MILITARY STORES FROM THE DISTRICT OF COLUMBIA, VIRGINIA, AND MARYLAND, TO PITTSBURG AND OTHER POSTS IN THE WESTERN COUNTRY.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES FEBRUARY 16, 1835.

WAR DEPARTMENT, *February 13, 1835.*

SIR: In answer to the resolution of the House of Representatives of the 6th instant, respecting the cost of transportation of arms, &c., from this District, and Virginia, and Maryland, to Pittsburg and other posts in the western country, I have the honor to transmit herewith a report from the Third Auditor containing the information called for.

Very respectfully, your most obedient servant,

LEWIS CASS.

Hon. JOHN BELL, *Speaker of the House of Representatives.*

TREASURY DEPARTMENT, *Third Auditor's Office, February 13, 1835.*

SIR: In pursuance of the resolution of the House of Representatives of the 6th instant, requiring "that the Secretary of War be, and is hereby, requested to communicate to this House a statement of the amount paid annually, and the price per pound, during the last five years, for the transportation of arms and all other military stores from Harper's Ferry, Baltimore, Washington arsenal, and any other posts or places in Virginia, Maryland, and the District of Columbia, to Pittsburg and other posts in the western country," referred by you to me, I have the honor to enclose herewith a statement exhibiting the amount annually paid, and the price per pound, for transportation of arms and military stores, &c., for the last five years, so far as the accounts settled and rendered to this office have been found to furnish the information required by the resolution.

I have the honor to be, most respectfully, your obedient servant,

PETER HAGNER, *Auditor.*

Hon. LEWIS CASS, *Secretary of War.*

Statement exhibiting the amount annually paid, and the price for transportation of arms and other military and public stores, during the last five years, from Harper's Ferry, &c., to Pittsburg and other posts in the western country; prepared in pursuance of the resolution of the House of Representatives, February 6, 1835.

Years.	Places from and to.	Articles transported.	Price per pound.	Amount.	Aggregate.
1830	From Harper's Ferry to Pittsburg	481 boxes of arms and equipments.....	2 cents.....		\$3,468 00
1831	..... do.....do.....do.....	500.....do.....do.....do.....	1 9-10 cent..		2,850 00
1832	.....do.....do.....do.....	242.....do.....do.....do.....	1 9-10 cent..	\$1,379 40	
	From Baltimore to Pittsburg	1 small box of military stores		1 00	
					1,380 40
1833	From Harper's Ferry to Pittsburg	800 boxes of arms and equipments.....	1 9-10 cent..	4,560 00	
	From Baltimore to Pittsburg.....	1 box of military stores.....		2 50	
					4,562 50
1834	From Harper's Ferry to Pittsburg	500 boxes of arms and equipments	1 9-10 cent..	2,850 00	
	From Baltimore to Wheeling	25 boxes of military stores.....	\$5 16 23-25 per box..	129 23	
	.....do.....do.....do.....	13.....do.....do.....do.....	\$4 48 10-13 per box..	53 34	
	From Baltimore to Pittsburg.....	1 box of cavalry tactics		1 50	
	From Wheeling to Cincinnati	25 boxes of military stores.....	25 cts. per 100 lbs..	13 84	
	From Wheeling to Louisville.....	13.....do.....do.....do.....	30 cts. per 100 lbs..	8 30	
	From Louisville to mouth of White river.....	13.....do.....do.....do.....	37½ cts. per box....	4 87	
					3,066 08
					15,326 98

TREASURY DEPARTMENT, Third Auditor's Office, February 13, 1835.

PETER HAGNER, Auditor.

23D CONGRESS.]

No. 606.

[2D SESSION.]

ON THE EXPEDIENCY OF PROVIDING FOR THE REPAIR OF FORT MIFFLIN, ON THE DELAWARE RIVER.

COMMUNICATED TO THE SENATE FEBRUARY 21, 1835.

IN SENATE OF THE UNITED STATES, February 21, 1835.

On motion by Mr. Buchanan, and by unanimous consent,

Resolved, That the Committee on Military Affairs be instructed to inquire into the expediency of making an appropriation for the repair of Fort Mifflin and the adjacent pier battery, in the river Delaware.

ENGINEER DEPARTMENT, February 19, 1835.

SIR: In answer to the inquiry which the House of Representatives has directed its Committee on Ways and Means to make, as to the expediency of making an appropriation for the repair of Fort Mifflin and adjacent pier, in the Delaware, and asking your opinion of the practicability of the proposed repairs, the amount of appropriation adequate for that object, and their expediency in case of an unfavorable change of our foreign relations, I have the honor to report: That, since the entire destruction of Fort Delaware, near the debouche of the Chesapeake and Delaware canal, the approach to the city of Philadelphia by water is left entirely open, and as the island and adjacent country is too low to admit of the construction of temporary batteries, having the requisite "command" to prevent the "plunge" from large ships, the shores of the Delaware being uniformly, on the channel side, very low, this circumstance will compel us in case of immediate necessity to reoccupy positions higher up. These are Fort Mifflin and the pier mentioned in Mr. Binney's letter on the subject just referred to this office, and which "are well-situated to cover the city, the navy yard, and Frankford arsenal from the approach of ships and barges," and ought by all means to be occupied "in case of an unfavorable change in our foreign relations."

The following is the present condition of Fort Mifflin, viz: the scarps are in excellent preservation, the parapets and ramparts require considerable additions to suit them for artillery, all the platforms have to be rebuilt, the magazines refitted anew, furnaces rebuilt in part, the gates of all the entrances renewed, quarters, bakery, &c., refitted for the accommodation of the garrison.

As regards the battery on the pier nothing of it remains; it will, therefore, have to be rebuilt.

The department is unable, from the want of the necessary data, to prepare anything like a correct estimate of the amount of appropriation requisite to effect the object in view; but considering the extent of the work to be executed, I am induced to believe with some confidence that not less than \$75,000 will be required, and I accordingly respectfully suggest the propriety of recommending that amount.

With the great resources of Philadelphia at command, it is believed the repairs in question can be effected in six weeks from their commencement.

I am, with respect, sir, your obedient servant,

C. GRATIOT.

HON. LEWIS GASS, Secretary of War.

23D CONGRESS.]

No. 607.

[2D SESSION.]

APPLICATION OF INDIANA THAT THE MILITIA SYSTEM OF THE UNITED STATES MAY
BE RENDERED MORE EFFICIENT AND LESS BURDENSOME.

COMMUNICATED TO THE SENATE FEBRUARY 25, 1835.

A JOINT RESOLUTION on the subject of the militia.

Be it resolved by the general assembly of the State of Indiana, That our senators in Congress be instructed, and our representatives requested, to use their best exertions to procure the passage of a law, the provisions of which shall limit the enrolment of the militia to the able-bodied free white male citizens of the United States between the ages of twenty-one and forty years, and provide for the more speedy arming and better disciplining the militia of the several States by the general government, with such other provisions as Congress in their wisdom may think proper to adopt, in order to render the militia system more efficient and less burdensome.

Resolved, That his excellency the governor be requested to forward a copy of this resolution to each of our senators and representatives in Congress.

JAMES GREGORY, *Speaker of the House of Representatives.*DAVID WALLACE, *President of the Senate.*

Approved February 7, 1835.

By order of the governor, transmitted.

N. NOBLE.

J. L. KETCHAM.

23D CONGRESS.]

No. 608.

[2D SESSION.]

ON THE EXPEDIENCY OF ESTABLISHING A NATIONAL FOUNDRY.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES MARCH 3, 1835.

Mr. W. COST JOHNSON, from the select committee who were appointed "to inquire into the propriety of establishing a national foundry for the purpose of fabricating ordnance of various kinds suitable to the wants of the general government," reported:

To fortify and strengthen its natural position and to build up defences against foreign aggression must be considered true policy in every government, but especially does it belong to the federal government of the United States to promote the general welfare and provide for the common defence; the very origin and end of the Union was for this. Composed of a number of representative democracies, while they reserved to themselves all the powers necessary for their municipal concerns and all the rights conservative of independent sovereignties for a common purpose and the common weal, they created a general government, and vested it with all the powers necessary, appropriate, and incident to a republic. With a wide and almost unlimited territory; with a seaboard extending from the frozen regions of the north to the sultry climes midway of a continent; with the whole coast indented by spacious and almost inland seas, offering access to the far interior by bold, navigable rivers, no country ever possessed more natural advantages improvable for its defence; no country ever required fortifications more; and perhaps there is no country over which the protecting arm of its government has been so feebly stretched.

It is not the purpose of the committee to inquire into the causes which have operated to retard the improvement of the natural facilities of defence. Be these causes what they may, disasters have already been the consequence of the delay. Had the valedictory admonition of the father of his country been duly regarded, much blood and treasure would have been saved the nation—no marauding enemy (as was the case during the last war) could have entered our bays, inlets, and rivers with impunity; have laid our cities under contribution; plundered our towns; annoyed the inhabitants of the whole seaboard with petty warfare; and never would the disgrace have fallen on the nation of having had this very capital sacked, pillaged, and left a heap of smoking ruins. It was these occurrences, however—this dear-bought experience—that induced the adoption of that system of defence by which fortifications have been and are now being erected at the most exposed and commanding positions along our whole frontier. But judicious as was the adoption of that system, efficiently as it has been carried into operation in the location and construction of those defences, what, after the length of time which has been spent and the millions which have been appropriated, is the present condition of our fortifications? and how far are they capable of subserving the purposes for which they were designed and constructed?

To enable them to answer these inquiries the committee have sought information from sources which they deem eminently entitled to consideration, and with deep anxiety they learn that there are no fortifications furnished with a full and complete armament, and scarcely any in a state of defence.

By reference to the accompanying report from the Secretary of War (Nos. 2 and 3) it appears that the number of guns required for the armament of the fortresses completed and in progress of completion is 6,632 of the calibre of 24 and 32-pounders; the number in possession of the government, including the old patterns, which are of doubtful utility, is 2,633, leaving the total number now required for the fortresses alone three thousand nine hundred and ninety-nine. Besides, there are required for necessary field trains, to be deposited in various sections of the Union, eight hundred and fifty pieces. It will also be seen that

the number of shot required, allowing 250 per gun, is 1,658,000, while the number in possession of government is only 137,746, leaving the total amount of shot required at this time *one million five hundred and twenty thousand two hundred and fifty-four*. Moreover, it will be seen that under the most liberal appropriations, allowing all possible zeal, good faith, and exertion on the part of those engaged in fabricating ordnance, it would take at least *four* years to supply the necessary amount for the *fortresses* now completed, and perhaps twice that time to supply the fortifications in progress of completion, independent of the large amount continually required to render our naval marine efficient and to provide those field trains, so serviceable, if not so absolutely necessary, to resist a hostile invasion.

Under these circumstances what would be the condition of the country in the event of a sudden war? Those very forts which have been erected at such expense could not be put in a state of defence but would fall an easy conquest to any enemy, and, instead of affording protection to our own people, would become *depots* and citadels to the enemy from whence to send forth their marauding parties or to concentrate their forces for bolder enterprises.

Taking this view for the subject and remembering the difficulties under which this government labored during the last war, the immense sacrifices which were made of blood and treasure and other disastrous consequences of our imprudence, the committee are unanimously of opinion that no further time should be lost, but that the government ought to take immediate steps to provide full armaments for our fortifications, and to supply not only the present and contingent demands for our navy but also to furnish field trains and other ordnance to be distributed in the manner suggested by the prudent foresight of the Secretary of War; and to accomplish these purposes the committee are entirely convinced that the establishment of a national foundry is not only appropriate and expedient, *but absolutely necessary*. Without entering into a detailed argument to show the advantages which would accrue from such an establishment or to point out the impolicy of the government depending upon its present limited and precarious means of supply, the committee take leave to refer to the accompanying documents, (marked No. 1 to No. 14, inclusive,) as embodying the strongest, most cogent, and conclusive reasons for the establishment of a national foundry.

Should Congress regard it unwise at this time to adopt a plan for the full and efficient protection of the forts and fortifications, which have already cost the nation more than twelve millions of dollars, and for the construction and repairs of which it appropriates about a million of dollars annually and should determine that the present amount of appropriation for the Ordnance department, which is about ninety thousand dollars annually, is sufficient, the committee are still of the opinion that the policy of establishing a national foundry is not less absolutely necessary.

A brief glance at the past and a slight view of the present history of our means of national defence and security will give abundant testimony of the propriety of adopting some more *systematic* mode of protection.

The nation does not now own a national foundry, nor has it ever had one.

During the revolutionary struggle it depended for its arms of every kind almost entirely upon France or upon rescuing them by battle from the enemy.

Those which the nation bought were for the most part old and nearly worn out cannon—the refuse of the French army—which are now only valuable for the reminiscence of the past.

The want of supply of good arms for the army during the revolution induced General Washington, early in his administration of the executive department of the government, to call the attention of Congress to the subject of establishing national factories for the fabrication of arms. Several laws were passed on the subject: one authorizing the Executive, in his wisdom, to establish a national foundry for the purpose of manufacturing cannon. The Executive did not deem it expedient to carry the law into effect at that time, upon the grounds that the nation had incurred a vast national debt, the finances of the country were deranged and limited, the nation had but few forts and fortifications and a very inconsiderable navy; but, by his recommendation, two factories were established for the purpose of making small arms, one in Springfield, Massachusetts, the other at Harper's Ferry, in Virginia. Although the mechanics of this country had much less experience in the mode of making firearms than those of Europe, yet, by the power of native genius and the experiments authorized by the government, we have now two factories which make the best rifles and muskets in the world.

The most experienced transatlantic officers and artisans admit that the muskets and rifles now made in the United States are superior, in point of finish and usefulness, to the best made in Europe.

So perfect and improved has been the system adopted in our factories that we have accomplished what a board of French officers pronounced a desideratum that was impossible. A board of French officers thought that it was impossible to so make all the parts of a musket that a part of the work made for one musket would suit and fit the residuary part made in another shop or factory, and by different hands; that the springs and the screws made to suit a given lock could not be made with such uniformity and precision as to answer for the corresponding parts of a different lock. If a part of a musket was lost or injured there could not be taken a similar part of another and make it quadrate with all its uses, but would be compelled to discard the musket or employ the aid of a mechanic. Such is, or has been, the fact with the arms made in France because the filings of the various parts are regulated chiefly by the eye. This is not the case in our national factories. The system of machinery is reduced to such perfection that every part of a musket is made with such nice precision and accuracy that every screw or spring made for a given part or purpose will fit every musket or pistol that is made in each of our factories.

Take any part of a musket made in the Springfield factory and it will be precisely, in every particular, like those parts made at Harper's Ferry. All the parts of two muskets may be taken asunder, though one be made at Harper's Ferry and the other be made at Springfield, and thrown into one indiscriminate mass, and there may be taken from the heap thus blended, at random, the component parts of a musket, and these put together, and the musket thus formed will be as perfect as precision can be, although half of the musket may have been made at one factory and the other moiety made at a different factory. The chief of the Ordnance bureau has frequently tried, with success, the experiment. Hence a musket or a pistol made in the public factories of the United States is almost indestructible, for from the fragments of arms on a battle field there can be put together readily a musket as perfect as when first made.

Of muskets of this kind the government has in depot about one hundred thousand. The English government has in depot about a million of muskets. The French a like number.

The improvement made in the rifle is still greater. The common rifle can be loaded and discharged

but *twice* in a minute, whilst Hall's rifle, made at Harper's Ferry, which receives the load at the breech, can be loaded and discharged *eight* times in a minute.

These vast improvements in the construction of machinery and in the improvement of small arms are owing to the fact of the government establishing factories and authorizing the trying of experiments in science, which have resulted in valuable improvements in the arms, and in greatly reducing the price of cost.

Might we not expect similar and highly beneficial results in the improvement of the materials, and in the fabrication of cannon, if the government had a foundery of its own? As cannon is most costly, (for a 42-pounder costs \$520, and other cannon costs nearly \$6 per cwt.,) is it not of the greatest moment that the government should possess such as are of the most durable and approved quality, and have an abundant and ready supply made in the best possible manner?

Private individuals have not a sufficient inducement to procure the best materials, and to try experiments essential to the fabrication of cannon of the best quality; nor can it be expected from individuals, however patriotic they may be, that they will expend largely their private fortunes in testing unprofitable experiments in combining and testing the strength of various metals, for which the government is not authorized to reimburse them.

In one point of view, especially, the committee conceive the present mode of depending on individuals for a supply of ordnance is objectionable. Founderies owned by individuals may at any time be placed beyond the reach and control of government; and in time of war, or upon any sudden emergency, even the case might occur that the secret agents of an enemy or of a foreign power might obtain the control or ownership, and then close them against the government itself.

Experience has proved that an iron cannon can be discharged but about twelve hundred times with a full charge without encountering imminent hazard. It is then only fit to be broken up and cast into balls, or used for other purposes.

It has been stated upon the authority of a scientific English author (Dr. Tredgold) that, by combining with iron five per cent. of copper, cannon can be made which will sustain one-fifth more gradual pressure, or pressure by percussion, than when made of iron alone—an improvement of the highest interest and importance. Although this fact has been known to the head of the Ordnance department, and he has been anxious for two years to fully test its truth, yet he has not been able to do so from the fact that the government, which has so deep an interest in the subject, has not a foundery. An experiment which he authorized, on a very small scale, has most abundantly realized the accuracy of the author's views.

For field cannon, it is of the greatest importance that they should be as light as possible to be safe and useful, so that they can be moved, when necessity may require it, with promptness and celerity; and likewise be of the best materials, for the explosion of one piece of cannon will create more alarm in the time of action among soldiers than a charge from the enemy's columns.

As far as the committee have extended their inquiries on the subject, they have found one general sentiment among the officers of the army and navy, that most of the cannon owned by government are unfit for service, and that the supply which the nation has is clearly disproportionate to the requirements and security of the government, if even lulled into the profoundest enjoyment of universal peace. No wisdom can foresee at what time the nation, though now at peace, may be engaged in hostilities.

But a few years ago the Ordnance department desired to have cast a small quantity of brass cannon. The contract could not be taken because the amount desired was not sufficient to justify the proprietors of private founderies in sending to England for experienced mechanics in this occult branch of casting, and this country did not contain artisans who possessed the necessary knowledge and experience.

Some few brass cannon have since been made, and although they have generally withstood the test of trial, yet they are regarded as inferior, and are rough in grain and finish; nor has there ever been made in the United States a brass cannon of the largest magnitude that has been pronounced equal to those made in England.

The committee are of the opinion that economy in the cost of ordnance is less to be consulted by the government than the good quality of the cannon. But whether economy or the good quality be the object to be attained, they are led by the information laid before them to the conclusion that, by the establishment of a national foundery, both of these objects would be effected in an eminent degree.

The committee, being of opinion that a national foundery ought to be established, recommend that it should be done as early as practicable, and in the most efficient manner; and they think no place could be selected combining so many advantages as the District of Columbia. Here a national foundery would be within a territory exclusively under the jurisdiction of Congress; central, in a great degree, as respects the several States, it would be accessible and convenient to all by means of navigable tide water, and the facilities of communication afforded by the Chesapeake and Ohio canal and the Baltimore and Ohio railroad, connected as these great works are, and will be, with others which traverse every section of the Union. The Potomac river would supply any quantity of water which would be required to propel the machinery, and the best ore and coal, with every other species of material, may be obtained at the smallest expense from inexhaustible and contiguous sources.

The Antietam iron ore is, perhaps, superior to any in the United States for the purpose of ordnance. It requires no admixture with any other ore, and is of a kind peculiarly suited to the purpose. The quantity of ore is abundant to meet any demand that might be made for it. It is situated immediately on the Potomac river, and the ore bank on the Maryland side of the river is penetrated by the Chesapeake and Ohio canal.

The following extract from the very able and intelligent letter (No. 5) of Captain Jones, who has been for several years inspector of ordnance, will better exhibit the quality of this ore:

"It does not often happen," he says, "that iron produced from any one ore possesses *all* the qualities requisite for *gun-metal*. One will be a little too hard, another too soft; one a close, compact, brittle grain, and another open, or porous and weak, &c. Hence the necessity, as a general rule, of mixing or combining two or more kinds of iron to produce what the founders term *gun-metal*; and hence arises one of the great difficulties and uncertainties attending *all first* efforts at cannon casting. An exception, however, to this general rule, as regards the necessity of mixing different kinds of iron to make strong guns, is to be found in the *Antietam iron*, (used at the Columbian foundery,) from the works of Brien & McPherson, on the banks of the Potomac, about 70 miles above Georgetown. That iron has, happily combined, all the essential qualities for making the *very best cannon, without the aid of any other admixture.*"

The Cumberland stone coal on the banks of the Potomac river is of the very best quality, as will be

seen by reference to Professor Ducatel's letter, No. 13, and Mr. Brien's, No. 12. The Cumberland coal can be had in unlimited abundance, and can be delivered in the District of Columbia, after the present year, when the Chesapeake and Ohio canal shall have reached the coal region on the Potomac, at ten or eleven cents per bushel.

Thus, every material that can be desired, and every facility of navigation and transportation, seem to indicate this situation as possessing superior advantages to any other in the Union; but especially, in the opinion of the committee, should a location within the District of Columbia be preferred, because a foundry thus situated would at all times be subject to the immediate supervision and inspection of the officers of the general government.

The committee will conclude this report by expressing their regret that the information which they desired could not be furnished at an earlier period of the session; and receiving it, as they did, on the eve of the adjournment of Congress, has not allowed them to bestow that full investigation which might otherwise have rendered a report more satisfactory. The object of the committee being to elicit information, they have called for it from the most intelligent and practical sources. All the information which they deem necessary to attain a correct conclusion has been transmitted, and which is appended, as furnished, to the end of this report.

All of which is respectfully submitted, together with the following resolution:

Resolved, That the Secretary of War ascertain upon what terms and at what price a proper site for the erection and establishment of a national foundry can be obtained within the District of Columbia, and that he report the same, together with the plan and estimates for a national foundry, to the next Congress.

No. 1.

WAR DEPARTMENT, *February 13, 1835.*

SIR: I have had the honor to receive your letter of the 6th instant, requiring certain information concerning the establishment of a cannon foundry by the government of the United States.

In answer, I beg leave to refer you to the accompanying report from the Ordnance department, which contains the information you ask for. My general views on the subject were so fully presented in my annual report to the President, in November, 1831, an extract from which accompanies the letter of the colonel of ordnance, that it does not appear to me necessary to add anything to what is there said.

Very respectfully, your most obedient servant,

LEWIS CASS.

Hon. WILLIAM C. JOHNSON, *Chairman Committee, &c., House of Representatives.*

ORDNANCE OFFICE, *Washington, February 12, 1835.*

SIR: In reply to the interrogatories of the select committee of Congress appointed to inquire into the propriety of establishing a national foundry for the purpose of fabricating ordnance of various kinds suitable to the wants of the general government, referred to this department, I have the honor to state, in relation to the first inquiry, viz:

"Are there not several foundries owned by citizens of the United States which cast cannon and shot under contracts with the general government? How many, and what is the character of their metal, &c.? And are they competent, upon an emergency, to supply all the cannon and shot necessary for the navy and fortifications, and other defences completed and in progress of completion?"

That there are four foundries owned by citizens employed in casting cannon and shot for the fortifications of the United States: One in the State of New York, near West Point; one in Pittsburg, Pennsylvania; one in the District of Columbia, and one near Richmond, Virginia. The metal used at these foundries is supposed to be good, as the guns, when proved, undergo heavy charges, and but few of them burst of late years.

In relation to the competency of the foundries now employed to supply, on an emergency, all the cannon and shot necessary for the navy, fortifications, and other defences, it may be stated that, with their present means, four years would at least be required to cast the cannon, shot, and carriages necessary for the armament of the FORTRESSES.

In answer to the second inquiry, viz:

"What amount of cannon and shot is, in your opinion, necessary for the navy and the several fortifications and other defences completed and in progress of completion over and above what is now possessed by the general government?"

It is to be remarked that the number of guns required for the armament of the fortresses completed and in progress of completion of the calibre of 24 and 32, is..... 6, 632
 And the number in possession of government, including the old patterns, which are of doubtful utility, is..... 2, 633

Total number of guns now required.....	3, 999
The number of shot required, at 250 per gun, is.....	1, 658, 000
And the number in possession of government is.....	137, 746
Total number of shot now required.....	1, 520, 254

In answer to the third inquiry, viz:

"Whether, in your opinion, it is most expedient for the general government to establish a national foundry, or to depend upon private foundries?"

I have the honor to refer to an extract from your report to the President, November 21, 1831, as follows:

"The United States have no armories for the fabrication of cannon. The practice for some years has been to make contracts with the owners of four founderies, at Richmond, Georgetown, Pittsburg, and West Point, to the amount of the annual appropriation, allowing about an equal proportion to each, and pay such price as the Ordnance department, on the best information, judge reasonable.

"This procedure has been repeatedly stated in the annual reports to Congress, together with the reasons which led to it. These are founded in the capital and experience required to conduct this business; in the necessity of depending, in some degree, upon the integrity and character of the manufacturers, as there may be defects in the piece not easily discoverable, owing to the necessity of mixing together iron of different qualities; and in the belief that if a general competition for these supplies were excited, the existing establishments would be broken down, and others endeavor to take their places, which would either fail from similar causes, or furnish cannon unfit for service, and thus leave the government, at some critical period, without the means of procuring this indispensable arm of defence. The provisions of the act of Congress of March 3, 1809, seem, however, to present serious objections to this course, and I bring the subject before you at this time that it may be fully considered.

"It appears to me that a public armory for the fabrication of cannon is required by obvious considerations. By forming such an establishment the necessary experience and artisans would be provided, and such supplies of heavy ordnance manufactured as the government might direct. The actual value of the article would be ascertained, and contracts with individuals could be formed with a full knowledge of the circumstances. There would be no danger of combinations, nor would any injury result from fair competition. The supplies might be so controlled as to leave no fear of a deficiency in the quality or quantity of this essential arm of defence." And to state, in addition, that, considering the great number of guns, carriages, shot, and shells yet to be provided by foundries, a national foundry would undoubtedly be productive of great public advantage, not only to aid in furnishing the public supplies and in assuring the government, through the means of its own disinterested officers, that the material and workmanship are the best, but to afford, by this means, a known, unexceptional standard by which the work of the several contractors may be regulated in respect of the important points of metal, workmanship, and price charged. The two national armories for muskets answer admirably well this important point in reference to the contractors for manufacturing muskets for the United States.

Relative to the fourth and last inquiry, viz:

"In the event of the government determining to establish a national foundry, where would, in your opinion, be the most eligible situation?"

I have to state that, in the opinion of this department, the most eligible situation for a national foundry would be somewhere on tide-water, or on the Chesapeake and Ohio canal, either in the District of Columbia or Maryland, and near the seat of the general government, from whence there would be the greatest facilities afforded for transporting the guns, &c., to the several fortifications, and where an abundant supply of coal and iron ore of the best quality can at all times be procured, and at the cheapest rates.

I have the honor to be, sir, your obedient servant,

GEO. BOMFORD, *Colonel of Ordnance.*

No. 3.

Extract from the Report of the Secretary of War.

To the Ordnance department is committed the duty of providing and preserving the necessary armament for the land service of the United States. The trust is a responsible one, requiring fidelity in the administration, and practical as well as scientific knowledge in the execution. The expenditure for these objects exceeds \$900,000 annually, and the value of the accumulated property equals twelve and a half millions. But the nature of the service gives it a still deeper interest than the pecuniary considerations connected with it. Unless our arms are well fabricated and preserved, and in sufficient abundance, and unless we keep pace with the improvements which modern science and ingenuity are making, the consequences may hereafter prove disastrous. The necessary provision for these objects cannot be made without much time and experience; and that they may be ready for war, they must be procured in peace. A stable and efficient organization is, therefore, essential to the ordnance corps; and in the report of the officer at the head of it, will be found his views of its present condition. I recommend the subject to your favorable notice. The suggestions are the result of much experience, and present in a forcible manner the defects of the existing system and the meliorations that are required. I am satisfied that the adoption of the measures proposed would give renewed efficiency to the operations of this section of the public interest, and more economy in its expenditures.

A commission of experienced officers will be directed to investigate the subject, and to report their views concerning the various matters connected with it, and particularly with respect to the patterns and construction of the small arms and cannon, and any alterations which experience may have indicated. Their report, when received, will be laid before you.

I have made some examination into the condition of this branch of the national defence, with the view of ascertaining the supplies in service and in depot, and determining the quantity yet required to meet the demands of a prudent forecast. The result I shall submit for your consideration.

The United States have now in serviceable condition about 465,000 muskets. The annual demand to supply the necessary loss in the army and the militia and to furnish the issues to the respective States is 18,300. The number manufactured in the public armories is about 25,000, and at private works about 11,000, making a total of 36,000, at the average cost of \$12 each. We had at the commencement of the late war 240,000 muskets in depot, and during its progress 60,000 were made and purchased. At its termination there were but 20,000 at the various arsenals, and many of those in the hands of the troops were unserviceable. Eight years were then required to replace the number lost during the war.

From 1802 to 1814 there were 3,956,257 small arms, of all descriptions, procured for the French service.

And during the same period, for the British service, 3,142,366.

The average number of small arms annually fabricated in the French arsenals, from 1805 to 1814, was 219,372.

In the British arsenals, from 1802 to 1814, 261,947.	•
The stock on hand in Great Britain in 1817, in depot, was.....	818,282
In the public service	200,974
Total	<u>1,019,256</u>

The number in depot in France in 1811 was 600,000, not including the great number in service.

These statements may be useful in determining the proper number of small arms which ought to be provided in this country. Being almost imperishable, when properly secured and preserved, their accumulation occasions no actual loss, as the time must, in all probability, come when they will be wanted.

Considering the nature of our service, requiring, as it does, an unusual expenditure of these articles, in consequence of the great proportion of militia we employ, and the system of rotation by which their services are regulated, and great losses consequently occasioned, and also the necessity of large deposits in different sections of such an extensive country, each of which should be adequate to any probable emergency, it is evident that our stock of small arms should at all times be large. Whether the quantity now on hand be sufficiently so is for Congress to determine.

There are now 623 cannon, of various calibre, for field service, and there are at the arsenals and in the old fortifications 1,165. But these cannon are all of antiquated patterns, and, with the exception of the six-pounders, amounting to 344, and a few of the heavier pieces, are considered unserviceable. There have been procured for the armament of the new fortifications 1,214 cannon of the improved pattern.

The old fortifications will require (probably)	646
The new, already completed.....	2,587
Those contemplated by the board of engineers, a part of which are now constructing.....	4,045
Besides these, proper field trains deposited in different sections of the Union, and sufficiently large to meet probable contingencies, may be estimated at.....	850

The average cost of our cannon is \$5 94 per hundred pounds, which gives the following prices for those of different calibres:

For 42-pounders.....	\$520
For 32-pounders.....	450
For 24-pounders.....	330
For 18-pounders.....	245
For 12-pounders.....	150
For 6-pounders.....	70

It is estimated that an iron cannon will not safely bear more than one thousand two hundred discharges with the service charge, after which it should be broken up.

The United States have no armories for the fabrication of cannon. The practice for some years has been to make contracts with the owners of the four founderies at Richmond, Georgetown, Pittsburg, and West Point, to the amount of the annual appropriation, allowing about an equal proportion to each, and paying such price as the Ordnance department, on the best information, judge reasonable.

This procedure has been repeatedly stated in the annual reports to Congress, together with the reasons which led to it. These are founded in the capital and experience required to conduct this business; in the necessity of depending, in some degree, upon the integrity and character of the manufacturers, as there may be defects in the piece not easily discoverable, owing to the necessity of mixing together iron of different qualities; and in the belief that if a general competition for these supplies were excited, the existing establishments would be broken down and others endeavor to take their places, which would either fail from similar causes or furnish cannon unfit for service, and thus leave the government, at some critical period, without the means of procuring this indispensable arm of defence. The provisions of the acts of Congress of March 3, 1809, seem, however, to present serious objections to this course, and I bring the subject before you at this time that it may be fully considered.

It appears to me that a public armory for the fabrication of cannon is required by obvious considerations. By forming such an establishment the necessary experience and artisans would be provided, and such supplies of heavy ordnance manufactured as the government might direct. The actual value of the article would be ascertained, and contracts with individuals could be formed, with a full knowledge of the circumstances. There would be no danger of combinations, nor would any injury result from fair competition. The supplies might be so controlled as to leave no fear of a deficiency in the quality or quantity of this essential arm of defence.

No. 4.

NAVY DEPARTMENT, *February 21, 1835.*

SIR: I have the honor to acknowledge the receipt of your letter of the 7th instant upon the subject of a national foundry; and, in compliance with your request, send herewith a copy of Captain Catesby Jones's report to the navy commissioners, as inspector of ordnance, dated the 20th of January, 1834.

The letter of the navy commissioners of the 18th instant, which accompanied the copy, is also enclosed. The committee also ask my opinion as to the expediency of establishing a national foundry for the purpose of fabricating ordnance for the use of the government.

I have not the information necessary to enable me to present a satisfactory view of the advantages of such an establishment, but this information will be obtained as soon as may be, to be offered hereafter, should it be called for.

In the meantime I may venture to say that we shall never arrive at any great perfection in the fabrication of ordnance without a national foundry. This perfection can only be attained by a long series of experiments, by men of skill and science, in the various materials which our country affords for the fabrication of cannon, and of the best means of casting and boring them. These experiments never will

be made under a contract system, and can only be expected from an establishment under the immediate control of the government.

Of the importance and expediency of such an establishment, therefore, I can entertain no doubt.

I am, very respectfully, your obedient servant,

M. DICKERSON.

HON. WILLIAM C. JOHNSON, *Chairman Foundry Committee, House of Representatives.*

No. 5.

NEAR PROSPECT HILL, *Fairfax County, Virginia, January 7, 1835.*

Answers to four interrogatories propounded by the select committee of the House of Representatives appointed to inquire into the expediency of establishing a national foundry, &c.

Answer to the first interrogatory.—There are at this time, I believe, five private foundries casting cannon or shot under contract with the general government, viz: Columbian foundry, near Georgetown, D. C.; Bellona foundry, on the James river, 12 miles above Richmond, Virginia; the West Point foundry, New York, on the North or Hudson river, opposite to West Point; — foundry, at or near Pittsburg, Pennsylvania, and Alger's foundry, Boston, Massachusetts. The metal (*iron*) used at the above-named foundries can scarcely be from the same or similar ore, nor is it probable that the guns cast at the different works are of like quality, and to be equally depended on, although all are subjected to the same severe proof before they are received, either for the army or the navy. It does not often happen that iron produced from any one ore possesses all the qualities requisite for *gun metal*: one will be a little too hard, another too soft, one a close, compact, brittle grain, and another open, or porous and weak, &c. Hence the necessity, as a general rule, of mixing or combining two or more kinds of iron, to produce what the founders term *gun metal*; and hence arises one of the great difficulties and uncertainties attending *all first efforts* at cannon casting. An exception, however, to this general rule, as regards the necessity of mixing different kinds of iron to make strong guns, is to be found in the *Antietam iron*, (used at the Columbian foundry,) from the works of Brien & McPherson, on the banks of the Potomac, about 70 miles above Georgetown; that iron has happily combined all the essential qualities for making the *very best cannon without the aid of any other admixture*. Some years ago I believe General Mason cast at the Columbian foundry some field-pieces for the Ordnance department, (by way of experiment, to test the utmost strength of the *Antietam metal*,) which were little or no heavier than the best brass or bronze guns of the same calibre would have been. The guns stood the severest proof test without bursting; nevertheless, they were not safe guns to be used in service; but the experiment proved beyond doubt what was before believed by those only who were well acquainted with the character of that metal, viz: its superiority over every other known iron used for casting cannon, except, indeed, the metal used by Major Clark at the Bellona foundry, which is believed to be the same vein passing in a southwesterly direction from the Potomac to the James river. Of the metal used at the other foundries I have less knowledge. Soon after the West Point foundry commenced operations, the highly intelligent managers of that institution made many and various experiments upon most of the metals produced in this country, as well as upon various foreign iron, and I think the result of their experiments proved the North river, New York, iron next in quality to the James river and Potomac metal, for making guns; and for the same purpose, Mr. Alger, of the Boston foundry, gives a decided preference to the Virginia, *i. e.*, the James river and Potomac metal, over any other yet discovered. Of the Pittsburg foundry, or the metal used thereat, I have no knowledge whatever; of course, I can say nothing concerning them.

The character of the works above enumerated differs materially. The Columbian and Bellona foundries are nearly on a par as respects magnitude, and their operations are pretty much confined to government work, viz: casting cannon and shot. The West Point foundry is, I believe, the most extensive work of the kind in the United States, and carries on, upon a large scale, almost every variety of casting in iron excepting hollow ware. Its present capacity for cannon making, however, does not much exceed that of the two last above-mentioned foundries. The Boston foundry, owned by Mr. Alger, has not, I believe, cast *any* guns for the navy, nor am I certain that he has for the army; but for shot he had a considerable contract with the Ordnance department in 1833, and his specimens were the best I have ever seen; and from the extensive plan, perfect machinery, and experienced workmen connected with that work, I should place great confidence in the productions of that foundry.

All the cannon and shot required under the law for the gradual increase of the navy were cast at the Columbian, Bellona, and West Point foundries. The quality of the castings at these three works does not materially differ; perhaps, upon the whole, the guns are smoother and may be better from the Columbian foundry than from either of the other two; but the shot turned out from the West Point foundry are decidedly superior in every respect to those cast at the Bellona and the Columbian foundries.

The answer to the last clause of the first interrogatory must be somewhat hypothetical, as I have no correct idea of the number or nature of the guns required for all the purposes enumerated in that interrogatory; but I conceive that, under the most favorable circumstances, in a state of profound peace, with an uninterrupted coast trade, and every other facility at command for procuring and transporting all the necessary materials to the several private foundries now in the employment of government, or which could be safely or successfully brought into its employment, sooner than an extensive public foundry might be erected and put in operation, from *six to eight hundred heavy cannon* would be the greatest number that could be obtained by private contract in any one year. This estimate is based upon the supposition that each of the five enumerated foundries would be enabled to turn out, on an average, *four heavy cannon* per week during the year, and this, I am sure, is a *full allowance*, when it is remembered that to bore a 24, 32, or 42-pounder requires five or six days under the most favorable circumstances, and that a single furnace cannot cast more than one gun of the above denomination in two days; that intense cold weather is unfavorable for heavy casting, and that, in the long droughts so common of late years in our climate, the boring mills of the Columbian, Bellona, and of the West Point foundries (driven by water power) are frequently inactive for want of water, and are unable to bore even a single set of guns in a month or six weeks; hence may be inferred the total inability of private foundries, under less

favorable circumstances, to supply even the current demand for *cannon, shot, &c., &c.*, for the navy, army, and other defences contemplated by the general government; and that so long as government does depend *solely* upon private contracts for the supply of cannon, shot, &c., so long will she be subjected to great disappointments and most fatal consequences, for no private citizen, however patriotic, wealthy, or public spirited he may be, will hazard a capital to fabricate cannon upon a scale sufficiently large to meet *all* the wants of the government, well knowing, as he must know, that however well he may have prepared himself, or even performed *well* all the stipulations of *one or more contracts*, some *novice* in the art may *underbid* him a few dollars, or even cents, and deprive him of the next contract; the *law* requiring all contracts to be given to the lowest bidder, after due notice by public advertisement.

Answer to the second interrogatory.—I have no correct data at hand upon which to base even a conjecture that would in any degree approximate the truth as to the amount or number of cannon and shot required for all the military purposes of the general government, but of naval ordnance, so far as regards *number*, NUMERICALLY, there are more cannon on hand than are absolutely required for arming *all* the ships of the navy *built*, or in the *progress of building*; but a large proportion of those guns are, from various causes, totally unfit for the navy, and never can be used on board our ships-of-war with safety and efficiency. Of this description there are *several hundred* which ought to be condemned, and the deficiency occasioned thereby ought to be *immediately* made up with new guns of suitable calibre, and of patterns better adapted to our new-modelled ships. For a more particular description of the ordnance of the navy, I refer you to my report, made to the board of navy commissioners, dated January 20, 1834.

In answering the third interrogatory, I state unequivocally my opinion, long entertained, that the best results and most beneficial effects would be secured to the nation in the *improvements and certain* fabrication of ordnance by the establishment of a public foundry; and, for so saying, I refer to the views expressed in my answer to interrogatory *first* of this series, and to the appended paper marked A; and, in addition thereto, will only add that the bare possibility that a wily enemy, by the expenditure of a sum of money too paltry to be named in comparison with the object to be gained, might, through secret agents, *destroy* or obtain entire control by *purchase* over any private foundry in the employment of government, and that, too, at a time when their operations might be of vital importance to some great military operations, is of itself all-sufficient to elicit the prompt and serious attention of Congress to this all-important subject.

It has sometimes happened, too, that private contractors have found their engagements with the government rather an incumbrance to them; for, at one period of the revolutions in South America, so great was the demand for cannon for those States (which paid better prices) that perhaps to the patriotism alone of the owners of the private foundries then in the employ of the government may be attributed the *faithful performance* of their engagements; but it is as unwise as it is unreasonable to suppose that individuals will *always* seek after government contracts when they can find *better customers*.

Answer to fourth and last interrogatory, viz: "In the event of the government determining to establish a national foundry, where would, in your opinion, be the most eligible situations? State your reasons fully for your preference."

I unhesitatingly say at or near the seat of government. Because there is the residency of the chiefs of the Ordnance and Engineer departments, and of the board of navy commissioners, who have the entire control and supervision of all ordnance and ordnance stores required for the public defences of every description; and as some of the great benefits to be derived from the establishment of a national foundry are increased and progressive perfection in the arm manufactured, a better acquaintance with the character and quality of the different metals produced in our country, and the just proportions to be used of each when combination shall be *necessary or desirable*, a knowledge of which can only be attained by actual and varied experiments, attended with too much uncertainty and expense to be undertaken by private founders, surely, then, no other place could be so entirely fit for a national foundry whereat to make experiments as one which may be found within an hour's walk of the public offices in Washington. But, independent of these most cogent reasons, there is a-site within the District of Columbia combining more *positive* advantages for a cannon foundry on a large scale than any other, perhaps, to be found on the navigable or tide waters of the United States. I allude to that extensive flat or low ground next *above* the locks of the old Potomac canal, lying between the Chesapeake and Ohio canal and Payne's fishing landing, at the head of *river* navigation, and terminating *above* by the causeway leading to the chain or suspension bridge connecting with the Virginia shore, just below the Little Falls of the Potomac. Here water power may be had at *all times, to any extent, even without limitation*. By the Chesapeake and Ohio canal, the best *ore* or pig iron for cannon can be delivered from the canal boat almost into the very furnace itself; and the coal banks of Cumberland, by the same medium of easy and cheap transportation, can supply the very best bituminous coal at least *fifty* per cent. *cheaper* than it can be delivered anywhere else on the Atlantic board. Materials of the most durable nature for constructing the necessary buildings are in abundance on the spot, or may be transported there with as little expense as they can be carried to any other given point. The facilities, too, for distributing ordnance which may be finished here for the various forts, arsenals, and navy yards, &c., are in nowise inferior to those afforded for the collection of the raw material; for, in fact, independent of the continuation of the canal through Georgetown to Alexandria and Washington, (at which latter place it connects with the Baltimore railroad,) it is not impossible so to locate an extensive foundry and boring mills at the point I have designated as to be taking in iron and coal from a boat on the canal at one door, whilst any ship that can pass the bar below Georgetown might be receiving the finished guns within less than a cable's length of the other. Here, too, is a space sufficient for a commodious proving ground, uninterrupted by any public highway or common resort—an advantage which none of the private foundries with which I am acquainted now possess, or can obtain at any reasonable price, though all know and feel the many vexatious delays and inconveniences to which they are often subjected for want of sufficient space to prove in, without encroaching on the rights of others, or sometimes hazarding the lives of their neighbors or waygoing travellers.

THOMAS AP GATESBY JONES, *Captain U. S. Navy.*

HON. WILLIAM C. JOHNSON, *Chairman of the Select Committee, &c., House of Representatives.*

A.

NEAR PROSPECT HILL, *Fairfax County, Virginia, January 7, 1835.*

I have had the honor to receive your letter of the 4th instant, asking my views in relation to the utility and expediency of establishing a national foundery for the fabrication of ordnance to supply the wants of the general government. As to the utility of such a work, I think no one who has bestowed the least thought upon the subject can entertain the smallest doubt; nor is the expediency at this time at all more questionable in my opinion.

It has always been a matter of great surprise to me that the subject of a national foundery has not been more fully looked into by those whose peculiar province it is provide for the *defences* of the country. Millions upon millions have been expended within the last twenty years in building ships-of-war, creating and improving navy yards, and in erecting the most extensive and magnificent fortifications at various points on our maritime frontier, and hundreds of thousands are annually appropriated by Congress for the support of several national armories for the manufacture of *small arms*; but the means of supplying the government with *cannon* for her forts and navy have been entirely neglected, and we are this day altogether dependent upon the private resources of a few individuals for a *limited* and *precarious* supply of heavy ordnance to arm the fortifications already built or under construction—a source from which it would hardly be possible to obtain heavy cannon enough for the works above mentioned *in seven years were the whole national treasury at the disposal of the Ordnance department.* To account for such supineness upon this important subject is difficult, unless, indeed, it is to be attributed to a very common though not less dangerous *error, that of supposing that any common foundery may at will be converted into a cannon foundery.* Nothing, I say, can be more *fallacious* than such an idea, and it may be as fatal as false; for the government, reposing with confidence upon such means for arming her defences, would, in the event of sudden war with any superior naval power, find herself deficient, *greatly deficient*, in heavy ordnance, *and without the means within her control to supply the deficiency.*

The fabrication of heavy ordnance is a branch of manufacture less understood, (*practically,*) perhaps, than almost any other to which the American artisans have turned their attention; and so uncertain is the result, that the most experienced practical founders, when removed from the furnaces they have been accustomed to work at (with perfect success) to other furnaces, and especially if they be new, often find it most difficult, even with the same materials, to make a gun which *will stand proof*, or that can be depended on for service. Of this fact I doubt not the War Department has some proofs on its records; for, if I mistake not, about the close of the late war with England, the government made considerable advances to a newly set up *cannon founder*, near *Newburg*, New York. The result was a total *failure*; the work was discontinued, and the government was obliged to take the stock on hand (consisting chiefly of the *machinery*) instead of *cannon*, upon a contract on which she had made a large *advance in money.* About the same period the West Point Foundry Association went into operation on the North river, nearly opposite to West Point. This institution was established under more favorable auspices than any other establishment of the kind in the United States; its capital was ample; among its stockholders were to be found men of science, talents, wealth, and political influence; and their avowed object was to *establish a cannon foundery to supply ordnance for the army and navy.* And what was the result of their *early labors in the art of cannon making?* *Anything but successful*; for, although the best workshops of Europe were resorted to and visited by one of the firm, who returned to this country with some of the most experienced cannon founders from Carron and other works in England, bringing with them English iron and coal, such as they had been accustomed to work, still tolerable success did not attend their labors. Ores and coal from almost every mine in the United States were tried with no better results. Even the identical iron and coal taken from the Columbian foundery near Georgetown, District of Columbia, with which General Mason was then manufacturing heavy ordnance for the navy, (of which he did not lose above one per cent. in proving,) could not be cast into cannon of the same description at West Point without a loss of from fifteen to twenty-five per cent. Like results ensued from experiments made at the West Point foundery with the *James river iron*, used with so much success by Major Clark, proprietor of Bellona foundery. In short, disappointment, severe losses, and personal mortification were all that the conductors of the West Point Foundry Association received for several years in return for their *heavy outlay of money* and great *personal exertions* in endeavoring to bring their works to a state of *perfection, in which they have ultimately succeeded, but not until they had expended a capital in unsuccessful experiments which few private companies or individuals in the United States could sustain.*

The difficulties encountered by the Newburg and West Point founderies, I am inclined to think, are only such as *every new work* of the kind would be more or less liable to in the beginning, *but would be much sooner overcome in a public than in any private work*, for the government would not only have it in its power to make more satisfactory and *extensive experiments* in the onset, but would be enabled at all times to draw to its works the most experienced artisans that the country affords, and after a few years would in its turn be enabled to send out experienced workmen enough to supply private founderies throughout the country.

The arguments in favor of a national foundery are multifarious, and might be almost indefinitely extended were it necessary, among which is the great advantage the government would inevitably derive from having an establishment of its own, where all *models* and *patterns* for castings would be made; the *quality* of all *metals* and *combinations* of metals could be *ascertained* and *settled* at the government works, under the eye and superintendence of its best officers, and, by a proper analysis of the various metals used in gun-making, she would always be enabled to have her guns cast, *even at private founderies, of the best metals, and thereby lessen the dreadful consequences of a gun bursting in battle.* The state of perfection, too, to which castings could be soon brought in a *national foundery would oblige all private founders to follow the example of improvements* made at the public works, *or else lose the government patronage* altogether.

If, sir, I have omitted an expression of opinion upon any point in your inquiry, or if the views I have endeavored to communicate are not sufficiently comprehensible, I will with pleasure answer any further calls that you may feel disposed to make on me.

I am, sir, with great respect, your obedient servant,

THOMAS AP GATESBY JONES, *Captain, and late Inspector of Ordnance, U. S. N.*

HON. WILLIAM C. JOHNSON, *Sec., &c., &c.*

No. 6.

HEADQUARTERS OF THE ARMY, *Washington, February 23, 1835.*

SIR: It was only last night that I had the honor of receiving your letter of the 18th instant, wishing to have my views on the propriety of establishing a national foundry, a subject with which the committee of which you are chairman is charged.

After duly considering the subject, it is my opinion that it is highly important that government should possess such an establishment. Besides the advantage it would afford of supplying itself with all kinds of castings for military, naval, and civil purposes of the best kind, it would afford the means of making such experiments under its own direction as circumstances might render it proper to make in the course of our experience in such matters; and if such an establishment could not meet the demands for all the castings that might be required for the public service, it would at least be able to furnish the patterns approved by government, and to determine the quality of the metal to be employed in the manufacture of any work or castings required for its uses which circumstances might require to be executed elsewhere. Ordinarily there would be sufficient employment for one foundry in casting the various pieces of ordnance and the projectiles required for them; and, further, I would beg leave to add that it is of great consequence to the nation that the art of manufacturing them should be preserved in the country.

I have the honor to be, sir, very respectfully, your obedient servant,

ALEXANDER MACOMB, *Major General.*

HON. WILLIAM COST JOHNSON.

No. 7.

WASHINGTON, *February 12, 1835.*

SIR: Your note of the 6th instant having been accidentally mislaid must be my apology for not having earlier complied with its request.

You ask my attention to this interrogatory: "Is it most expedient for the general government to establish a national foundry or to depend on private foundries?"

In obtaining ordnance for national purposes the objects are: 1st, perfection of model; 2d, excellence of metal; 3d, perfection in mechanical execution; 4th, certainty of supply; 5th, cheapness.

Whether the work be executed at a public or private foundry, the government prescribes the model and specifies the metal. At a public foundry these objects may be secured by the constant *superintendence* of scientific and practical officers or agents of the government, and by subsequent inspection and proofs made by another set of officers or agents. At private foundries the same objects are secured by *the terms of the contract*, in which it is stipulated that the ordnance shall be rigorously inspected and proved before received or paid for. At either establishment mechanical execution is or may be secured in like manner; and if in contracts the right of constant superintendence on the part of officers or agents of the government were stipulated for, then the security in favor of having good work done at private foundries would be as great as in the other mode of supply.

Certainty of supply.—There are in the country already four private foundries engaged in supplying the government with cannon, howitzers, mortars, shot, and shells for the use of the militia, the navy, and the army. Considering the capital, skill, and enterprise of our people, all stimulated by the desire of gain, it cannot be doubted that, in case of demand, new establishments of the same kind would be immediately created. It is believed, however, that those now in existence are capable, by a slight extension, of supplying promptly the wants of the government under almost any circumstances. I think, therefore, that the principle of gain may be safely relied upon for a certain and prompt supply of any amount of ordnance the country may want in any reasonable time, and a public foundry, if in actual existence, would be able to do no more.

Cheapness.—This object, though important, is inferior to either of those already discussed.

I am unacquainted with the details of the recent contracts with the foundries, and know not what measures are taken to excite competition in the bids for the work of the government. I should think, however, that, by care, the work might be contracted for at prices which would give a fair compensation to the proprietors of the foundries, and at the same time at a cost much less than that which would necessarily be incurred if the government were to undertake to supply itself with the same articles by direct means.

All of which I have the honor respectfully to submit.

WINFIELD SCOTT.

HON. WM. COST JOHNSON, *Chairman of Select Committee, House of Representatives.*

No. 8.

WASHINGTON, *February 14, 1835.*

SIR: I have the honor to acknowledge the receipt of your circular of the 6th instant, and I regret that it is not in my power to go into the detail required by the resolution and the annexed interrogatories. Since I left the service, I have not kept myself informed of all the places of manufacture, or the amount of ordnance supplied annually for the public service. I believe, however, that the government still depend wholly on contracts with private individuals and companies for cannon, shot, shells, &c., as well for fortifications and the army as for all public vessels and navy service.

I will not take up your time with a discussion of the advantages of public establishments for all national supplies; all know the advantage of public armories and navy yards. I consider national foundries equally desirable and necessary, and will briefly consider the question of location, which involves several considerations. The most important, in my opinion, are, the quality of the ore, the means of obtaining

and transporting it, with the necessary fuel, to a point where proper water power and other facilities for manufacture can be found advantageously united in the vicinity of water transportation of heavy ordnance, &c., to navy yards and seaboard fortifications, and the expedition and economy with which all can be accomplished. There is no position, in my opinion, combining so many, in fact all these advantages, as well as others of great national and political consideration, as the lands binding on the Chesapeake and Ohio canal, in the District of Columbia, in the vicinity of the Little Falls, immediately below the road leading from the canal to the *chain bridge* of the Potomac. There all the water of the canal not required for navigation is controlled, and will always be sufficient for this and other manufacturing purposes the government may require. In this vicinity a private foundry has been patronized by the government, on account of the superiority of the ore, more than twenty-five years, and the late war has so fully tested the ordnance of that factory as to leave nothing to chance in relation to the ore, so abundant and easy of access.

A proper national foundry on the canal, as above described, might supply all future demands, under the immediate eye of the Executive and Congress.

I have the honor to be, very respectfully, your most obedient servant,

D. PARKER.

Wm. Cost Johnson, Esq., *Chairman of Select Committee, House of Representatives.*

No. 9.

RESOLUTIONS OF THE LEGISLATURE OF MARYLAND.

By the Senate, *March 5, 1832.*

Whereas it is the admonition of the Father of his Country "that we should in peace prepare for war," remembering that timely disbursements to "prepare for danger frequently prevent much greater disbursements to repel it;" and whereas, in his message to Congress, he declared it advisable to provide and lay up materials of war in proportion as our resources should render it practicable, without inconvenience, so that in future wars we might not be found destitute of every necessary means of defence; and, in pursuance of these views, he recommended the establishment of national works for manufacturing such articles as were necessary for the defence of the country; and whereas the experience of the late war fully demonstrated the wisdom of that policy which his solicitude for our welfare recommended, and the loss of blood and treasure which this republic suffered has proved the value of these precepts; and whereas it belongs to the general government, under the Constitution of the Union, "to provide for the common defence, and to promote the general welfare:" Therefore—

Resolved by the general assembly of Maryland, That a knowledge of the topography of the country is of essential importance, as well for the promotion of works of internal improvement as to give effect to military operations; and that this knowledge should be gathered by repeated surveys, and proper maps and charts deposited in our archives; and as the acquisition of such information (alike useful in peace and war) can only be made by those who, devoting their talents and energies to the duty, become skilled in scientific principles, and accurate in practical details, the topographical corps of the United States should be fostered and gradually increased.

Resolved, That the Ordnance department is of peculiar importance, requiring fidelity, and practical skill, and scientific knowledge in its administration. Its efficient organization is therefore demanded, as well to insure the fabrication and preservation of our arms in sufficient abundance as to render the ingenuity and science of those to whom these duties are intrusted available and beneficial to the country.

Resolved, That the establishment of fortifications throughout our borders should be persevered in as essential to the security of the important outlets of our commerce, and at the same time to give additional maritime strength to the Atlantic States.

Resolved, That the establishment of a national foundry for the fabrication of cannon is required as well to provide for the armament of our fortifications as to furnish proper field trains, to be distributed throughout the different States, and that, by such an establishment, not only would artisans be drawn together, but the true principles of economy be preserved by the government, commanding at all times the means of supplying the most important arm of defence, in quantity and quality, as the emergency may demand.

Resolved, That our senators be instructed, and our representatives in Congress be requested, to advocate the views and measures recommended in the foregoing resolutions.

Resolved, That the governor be requested to transmit a copy of the above resolutions to each of our said senators and representatives.

By order:

JOS. H. NICHOLSON, *Clerk.*

By the House of Delegates, *March 6, 1832.*

Read the second time, by special order, and unanimously assented to.

By order:

G. G. BREWER, *Clerk.*

No. 10.

WASHINGTON, *February 11, 1835.*

SIR: I have the honor to acknowledge the receipt of your letter of — instant, requesting my opinion of the propriety of establishing a national foundry for making ordnance for the government, and my reasons for such opinion.

In reply I beg leave to offer as my opinion, that a national foundry for making ordnance would be desirable, and conducive to the public interests; but that it would not be expedient to establish one upon a large scale until its advantages should be tested by experiment.

The advantages which might, in my opinion, be reasonably anticipated from such an establishment are: the ascertainment of the actual cost of the manufacture of ordnance, and the proper price which ought to be paid for such as might be obtained from contractors; the acquirement of valuable information respecting the different qualities of iron, and of their proper combination and treatment to make the best

ordnance; the power of determining, by our own officers, what degree of accuracy in the dimensions of the different guns and projectiles, and what tests of their strength and tenacity we may, with propriety, require from contractors, to secure from them the manufacture of ordnance of the best metal and most accurate dimensions.

A belief that these objects may be secured by a national foundry, and that such an establishment would also afford the best means for making ordnance of new patterns, when they might be required for experiments, form the principal reasons which I have to offer in support of my opinion.

I have the honor to be, very respectfully, sir, your most obedient servant,

C. MORRIS.

HON. WM. COST JOHNSON, *Chairman of a Committee of the House of Representatives, &c.*

No. 11.

NAVY DEPARTMENT, *February 24, 1835.*

SIR: I have the honor to acknowledge the receipt of your letter of yesterday, requesting a copy of the tabular statements connected with Captain Gatesby Jones's report upon navy ordnance.

Your letter has been forwarded to the commissioners of the navy, for a copy to be made as early as practicable.

Their former letter stated that it would occupy about a month to prepare it.

I am, very respectfully, sir, your obedient servant,

M. DICKERSON.

HON. WM. COST JOHNSON, *Chairman, &c., House of Representatives.*

No. 12.

ANTIETAM IRON-WORKS, *February, 1835.*

DEAR SIR: My father's heirs and myself are equally interested in these works, to which is attached a very large tract of land, which gives us many advantages over other establishments of this kind in the United States, there being two *inexhaustible* ore banks; also an abundant supply of wood upon the property, and *the water power is second to none.* The ores from these banks are *peculiarly* well calculated for the fabrication of cannon. The pig iron made from these ores has for many years been used at General John Mason's foundry for this purpose; and I think I can say with safety that there has been more of this iron used for the making of cannon than has been from any *one* establishment in the United States. This place supplied General Mason's foundry with iron some years previous to his being proprietor of it. We have not, however, sold any for the last two years to Mason, on account of the small quantity made. The extensive improvements we have made prevented our operating fully, as we are *now* able to do; besides, our rolling mill, which is a *very capacious* one, manufactured a large quantity into bar iron. The iron does not require to be mixed with any other; it has in itself *all* the requisite qualities. We can furnish a national foundry with 1,500 tons of pig iron per annum; and if the government would give us a standing order for the quantity of iron used at such a foundry we would build another furnace and double the above amount of pig iron, provided we could not supply their wants with one furnace. The canal which passes through our property from nine to ten miles, and which is very contiguous to our works, would of course afford us great facilities for transportation of our iron, as well as procuring our stone coal from Cumberland. We calculate upon purchasing this article (stone coal) for one-half the price we are now giving, after this great work (the canal) is completed to the coal mines. I have this spring purchased for two cents per bushel less than I did last year, or any year previous. This can be certainly attributed to nothing save the operation of this canal from Williamsport only. We have made a fair experiment of this coal with the Richmond, and find this to be a much superior article. *One* bushel of Cumberland coal is worth *two* of Richmond, or any other we have used. The experience I have had, and the frequent trials I have given this article, convince me, and all my workmen, that the Westernport coal (which is generally called *Cumberland coal*) is the strongest bituminous coal in the United States yet discovered; and there are mountains of it, and so convenient to the river that it does not cost one cent per bushel to put it into the boats; many say half a cent will deposit it in the boats ready for market. It is therefore easy to calculate what the expense will be to bring it by the canal to this place, after ascertaining the distance, which I am not really able to name. It is, I think, called seventy-two or three miles from this to Georgetown; this, deducted from the whole distance of the line, will prove the number of miles from here to Cumberland by the canal. As regards the *propriety* of establishing a national foundry in the District of Columbia, and the apprehension that iron suitable for the fabrication of cannon cannot be procured, let the committee inquire and collect the true facts, and they will find that a great portion of the cannon now in use was made from this iron; and I will unhesitatingly say that *we* can supply the government with as much iron as she may require for cannon at this contemplated foundry, and none shall be sent but of the very best quality. Look at the immense sums of money Mason has paid us ever since *he* has had the making of cannon for government; and I assure you it was a rare thing to have a complaint from him about the quality of the iron; in fact, I recollect of none. I should be very glad to see you here, when I could, perhaps, more fully explain to you. If there is any further statement necessary you will please let me know.

Yours, very truly,

JNO. McP. BRIEN.

HON. WM. COST JOHNSON, *Jefferson, Frederick County, Maryland.*

No. 13.

BALTIMORE, 1835.

DEAR SIR: I seize the earliest available opportunity to reply to your inquiries concerning the "quality of the coal and iron ores on the banks of the Potomac," &c.

In the report on the projected survey of the State of Maryland, made at the December session, 1833, of our assembly, and to which I beg leave to refer you for further details, (B,) I have stated that the coal, occurring in such immense deposits in Allegany county, should be ranked among the best kinds of this

very useful combustible, because it is found to burn easily, and that in burning it swells and agglutinates, or *cakes*, as it is termed—properties that render it eminently serviceable in all metallurgic operations. This variety of coal is known to mineralogists by the name of *slaty coal*, and is, emphatically, all things considered, the best kind of coal; its analysis is given at page 31 of the report.

As to the quality of iron ores on the Potomac, you will find it stated in the same report that a great abundance of one kind occurs along the whole length of the eastern slope of the Cotoctin range of mountains, terminating in Maryland, at the Point of Rocks. This variety of iron ore, known to mineralogists by the name of *hematitic brown oxide of iron*, is much mixed with *phosphate of iron*; hence the metal which it yields is very brittle. Beyond this, at the issue of Pleasant Valley, on the Potomac, there is another extensive deposit, in which the ore, analogous in composition to that described as occurring on the eastern slope of the Cotoctin, is, however, free from phosphate of iron. This ore, then, will yield metal of a much better quality, and well adapted to the making of bar iron. Such is the nature of the ore worked at the Antietam furnace. The same ore again occurs in the northern portions of the west slope of the south mountains. Other deposits, no doubt, exist on the Virginia as well as Maryland shore of the river; but I have had no opportunity of examining them.

That the varieties of iron ore designated above will be found to yield a good metal for the casting of ordnance, I confess I am not prepared to say. But if we will not confine ourselves to the banks of the Potomac, there may be indicated as occurring in the vicinity of New London, Frederick county, that variety of iron ore called *specular oxide of iron*, which is known to afford a metal peculiarly well adapted to castings. The same variety has been found in Baltimore and Harford counties; and without going so far, there is known to be abundantly diffused throughout a large belt of country between Baltimore city and the District those varieties described in systematic works as *carbonate of iron* and *brown oxide of iron*, acknowledged to be among the best ores of this metal. The Washington railroad traverses this belt nearly in its whole length.

It may be safely asserted, therefore, that, from the great variety and great abundance of iron ores occurring in Maryland, no deficiency in quantity nor in quality of the metal can be apprehended from this quarter; and the bright prospect which has lately dawned upon us of a speedy completion of the Chesapeake and Ohio canal, at least as far as Cumberland, furnishes us a sure promise of soon possessing the most ample and efficient means of putting all these resources to the best advantage for private wealth as well as national strength.

In the hope that the information now given, imperfect as it is, may be of some service, I transmit it without delay, together with the assurance of the great regard and esteem of, dear sir, very respectfully, yours, &c.,

J. T. DUCATEL.

Hon. W. COST JOHNSON, *Washington City*.

B.

Extract from a report to the legislature, made in 1833, on a geological and topographical survey of the State of Maryland, by Julius T. Ducatel, M. D., professor of chemistry, University of Maryland, and John H. Alexander, esq., topographical engineer; made by order of the general assembly of Maryland.

“The fifth and last geological division which it is deemed expedient to make comprehends the remaining portion of Allegany county, westward of Wills’s creek. Some general remarks concerning this very interesting part of the State, comprising its deposits of *bituminous coal* and the *iron ores* frequently associated with them, will conclude what the undersigned have to report on the geology of Maryland.

“The carboniferous group of rocks forming the most prominent geological feature of Allegany county consists principally of beds of *sandstone, slate, shale, and coal*, irregularly interstratified; besides which, it embraces formations of *red sandstone, whinstone, and carboniferous limestone*, and, what is of more importance, considerable deposits of *iron ore*.

“In reference to the agricultural resources of the coal districts, which may be described as hilly, it is found that the soil upon them, being a mixture of decomposed slate and limestone with sand, is in general very fertile, and yields abundant crops of grain—principally *oats*—of a very superior quality. Within a few years the cultivation of the tobacco plant has been commenced, and in the newly-cleared lands is produced the bright leaf staple, which always commands a high price.

“The more mountainous districts above the level of the coal formation present broad valleys bearing every evidence of having formerly been the beds of extensive lakes now dried up or drained, the waters of which have left behind them deep deposits of clayey loam. These beautiful tracts of country have received the name of *glades*. From their elevated position and their constant moist condition, they form very productive meadows and the most luxuriant pastures. The mineral resources of the coal districts it would be folly to attempt to estimate. That district alone, of which Frostburg may be assumed to be the centre, is represented as ‘bounded by the Savage mountain on the west, extending from the west branch of Wills’s creek to the Savage river, and by the same mountain continued southwest to the head branch of the Potomac; and on the east by the Little Allegany, Piney mountain, Dan’s mountain, and the same mountain continued into Virginia, to the upper branches of the Potomac. The space between the two ranges of mountains is from five to seven miles, and sixty miles long, making a surface of near four hundred square miles, over a great part of which coal is known to abound.’

“The thickness of these beds of coal varies from three feet to *fifteen feet*. The following account of three coal deposits, two at Westernport and one on the Potomac a little above the mouth of Savage, will exhibit the more striking appearances of these coal strata—preference having been given to these localities over those near Frostburg because it is believed they have not been elsewhere described:

“The first deposit, at Westernport, known by the name of *Murphy’s bed*, is situated on the eastern side of George’s creek and northwestern slope of Dan’s mountain; its elevation above the Potomac is one hundred feet; the thickness of the bed is three feet, and it is overlaid by sandstone. The second deposit, also at Westernport, called *Paris’s bed*, is on the western side of the creek and eastern slope of Savage mountain; its elevation above the river is one hundred and thirty feet; the thickness of the bed five feet, and this is covered by shale and slate.

"The third and most extensive deposit is that at Brant's mine. There are in this place five distinct beds, the lowest corresponding, it is thought, with Murphy's bed; it is covered by sandstone. The second, which is thirty feet higher, is covered by shale; it probably corresponds with Paris's. The depth and elevation of the fourth bed could not be ascertained; and the fifth bed, which is at an elevation of nine hundred feet above the river, is fifteen feet thick. This important deposit is on the Virginia side of the Potomac, and forms the north slope of what is termed the New Creek ridge. The precipitous nature of the mountain slope allows the discharge of the coal, by means of a slide, from each successive stratum into the very bed of the river below.

"A very satisfactory account of the coal mines in the immediate vicinity of Frostburg is furnished in the collection of reports and letters of the engineers of the Chesapeake and Ohio Canal Company, from which the extract above, referring to the extent of this deposit, was also taken:

"In the hills and valley three distinct beds of rich bituminous coal are frequently opened. The first or lowest is near the base of the hills, and is from two and a half to three and a half feet thick. This was first discovered and opened about twenty years ago by Mr. Rizor, and the coal was held in high estimation for many years until the richer beds were discovered. The second bed is from eighty to one hundred feet higher in the hills, and is from four to six feet thick. The third and most valuable mass is found nearer the summit of the hills and the upper parts of the deep valleys. This bed is from eight to ten feet thick, and, like those below, is between strata of rock. The bed on which the coal rests and the roof which covers it are of slate with a great mixture of coal; but the coal diminishes and the slate prevails for three or four feet in thickness. This often gives the mine an appearance of uncommon depth until it is thoroughly opened. But in those mines which are worked to any great extent the bed of pure coal is about eight feet thick, subdivided horizontally by three or four very thin veins of slate, seldom more than half an inch thick. Next above the slate roof is sandstone in thick layers, and often of a quality suitable for the various purposes of freestone in building. A preference is given to those mines that lie deep, which are in a moist situation and have a considerable height of hill over them; the coal from such mines, being more pure and solid, is quarried in much larger blocks, and is much less liable to crumble and waste in handling than that from mines situated so near the top of the hills as to be too dry and to have but little depth of earth over them.—(Pages 93, 94.)

"The analysis of a specimen of the coal from the large bed known as Frost's mine, about half a mile southwest from Frostburg, gave the following results:

Carbon.....	70.
Bitumen.....	20.5
Earthy matter.....	6.
Water.....	3.5
	100.

"It is thus shown to be of that variety distinguished mineralogically as *slaty coal*, which is ranked among the best, as it burns easily with a bright and durable flame, swells and agglutinates, or *cakes*, as it is termed, and leaves little residue.

"From this view of the extent and condition of the coal deposits in this district, it will be seen that should the projected schemes of communication between the Chesapeake bay and the western waters, by means of canals and railroads, be effected no further even than Cumberland—and there is but little doubt that the communication will soon extend thus far—there will be furnished a convenient outlet for an amount of coal which can be estimated only by hundreds of millions of bushels.*

"But this is not the sole district in which the coal deposits occur. Another, probably of equal extent, lies beyond the Great Backbone ridge, along the valley of the Youghiogeny, and extending as far as the most southern limits of Maryland, which, by way of distinction, may be called the *Youghiogeny coal district*. It has been remarked of this western coal region that the beds within it are generally thicker than those of the Frostburg district. That bed, for example, which seems to correspond with the fifteen feet vein in Brant's mine, is found, near the heads of the Potomac, to *exceed twenty feet in thickness*. Time, no doubt, may be expected to elapse before these mineral riches will be brought into operation. Far removed from any convenient outlet, the mineral for fuel cannot come into competition with the coal from the more accessible districts; and the employment of it for the purpose of *coking*, applied to the smelting of iron, will not be required so long as our native forests supply in such abundance the means of obtaining the charcoal, by use of which metal of a better quality is obtained. It is, nevertheless, advisable to determine at once the extent and nature of this second coal formation, the greatest portion of which lies within our own limits; and the more so, on account of several of its accessories, whose importance has not been perhaps hitherto fully appreciated.

"One of these is the *iron ore* with which it abounds. *The occurrence of iron ore associated with coal has been considered the most prolific source of commercial prosperity possessed by Great Britain. Her political economists have long been accustomed to ascribe the extent of her manufactures to the abundance and cheapness of both these substances, by which are furnished not only fuel for working the steam engines which put into operation their machinery, but the material also for the construction of this machinery.* The time will come when a similar ascription shall apply to the United States, and when the western county of Maryland shall be looked upon as the Wales of North America.

"On the Youghiogeny the *iron ore exists of the best quality and in the greatest abundance*. It is of the variety described by mineralogists under the specific head of *argillaceous oxide of iron*. The following extracts taken from notes made on the spot will give an idea of the circumstances under which it is found to occur:

"1st. Iron ore bank on the western shore of the Youghiogeny.—*Argillaceous iron ore*, lying under sandstone; above which, at an elevation of about thirty feet, there is a bed of coal three feet thick overlaid by a stratum of slate ten feet thick; and above this again a deposit of clay with nodules of iron ore. The coal in the upper part of this bed is much mixed with shale, and this with iron pyrites.

"2d. *Nodular argillaceous iron ore* at the mouth of Bear creek, occurring in a bed the depth of which has not been ascertained, and lying under a mixed deposit of debris of *clay slate* and *sandstone*, the whole covered by a heavy superstratum of ferruginous sand and a deep vegetable soil.

*The last legislature of Maryland passed an appropriation of two millions of dollars, which it is supposed will carry the canal to the coal region.

"3d. *Extensive deposit of clay* on the slope of Winding ridge, east shore of Youghiogeny. This deposit contains nodules of *argillaceous* iron ore. It rests upon the sandstone, and is covered by a continuous stratum of *calcareous marl*; the ore promiscuously extracted from the bed has been found to smelt itself.

"Associated with the deposits there has been observed in the stratum of ferruginous clay, overlying the coal, (as remarked in note 1st, above,) nodules of a mineral substance, consisting of lime, clay, and oxide of iron, answering very nearly the description of what by English writers is termed *Parker's cement*, but better known in this country under the name of *Roman cement*. This article will probably hereafter prove susceptible of most useful application.

"Manganese, some of which is of very good quality, has been found on Bear creek. It occurs also on Keyser's ridge, five miles south of the national road.

"The Youghiogeny furnace, on Bear creek, is situated in the midst of these resources. With an immense amount of water power at command, and under an active and intelligent management, it requires nothing but greater facilities for sending its valuable products to market."

NAVY COMMISSIONERS' OFFICE, *February* 18, 1835.

SIR: The commissioners of the navy have had the honor of receiving your letter of the 10th instant, transmitting a call from the honorable W. Cost Johnson, chairman of the committee of the House of Representatives charged with the investigation of the "propriety of establishing a national foundry, &c.," dated 7th instant; and, agreeably to your instructions, they enclose a copy of your report to the board, from Captain Thomas Ap C. Jones, late inspector of naval ordnance, dated 20th January, 1834. They have not sent the tabular statements referred to in Captain Jones's report, because they are very voluminous, would require probably a month to copy them, and are not, it is presumed, essential to the inquiries of the committee.

The files of the office do not, it is believed, afford any further "information" upon the subject.

Mr. Johnson's letter is herewith returned.

I have the honor to be, with great respect, sir, your most obedient servant,

JOHN RODGERS.

Hon. M. DICKERSON, *Secretary of the Navy*.

No. 14.

WASHINGTON, *January* 20, 1834.

To the Board of Navy Commissioners:

GENTLEMEN: My letter of the 5th October informed you of the progress I had made up to that time in the inspection directed by your several orders bearing date April 5, July 22, July 29, and August 12, 1833. I now have the honor to announce the completion of those inspections, as directed in the foregoing orders, and to report in detail the result thereof.

The order of the 5th April requires a "thorough and minute inspection of each gun, and a report in detail of its defects, if any." I had scarcely approached the threshold of the inspection before I found that a tabular form was the only mode by which the information desired by the board could be presented to them in an intelligent shape; and as no form had been furnished me, I felt myself at liberty to adopt such a one as I believed would embrace all the material information required by my instructions, and at one view present the *position* as well as the *relative* condition of every gun inspected. The first column of the table presented herewith contains a number which, as its heading denotes, is an *index* number designed as a guide or reference to any particular gun; the index number is painted in white on the breech of every gun of *each denomination*, commencing with No. 1, and continuing on in numerical progression to as high a number as there are guns of any *one* kind at any *particular yard* or naval station, *always commencing with the lowest number again at each of the navy yards*. The second column, containing letters of the alphabet, is designed to express the class to which each gun belongs; for instance, the letters A, B, or C, marked upon the pomillion of any gun, denote that every gun of *that particular* denomination, marked with the same letter, *will fit the same carriage*, and is used on the same deck; the third column, headed *marks*, contains the most prominent *old marks* cut, cast, or engraved upon each gun. The headings of the other columns are sufficiently explanatory of themselves; and from which it will appear that, in addition to the objects pointed out by the board, I have embraced *all the dimensions* necessary for the *carriage-maker* to work by, and for disparting for sights.

The letter A, marked on the pomillion of any *carronade*, denotes that its diameter of bore *corresponds* with the bore of long guns of the same denomination.

The letter O, upon the pomillion of a *carronade*, signifies that its diameter of bore *is less* than the bore of the long guns of the same nominal calibre.

The broad arrow, thus ∇^* marked upon the pomillion, with white paint, of any gun or *carronade*, signifies *condemned as totally unfit for the navy*, for reasons assigned against each condemned gun on the margin of the table.

With these explanatory remarks I might have closed this report; but as I am required to express an opinion of the "number of guns and shot of the several weights and calibres *that I consider serviceable and fit to be used in the navy*," I feel myself called on to make a few general remarks in support of the opinions I have expressed in the marginal notes appended to the table. I enter upon this part of my report not without much embarrassment, well knowing that navy officers, like doctors, sometimes disagree. The gross number of great guns which have been thus critically inspected is 1,453, exclusive of 789 cannon and gunnades; of

* A number of the guns being found at each of the naval stations, which, from age or accident, have become manifestly unfit for service, but having no authority to condemn or mutilate any gun, whatever might be its defects, to avoid confusion, and perhaps fatal mistakes, I have marked them with white paint on the pomillion, with the broad arrow ∇^* , to designate them from guns which are perfect of their kind. Guns thus marked are *termed* condemned in the subsequent pages and tables of this report.

this number, 499 are below 18-pounders, and are composed of every *description, shape, and form*, of the manufacture of every nation of the earth that has ever cast a gun. The substitution of carronades for long guns of less calibre than 18-pounders in naval armament renders by far the greater portion of the old guns of and below 12-pounders, in my opinion, unfit for the navy, except such as may be deemed necessary to be retained for *pivot* or *chase* guns for the schooners and smaller vessels that are now or may be hereafter introduced into the service. But of the heavy metal (18-pounders and upwards) I have more to say, especially in *pronouncing against medium or light guns of any calibre*; that is to say, *battering cannon* which does not contain *nearly 200 cwt.* of iron to the pound ball; of this denomination there are at the several navy yards at this time, 225 32-pounders, whose average length is only 9 feet 3 inches, weighing from 48 to 52 cwt. That guns of this pattern, throwing a 32-pound ball, *cannot be safe or efficient*, I think needs no argument to prove at the present day. I know that I shall be told that a reduced charge of powder must be used with such guns, and that they must never be *double shotted*. These very precautions are of themselves conclusive evidence of the unfitness of that description of gun for naval warfare; for the fact is, that you cannot materially reduce the quantum of powder from that long and well established charge of one-third the weight of the ball for long guns, without sensibly diminishing both the range and velocity of the ball; and although you do reduce the powder even to one-half of that standard, and train your men to the use of the *single ball, a task infinitely more difficult in practice than in theory*, still the reaction of the piece, and the consequent strain upon the breeching and bolts will scarcely be lessened, for the recoil of a gun does not depend altogether upon the quantity of the powder ignited or exploded, but is governed almost entirely by the weight of the ball or balls to be put in motion by it, and is violent in exact proportion to the approximate weight of the projectile, compared with the gun from which it is discharged; the truth of this position is made manifest from the violent reaction of carronades when two pounds of powder only are frequently used as the *reduced* charge for 32-pound guns of that description. Again, too, for the same reasons, *reducing* the charge of powder is *not perfect security* against *bursting*; for gunpowder when inflamed expands with equal force upon the bottom of the chamber, and upon the ball, and for a moment there is a sort of contest between the gun and the ball which of them is to give way; and should the gun be overshotted, (a very probable event in the heat of battle,) or even a single ball by any accident get wedged in the gun, it would be as certain to burst with a *reduced* as with a full charge of powder, and the only difference would be, that the damage in the one case might possibly be less than in the other. Admitting, however, that there is no danger to be apprehended from *bursting of light guns*, (an admission, for one, I can never make,) there are other and insuperable objections to their use in the navy, which, in my opinion, far outweigh any advantages which light 32-pounders can possess over heavy 24's on frigate's decks. In the first place, then, in order to diminish the risk of bursting, the medium 32-pounder has *increased* windage from one to two-tenths of an inch, is one-fifth lighter, and one foot shorter than the standard ship 32-pounders used in the navies of Europe, and in this country, too, before the introduction of this new species of ordnance. All of these variations combine to produce one certain and inevitable effect, *viz: greatly to diminish the impetus*, and, consequently, the *range, particularly the point blank*, not only as to *distance*, but most *essentially lessen the chance of accurate firing*. The *want of length*, too, in the medium 32-pounders is a very serious objection to it, the *chase* of this gun being *too short* to admit of its projecting sufficiently clear of the ship's side even when on an even keel and the gun square in the port; but should it be necessary to use the weather guns in a fresh breeze by the wind, it would be almost impossible to train such guns at all without bringing their muzzles within the ports, and doing more injury by your fire to your own than you would to your enemy's ship. All of, or even any one of, the foregoing objections *more than counterbalance* any positive superiority which the *short, light, or medium* 32-pounder can have over the long 24-pounder, such as the Constitution's battery, or such as have been recently cast for the Pennsylvania. And to illustrate my views, I will suppose two frigates, if you choose, the Brandywine and the Constitution, to be within half point blank range, the Constitution with her heavy 24-pounders, with a reduced charge of six pounds of good powder, firing *two round* shot, against the Brandywine's single 32-pound ball, fired from medium 32's, with the same quantity of powder, *viz, six pounds*, (for the medium 32's will not bear a heavier charge after two or three rounds;) can there be any *doubt* as to the result of such contest? especially if the 24-pounder ship had the advantage of wind, and, by superior sailing, could choose her distance, and take a position forward of or abaft the beam of her antagonist; the leeward ship would, in that case, only be able to bring her guns to bear by yawning off or luffing up in the wind to fire—a mode of fighting which at once destroys *all* chance of accurate gunnery. Is there a captain in the navy who, having the choice of two such ships, would hesitate a moment in making his selection? I can but think that we have been led into a great error in seeking after *heavy metal*, at the expense of everything else, by attributing *certain causes to wrong effects*; and, perhaps, the brilliant success of our frigates mounting 24-pounders over those of our late enemy mounting 18-pounders has been the most fruitful cause of this *error*, by attributing those gallant achievements to the mere difference of *metal*; *that is, to the difference between the effects of an 18 and 24-pound ball*, when, in point of fact, the great superiority consisted in the superior *skill* and gallantry of our officers and men; and I hazard but little in saying, that had the difference of metal been *against us*, the result would have been nearly the same, for the English 18-pound shot seldom *struck* our ships, even when at close quarters; consequently it would have made no sort of odds what kind of balls they might have fired, for if they *missed their aim* altogether, the 18, 24, 32, or even 42-pound ball would be *alike harmless* in its passage *through the air*. Another objection to the medium 32-pounders now in service is, that although they differ but little in any of the material dimensions, still the same *carriages will not answer for all guns* of that description, as it will be seen that their trunnions are *differently* placed—some below, and some in the centre. This irregularity in the position of trunnions exists in almost every species of ordnance belonging to the navy, except the gradual increase guns, which have their *trunnions in the centre*; and as the navy board have established *central* trunnions as the navy pattern, a strict regard to uniformity in this important branch of naval equipment would point out the propriety of excluding every other description of guns from our depots and arsenals; otherwise very fatal consequences may arise from the mismatching of guns and carriages. If I have said I have felt delicacy in advancing opinions in relation to the *old* ordnance of the navy, which may be in opposition to those entertained by some of our most experienced commanders, there is yet another branch of the subject which I approach with still greater deference; but called on, as I conceive I am, by a sense of duty to my country, I have no disposition to shrink from its responsibility. By the order of the 5th of April the guns cast for the navy since the year 1816 would be excluded from this report, but the orders of the 22d and 29th of July direct my attention to all guns and carronades in depot. Those under the head of gradual increase consist of long or heavy 42-pounders, long 32-pounders, 42 and 32-pound

carronades, and a set of long 24-pounders for the upper deck of the Pennsylvania; these guns and carronades, except the 42-pounders, I think, are *without fault*, and probably could not be improved on. Of the doubtful utility of using the long 42-pounder on board our ships at all, I shall here say nothing; but if they are to be retained as a *permanent* part of our naval armament, a new pattern ought to be adopted, for the present guns are manifestly *defective in two essential particulars*, viz: in length, the *chase* being *too short* to admit of *free use* through the sides of ships as thick as those of our large class 74's. The other defect is in the turn of the *breech*, which is almost at right angles with the axis of the bore, thereby forming so short a nip over the breech band as to make it very difficult to render the breeching, especially in cold weather, and, in my opinion, would be the cause of rendering useless *many* a gun in course of an ordinary fight.

I now have to speak of another description of guns, of *modern invention*, which, if the concurrent opinions of commanders who have sailed in ships which mount them will pass for anything, are of *more than doubtful character*, and the propriety of retaining them in the navy ought at once to be inquired into, and the question of their capacity to do good service be at once put to rest; for at present, no one, that I have heard speak of those guns, has confidence in them, as the entire armament of a sloop-of-war. I mean the new Congreve, or medium 24-pounders, cast for the ten sloops-of-war built by a special act of Congress, passed March 3, 1825. What I have said in *opposition* to medium, or light 32-pounders, in another part of this report, appears to me to apply with *peculiar force* to this last description of guns.

I will now proceed to close my remarks, making a few observations upon the general condition and state of preservation in which I found the ordnance of the navy at the several depots. The aggregate number (old) of guns and carronades of every description, which passed under my view during the last summer, at Portsmouth, N. H., Charleston, Mass., Brooklyn, N. Y., Philadelphia, Gosport, Va., and Washington, D. C., is 2, 242. These guns are, for the most part, stowed on wooden skids or ways, more or less elevated from the ground, except at the Charlestown yard, where they are ranged on *granite ways*. The guns at Portsmouth, Charlestown, Philadelphia, and Washington, are in a state of tolerable preservation; but at New York, from their exposed situation, being stowed on what is called the block, subjected as they are to the constant action of the salt air by which they are surrounded, and to frequent wetting by the dashing of the spray over the walls during high winds, and the occasional overflowing of the block by high tides, the guns in that depot are in a state of rapid deterioration, which, if not arrested, will in a few years render them all unfit for the navy. Whatever the necessity may have been for placing the guns in that position *while the grading of the navy yard was going on* does not now seem to exist, for the several parks recently enclosed within the yard appear to be the most appropriate places to deposit such of the guns as it may be determined to retain in our service. At Gosport, Va., the guns were in progress of cleaning and restowing; when that work is completed they will be in a better condition to resist the effects of time than they have hitherto been. In the course of this inspection I have had good opportunities of comparing the effects of various compositions used at the different stations for coating iron guns exposed to the weather, none of which seem to be of the least benefit, except that which consists chiefly of *black lead*. On the contrary, every description of lacquer, consisting wholly or in part of bitumen, is manifestly injurious as a covering to iron exposed to the weather, for I found almost invariably, when thick coats of lacquer had been long on a gun, an attempt to remove it brought with it *thick scales of metal*, and left the surface *rough* and uneven; next to the black lead composition, common *cold tar* seemed to be the best preservative for outside coating, but an objection to its use may be in the difficulty of removing it when the gun is required for service.

At the old military arsenal on the Schuylkill, near Philadelphia, I found about eighty pieces of cannon belonging to the navy, which, it seems from tradition, have been lying there more than thirty years, probably ever since the reduction of the navy in 1800; but be that as it may, these guns have taken very good care of themselves, for I found no old guns anywhere else whose exterior as well as interior surface was as smooth and free from rust and scales as those guns are, *both inside and out*; they had been stowed on yellow pine skids, the upper angles of which were chamfered off to a narrow ridge. These skids are supported by pieces of masonry about three feet high, so that the guns, when placed on the *skids*, are about four feet clear of the ground; some of the *skids*, however, have decayed, and the guns have fallen to the ground. The only additional precaution which seems to have been taken to protect these guns from the effects of all-destroying time, was to drive tompons of pine (in length more than the diameter of the bore) firmly into, and even with, the muzzles. The touch-holes, or vents, were plugged with soft pine, forcibly driven in, and the guns were then turned vents down, and so left to time and chance; for I could not discover that any lacquer or coating of any kind had been put on them other than the ordinary painting which they may have had on board of whatever ship or vessel they were last used, and that had long since washed off, leaving the part of the gun most exposed to the pelting storms as naked and as *smooth, too*, as when they left the boring-mill.

From the length of time which has elapsed since the date of your first order, "April 5, 1833," it may not be amiss here to remark that nearly three months were lost in waiting for the cylinder shot-gauges which had to be cast at the West Point foundery; and when they were received, an error in their dimensions rendered them unfit for use, as reported by me in a former communication. The progress of inspection was subsequently suspended several weeks, in the execution of your orders to regulate eprouvettes and prove powder, dated October 9 and 10. The nicety to be observed in many of the admeasurements, as well as magnitude of the work, and the great amount of labor to be performed, would not admit of hurry in the performance of this duty; and notwithstanding no means, within my control, have been left unemployed to insure accuracy throughout, I cannot flatter myself into a belief that some errors will not be found which may make it necessary for myself or assistant to revisit some, or perhaps all, of the stations, to correct, particularly in the *nomenclature* and classification of guns.

The order of the 12th of August suspended a critical inspection of the shot at that time; I therefore made but a superficial examination of them in the course of my tour; but without gauging or handling them at all, I saw enough to justify me in saying that, in general, they require a thorough overhauling, and restowing in proper order, and under cover, without being lacquered, unless black lead is used. This would be a work of much time, and unless some responsible officer (a lieutenant) at each station is assigned to this work, and held accountable for its faithful performance, it will be useless to undertake it.

A report of the number and condition of the small arms will be the subject of another communication, and will be made as soon as time will permit.

All which is most respectfully submitted by, &c., &c.,

THOS. AP GATESBY JONES, *Captain, Inspector of Ordnance, U. N. Navy.*

Nature of ordnance.	Diameter of bore.		Diameter forward of the trunnions.		Length.		Weight.		Trunnions in the centre.	Trunnions below the centre.	Vent fields for locks.	Plain vent fields.
	Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.				
42-pounder, long.....	7.018	7.018	1.10 2-10	1.10 2-10	10.2	10.2	69.2	69.2	208	.....	208	.....
42-pounder carronade, same bore as long guns.....	7.040	7.018	.....	.....	5.9	5.8	27.0	.....	.....	.....	141	.....
Smaller bore than long guns.....	6.900	6.860	.....	.....	5.9	5.8	27.0	.....	.....	.....	378	.....
First class, 32-pounder, heavy, long, trunnions centre hung.....	6.418	6.410	1.10	1.8	10.3	10.2	63.2	60.0	631	.....	631	.....
Second class, 32-pounder, heavy, long, trunnions centre hung.....	6.500	6.400	1.7	1.6	10.8	10.0	63.3	54.2	188	.....	188	.....
Third class, 32-pounder, heavy, hung below centre.....	6.450	6.400	1.7	1.5	10.8	10.2	65.0	55.0	.....	72	72	.....
Third class, centre hung medium.....	6.500	6.420	1.6	1.6	9.4	9.2	53.2	48.3	190	.....	190	.....
Third class, trunnions below the centre.....	6.430	6.420	1.6	1.6	9.4	9.2	53.2	48.3	.....	35	35	.....
Same bore as long guns, carronades.....	6.400	6.400	.....	.....	5.5	5.3	21.0	19.0	.....	.....	202	.....
Smaller bore than long guns.....	6.300	6.300	.....	.....	5.5	5.3	21.0	19.0	.....	.....	128	.....
24-pounder, long, trunnions in centre.....	5.900	5.750	1.6	1.5	9.9	9.8	50.1	48.1	142	.....	142	.....
24-pounder, long, trunnions below the centre.....	5.900	5.750	1.6	1.4	10.6	9.3	50.0	46.0	.....	94	94	.....
24-pounder, light.....	5.823	5.823	1.4 5-10	1.4 5-10	7.8 8-10	7.8 8-10	33.0	30.0	.....	.....	.....	.....
24-pounder, Congreve.....	5.800	5.800	1.5 2-10	1.4 5-10	8.4	8.4	41.0	38.0	.....	.....	17	.....
Same as long carronades.....	5.800	5.800	.....	.....	4.10	4.8	13.2	12.0	.....	.....	17	7
Smaller than long guns.....	5.660	5.660	.....	.....	4.10	4.8	13.2	12.0	.....	.....	31	.....
18-pounder, long, centre hung.....	5.450	5.250	1.4	1.3	9.10	9.9	40.0	38.0	85	.....	85	.....
18-pounder, below the centre.....	5.450	5.250	1.4	1.2	10.7	9.8	44.0	34.0	.....	20	20	.....
18-pounder, ship, below centre.....	5.300	5.200	1.4	1.2	8.0	8.4	38.0	30.0	.....	77	77	.....
Same as long carronades.....	5.400	5.300	.....	.....	4.8	4.4	11.0	9.0	.....	.....	24	.....
Smaller than long guns.....	5.200	5.200	.....	.....	4.8	4.4	11.0	9.0	.....	.....	47	.....
12-pounder, long, trunnions below centre.....	4.680	4.560	1.2 6-10	1.0 6-10	9.8	8.3	34.0	22.1	.....	42	39	3
12-pounder, ship, trunnions below centre.....	4.800	4.560	1.2	1.1	7.9	6.11	26.3	18.2	.....	92	90	2
9-pounder, long, trunnions below centre.....	4.400	4.200	1.2	1.1	8.0	7.10	26.3	18.0	.....	28	28	.....
9-pounder, medium, trunnions below centre.....	4.300	4.200	1.1	1.0 5-10	6.9	6.6	19.0	17.0	.....	41	41	.....
18-pounder gunades, centre hung.....	5.250	5.250	1.1 5-10	1.1 5-10	4.9	4.9	14.0	14.0	11	.....	11	.....

Every gun, as arranged on the same horizontal line of this table, will fit in the same carriage, and will answer for the same battery, although they are not precisely similar in all their dimensions.

THOS. AP CATESBY JONES, Captain, and Inspector of Ordnance, United States Navy.

No. 2.—A table exhibiting the number and denomination of guns at the several navy yards—Portsmouth, N. H., Charlestown, Mass., Brooklyn, N. Y., Philadelphia, Penn., Washington, D. C., and Gosport, Va., marked condemned on account of various defects, or are so heteroginial in shape and dimensions as to render them unfit for use in battery, and consequently cannot be classed or arranged in any kind of order. The first description are marked thus: V.

Nature of ordnance.	Portsmouth, N. H.			Charlestown, Mass.			Brooklyn, N. Y.			Philadelphia, Penn.			Washington, D. C.			Gosport, Va.			Total defective from time or accident.	Total defective in workman-ship.	Total unclassified.	Length.		Weight.		Trunnions in the centre.	Trunnions below the centre.	Vent fields for locks.	Plain vent fields.	
	Defective from time or accident.	Defective in workman-ship.	Serviceable, but unclassified.	Defective from time or accident.	Defective in workman-ship.	Serviceable, but unclassified.	Defective from time or accident.	Defective in workman-ship.	Serviceable, but unclassified.	Defective from time or accident.	Defective in workman-ship.	Serviceable, but unclassified.	Defective from time or accident.	Defective in workman-ship.	Serviceable, but unclassified.	Defective from time or accident.	Defective in workman-ship.	Serviceable, but unclassified.				Ft. in.	Ft. in.	Cwt. gr.	Cwt. gr.					
68-pounder, carronade.....						1													1	6 8	35 2									
50-pounder, columbiad.....																			2	6 3	35 0		2							
32-pounder, long.....							32													10 0	to 10 7	47 0	to 66 1	2	34	34		2		
32-pounder, carronade.....						1														20 0										
Do.....				1		1														5 5	to 5 5	20 0								
24-pounder, long.....				2		8														9 4	to 9 9	48 0	to 50 0	42	8	50				
Do.....	6			4		10														9 10	to 10 6	43 0	to 49 0	1	19	19			1	
24-pounder, medium.....								2												8 6		38 0	to 39 0		2	2				
24-pounder, medium, nondescript.....								5												7 4		32 0	to 33 0		5	5				
18 pounder, long.....						1														9 9	to 9 10	34 0	to 40 0	4		3			1	
18-pounder, ship.....	1			1					1											8 5	to 8 6	36 0			34	33			1	
Do.....																				8 5		33 0								
18-pounder, medium.....								22												8 4		29 0	to 32 0	22					22	
Do.....																				7 4		22 3								
18-pounder, gunades.....								3												4 4						3	3			
12-pounder, long.....									1											8 3		25 0				1			1	
12-pounder, ship.....							6													7 2		26 0				6	6			
Do.....										1										7 4		27 0								
12-pounder, light.....							4													5 9		12 0		4					4	
12-pounder, carronades.....						2		8			1									3 7	to 4 3	6 0	to 8 0			19	14			
Do.....	1																			6 0										
12-pounder, gunade.....								1												3 7	to 4 10	8 0	to 9 0	12	7	12			7	
Do.....																				2										
9-pounder, carriage guns.....						6		29			25									6 0	to 8 9	18 0	to 26 0	65	27	90			2	
Do.....						2			5											6 4	to 7 10	24 0								
9-pounder, gunade.....						1														3 9	to 4 9	6 0	to 12 0		26	9			17	
Do.....		2																		3 7		7 0								
6-pounder, carriage guns.....						2		3												5 2	to 6 2	10 0	to 17 0		20	11			9	
Do.....	1								1				1							15		4 6	to 5 0	2	13	2			13	
6-pounder, gunades.....								2												3 5	to —	4 6	to 5 0	2	13	2				
Do.....																				7 0	to 11 0				31				31	
4-pounder, carriage guns.....								22												3 7	to —	7 0	to —							
Do.....		2																		2										
9 pounder and 12-pounder carriage guns.....									15											15		23 0	to 26 0							

A table of definitions explanatory of letters and terms used in the classification of naval ordnance.

Definitions, &c.	Diameter of bore.		Diameter forward of trunnions.		Length.		Weight.	
	Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.
Letter A, 1st class of long or heavy 32-pounders, trunnions <i>in</i> the centre.....								
Letter B, 2d class of long or heavy 32-pounders, trunnions <i>in</i> the centre.....	6.500	6.400	1.7	1.6	10.8	10.0	63.3	54.2
Letter C, 3d class of long or heavy 32-pounders, trunnions <i>below</i> the centre.....	6.450	6.400	1.7	1.5	10.8	10.2	65.0	55.0
Letter B, 1st class of medium or light 32-pounders, trunnions <i>in</i> the centre.....	6.500	6.420	1.6	1.6	9.4	9.2	53.2	48.3
Letter C, 2d class of medium or light 32-pounders, trunnions <i>below</i> the centre.....	6.430	6.420	1.6	1.6	9.4	9.2	53.2	48.3
Letter A, 1st class of long or heavy 24-pounders, trunnions <i>in</i> the centre.....	5.900	5.750	1.6	1.5	9.9	9.8	50.1	48.1
Letter C, 2d class of long or heavy 24-pounders, trunnions <i>below</i> the centre.....	5.900	5.750	1.6	1.4	10.6	9.3	50.0	46.2
Letter A, 1st class of long or heavy 18-pounders, trunnions <i>in</i> the centre.....	5.456	5.250	1.4	1.3	9.10	9.9	40.0	38.0
Letter B, 2d class of long or heavy 18-pounders, trunnions <i>below</i> the centre.....	5.450	5.250	1.4	1.2	10.7	9.8	44.0	34.0
Letter B, ship 18-pounders, trunnions <i>below</i> the centre.....	5.300	5.200	1.4	1.2	8.9	8.4	38.0	30.0
Letter A, gunade 18 pounders, trunnions <i>in</i> the centre.....	5.250	5.250	1.1 5-10	1.1 5-10	4.9	4.9	14.0	14.0
Letter A, long or heavy 12-pounders, trunnions <i>below</i> the centre.....	4.680	4.500	1.2 6-10	1.0 5-10	9.8	8.3	34.0	22.1
Letter A, ship 12-pounders, trunnions <i>below</i> the centre.....	4.800	4.560	1.2 5-10	1.0 8-10	7.9	6.11	26.3	18.2
Letter A, long or heavy 9-pounders, trunnions <i>below</i> the centre.....	4.400	4.200	1.2 3-10	1.0 7-10	8.9	7.10	26.3	18.0
Letter A, medium 9-pounders, trunnions <i>below</i> the centre.....	4.300	4.200	1.1	1.0 5-10	6.9	6.6	19.0	17.0

NOTE.—The table of maximum and minimum dimensions, appended to the foregoing table of definitions, explaining the principles upon which the general classification of guns has been made throughout the following tables, it will be seen that, in all cases, guns which have their trunnions differently placed, are arranged to different classes, although they may differ but little in other respects; for instance, letter B, 2d class of long pounders, have their trunnions *in* the centre; and letter C, 3d class, the same denomination of gun (not varying materially in general dimensions) have their trunnions *below* the centre; but for that difference they would have been letter B, 2d class of long 32-pounders. Such, too, is the difference between B and C, medium 32-pounders, A and C, long 24-pounders, and A and B, long 18-pounders. Letter A marked on the pomillion of any carronade, denotes that its diameter of bore corresponds with the bore of long guns of the same denomination; and the letter O, upon the pomillion of a carronade, signifies that its diameter of bore is *less* than the bore of long guns of the same nominal calibre.

Inspection return of ordnance at the United States navy yard, Portsmouth, New Hampshire.

Index No.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
1	V		Long 24-pounder.....										<i>Cwt. gr. lb.</i> 49 1 14	From 1 to 6, inclusive, are long 24-pounders; old French guns, roughly bored, ill-shaped, and unfit for the navy; trunnions below the centre; tapered with shoulders underneath; raised vent fields; without breech rings.
2	V		do.....										48 1 14	
3	V		do.....										44 1 14	
4	V		do.....										49 1 7	
5	V		do.....										48 3 14	
6	V		do.....										48 2 0	
1	V	23	Ship 18-pounder.....											Honeycombed and unfit for the navy.
1	A	P	Long 32-pounder.....	6.400	8.7	1.10 3-10	10.3	5.2 5-10	2.0 2-10	1.4 7-10	6 5-10	6 5-10	63 1 4	From 1 to 5, inclusive, are long 32-pounders; all have raised vent fields for locks; breech rings; trunnions in the centre; American manufacture.
2	A	P	do.....	6.400	8.7	1.10 3-10	10.3	5.2 5-10	2.0 2-10	1.4 7-10	6 5-10	6 5-10	63 0 4	
3	A	P	do.....	6.400	8.7	1.10 3-10	10.3	5.2 5-10	2.0 2-10	1.4 7-10	6 5-10	6 5-10	63 2 0	
4	B	109	do.....	6.400	8.11	1.6 7-10	10.6 5-10	5.1	1.10 3-10	1.3 8-10	6 5-10	6	62 2 14	
5	B	123	do.....	6.400	8.11	1.6 7-10	10.8	5.1	1.10 3-10	1.3 8-10	6 5-10	6	62 2 14	
1	A	20	Long 18-pounder.....	5.300	8.5 5-10	1.3 4-10	9.10 5-10	5.0	1.7 3-10	1.0 7-10	5 7-10	5 7-10	40 3 7	No. 1, long 18-pounder; raised vent field; breech rings; and trunnions in the centre.
1	V	WG 1798, P	Long 6-pounder.....											No. 1, long 6-pounder, foreign manufacture; defective vent fields and large touch-hole; no breech rings; unfit for the navy.
1	A	A ^o 1793	Long 4-pounder.....	3.340	5.3 7-10	0.10 5-10	6.6	3.4	1.0 4-10	0.9 7-10	3 5-10	3 5-10	1,227 lbs.	Nos. 1 and 2, long 4-pounders, French manufacture; have sunk vent fields;
2	A	A ^o 1793	do.....	3.340	5.3 7-10	0.10 5-10	6.6	3.4	1.0 4-10	0.9 7-10	3 5-10	3 5-10	1,252 lbs.	no breech rings; trunnions below the centre.
1	B	Z 181	do.....	3.260	5.6	0.10 5-10	6.0 5-10	3.3 5-10	1.1 3-10	0.10 1-10	3 5-10	3	11 1 26	From 1 to 5, inclusive, are long 4-pounders, English Crown guns; raised vent fields; without breech rings; trunnions below the centre.
2	B	Z 178	do.....	3.260	5.6	0.10 5-10	6.0 5-10	3.3 5-10	1.1 3-10	0.10 1-10	3 5-10	3	11 1 26	
3	B	Z 191	do.....	3.260	5.6	0.10 5-10	6.0 5-10	3.3 5-10	1.1 3-10	0.10 1-10	3 5-10	3	11 1 26	
4	B	Z 112	do.....	3.260	5.6	0.10 5-10	6.0 5-10	3.3 5-10	1.1 3-10	0.10 1-10	3 5-10	3	11 1 26	
5	B	Z 310	do.....	3.260	5.6	0.10 5-10	6.0 5-10	3.3 5-10	1.1 3-10	0.10 1-10	3 5-10	3	11 2 26	
6	V		Medium 4-pounder.....										7 0 21	Nos. 6 and 7, medium 4-pounders; have raised vent fields; breech rings; trunnions below the centre; are badly bored, and unfit for the navy.
7	V		do.....										7 0 21	
1			Gunade 9-pounder.....	4.200	3.4 2-10	0.10 5-10	4.1 5-10	2.1 5-10	1.0 5.10		4	4	7 2 9	No. 1, gunade 9-pounder; has raised vent fields; trunnions below the centre, and breech rings; slightly chambered. Nos. 2 and 3, gunade 9-pounders; defective, and unfit for the navy. No. 4, carronade 12-pounder; honeycombed, and unfit for the navy. From 5 to 9, inclusive, are 6-pounders, English gunades, with trunnions below the centre; breech rings, and plain vent fields.
2	V		do.....										7 0 14	
3	V		do.....	4.200	2.7 5-10	0.11	3.7 7-10	2.2 5-10	1.0 5-10		4	4	7 0 16	
4	V		Carronade 12-pounder.....										6 3 6	
5			Gunade 6-pounder.....		2.6	0.9 3-10	3.4	1.10	0.11		3 5-10	3	4 1 6	
6			do.....		2.6	0.9 3-10	3.4	1.10	0.11				4 1 15	
7			do.....		2.6	0.9 3-10	3.4	1.10	0.11				4 1 14	
8			do.....		2.6	0.9 3-10	3.4	1.10	0.11				4 1 20	
9			do.....		2.6	0.9 3-10	3.4	1.10	0.11				4 1 17	
1	A	138	Medium 9-pounder.....	4.250	5.8 5-10	1.0 5-10	6.8 5-10	3.4	1.3 2-10	0.10 9-10	4 5-10	4	18 1 4	From 1 to 18, inclusive, are medium 9-pounders, with raised vent fields for locks, trunnions below the centre, and without breech rings, except Nos. 1, 8, 9, 10, and 18; supposed to be American manufacture; mounted as saluting battery, Portsmouth, New Hampshire.
2	A	P 19	do.....	4.200	5.6	1.0 6-10	6.7 8-10	3.3 6-10	1.2 7-10	0.10 3-10	4 5-10	4	17 0 11	
3	A	P 24	do.....	4.200	5.6 3-10	1.0 6-10	6.7 8-10	3.4 6-10	1.2 7-10	0.10 5-10	4 5-10	4	17 2 16	
4	A	P 9	do.....	4.200	5.6	1.0 6-10	6.7 8-10	3.4 5-10	1.2 7-10	0.10 4-10	4 5-10	4	17 0 22	

Inspection return of ordnance at the United States navy yard, Portsmouth, New Hampshire—Continued.

Index No.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
5	A	P 7	Medium 9-pounder.....	4.200	5.6	1.0 6-10	6.7 8-10	3.4 5-10	1.2 7-10	0.10 2-10	4 5-10	4	<i>Cwt. gr. lb.</i> 17 0 0	
6	A	P 6	.....do.....	4.200	5.6	1.0 6-10	6.7 8-10	3.4	1.2 7-10	0.10 4-10	4 5-10	4	17 2 26	
7	A	P 10	.....do.....	4.200	5.6 3-10	1.0 6-10	6.7 2-10	3.4	1.2 7-10	0.10 4-10	4 5-10	4	17 0 22	
8	A	156	.....do.....	4.200	5.8 5-10	1.0 5-10	6.8 5-10	3.4	1.3 2-10	0.10 9-10	4 5-10	4	18 0 17	
9	A	155	.....do.....	4.200	5.8 5-10	1.0 5-10	6.8 5-10	3.4	1.3 2-10	0.10 9-10	4 5-10	4	18 0 15	
10	A	179	.....do.....	4.200	5.9 3-10	1.0 5-10	6.8 5-10	3.4	1.3 2-10	0.10 9-10	4 5-10	4	18 0 17	
11	A	P 21	.....do.....	4.200	5.6 5-10	1.0 6-10	6.7 3-10	3.4 6-10	1.2 7-10	0.10 3-10	4 5-10	4	17 0 3	
12	A	P 2	.....do.....	4.200	5.6 5-10	1.0 6-10	6.7 3-10	3.4 5-10	1.2 7-10	0.10 3-10	4 5-10	4	17 0 12	
13	A	P 5	.....do.....	4.200	5.6	1.0 6-10	6.7 3-10	3.4 5-10	1.2 7-10	0.10 3-10	4 5-10	4	17 3 14	
14	A	P 3	.....do.....	4.200	5.6 1-10	1.0 6-10	6.6 8-10	3.4 1-10	1.2 7-10	0.10 2-10	4 5-10	4	17 2 14	
15	A	P 12	.....do.....	4.200	5.6	1.0 6-10	6.6 8-10	3.4 1-10	1.2 7-10	0.10 3-10	4 5-10	4	17 3 14	
16	A	P 2	.....do.....	4.200	5.6 1-10	1.0 6-10	6.7 3-10	3.4 6-10	1.2 7-10	0.10 2-10	4 5-10	4	17 0 14	
17	A	P 20	.....do.....	4.200	5.6 6-10	1.0 6-10	6.7 8-10	3.5	1.2 7-10	0.10 2-10	4 5-10	4	17 2 21	
18	A	177	.....do.....	4.200	5.8 5-10	1.0 5-10	6.8 5-10	3.4	1.3 2-10	0.10 3 10	4 5-10	4	18 1 0	
46	O	G I	Carronade 42-pounder....	6.860	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	.....	.....	Light 24-pounder.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cast for new sloops, 1825, Concord's armament.

THOS. AP GATESBY JONES, Captain and Inspector of Ordnance, United States Navy.

Recapitulation of gradual increase and classed guns at Portsmouth, New Hampshire.

Recapitulation of condemned and unclassed guns at Portsmouth, New Hampshire.

Nature of ordnance.	Class letter.	Portsmouth, N. H.			Nature of ordnance.	Portsmouth, N. H.		
		Gradual increase.	Repairs.	New sloops.		Defective from time or accident.	Defective in workmanship.	Serviceable, but unclassified.
42-pounders, long.....	.....	32	.....	.....	24-pounders, long.....	6	.....	.....
42-pounders, carronades.....	O	46	.....	.....	18-pounders, ship.....	1	.....	.....
32-pounders, long.....	A	68	.....	.....	12-pounders, carronade.....	1	.....	.....
32-pounders, long.....	B	.....	2	.....	6-pounders, carriage gun.....	.....	.....	.....
24-pounders, light.....	.....	.....	.....	.....	9-pounders, gunades.....	.....	2	.....
18-pounders, long.....	A	.....	1	.....	6-pounders, gunades.....	.....	.....	5
9-pounders, medium.....	A	.....	18	.....	4-pounders, carriage guns.....	.....	2	7

THOS. AP GATESBY JONES, Captain and Inspector of Ordnance, United States Navy.

Inspection return of ordnance at the United States navy yard at Charlestown, Massachusetts.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
1	.....	2191	Long 9-pounder.....	4,300	6,10 5-10	1,0 7-10	7 11	3.11	1.3 1-10	1.0 1-10	4 2-10	2-10	Cwt. gr. lb. 18 0 0	No. 1, long 9-pounder, plain vent field; no breech ring trunnions below the centre; slightly honeycombed; French make.
2	.....	V 21	.....do.....	4,300	7,6 5-10	1,1 2-10	8,8 2-10	4,4 2-10	1,4 7-10	1,1 2-10	4 5-10	4 5-10	25 2 18	Nos. 2 and 3, long 9-pounders; English Crown guns; have raised vent fields for locks; no breech rings; trunnions below the centre.
3	.....	V 6	.....do.....	4,300	7,0	1,1 2-10	8,3	4,1 5-10	1,4 6-10	1,1 2-10	4 3-10	4 6-10	25 0 3	
4	.....	90	.....do.....	4,300	6,10 5-10	1,0 8-10	7,10	3,10	1,3 2-10	1,0 8-10	4 4-10	4 4-10	20 0 3	No. 4, long 9-pounder, foreign make, without vent field or breech rings; trunnions below the centre.
5	A	178	Medium 9-pounder.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 1 3	From 5 to 20, inclusive, are medium 9-pounders. All have raised vent fields for locks; breech rings, with the trunnions below the centre, except 11 and 12, which have no breech rings or raised vent fields for locks, and have the trunnions in the centre; American manufacture; mounted as saluting battery.
6	A	188	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	5-10	18 0 20	
7	A	193	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 1 7	
8	A	176	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 0 20	
9	A	169	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 0 23	
10	A	182	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 1 2	
11	.....	H F	.....do.....	4,300	6,0	1,1 5-10	7,2	3,9	1,4 3-10	0,11	4 2-10	4 2-10	19 0 0	
12	.....	H F	.....do.....	4,300	5,7 5-10	1,1 5-10	6,8 5-10	3,6 5-10	1,4 3-10	0,11	4 2-10	4 2-10	18 2 0	
13	A	183	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 1 4	
14	A	157	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	5-10	18 0 23	
15	A	184	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 1 1	
16	A	172	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 0 9	
17	A	185	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 0 23	
18	A	206	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 0 23	
19	A	136	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	3-10	4 5-10	18 1 3	
20	A	192	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 1 9	
21	A	166	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 1 3	
22	A	187	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 0 23	
23	A	205	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 0 20	
24	A	126	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 0 7	
25	A	159	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 1 0	
26	A	168	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 1 1	
27	A	158	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 0 7	
28	A	125	.....do.....	4,200	5,9	1,0 5-10	6,8 7-10	3,5 7-10	1,3 3-10	0,11	4 3-10	4 5-10	18 1 3	
1	.....	P 1798 W G	Long 6-pounder.....	3,800	5,1 8-10	1,0	6,2 5-10	3,0	1,3	0,10 2-10	4	4	15 0 0	No. 1, long 6-pounder, has raised vent fields, without breech rings; trunnions below the centre; foreign make.
2	.....	V W G	.....do.....	3,700	5,6 8-10	0,11 8-10	6,6 5-10	3,3 5-10	1,2 8-10	1,11	3 2-10	3 2-10	17 1 3	No. 2, long 6-pounder, has raised vent fields for locks; breech rings; trunnions below the centre; English Crown gun.
1	A	.....	Ship 12-pounder.....	4,600	6,2	1,2 5-10	7,2	3,7	1,4 5-10	1,0 9-10	5 1-10	5 2-10	26 0 26	Nos. 1 and 2, ship 12-pounders, have plain vent fields, without breech rings; trunnions below the centre, roughly bored; foreign make.
2	A	4	.....do.....	4,600	6,2	1,2 5-10	7,2 5-10	3,7 5-10	1,4 5-10	1,0 9-10	5 1-10	5 2-10	26 3 12	
1	V	.....	Ship 18-pounder.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36 1 2	No. 1, ship 18-pounder; defective bore; bad casting, and unfit for the navy.

Inspection return of ordnance at the United States navy yard at Charlestown, Massachusetts—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
2	B	.....	Ship 18-pounder	5.700	7.2 3-10	1.4 3-10	8.6	4.4	1.7 4.10	1.3 6-10	5	5 5-10	<i>Cwt. gr. lb.</i> 36 3 9	No. 2, ship 18-pounder, has raised vent fields for lock; breech ring; trunnions below the centre; supposed American manufacture.
1	A	77	Long 18-pounder.....	5.300	8.6	1.3 5-10	9.10 8-10	4.10	1.6 8-10	1.1	5 2-10	5 2-10	.....	From 1 to 4, inclusive, long 18-pounders, have raised vent fields for locks, breech rings, and with trunnions in the centre; American manufacture.
2	A	79	.....do.....	5.300	8.6	1.3 5-10	9.10 5-10	4.10 5-10	1.6 8-10	1.1	5 2-10	5 2-10	.....
3	A	20	.....do.....	5.300	8.6	1.3 2-10	9.10	4.11	1.6 5-10	1.1	5 4-10	5 4-10	.....
4	A	24	.....do.....	5.300	8.6	1.3 2-10	9.3 1-10	4.11	1.6 5-10	1.1	5 4-10	5 4-10	.....
5	B	W G 1798	.....do.....	5.300	8.5	1.4 2-10	9.8 5-10	4.9	1.8	1.2 2-00	5 4-10	5 4-10	.....	No. 5, long 18-pounder, English Crown gun, has raised vent fields for lock; breeching with trunnions below the centre.
6	A	.....	.....do.....	5.300	8.5	1.3 2-10	9.9	4.11	1.7 2-10	1.10 7-10	5 4-10	5 7-10	.....	Nos. 6, 7, and 8, long 18-pounders, have raised vent fields for locks, breech rings, and have trunnions in the centre; American manufacture.
7	A	.....	.....do.....	5.300	8.5	1.3 2-10	9.9	4.11	1.7 2-10	1.10 7-10	5 4-10	5 7-10	.....
8	A	.....	.....do.....	5.300	8.5	1.3 2-10	9.9	4.11	1.7 2-10	1.10 7-10	5 4-10	5 7-10	.....
1	A	S 10	Long 24-pounder.....	5.800	8.3	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	6	6	48 1 4	From 1 to 10, inclusive, are long 24-pounders; all have raised vent fields, and bored for locks; no breech rings; trunnions in the centre. American manufacture, similar to the Constitution's battery, except that they have no breech rings.
2	A	.....	.....do.....	5.800	8.3	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 3 16	
3	A	.....	.....do.....	5.800	8.3	1.5 3-10	9.7 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	49 0 0	
4	A	.....	.....do.....	5.800	8.3	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 1 10	
5	A	.....	.....do.....	5.800	8.3	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 3 6	
6	A	.....	.....do.....	5.800	8.2	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 3 18	
7	A	.....	.....do.....	5.800	8.3	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 1 24	
8	A	.....	.....do.....	5.800	8.1 5-10	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 1 24	
9	V	.....	.....do.....	5.800	8.3	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.2	4	6	48 1 24	No. 9, imperfect casting, and unfit for the navy.
10	A	.....	.....do.....	5.800	8.4	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 3 10	From 10 to 32, inclusive, long 24-pounders; all have raised vent fields, and bored for locks; no breech rings; trunnions in the centre. American manufacture, similar to the Constitution's battery, except that they are without breech rings.
11	A	.....	.....do.....	5.800	8.3	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 2 6	
12	A	.....	.....do.....	5.800	8.2 6-10	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 1 24	
13	A	.....	.....do.....	5.800	8.3	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 3 18	
14	A	.....	.....do.....	5.800	8.3	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 3 6	
15	A	.....	.....do.....	5.800	8.2	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 1 24	
16	A	80	.....do.....	5.800	8.3 6-10	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	49 2 0	
17	A	35	.....do.....	5.800	8.4	1.5 3-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	49 2 4	
18	A	.....	.....do.....	5.800	8.3	1.6	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 3 18	
19	A	.....	.....do.....	5.800	8.2 5-10	1.6	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 3 18	
20	A	.....	.....do.....	5.800	8.3	1.5 6-10	9.8 5 10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 2 21	
21	A	.....	.....do.....	5.800	8.2 5 10	1.5 6-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 3 20	
22	A	.....	.....do.....	5.800	8.3	1.5 5-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 3 18	
23	A	.....	.....do.....	5.800	8.2 5-10	1.5 5-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 3 18	
24	A	.....	.....do.....	5.800	8.3 5-10	1.5 5-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	48 3 18	
25	A	32	.....do.....	5.800	8.4	1.5 3-10	9.8 5-10	4.11 5-10	1.9 3-10	1.1 8-10	4	6	50 0 13	
26	A	34	.....do.....	5.800	8.4 5-10	1.5 4-10	9.8 5-10	4.11 5-10	1.9 3-10	1.1 8-10	4	6	49 2 4	

Inspection return of ordnance at the United States navy yard at Charlestown, Massachusetts—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore-part of trunnion.	Extreme diameter at breach.	Extreme diameter at the muzzle.	Diameter of trunnions.	Length of trunnions.	Weight.	Remarks.
27	A	.....	Long 24-pounder,	5.800	8.2 5-10	1.5 6-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	Cwt. gr. lb.	
28	A	.....	.....do.....	5.800	8.2 8-10	1.5 6-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 8-10	4	6	49 1 12	
29	A	.....	.....do.....	5.800	8.3	1.5 3-10	9.8 5-10	4.11 5-10	1.8 6-10	1.1 8-10	4	6	49 1 13	
30	A	.....	.....do.....	5.800	8.3	1.5 3-10	9.8 5-10	4.11 5-10	1.8 6-10	1.1 8-10	4	6	48 3 3	
31	A	.....	.....do.....	5.800	8.2 5-10	1.5 3-10	9.8 5-10	4.11 5-10	1.8 6-10	1.1 8-10	4	6	48 2 21	
32	A	.....	.....do.....	5.800	8.2 5-10	1.5 3-10	9.8 5-10	4.11 5-10	1.8 7-10	1.1 6-10	4	6	48 2 21	
33	A	P 67	.....do.....	5.800	8.2 5-10	1.5 3-10	9.8 5-10	4.11 5-10	1.8 7-10	1.1 6-10	4	6	48 3 18	
34	A	P 65	.....do.....	5.800	8.4 5-10	1.5 5-10	9.8 7-10	5.0	1.9	1.1 5-10	4	6	49 1 14	
35	A	22	.....do.....	5.800	8.4	1.5 5-10	9.8 7-10	5.0	1.9	1.1 5-10	4	6	50 1 0	
36	A	11	.....do.....	5.800	8.4	1.5 5-10	9.9	5.0	1.9	1.1 5-10	4	6	49 2 6	
37	A	56	.....do.....	5.800	8.3	1.5 5-10	9.9 4-10	5.0	1.9	1.1 5-10	4	6	49 2 6	
38	A	19	.....do.....	5.800	8.3 5 10	1.5 5-10	9.9	5.0	1.9	1.1 5-10	4	6	50 0 0	
39	A	7	.....do.....	5.800	8.4 5-10	1.5 5-10	9.8 7-10	5.0	1.9	1.1 5-10	4	6	50 0 0	
40	A	46	.....do.....	5.800	8.4	1.5 5-10	9.9 3-10	5.0	1.9	1.1 5-10	4	6	49 3 3	
41	A	57	.....do.....	5.800	8.4 7-10	1.5 5-10	9.8 7-10	5.0	1.9	1.1 5-10	4	6	50 0 0	
42	A	52	.....do.....	5.800	8 4 3-10	1.5 5-10	9.9 2-10	5.0	1.9	1.1 5-10	4	6	50 1 0	
43	A	64	.....do.....	5.800	8.4 2-10	1.5 5-10	9.9	5.0	1.9	1.1 5-10	4	6	50 0 0	
44	A	55	.....do.....	5.800	8.4 2-10	1.5 5-10	9.9	5.0	1.9	1.1 5-10	4	6	50 1 0	
45	A	60	.....do.....	5.800	8.4 5-10	1.5 5-10	9.9	5.0	1.9	1.1 5-10	4	6	50 0 0	
46	V	.....	.....do.....	5.800	8.4 5 10	1.5 5-10	9.9	5.0	1.9	1.1 5-10	4	6	50 0 0	
47	A	63	.....do.....	5.800	7.11	1.5 5-10	9.4 4-10	5.0	1.9	1.1 5-10	4	6	48 1 21	No. 46, imperfectly cast, and unfit for the navy.
48	A	14	.....do.....	5.800	8.4 5-10	1.5 5-10	9.8 5-10	5.0	1.9	1.1 5-10	4	6	49 3 0	
49	C	11	.....do.....	5.800	8.4 5-10	1.5 5-10	9.8 5-10	5.0	1.9	1.1 5-10	4	6	50 0 14	
50	C	10	.....do.....	5.800	7.10	1.5 5-10	9.3 5-10	4.8	1.8 5-10	1.3 2-10	5 1-10	5 7-10	48 3 0	Nos. 49 and 50, long 24-pounders, have raised vent fields bored for locks; trunnions below the centre. No. 49 has a breech ring, and No. 50 has its breech ring broken off.
51	C	WG 1798	.....do.....	5.800	8.11	1.4 6-10	10.4	5.2	1.8 5-10	1.3 2-10	5 1-10	5 7-10	48 2 11	Nos. 49 and 50, long 24-pounders, have raised vent fields bored for locks; trunnions below the centre. No. 49 has a breech ring, and No. 50 has its breech ring broken off.
52	V	.....	.....do.....	5.800	8.11	1.4 6-10	10.4	5.2	1.8 7-10	1.3 2-10	6	6	50 1 20	No. 51, long 24-pounder, English Crown gun, has raised vent fields, bored for lock, with a breech ring; trunnions below the centre.
53	V	.....	.....do.....	5.800	8.5 8-10	1.5 2-10	9.11 6-10	4.11 5-10	1.9	1.3 9-10	6 5-10	6 5-10	47 3 0	Nos. 52, 53, 54, and 55 are long 24-pounders; trunnions below the centre; tapered with shoulders underneath; raised vent fields, without breech rings.
54	V	.....	.....do.....	5.800	8.6	1.5 5-10	9.11 6 10	4.11 5-10	1.9 4-10	1.3 9-10	6 5-10	6 5-10	48 3 0	French guns, roughly bored, ill-shaped, and unfit for the navy.
55	V	.....	.....do.....	5.800	8.5 5-10	1.5 5-10	9.11 2-10	4.11 5-10	1.9 4-10	1.3 9-10	6 5-10	6 5-10	49 1 21	
56	A	.....	.....do.....	5.800	8.5 5-10	1.5 5-10	9.11 8-10	4.11 5-10	1.9	1.3 9-10	6 5 10	6 5-10	48 3 0	
57	A	4	.....do.....	5.800	8.4 4-10	1.5 5-10	9.8 8-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 2 16	
58	A	20	.....do.....	5.800	8.4 4-10	1.5 5-10	9.9	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 2 16	
59	A	9	.....do.....	5.800	8.4 4-10	1.5 5 10	9.8 8-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 2 24	
59	A	31	.....do.....	5.800	8.4 4-10	1.5 5-10	9.8 2-10	4.11 5-10	1.8 8-10	1.1 4-10	5 8-10	5 8-10	49 2 21	
60	A	16	.....do.....	5.800	8.4	1.5 5-10	9.9	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 3 3	
61	A	10	.....do.....	5 800	8.5	1.5 5-10	9.8 8-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 2 21	The rest are American manufacture. From 56 to 85, inclusive, are part of the Constitution's armament.

Inspection return of ordnance at the United States navy yard at Charlestown, Massachusetts—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breach.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
62	A	2	Long 24-pounder	5.800	8.5	1.5 5-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	<i>Cwt. gr. lb.</i> 49 2 6	
63	A	7	.....do.....	5.800	8.4 4-10	1.5 5-10	9.9	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 2 6	
64	A	27	.....do.....	5.800	8.4 2-10	1.5 5-10	9.9	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 1 19	
65	A	18	.....do.....	5.800	8.4 2-10	1.5 5-10	9.9	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 2 6	
66	A	24	.....do.....	5.800	8.4 5-10	1.5 5-10	9.9 2-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 3 18	
67	A	6	.....do.....	5.800	8.4	1.5 5-10	9.9 4-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 3 18	
68	A	1	.....do.....	5.800	8.4 5-10	1.5 5-10	9.9 4-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 1 19	
69	A	12	.....do.....	5.800	8.4 5-10	1.5 5-10	9.9 2-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 3 3	
70	A	17	.....do.....	5.800	8.4 3-10	1.5 5-10	9.9 2-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	50 0 0	
71	C	W. G. 1798	.....do.....	5.900	8.11 2-10	1.4 7-10	10.4 2-10	5.2	1.8 8-10	1.3 1-10	5 8-10	5 8-10	50 1 27	
72	A	23	.....do.....	5.800	8.4 2-10	1.5 2-10	9.9	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 2 21	
73	A	14	.....do.....	5.800	8.4 2-10	1.5 2-10	9.9	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	50 0 0	
74	A	5	.....do.....	5.800	8.4 3-10	1.5 2-10	9.9 3-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 1 10	
75	A	28	.....do.....	5.800	8.4 3-10	1.5 2-10	9.9 3-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 1 24	
76	A	8	.....do.....	5.800	8.4 1-10	1.5 2-10	9.9	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 1 24	
77	G	W. G. 1798	.....do.....	5.800	8.11 2-10	1.4 7-10	10.4	5.2	1.8 8-10	1.3 1-10	5 8-10	5 8-10	50 1 23	
78	A	25	.....do.....	5.800	8.4 4-10	1.5 2-10	9.9 2-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 2 6	
79	A	3	.....do.....	5.800	8.4 4-10	1.5 2-10	9.9 2-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 1 24	
80	A	26	.....do.....	5.800	8.4 2-10	1.5 2-10	9.9 2-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 1 23	
81	A	36	.....do.....	5.800	8.4 2-10	1.5 2-10	9.9	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 3 3	
82	A	13	.....do.....	5.800	8.4 5-10	1.5 2-10	9.9	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	49 2 11	
83	.....	6	.....do.....	5.800	8.5 1-10	1.5 2-10	9.8 5-10	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	50 0 8	
84	A	29	.....do.....	5.800	8.4 3-10	1.5 2-10	9.9	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	50 0 8	
85	A	30	.....do.....	5.800	8.5	1.5 2-10	9.9	4.11 5-10	1.8 8-10	1.1 7-10	5 8-10	5 8-10	50 0 0	
1	A	V	Congreve 24-pounder.....	5.800	6.11 8-10	1.5 3-10	8.4 2-10	4.0	1.8	1.0	6	6	41 1 21	
2	A	V	.....do.....	5.800	6.11 8-10	1.4 5-10	8.3 3-10	3.11	1.8	0.11 5-10	6	6	38 1 4	
3	A	V	.....do.....	5.800	6.11 8-10	1.5 3-10	8.3 5-10	4.0	1.8	1.0	6	6	40 3 0	
4	A	V	.....do.....	5.800	6.11 8-10	1.5 3-10	8.4	4.0	1.8	1.0	6	6	40 3 17	
5	A	V	.....do.....	5.800	6.11 8-10	1.5 3-10	8.4 2-10	4.0	1.8	1.0	6	6	41 0 0	
6	A	V	.....do.....	5.800	7.0	1.5 3-10	8.4	4.0	1.8	1.0	6	6	41 3 18	
7	A	V	.....do.....	5.800	6.11 8-10	1.5 3-10	8.4 2-10	4.0	1.8	1.0	6	6	40 3 18	
8	A	V	.....do.....	5.800	7.0	1.5 3-10	8.4 5-10	4.0	1.8	1.0	6	6	40 0 20	
9	A	V	.....do.....	5.800	7.0	1.5 2-10	8.4	4.0	1.8	1.0	6	6	41 0 10	
10	A	V	.....do.....	5.800	7.0	1.5 2-10	8.4	4.0	1.8	1.0	6	6	40 2 21	
11	A	V	.....do.....	5.800	6.11 8-10	1.5 2-10	8.4	4.0	1.8	1.0	6	6	40 2 0	
12	A	V	.....do.....	5.800	7.0	1.5 2-10	8.4	4.0	1.8	1.0	6	6	40 2 1	

From 1 to 12, inclusive, are Congreve 24-pounders, English Crown guns; all have raised vent fields, bored for locks, with raised sights over reinforce ring; have breech rings, with trunnions *below* the centre. They are marked on one trunnion "24 P.;" on the other, "Cannon, 1814," with the mill number. The propriety of retaining these guns in the navy may be well questioned.

Inspection return of ordnance at the United States navy yard at Charlestown, Massachusetts—Continued.

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VOL. V

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
1	C	HF 17	Medium 32-pounder.....	6.420	7.7 4-10	1.6	9.3 5-10	4.10	1.9 6-10	1.3 5-10	6 2-10	6 4-10	<i>Cwt. gr. lb.</i> 50 3 24	From 1 to 16, inclusive, are medium 32-pounders; all have raised vent fields, bored for locks; have breech rings, with trunnions below the centre, except No. 16, which has trunnions in the centre. All are American manufacture. No. 16 has breech broken off. These guns are badly cast; too short and too light for good service, and, in my opinion, not fit for the navy.
2	C	HF 3	.....do.....	6.420	7.7 4-10	1.6	9.3 5-10	4.10	1.9 6-10	1.3 5-10	6 2-10	6 4-10	51 0 0
3	C	HF 5	.....do.....	6.420	7.7	1.6	9.3	4.10	1.9 6-10	1.3 5-10	6 2-10	6 4-10	50 3 12
4	C	HF 33	.....do.....	6.420	7.6 5-10	1.6	9.3 8-10	4.10	1.9 6-10	1.3 5-10	6 2-10	6 4-10	51 0 0
5	C	HF 16	.....do.....	6.420	7.6 8-10	1.6	9.3 6-10	4.10	1.9 6-10	1.3 5-10	6 2-10	6 4-10	50 3 5
6	C	HF 4	.....do.....	6.420	7.7	1.6	9.3 6-10	4.10	1.9 6-10	1.3 5-10	6 2-10	6 4-10	50 1 0
7	C	HF 27	.....do.....	6.420	7.8 5-10	1.6	9.3	4.10	1.9 6-10	1.3 5-10	6 2-10	6 4-10	50 2 22
8	C	HF 1	.....do.....	6.420	7.6 8-10	1.6	9.3 5-10	4.10	1.9 6-10	1.3 5-10	6 2-10	5 4-10	50 3 5
9	C	HF 30	.....do.....	6.420	7.8	1.6	9.3 2-10	4.10	1.9 5-10	1.3 5-10	6 2-10	6 4-10	50 3 7
10	C	HF 32	.....do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.10	1.9 5-10	1.3 5-10	6 2-10	6 4-10	50 3 8
11	C	HF 19	.....do.....	6.420	7.7	1.6	9.3 5-10	4.10	1.9 6-10	1.3 5-10	6 2-10	6 4-10	51 0 0
12	C	HF 7	.....do.....	6.420	7.6 7-10	1.6	9.3 5-10	4.10	1.9 6-10	1.3 5-10	6 2-10	6 4-10	51 0 0
13	C	HF 31	.....do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.10	1.9 6-10	1.3 5-10	6 2-10	6 4-10	50 3 10
14	C	HF 6	.....do.....	6.420	7.6 8-10	1.6	9.3 3-10	4.10	1.9 6-10	1.3 5-10	6 2-10	6 4-10	50 1 0
15	C	HF 28	.....do.....	6.420	7.8	1.6	9.3	4.10	1.9 6-10	1.3 5-10	6 2-10	6 4-10	50 3 6
16	B	HF 69	.....do.....	6.420	7.8	1.6	9.3	4.7	1.9 6-10	1.3 5-10	6 2-10	6 4-10	50 0 0
17	Bdo.....do.....	6.420	7.9	1.6	9.3	4.7	1.9 6-10	1.3 8-10	6 7-10	6	51 1 14	From 17 to 58, inclusive, are medium 32-pounders; all have raised vent fields for locks; trunnions in the centre, and no breech rings. These guns are horizontally cast, flawey, and uneven exterior; are American manufacture, badly executed; too short, and too light for hard service, and, in my opinion, are unfit for the navy, though I have not marked them condemned.
18	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.7	1.9 6-10	1.3 8-10	6 7-10	6	50 2 14
19	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.7	1.10 2-10	1.3 8-10	6 7-10	6	51-0 21
20	B	.....do.....	.....do.....	6.420	7.9	1.6	9.2 2-10	4.7	1.9 8-10	1.3 8-10	6 7-10	6	51 0 0
21	B	.....do.....	.....do.....	6.420	7.9	1.6	9.2 2-10	4.7	1.9 7-10	1.3 8-10	6 7-10	6	51 0 0
22	B	.....do.....	.....do.....	6.420	7.9	1.6	9.2 8-10	4.7	1.9 8-10	1.3 8-10	6 7-10	6	50 2 14
23	B	.....do.....	.....do.....	6.420	7.9	1.6	9.2 6-10	4.7	1.9 7-10	1.3 8-10	6 7-10	6	51 1 14
24	B	.....do.....	.....do.....	6.420	7.9	1.6	9.2 6-10	4.7	1.9 7-10	1.3 8-10	6 7-10	6	51 2 0
25	B	.....do.....	.....do.....	6.420	7.9	1.6	9.2 7-10	4.7	1.9 6-10	1.3 8-10	6 7-10	6	51 0 0
26	B	.....do.....	.....do.....	6.420	7.9	1.6	9.2 4-10	4.7	1.9 7-10	1.3 8-10	6 7-10	6	51 1 0
27	B	.....do.....	.....do.....	6.420	7.9	1.6	9.2 8-10	4.7	1.9 7-10	1.3 8-10	6 7-10	6	51 0 14
28	B	.....do.....	.....do.....	6.420	7.9	1.6	9.2 7-10	4.7	1.9 7-10	1.3 8-10	6 7-10	6	51 1 14
29	B	.....do.....	.....do.....	6.420	7.9	1.6	9.2 5-10	4.7	1.9 5-10	1.3 4-10	6 7-10	6	51 1 14
30	B	.....do.....	.....do.....	6.420	7.9	1.6	9.2 3-10	4.7	1.9 6-10	1.3 8-10	6 7-10	6	51 1 0
31	B	.....do.....	.....do.....	6.420	7.9	1.6	9.2 6-10	4.7	1.9 7-10	1.3 8-10	6 7-10	6	51 1 14
32	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.7	1.9 6-10	1.3 8-10	6 7-10	6	50 3 14
33	B	.....do.....	.....do.....	6.420	7.9	1.6	9.2 6-10	4.7	1.9 6-10	1.3 8-10	6 7-10	6	51 2 14
34	B	.....do.....	.....do.....	6.420	7.9	1.6	9.2 7-10	4.7	1.9 5-10	1.3 8-10	6 7-10	6	51 0 14
35	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.7	1.9 5-10	1.3 8-10	6 7-10	6	51 2 0
36	Bdo.....do.....	6.420	7.9	1.6	9.2 7-10	4.7	1.9 5-10	1.3 8-10	6 7-10	6	51 0 0	
37	Bdo.....do.....	6.420	7.9	1.6	9.3	4.7	1.9 6-10	1.3 8-10	6 7-10	6	50 2 14	

1835.]

NATIONAL FOUNDRY.

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Inspection return of ordnance at the United States navy yard at Charlestown, Massachusetts—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.	
38	B	Medium 32-pounder.....	6.420	7.9	1.6	9.2 7-10	4.7	1.9 8-10	1.3 8-10	6 7-10	6	<i>Cwt. gr. lb.</i> 51 0 0	From 59 to 88, inclusive, are medium 32-pounders; all have raised vent fields bored for locks; breech rings, with trunnions in the centre; American manufacture; better castings than the preceding lot, from 1 to 58, though, in my opinion, they are inefficient and unsafe guns, being deficient in length and weight of metal, and ought not to be retained in the navy.	
39	B	.....	do.....	6.420	7.9	1.6	9.3	4.7	1.9 6-10	1.3 8-10	6 7-10	6	51 0 0	
40	B	.....	do.....	6.420	7.9	1.6	9.3 2-10	4.7	1.9 6-10	1.3 8-10	6 7-10	6	51 0 0	
41	B	.....	do.....	6.420	7.9	1.6	9.2 8-10	4.7	1.9 6-10	1.3 8-10	6 7-10	6	51 1 14	
42	B	.....	do.....	6.420	7.9	1.6	9.2 5-10	4.7	1.9 5-10	1.3 8-10	6 7-10	6	51 1 0	
43	B	.....	do.....	6.420	7.9	1.6	9.2 3-10	4.7	1.9 5-10	1.3 8-10	6 7-10	6	51 1 14	
44	B	.....	do.....	6.420	7.9	1.6	9.2 4-10	4.7	1.9 7-10	1.3 8-10	6 7-10	6	50 3 14	
45	B	.....	do.....	6.420	7.9	1.6	9.2 5-10	4.7	1.9 5-10	1.3 8-10	6 7-10	6	51 0 14	
46	B	.....	do.....	6.420	7.9	1.6	9.2 7-10	4.7	1.9 6-10	1.3 8-10	6 7-10	6	50 2 14	
47	B	.....	do.....	6.420	7.9	1.6	9.2 5-10	4.7	1.9 5-10	1.3 8-10	6 7-10	6	51 1 14	
48	B	.....	do.....	6.420	7.9	1.6	9.2 5-10	4.7	1.9 6-10	1.3 8-10	6 7-10	6	51 0 14	
49	B	.....	do.....	6.420	7.9	1.6	9.2 5-10	4.7	1.9 5-10	1.3 8-10	6 7-10	6	51 1 0	
50	B	.....	do.....	6.420	7.9	1.6	9.2 5-10	4.7	1.9 6-10	1.3 8-10	6 7-10	6	51 1 0	
51	B	.....	do.....	6.420	7.9	1.6	9.2 4-10	4.7	1.9 6-10	1.3 8-10	6 7-10	6	51 1 0	
52	B	.....	do.....	6.420	7.9	1.6	9.2 4-10	4.7	1.9 6-10	1.3 8-10	6 7-10	6	51 1 14	
53	B	.....	do.....	6.420	7.10	1.6	9.2 8-10	4.7	1.9 8-10	1.3 8-10	6 7-10	6	51 1 0	
54	B	.....	do.....	6.420	7.9	1.6	9.2 6-10	4.7	1.9 5-10	1.3 8-10	6 7-10	6	50 3 14	
55	B	.....	do.....	6.420	7.9	1.6	9.2 7-10	4.7	1.9 5-10	1.3 8-10	6 7-10	6	51 1 14	
56	B	.....	do.....	6.420	7.9	1.6	9.1 5-10	4.7	1.9 5-10	1.3 8-10	6 7-10	6	50 3 0	
57	B	.....	do.....	6.420	7.9	1.6	9.2 6-10	4.7	1.9 5-10	1.3 8-10	6 7-10	6	51 1 14	
58	B	.....	do.....	6.420	7.9	1.6	9.2 5-10	4.7	1.9 5-10	1.3 8-10	6 7-10	6	50 0 0	
59	B	HF 70	do.....	6.420	7.8 5-10	1.6	9.4	4.9	1.9 7-10	1.3 6-10	6 3-10	6 5-10	49 3 6		From 59 to 88, inclusive, are medium 32-pounders; all have raised vent fields bored for locks; breech rings, with trunnions in the centre; American manufacture; better castings than the preceding lot, from 1 to 58, though, in my opinion, they are inefficient and unsafe guns, being deficient in length and weight of metal, and ought not to be retained in the navy.
60	B	HF 63	do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 5-10	50 0 0		
61	B	HF 60	do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 5-10	50 1 17		
62	B	HF 65	do.....	6.420	7.8 5-10	1.6	9.4	4.9	1.9 7-10	1.3 6-10	6 3-10	6 5-10	50 0 12		
63	B	HF 54	do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 5-10	50 1 17		
64	B	HF 40	do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 5-10	50 2 21		
65	B	HF 51	do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 5-10	50 2 5		
66	B	HF 56	do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 5-10	50 1 6		
67	B	HF 49	do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 0 14		
68	B	HF 47	do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 2 0		
69	B	HF 43	do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 1 17		
70	B	HF 53	do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 0 0		
71	B	HF 8	do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	49 0 6		
72	B	HF 55	do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 0 0		
73	B	HF 46	do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 1 4		
74	B	HF 38	do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 2 3		

Inspection return of ordnance at the United States navy yard at Charlestown, Massachusetts—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
75	B	HF 61	Medium 32-pounder.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 1 8	
76	B	HF 36	.....do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 4-10	1.3 6-10	6 3-10	6 3-10	50 2 9	
77	B	HF 37	.....do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 2 0	
78	B	HF 57	.....do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 0 0	
79	B	HF 52	.....do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 0 1	
80	B	HF 67	.....do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	49 2 22	
81	B	HF 59	.....do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 0 0	
82	B	HF 50	.....do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 0 22	
83	B	HF 39	.....do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 2 14	
84	B	HF 62	.....do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 0 0	
85	B	HF 15	.....do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 0 17	
36	B	HF 42	.....do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 1 5	
87	B	HF 68	.....do.....	6.420	7.8 5-10	1.6	9.3 5-10	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	49 2 11	
88	B	HF 66	.....do.....	6.420	7.8 5-10	1.6	9.4	4.9	1.9 7-10	1.3 6-10	6 3-10	6 3-10	50 0 0	
1	B	49	Long 32-pounder.....	6.400	8.7	1.6 3-10	10.0 4-10	5.1 5-10	1.9 7-10	1.3 2-10	6 5-10	6 5-10	54 3 0	From 1 to 6, inclusive, are long 32-pounders; all have raised vent fields for locks; trunnions in the centre, and without breech rings.
2	B	60	.....do.....	6.400	8.7	1.6 3-10	10.0 4-10	5.1 5-10	.....	1.3 3-10	6 5-10	6 5-10	55 0 0	
3	B	57	.....do.....	6.400	8.7 4-10	1.6 3-10	10.0 4-10	5.1 5-10	.....	1.3	6 5-10	6 5-10	55 0 0	
4	B	70	.....do.....	6.400	8.7 4-10	1.6 3-10	10.0 4-10	5.1 5-10	.....	1.3 3-10	6 5-10	6 5-10	54 3 21	
5	B	69	.....do.....	6.400	8.7 4-10	1.6 3-10	10.0 6-10	5.1 5-10	.....	1.3 3-10	6 5-10	6 5-10	54 2 14	
6	B	65	.....do.....	6.400	8.7 4-10	1.6 3-10	10.0 8-10	5.1 5-10	.....	1.3 3-10	6 5-10	6 5-10	54 2 15	
7	B	09	.....do.....	6.400	8.6 8-10	1.6 3-10	10.0 7-10	5.1 5-10	.....	1.3 4-10	6 5-10	6 5-10	00 0 0	
8	B	75	.....do.....	6.400	8.7	1.6 3-10	10.0 7-10	5.1 5-10	.....	1.3 3-10	6 5-10	6 5-10	55 0 18	
9	C	.....	.....do.....	6.400	8.7 3-10	1.6 8-10	10.1 8.10	5.3	1.10 2-10	1.4 1-10	6 4-10	6 6 10	62 2 0	
10	C	WG 1798	.....do.....	6.420	8.11	1.5 5-10	10 4 3-10	5.3	1.10 2-10	1.4 5-10	6 4-10	6 6-10	55 1 2	Nos. 10, 11, and 12, long 32-pounders, are English crown guns; all have raised vent fields bored for locks; trunnions below the centre, with breech rings.
11	C	WG 1798	.....do.....	6.420	8.11	1.5 5-10	10.4 2-10	5.3	1.10 2-10	1.4 5-10	6 4-10	6 6-10	55 1 2	
12	C	WG 1798	.....do.....	6.420	8.11	1.5 5-10	10.4	5.3	1.10 2-10	1.4 5-10	6 4-10	6 6-10	55 1 9	
1	A	4	Long 12-pounder.....	4.600	7.2 5-10	1.0 5-10	8.4 3-10	4.1	1.3 7-10	0.11	4 7-10	4 7-10	22 1 26	From 1 to 5, inclusive, are long 12-pounders; all have trunnions below the centre; no breech rings. Nos. 1 and 5 have raised vent fields. Nos. 2, 3, and 4 have plain vent fields. All are of foreign manufacture.
2	A	22	.....do.....	4.600	7.2 5-10	.....	.....	.....	.....	0.10 5-10	4 7-10	4 7-10	22 1 0	
3	A	40	.....do.....	4.600	7.2	.....	.....	.....	.....	0 11	4 7-10	4 7-10	22 1 0	
4	A	34	.....do.....	4.600	7.3 3-10	.....	.....	.....	.....	.....	4 7-10	4 7-10	22 1 8	
5	A	20	.....do.....	4.600	7.3 2-10	.....	.....	.....	.....	.....	4 7-10	4 7-10	22 1 0	
1	.....	.....	Gunade 9-pounder.....	4.200	2.7 5-10	0.11	3.5 6-10	2.1	1.0 5-10	.....	4 2-10	4 5-10	6 1 22	No. 1 is a 9 pound gunade, chambered; trunnions below the centre, with breech rings.
1	V	.....	Gunade 6-pounder.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	No. 1 is a 6-pound gunade; is rough and badly bored; unfit for the navy.

Inspection return of ordnance at the United States navy yard at Charlestown, Massachusetts—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to centre of the nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.
1	W G 1804	Carronade 12-pounder	4.400	2.8 4-10	2	6	6 1 7	Nos. 1 and 2 are 12-pound carronades; have breech rings and hole for screw are slightly chambered; English crown guns. From 1 to 11, inclusive, are 18-pound carronades; all have plain vent fields; no breech rings or hole for screw, except No. 1, which has a sciew hole.
2	.....	W 1798	.....do.....	4.400	2.8 4-10	.....	.....	.....	2	.....	.....	.....	6 1 4
1	A	.....	Carronade 18-pounder ...	5.300	2.11	5 5-10	4.7 5-10	2.5 5-10	1.3	0.10 9.10	2 3 10	6 5-10	11 0 0
2	A	.....	.....do.....	5.300	2.11	5 5-10	.....	2.7	1.3 5-10	0.11	2	7	11 0 13
3	A	.....	.....do.....	5.300	2.11	5 5-10	.....	2.7	1.3 5-10	0.11	.....	7	11 0 13
4	A	.....	.....do.....	5.300	2.11	5 5-10	.....	2.7	1.3 5-10	0.11	.....	7	11 0 13
5	A	.....	.....do.....	5.300	2.11	5 5-10	.....	2.7	1.3 5-10	0.11	.....	7	11 0 13
6	A	.....	.....do.....	5.300	2.11	5 5-10	4.7 5-10	2.7	1.3 5-10	0.11	2	7	11 0 13
7	A	.....	.....do.....	5.300	2.11	5 5-10	4.7 5-10	2.7	1.3 5-10	.....	2	7	11 0 13
8	A	.....	.....do.....	5.300	2.11	5 5-10	4.7 5-10	2.7	1.3 5-10	.....	2	7	11 3 14
9	A	.....	.....do.....	5.300	2.11	5 5-10	4.7 5-10	2.7	1.3 5-10	.....	2	7	12 0 19
10	A	.....	.....do.....	5.300	2.11	5 5-10	4.7 5-10	2.7	1.3 5-10	.....	2	7	11 3 14
11	A	.....	.....do.....	5.300	2.11	5 5-10	4.7 5-10	2.7	1.3 5-10	.....	2	7	11 3 24
1	A	Carronade 24-pounder	5.800	3.1 5-10	6	4.10	2.7	1.4 4-10	0.10	2	7 5-10	15 0 10	From 1 to 7, inclusive, are 24-pound carronades; all have plain vent fields. Nos. 1 and 2 have no breech rings. No. 3 has a breech ring; no hole for screw. Nos. 5, 6, and 7 have breech rings and screw holes.
2	A	.....	.....do.....	5.800	3.1 5-10	6	4.10	2.7	1.4 4-10	0.10	2	7 5-10	15 0 10
3	A	.....	.....do.....	5.800	3.1 5-10	6	4.10	2.7	1.4 4-10	0.10	2	7 5-10	14 3 3
4	A	.....	.....do.....	5.800	3.1 5-10	6	4.10	2.7	1.4 4-10	0.10	2	7 5-10	14 3 3
5	A	.....	.....do.....	5.800	3.1 5-10	6	4.10	2.7	1.4 4-10	0.10	2	7 5-10	14 3 3
6	A	.....	.....do.....	5.800	3.1 5-10	6	4.10	2.7	1.4 4-10	0.10	2	7 5-10	14 3 8
7	A	.....	.....do.....	5.800	3.1 5-10	6	4.10	2.7	1.4 4-10	0.10	2	7 5-10	14 3 8
1	O	Carronade 42-pounder	1.860	3.9	6 8-10	5.9	2.9	1.8 3-10	1.2 7-10	2 8-10	8 5-10	25 1 2		No. 1 is a 42-pound carronade; has raised vent fields for lock; breech ring and screw hole. From 2 to 11, inclusive, are 42-pound carronades; all have raised vent fields for locks; no breech rings nor holes for screws. American manufacture.
2	O	.....	.....do.....	1.860	3.9	6 8-10	5.8 5-10	2.9	1.8 3-10	1.3	2 8-10	8 5-10	27 2 10
3	O	.....	.....do.....	1.860	3.9	6 8-10	5.8 5-10	2.9	1.8 3-10	1.3	2 8-10	8 5-10	28 0 4
4	O	.....	.....do.....	1.860	3.9	6 8-10	5.8 5-10	2.9	1.8 3-10	1.3	2 8-10	8 5-10	27 0 2
5	O	.....	.....do.....	1.860	3.9	6 8-10	5.8 5-10	2.9	1.8 3-10	1.3	2 8-10	8 5-10	27 1 18
6	O	.....	.....do.....	1.860	3.9	6 8-10	5.8 5-10	2.9	1.8 3-10	1.3	2 8-10	8 5-10	27 2 10
7	O	.....	.....do.....	1.860	3.9	6 8-10	5.8 5-10	2.9	1.8 3-10	1.3	2 8-10	8 5-10	27 1 20
8	O	.....	.....do.....	1.860	3.9	6 8-10	5.8 5-10	2.9	1.8 3-10	1.3	2 8-10	8 5-10	27 1 18
9	O	.....	.....do.....	1.860	3.9	6 8-10	5.8 5-10	2.9	1.8 3-10	1.3	2 8-10	8 5-10	27 1 3
10	O	.....	.....do.....	1.860	3.9	6 8-10	5.8 5-10	2.9	1.8 3-10	1.3	2 8-10	8 5-10	27 1 10
11	O	.....	.....do.....	1.860	3.9	6 8-10	5.8 5-10	2.9	1.8 3-10	1.3	2 8-10	8 5-10	27 1 10
1	O	W G 1798	Carronade 32-pounder	6.300	3.6 5-10	5	5.3	2.7 5-10	1.5 5-10	1.0 5-10	2 2-10	8	16 3 0	From 1 to 18, inclusive, are 32-pound carronades. All have raised vent fields for locks; breech rings and holes for screws. Nos. 1 and 2 are English crown guns; the others are American manufacture. All are a part of the Constitution's armament.
2	O	W G 1798	.....do.....	6.300	3.6 5-10	5	5.3	2.7 5-10	1.5 5-10	1.0 5-10	2 2-10	8	16 2 26
3	.....	.....	.....do.....	6.300	3.5	6 5-10	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	10 2 26
4	.....	.....	.....do.....	6.300	3.5	6 5-10	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	19 2 26
5	.....	.....	.....do.....	6.300	3.6	5 2-10	6.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	19 2 26

Inspection return of ordnance at the navy yard at Charlestown, Massachusetts—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to centre of the nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.
6			Carronade 32-pounder	6.300	3.6	5 6-10	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	<i>Cwt. gr. lb.</i> 19 3 3	From 19 to 63 are 32-pound carronades; all have raised vent fields for locks; breech ring and hole for screw, except 57, 58, and 59, which have breech rings but no screw hole. Nos. 60, 61, 62, and 63 have their breech rings broken off. These guns are irregular in length of chamber and weight, and their vents are very badly bored.
7			do.....	6.300	3.6	5	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	19 3 3	
8			do.....	6.300	3.6	6	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	19 3 11	
9			do.....	6.300	3.6	5 6-10	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	19 2 24	
10			do.....	6.300	3.6	6	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	19 2 26	
11			do.....	6.300	3.6 5-10	4	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	19 3 1	
12			do.....	6.300	3.6	5 2-10	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	19 3 6	
13			do.....	6.300	3.5	6 9-10	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	19 2 8	
14			do.....	6.300	3.5	6 7-10	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	19 2 19	
15			do.....	6.300	3.5	6 3-10	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	19 3 3	
16			do.....	6.300	3.6 2-10	4 8-10	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	19 3 3	
17			do.....	6.300	3.5	6 5-10	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	19 3 3	
18			do.....	6.300	3.5	6 5-10	5.3	2.7 5-10	1.6 2-10	1.1 5-10	2 2-10	8	19 3 1	
19	A		do.....	6.400	3.3 5-10	6 8-10	5.4	2.9	1.6	1.1	2 9-10	8 6-10	19 2 6	
20	A		do.....	6.400	3.5	6 3-10	5.4	2.9	1.6	1.1	2 9-10	8 6-10	18 3 10	
21	O		do.....	6.300	3.5	5 8-10	5.4	2.9	1.6	1.1 4-10	2 9-10	8 6-10	18 3 5	
22	O		do.....	6.300	3.4 5-10	7 2-10	5.4	2.9	1.6	1.1 4-10	2 9-10	8 6-10	18 3 10	
23	A		do.....	6.400	3.4	6 5-10	5.4	2.9	1.6	1.1	2 9-10	8 6-10	18 2 11	
24	A		do.....	6.400	3.5	6 3-10	5.4	2.8	1.6	1.1	2 9-10	8 6-10	19 2 6	
25	O	P 1820	do.....	6.300	3.5	5 9-10	5.4	2.8	1.6	1.1 9-10	2 9-10	8 6-10	20 3 21	
26	A	P 1820	do.....	6.400	3.5	6 2-10	5.4	2.8	1.6	1.6 9-10	2 9-10	8 6-10	19 1 9	
27	O	P 1820	do.....	6.300	3.5	6 1-10	5.4	2.8	1.6	1.2	2 9-10	8 6-10	21 0 2	
28	O	P 1820	do.....	6.300	3.4	6 5-10	5.4	2.8	1.6	1.2	2 9-10	8 6-10	21 0 2	
29	A	P 1820	do.....	6.400	3.5	6 2-10	5.4	2.8	1.6	1.0 9-10	2 9-10	8 6-10	18 3 15	
30	O	P 1820	do.....	6.300	3.4	7 2-10	5.4	2.8	1.6	1.2	2 9-10	8 6-10	21 2 6	
31	O	P 1820	do.....	6.300	3.6 4-10	6 5-10	5.4	2.8	1.6	1.2	2 9-10	8 6 10	20 3 20	
32	O	P 1820	do.....	6.300	3.4	7 3-10	5.4	2.8	1.6	1.2	2 9-10	8 6-10	21 1 4	
33	A	P 1820	do.....	6.400	3.5	6 6-10	5.4	2.8	1.6	1.1 2-10	2 9-10	8 6-10	19 2 6	
34	A	P 1820	do.....	6.400	3.5	6 1-10	5.4	2.8	1.6	1.1	2 9-10	8 6-10	19 2 6	
35	O	P 1820	do.....	6.300	3.4 5-10	6 6-10	5.4	2.8	1.6	1.2	2 9-10	8 6-10	21 0 17	
36	O	P 1820	do.....	6.300	3.4 5-10	6 6-10	5.4	2.8	1.6	1.2	2 9-10	8 6-10	21 9 12	
37	A	P 1820	do.....	6.400	3.5	6 2-10	5.4	2.8	1.6	1.0 8-10	2 9-10	8 6-10	19 1 24	
38	O	P 1820	do.....	6.300	3.4 5-10	7 5-10	5.4	2.8	1.6	1.1 9-10	2 9-10	8 6-10	21 0 27	
39	O	P 1820	do.....	6.300	3.4 5-10	7	5.4	2.8	1.6	1.2	2 9-10	8 6-10	21 0 27	
40	A		do.....	6.400	3.5	6 4-10	5.4	2.8	1.6	1.1 6-10	2 9-10	8 6-10	21 0 2	
41	A		do.....	6.400	3.5	6 6-10	5.4	2.8	1.6	1.1 6-10	2 9 10	8 6-10	20 3 15	

Inspection return of ordnance at the navy yard at Charlestown, Massachusetts—Continued.

Index number.	Class number.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to centre of the nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.	
42	V	Carronade 32-pounder.....	3.1 5-10	9 8-10	5.4	2.8	1.6	1.2	2 9-10	8 6-10	21 1 10	No. 42 unfit for service. Vent striking forepart of chamber, a reduced cartridge would not be touched by a priming wire.	
43	O	.....	do.....	6.300	3.4	7 5-10	5.4	2.8	1.6	1.1 7-10	2 9-10	8 6-10	21 1 15	
44	A	.....	do.....	6.400	3.5	6 6-10	5.4	2.8	1.6	1.1 5-10	2 9-10	8 6-10	21 3 4	
45	A	.....	do.....	6.400	3.5	5 9-10	5.4	2.8	1.6	1.1 5-10	2 9-10	8 6-10	21 1 0	
46	O	P 1820	do.....	6.300	3.4 5-10	6 8-10	5.4	2.8	1.6	1.1 8-10	2 9-10	8 6-10	21 1 10		
47	A	P 1820	do.....	6.400	3.5 5-10	5 8-10	5.4	2.8	1.6	1 0 8-10	2 9-10	8 6-10	19 1 19		
48	A	P 1820	do.....	6.400	3.5	6 1-10	5.4	2.8	1.6	1.0 8-10	2 9-10	8 6-10	19 1 19		
49	O	P 1820	do.....	6.300	3.3 5-10	7 5-10	5.4	2.8	1.6	1.1 8-10	2 9-10	8 6-10	21 1 15		
50	O	P 1820	do.....	6 300	3.4 5-10	6 8-10	5.4	2.8	1.6	1.1 6-10	2 9-10	8 6-10	21 0 2		
51	A	P 1820	do.....	6.400	3.5	6 3-10	5.4	2.8	1.6	1.0 8-10	2 9-10	8 6-10	19 1 14		
52	O	P 1820	do.....	6.300	3.3	7 2-10	5.4	2.8	1.6	1.1 7-10	2 9-10	8 6-10	21 1 25		
53	A	P 1820	do.....	6.400	3.5	6 4-10	5.4	2.8	1.6	1.0 8-10	2 9-10	8 6-10	19 2 6		
54	O	P 1820	do.....	6.300	3.5	6 4-10	5.4	2.8	1.6	1.1 9-10	2 9-10	8 6-10	21 0 13		
55	A	P 1820	do.....	6.400	3.5	6 4-10	5.4	2.8	1.6	1.1 6-10	2 9-10	8 6-10	21 3 25		
56	A	.....	do.....	6.400	3.5 3-10	6 3-10	5.4	2.8	1.6	1.1 6-10	2 9-10	8 6-10	21 0 13	
57	A	P 1820	do.....	6.400	3.5 3-10	6 2-10	5.4	2.8	1.6	1.1 6-10	2 9-10	8 6-10	21 2 18		
58	A	P 1820	do.....	6.400	3.6 5-10	5 3-10	5.4	2.8	1.6	1.1 6-10	2 9-10	8 6-10	21 2 27		
59	A	P 1820	do.....	6.400	3.5	6 7-10	5.4	2.8	1.6	1.1 6-10	2 9-10	8 6-10	21 2 27		
60	O	P 1820	do.....	6 300	3.4 5 10	6 4-10	5.4	2.8	1.6	1.2	2 9-10	8 6-10	21 3 21		
61	A	P 1820	do.....	6.400	3.4 5-10	6 7-10	5.4	2.8	1.6	1.1 8-10	2 9-10	8 6-10	21 3 4		
62	O	P 1820	do.....	6.300	3.4	7 1-10	5.4	2.8	1.6	1.2	2 9-10	8 6-10	21 0 1		
63	O	P 1820	do.....	6.300	3.4 5-10	7 2-10	5.4	2.8	1.6	1.2	2 9-10	8 6-10	21 2 27		
64	A	do.....	6.400	3.5 5-10	6 5-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 3 9		From 64 to 85, inclusive, are 32-pound carronades; all have raised vent fields for locks, and without breech rings or holes for screw; American manufacture. They are part of the Independence's armament.
65	A	.....	do.....	6.400	3.5 5-10	6 5-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 2 27	
66	A	.....	do.....	6.400	3.5 5-10	6 2 10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 2 22	
67	A	.....	do.....	6.400	3.5 5-10	6 2-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 2 27	
68	A	.....	do.....	6.400	3.5 5-10	6 4-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 2 22	
69	A	.....	do.....	6.400	3.5 5-10	6 7-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 3 9	
70	A	.....	do.....	6.400	3.5	6 5-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 2 7	
71	A	.....	do.....	6.400	3.5 5-10	6 6-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 3 19	
72	A	.....	do.....	6.400	3.5 5-10	6	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 3 9	
73	A	.....	do.....	6.400	3.5 5-10	6 2-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 3 4	
74	A	.....	do.....	6.400	3.5 3-10	6 6-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 3 4	
75	A	.....	do.....	6.400	3.5 3-10	6 2-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 3 4	
76	A	.....	do.....	6.400	3.5 3-10	6 2-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6 10	21 3 4	
77	A	.....	do.....	6.400	3.6	6	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 2 22	
78	A	.....	do.....	6.400	3.5 5-10	6 8-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 3 4	

Inspection return of ordnance at the navy yard at Charlestown, Massachusetts—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to centre of the nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.
79	A	Carronade 32-pounder...	6.400	3.5 5-10	6 8-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	<i>Cut. gr. lb.</i> 21 3 4	From 85 to 107, inclusive, are 32-pound carronades; all have raised vent fields for locks; breech rings and hole for screw; American manufacture; are part of the sloop-of-war Boston's armament.
80	A	.....	do.....	6.400	3.6	6	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 3 4
81	A	.....	do.....	6.400	3.5 5-10	6	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 3 14
82	A	.....	do.....	6.400	3.5 5-10	7 1-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	22 0 4
83	A	.....	do.....	6.400	3.6 5-10	6	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 2 22
84	A	.....	do.....	6.400	3.5 5-10	6 5-10	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 2 17
85	A	.....	do.....	6.400	3.6	6	5.4 7-10	2.8 5-10	1.6 5-10	1.1 7-10	2 9-10	8 6-10	21 2 17
86	O	.....	do.....	6.300	3.5	6 8-10	5.3 7-10	2.8 5-10	1.6 2-10	1.1 8-10	2 7-10	9	19 2 3
87	O	.....	do.....	6.300	3.5	6 8-10	5.3 7-10	2.8 5-10	1.6 2-10	1.1 8-10	2 7-10	9	19 1 2
88	O	.....	do.....	6.300	3.4 3-10	6 5-10	5.3 7-10	2.8 5-10	1.6 2-10	1.1 8-10	2 7-10	9	21 0 6
89	O	.....	do.....	6.300	3.5 5-10	6 2-10	5.3 7-10	2.8 5-10	1.6 2-10	1.1 8-10	2 7-10	9	21 0 6
90	O	.....	do.....	6.300	3.6 3-10	4 9-10	5.3 7-10	2.8 5-10	1.6 2-10	1.1 8-10	2 7-10	9	21 1 0
91	A	.....	do.....	6.400	3.5	6	5.4 7-10	2.9 5-10	1.6 2-10	1.1	2 7-10	8 5-10	19 0 0
92	O	.....	do.....	6.300	3.4 5-10	6 5-10	5.3 7-10	2.8 5-10	1.6 2-10	1.1 8-10	2 7-10	9	21 1 0
93	O	.....	do.....	6.300	3.5 2-10	6 2-10	5.3 7-10	2.8 5-10	1.6 2-10	1.1 8-10	2 7-10	9	21 1 3
94	O	.....	do.....	6.300	3.5 5-10	5 9-10	5.3 7-10	2.8 5-10	1.6 2-10	1.1 8-10	2 7-10	9	21 0 8
95	A	.....	do.....	6.400	3.5	6	5.4 7-10	2.9 5-10	1.6 2-10	1.1	2 7-10	8 5-10	19 2 1
96	A	.....	do.....	6.400	3.5	6 6-10	5.4 7-10	2.9 5-10	1.6 2-10	1.1	2 7-10	8 5-10	19 0 0
97	O	.....	do.....	6.300	3.4 7-10	6 9-10	5.3 7-10	2.8 5-10	1.6 2-10	1.1 8-10	2 7-10	9	21 1 10
98	O	.....	do.....	6.300	3.4 5-10	6 8-10	5.3 7-10	2.8 5-10	1.6 2-10	1.1 8-10	2 7-10	9	2 1 0
99	A	.....	do.....	6.400	3.5 5-10	6 1-10	5.4 7-10	2.9 5-10	1.6 2-10	1.1	2 7-10	8 5-10	20 3 26
100	O	.....	do.....	6.300	3.5	6 1-10	5.3 7-10	2.8 5-10	1.6 2-10	1.1 8-10	2 7-10	9	21 0 13
101	A	.....	do.....	6.400	3.5 3-10	6 2-10	5.4 7-10	2.9 5-10	1.6 9-10	1.1	2 7-10	8 5 10	20 2 14
102	O	.....	do.....	6.300	3.5	6	5.3 7-10	2.8 5-10	1.6 9-10	1.1 8-10	2 7-10	9	21 0 14
103	A	.....	do.....	6.400	3.4 5-10	6 5-10	5.4 7-10	2.9 5-10	1.6 9-10	1.1	2 7-10	8 5-10	19 2 6
104	A	.....	do.....	6.400	3.5 4-10	5 7-10	5.4 7-10	2.9 5-10	1.6 9-10	1.1	2 7-10	8 5-10	19 1 24
105	A	.....	do.....	6.400	3.5	6 1-10	5.4 7-10	2.9 5-10	1.6 9-10	1.1	2 7-10	8 5-10	19 0 0
106	O	.....	do.....	6.300	3.3 3-10	7 8-10	5.3 7-10	2.8 5-10	1.6 9-10	1.1 8-10	2 7-10	9	19 3 17
107	O	.....	do.....	6.300	3.5	5 9-10	5.3 7-10	2.8 5-10	1.6 9-10	1.1 8-10	2 7-10	9	19 2 21
.....	.....	.....	do.....	.....	4.0	6 5-10	5.10	2.11	1.7 5-10	1.2	2 8-10	8 5-10	.....

THOS. AP CATESBY JONES, Captain and Inspector of Ordnance, United States Navy.

RECAPITULATION

Of gradual increase and classed guns at Charlestown, Massachusetts.

Nature of ordnance.	Class letter.	Charlestown, Mass.		
		Gradual increase.	Repairs.	New sloops.
42-pounders, long		43		
42-pounders, carronades	O	92	11	
32-pounders, long	A	167		
32-pounders, long	B		8	
32-pounders, long	C		4	
32-pounders, medium	B		73	
32-pounders, medium	C		15	
32-pounders, carronades	A		53	
32-pounders, carronades	O		53	
24-pounders, long	A		74	
24-pounders, long	C		5	
24-pounders, Congreve	A		12	
24-pounders, carronades	A		7	
18 pounders, long	A		7	
18-pounders, long	B		1	
18-pounders, ship	B		1	
18-pounders, carronades	A		11	
12-pounders, long	A		5	
12-pounders, ship	A		2	
9-pounders, medium	A		22	

RECAPITULATION

Of condemned and unclassed guns at Charlestown, Massachusetts.

Nature of ordnance.	Charlestown, Mass.		
	Defective from time or accident.	Defective in workman-ship.	Serviceable, but un-classed.
32-pounders, carronades		1	
24-pounders, long	4	2	
18-pounders, ship	1		
12-pounders, carronades			2
9-pounders, carriage guns			6
9-pounders, gunades			1
6-pounders, carriage guns			2
6-pounders, gunades		1	

Inspection return of ordnance at the United States navy yard, Brooklyn, New York.

0 01—A TOA

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnions.	Extreme diameter of breech.	Extreme diameter at the muzzle.	Diameter of the trunnions.	Length of the trunnions.	Weight.	Remarks.
1	B	Medium 32-pounder....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	<i>Cwt. gr. lb.</i> 51 0 14	From 1 to 19, inclusive, are medium 32-pounders, with raised vent fields, bored for locks; have trunnions in the centre, and are without breech rings.
2	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	53 0 0
3	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 2 14
4	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 3 14
5	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 0 10
6	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 0 14
7	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 3 0
8	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 0 14
9	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 0 0
10	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 2 0
11	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 2 14
12	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 0 0
13	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 0 14
14	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 0 0
15	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 1 14
16	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 0 0
17	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 0 0
18	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 0 0
19	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 3 0
20	Cdo.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 0 0	Nos. 20 and 21 have breech rings and raised vent fields, bored for locks, but their trunnions are below the centre.
21	C	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 2 23
22	Bdo.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 2 0	From 22 to 39, inclusive, have raised vent fields, bored for locks; have trunnions in the centre, and are without breech rings.
23	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 2 0
24	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 3 14
25	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 1 0
26	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 3 0
27	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 3 14
28	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 3 14
29	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 3 0
30	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 2 14
31	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 2 14
32	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 2 14
33	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 0 14
34	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 2 14
35	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 1 0
36	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	51 1 0
37	B	.....do.....	.....do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 3 14

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore-part of trunnions.	Extreme diameter at breech.	Extreme diameter at the muzzle.	Diameter of the trunnions.	Length of the trunnions.	Weight.	Remarks.
38	B	Medium 32-pounder....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	Cwt. gr. lb. 50 3 0	
39	B	do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 3 14	
40	C	do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 2 11	From 40 to 56, inclusive, are medium 32-pounders; have raised vent fields, bored for locks; have trunnions <i>below</i> the centre, and have breech rings, with the exception of No. 47, which has trunnions in the centre, and is without breech rings. All of these guns (from 1 to 56, inclusive,) are American manufacture, and the objection made to medium 32-pounders, at page 7, applies with equal force to this lot.
41	C	.....	do.....	6.420	7.9	1.6	9.3	4.8	1.9 7-10	1.3 8-10	6 5-10	6	50 3 6
42	C	10	do.....	6.420	7.8	1.6	9.2 5-10	4.7	1.9 7-10	1.3 8-10	6 5-10	6	51 0 11	
43	C	P HF 20	do.....	6.420	7.8	1.6	9.2 5-10	4.7	1.9 7-10	1.3 6-10	6 5-10	6	50 2 0	
44	C	P HF 22	do.....	6.420	7.8	1.6	9.2 5-10	4.7	1.9 7-10	1.3 6-10	6 5-10	6	50 2 23	
45	C	P HF 23	do.....	6.420	7.8	1.6	9.2 5-10	4.7	1.9 7-10	1.3 6-10	6 5-10	6	50 1 17	
46	C	P HF 9	do.....	6.420	7.8	1.6	9.3 5-10	4.9 5-10	1.9 5-10	1.3 6-10	6 5-10	6	51 0 0	
47	B	.....	do.....	6.420	7.8	1.6	9.3 5-10	4.9 5-10	1.9 5-10	1.3 6-10	6 5-10	6	51 0 0
48	C	HF 18	do.....	6.420	7.8	1.6	9.3 5-10	4.9 5-10	1.9 5-10	1.3 6-10	6 5-10	6	50 2 17	
49	C	HF 26	do.....	6.420	7.8	1.6	9.3 5-10	4.9 5-10	1.9 5-10	1.3 6-10	6 5-10	6	50 3 17	
50	C	HF 34	do.....	6.420	7.8	1.6	9.3 5-10	4.9 5-10	1.9 5-10	1.3 6-10	6 5-10	6	50 2 13	
51	C	HF 13	do.....	6.420	7.8	1.6	9.3 5-10	4.9 5-10	1.9 5-10	1.3 6-10	6 5-10	6	50 2 12	
52	C	HF 2	do.....	6.420	7.8	1.6	9.3 5-10	4.9 5-10	1.9 5-10	1.3 6-10	6 5-10	6	52 2 17	
53	C	HF 12	do.....	6.420	7.9	1.6	9.4	4.9	1.9	1.3 6-10	6	6 5-10	50 0 0	
54	C	HF 35	do.....	6.420	7.9	1.6	9.4	4.9	1.9	1.3 6-10	6	6 5-10	50 3 6	
55	C	HF 24	do.....	6.420	7.9	1.6	9.4	4.9	1.9	1.3 6-10	6	6 5-10	51 0 0	
56	C	HF 29	do.....	6.420	7.9	1.6	9.4	4.9	1.9	1.3 6-10	6	6 5-10	50 2 20	
57	B	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	50 3 0	From 57 to 88, inclusive, are medium 32-pounders, (Brandywine's present battery;) are American manufacture; have raised vent fields, bored for locks; have no breech rings, and their trunnions are in the centre. These guns have been badly treated; several of them are considerably honey-combed, and scales nearly one-tenth of an inch thick were taken by me from within the calibre of one of the chase guns. These guns are of the same description as those objected to at page 57.
58	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 0 0
59	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 2 14
60	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	50 3 0
61	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 0 0
62	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 0 14
63	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 1 0
64	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	50 2 14
65	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	50 3 14
66	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 0 0
67	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 0 0
68	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 3 0
69	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 3 14
70	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	50 3 14
71	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	50 3 14
72	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 1 0
73	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 1 14
74	B	.....	do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	50 2 0

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnions.	Extreme diameter at breech.	Extreme diameter at the muzzle.	Diameter of the trunnions.	Length of the trunnions	Weight.	Remarks.	
75	B	Medium 32-pounder....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	Cwt. gr. lb. 51 0 0	From 1 to 74, inclusive, are 42-pound carronades; have vent fields, bored for locks, and breech rings, with holes for screws. The following are exceptions to the above descriptions, viz: Nos. 1, 16, 26, and 30, have no breech rings; and Nos. 3, 9, 34, 50, 52, 55, 61, and 62, have had their breech rings broken off. These guns are said to be from the lakes, and are supposed to be of American manufacture, but have neither marks nor weights on them.	
76	B	.....	.....do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 2 14
77	B	.....	.....do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 1 14
78	B	.....	.....do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 0 14
79	B	.....	.....do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	50 2 14
80	B	.....	.....do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	50 3 0
81	B	.....	.....do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	50 2 14
82	B	.....	.....do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 2 0
83	B	.....	.....do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 2 0
84	B	.....	.....do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	50 1 0
85	B	.....	.....do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	50 1 14
86	B	.....	.....do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 0 0
87	B	.....	.....do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	50 2 14
88	B	.....	.....do.....	6.420	7.10	1.6	9.2 5-10	4.7 5-10	1.9 9-10	1.3 6-10	6 5-10	6	51 0 14
						Length of chamber.					Diameter of nave hole.	Length of nave.			
1	O	Carronade 42-pounder..	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9		
2	O	.....	.....do.....	.....	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
3	A	.....	.....do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
4	O	.....	.....do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
5	O	.....	.....do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
6	O	.....	.....do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
7	O	.....	.....do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
8	O	.....	.....do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
9	A	.....	.....do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
10	A	.....	.....do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
11	O	.....	.....do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
12	A	.....	.....do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
13	O	.....	.....do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
14	O	.....	.....do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
15	A	.....	.....do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
16	O	.....	.....do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
17	O	.....	.....do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
18	A	.....	.....do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
19	O	.....	.....do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	
20	O	.....	.....do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....	

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to centre of nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.
21	A	.....	Carronade 42-pounder..	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	<i>Cwt. gr. lb.</i>	
22	A	.....	do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
23	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
24	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
25	A	.....	do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
26	A	.....	do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
27	A	.....	do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
28	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
29	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
30	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
31	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
32	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
33	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
34	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
35	A	.....	do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
36	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
37	A	.....	do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
38	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
39	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
40	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
41	A	.....	do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
42	A	.....	do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
43	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
44	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
45	A	.....	do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
46	A	.....	do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
47	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
48	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
49	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
50	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
51	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
52	A	.....	do.....	7.018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
53	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
54	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
55	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
56	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
57	O	.....	do.....	6.900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to centre of nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.
													<i>Cwt. gr. lb.</i>	
58	O	.....	Carronade 42-pounder..	6,900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
59	A	.....	do.....	7,018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
60	A	.....	do.....	7,018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
61	A	.....	do.....	7,018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
62	A	.....	do.....	7,018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
63	A	.....	do.....	7,018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
64	A	.....	do.....	7,018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
65	A	.....	do.....	7,018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
66	A	.....	do.....	7,018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
67	A	.....	do.....	7,018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
68	A	.....	do.....	7,018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
69	A	.....	do.....	7,018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
70	A	.....	do.....	7,018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
71	O	.....	do.....	6,900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
72	A	.....	do.....	7,018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
73	O	.....	do.....	6,900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
74	A	.....	do.....	7,018	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
75	O	.....	do.....	6,900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
76	O	.....	do.....	6,900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
77	O	.....	do.....	6,900	3.9	6 2-10 to 7 8-10	5.9	2.9 5-10	1.8	1.2 5-10	3	9	.....
78	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
79	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
80	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
81	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
82	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
83	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
84	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
85	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
86	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
87	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
88	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
89	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
90	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
91	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
92	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
93	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
94	A	.....	do.....	7,018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....

Nos. 75, 76, and 77, are 42-pound carronades, have raised vent fields bored for locks, have breech rings, and holes for screws. Supposed to be American manufacture, but have neither marks nor weights on them.

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomition.	Length from extremity of pomition to centre of nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.
95	A	.....	Carronade 42-pounder..	7.018	3.10	6.5	5.8 5 10	2.9	1.8	1.2 5-10	3	9	<i>Cwt. gr. lb.</i>	
96	A	.....	do.....	7.018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
97	A	.....	do.....	7.018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
98	A	.....	do.....	7.018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
99	A	.....	do.....	7.018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
100	A	.....	do.....	7.018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
101	A	.....	do.....	7.018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
102	A	.....	do.....	7.018	3.10	6.5	5.8 5 10	2.9	1.8	1.2 5-10	3	9	.....
103	A	.....	do.....	7.018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
104	A	.....	do.....	7.018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5 10	3	9	.....
105	A	.....	do.....	7.018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
106	A	.....	do.....	7.018	3.10	6.5	5.8 5-10	2.9	1.8	1.2 5-10	3	9	.....
107	O	.....	do.....	6.900	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
108	O	.....	do.....	6.900	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
109	A	.....	do.....	7.018	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
110	O	.....	do.....	6.900	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
111	A	.....	do.....	7.018	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
112	A	.....	do.....	7.018	3.9 5-10	6.5	5.9 5 10	2.10	1.8	1.2 5-10	3	9	.....
113	A	.....	do.....	7.018	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
114	O	.....	do.....	6.900	3.9 5-10	6.5	5.9 5 10	2.10	1.8	1.2 5-10	3	9	.....
115	O	.....	do.....	6.900	3.9 5-10	6.6	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
116	O	.....	do.....	6.900	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
117	O	.....	do.....	6.900	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
118	A	.....	do.....	7.018	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
119	O	.....	do.....	6.900	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
120	A	.....	do.....	7.018	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
121	A	.....	do.....	7.018	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
122	O	.....	do.....	6.900	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
123	.....	.....	do.....	6.900	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5 10	3	9	.....
124	.....	.....	do.....	6.900	3.9 5-10	6.5	5.9 5-10	2.10	1.8	1.2 5-10	3	9	.....
1	A	.....	Carronade 32-pounder..	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8 10	8 5-10	.....	From 1 to 21, inclusive, are 32-pound carronades. All have raised vent fields, bored for locks, breech ring, and hole for screw; are without either marks or weights on them; are supposed to be American manufacture.
2	.....	.....	do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
3	.....	.....	do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
4	.....	.....	do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
5	.....	.....	do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
6	.....	.....	do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4 10	1.1 7-10	2 8-10	8 5-10	.....
7	.....	.....	do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to centre of nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.
													<i>Cwt. gr. lb.</i>	
8			Carronade 32-pounder ..	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
9			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
10			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
11			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
12			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
13			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
14			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
15			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
16			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
17			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
18			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
19			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
20			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
21			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
22			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....
23			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....	From 22 to 31, inclusive, are 32-pound carronades, have raised vent fields bored
24			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....	for locks, breech rings, and holes for screws; are without either marks or
25			do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....	weights on them; are supposed to be American manufacture.
26	A		do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....	Note.—There was no instrument at the Brooklyn navy yard by which guns
27	A		do.....	6.400	3.5	6 8-10	5.5	2.9 5-10	1.6 4-10	1.1 7-10	2 8-10	8 5-10	.....	could be weighed. A requisition was made by me for a balance of sufficient
28	A		do.....	6.400	3.5	6 8-10	5.4	2.7 5-10	1.5 8-10	1.1 4-10	2 8-10	8	.....	power to weigh cannon, but, as none could be obtained short of Boston, it did
29	A		do.....	6.400	3.5	6 8-10	5.3	2.7 5-10	1.5 8-10	1.1 4-10	2 8-10	8	.....	not arrive in time.
30	A		do.....	6.400	3.5	6 8-10	5.3	2.7 5-10	1.5 8-10	1.1 4-10	2 8-10	8	.....
31	A		do.....	6.400	3.5	6 8-10	5.3	2.7 5-10	1.5 8-10	1.1 4-10	2 8-10	8	.....
32	A		do.....	6.400	3.5	6 8-10	5.3	2.7 5-10	1.6	1.1 6-10	2 8-10	8	.....	No. 32 is a 32-pound carronade, has a screw hole and raised vent field; its
33	A		do.....	6.400	3.5	6 8-10	5.3	2.7 5-10	1.6	1.1 6-10	2 8-10	8	.....	breech ring is broken off.
34	A		do.....	6.400	3.5	6 8-10	5.3	2.7 5-10	1.6	1.1 6-10	2 8-10	8	.....	Nos. 33, 34, 35, 43, 44, and 48 have vent fields for locks, breech rings, and screw
35	A		do.....	6.400	3.5	6 8-10	5.3	2.7 5-10	1.6	1.1 6-10	2 8-10	8	.....	holes.
36	A		do.....	6.400	3.5	6 8-10	5.3	2.7 5-10	1.6	1.1 6-10	2 8-10	8	.....
37	A		do.....	6.400	3.5	6 8-10	5.3	2.7 5-10	1.6	1.1 6-10	2 8-10	8	.....	From 36 to 42, inclusive, and 45, 46, 47, 50, 53, 54, and 55 are 32-pound carron-
38	A		do.....	6.400	3.5	6 8-10	5.3	2.7 5-10	1.6	1.1 6-10	2 8-10	8	.....	ades, have raised vent fields for locks and breech rings, but no hole for screw.
39	A		do.....	6.400	3.5	6 8-10	5.3	2.7 5-10	1.6	1.1 6-10	2 8-10	8	.....
40	A		do.....	6.400	3.5	6 8-10	5.3	2.7 5-10	1.6	1.1 6-10	2 8-10	8	.....
41	A		do.....	6.400	3.5	6 8-10	5.4 5-10	2.9 5-10	1.6	1.1 6-10	2 8-10	8 5-10	.....
42	A		do.....	6.400	3.5	6 8-10	5.4 5-10	2.9 5-10	1.6	1.1 6-10	2 8-10	8 5-10	.....
43	A		do.....	6.400	3.5	6 8-10	5.3	2.7 7-10	1.6	1.1 6-10	2 8-10	8	.....

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to centre of nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.
													<i>Cwt. gr. lb.</i>	
44	A	.....	Carronade 32-pounder..	6.400	3.5	6 8-10	5.3	2.7 7-10	1.6	1.1 6-10	2 8-10	8	.....
45	A	.....	.....do.....	6.400	3.5	6 8-10	5.3	2.7 7-10	1.6	1.1 6-10	2 8-10	8	.....
46	A	.....	.....do.....	6.400	3.5	6 8-10	5.3	2.7 7-10	1.6	1.1 6-10	2 8-10	8	.....
47	A	.....	.....do.....	6.400	3.5	6 8-10	5.3	2.7 7-10	1.6	1.1 6-10	2 8-10	8	.....
48	A	.....	.....do.....	6.400	3.5	6 8-10	5.3 5-10	2.7 7-10	1.6	1.1 6-10	2 8-10	8	.....
49	A	.....	.....do.....	6.400	3.5	6 8-10	5.3 5 10	2.7 7-10	1.6	1.1 6-10	2 8-10	8	.....	Nos. 49, 51, and 52 are 32-pound carronades, have vent fields for locks, screw holes, but are without breech rings.
50	V	.....	.....do.....	6.400	3.5	6 8-10	5.3 5-10	2.7 7-10	1.6	1.1 6-10	2 8-10	8	.....	No. 50 unfit for the navy; nave defective in casting.
51	A	.....	.....do.....	6.400	3.5	6 8-10	5.3 5-10	2.7 7-10	1.6	1.1 6-10	2 8-10	8	.....	From 52 to 55, inclusive, are supposed to be American manufacture; they are without either marks or weights on them.
52	A	.....	.....do.....	6.400	3.5	6 8-10	5.3 5-10	2.7 7-10	1.6	1.1 6-10	2 8-10	8	.....
53	A	.....	.....do.....	6.400	3.5	6 8-10	5.4 5-10	2.9 5-10	1.6	1.1 6-10	2 8-10	8 5-10	.....
54	A	.....	.....do.....	6.400	3.5	6 8-10	5.4 5-10	2.9 5-10	1.6	1.1 6-10	2 8-10	8 5-10	.....
55	O	.....	.....do.....	6.300	3.5	6 8-10	5.4 5-10	2.9 5-10	1.6	1.1 6-10	2 8-10	8 5-10	.....
56	A	.....	.....do.....	6.400	3.5	6	5.5	2.9 5-10	1.6	1.1 6-10	2 8-10	8 5-10	.....
57	A	.....	.....do.....	6.400	3.5	.....	5.5	2.9 5-10	1.6	1.1 6-10	2 8-10	8 5-10	.....
58	A	.....	.....do.....	6.400	3.5	.....	5.5	2.9 5 10	1.6	1.1 6-10	2 8-10	8 5-10	.....
59	A	.....	.....do.....	6.400	3.5	.....	5.5	2.9 5-10	1.6	1.1 6-10	2 8-10	8 5-10	.....
60	A	.....	.....do.....	6.400	3.5	.....	5.5	2.9 5-10	1.6	1.1 6-10	2 8-10	8 5-10	.....
61	A	.....	.....do.....	6.400	3.5	.....	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
62	A	.....	.....do.....	6.400	3.5	.....	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
63	A	.....	.....do.....	6.400	3.5	.....	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
64	A	.....	.....do.....	6.400	3.5	.....	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
65	A	.....	.....do.....	6.400	3.5	.....	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
66	A	.....	.....do.....	6.400	3.5	.....	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
67	A	.....	.....do.....	6.400	3.5	.....	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
68	O	.....	.....do.....	6.300	3.5 5-10	4 8-10	5.3 5-10	2.7	1.6	1.1 4-10	2 8-10	8 5-10	.....
69	O	.....	.....do.....	6.300	3.6 5-10	5	5.3	2.7	1.5 5-10	1.0 5-10	2 8-10	8	.....
70	O	.....	.....do.....	6.300	3.6 5-10	5	5.3	2.7	1.5 5-10	1.0 5-10	2 8-10	8	.....
71	O	.....	.....do.....	6.300	3.5 5-10	4 8-10	5.3 5-10	2.7	1.6	1.1 4-10	2 8-10	8 5-10	.....
72	O	.....	.....do.....	6.300	3.5 5-10	4 8-10	5.3 5-10	2.7	1.6	1.1 4-10	2 8-10	8 5-10	.....
73	O	.....	.....do.....	6.300	3.5 5-10	4 8-10	5.3 5-10	2.7	1.6	1.1 4-10	2 8-10	8 5-10	.....
74	A	.....	.....do.....	6.400	3.5	6	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
75	O	.....	.....do.....	6.300	3.5 5-10	4 8 10	5.3 5-10	2.7	1.6	1.1 4-10	2 8-10	8 5-10	.....
76	A	.....	.....do.....	6 400	3.5	6	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
77	O	.....	.....do.....	6.300	3.5 5-10	4 8-10	5.3 5-10	2.7	1.6	1.1 4-10	2 8-10	8 5-10	.....
78	O	.....	.....do.....	6.300	3.7	4 8-10	5.3	2.7	1.5 5-10	1.6 5-10	2 8-10	8	.....
79	O	.....	.....do.....	6.300	3.6	5	5.3 5-10	2.7	1.6	1.1 4-10	2 8-10	8 5 10	.....
80	O	.....	.....do.....	6.300	3.6 5-10	5	5.3	2.7	1.5 5 10	1.0 5-10	2 8-10	8	.....

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

0 14—A TOA

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to centre of nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.
													<i>Cwt. gr. lb.</i>	
81	O	.....	Carronade 32-pounder..	6.300	3.6	5	5.3 5-10	2.7	1.6	1.1 4-10	2 8-10	8 5-10	.....
82	A	.....	.....do.....	6.400	3.5	6	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
83	O	.....	.....do.....	6.300	3.7	4 8-10	5.3	2.7	1.5 5-10	1.0 5-10	2 8-10	8	.....
84	A	.....	.....do.....	6.400	3 5	6	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
85	O	.....	.....do.....	6.300	3.6 5-10	4 4-10	5.3 5-10	2.7	1.6	1.1 4-10	2 8-10	8 5-10	.....
86	A	.....	.....do.....	6.400	3.5	6	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
87	A	.....	.....do.....	6.400	3.5	6	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
88	A	.....	.....do.....	6.400	3.5	6	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
89	A	.....	.....do.....	6.400	3 5	6	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
90	A	.....	.....do.....	6.400	3.5 5-10	5	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
91	A	.....	.....do.....	6.400	3.5	6	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
92	O	.....	.....do.....	6.300	3.6	4 5-10	5.3 5-10	2.7 5-10	1.6	1.1 4-10	2 8-10	8 5-10	.....
93	O	.....	.....do.....	6.300	3.6	4 8-10	5.3 5-10	2.7 5-10	1.6	1.1 4-10	2 8-10	8 5-10	.....
94	A	.....	.....do.....	6.400	3.5	6 5-10	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
95	A	.....	.....do.....	6.400	3.5	6 5-10	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
96	A	.....	.....do.....	6.400	3.5	6	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
97	O	.....	.....do.....	6.300	3 6 5-10	5	5.3 5-10	2.7	1.6	1.1 4-10	2 8-10	8 5-10	.....
98	A	.....	.....do.....	6.400	3.5	6	5.5	2.9 5-10	1.6	1.1 7-10	2 8-10	8 5-10	.....
99	O	.....	.....do.....	6.300	3.5 5-10	5	5.3 5-10	2.7	1.6	1.1 4-10	2 8-10	8 5-10	.....
100	O	.....	.....do.....	6.300	3.5 5-10	6	5.5	2.9 5-10	1.6 3-10	1.1 6-10	2 8-10	8 5-10	.....
101	A	.....	.....do.....	6.400	3.5 5-10	6	5.5	2.9 5-10	1.6 3-10	1.1 6-10	2 8-10	8 5-10	.....
102	O	.....	.....do.....	6.300	3.5 5-10	6	5.5	2.9 5-10	1.6 3-10	1.1 6-10	2 8-10	8 5-10	.....
103	A	.....	.....do.....	6.400	3.5 5-10	6	5.5	2.9 5-10	1.6 3-10	1.1 6-10	2 8-10	8 5-10	.....
104	A	.....	.....do.....	6.400	3 5 5-10	6	5.5	2.9 5-10	1.6 3-10	1.1 6-10	2 8-10	8 5-10	.....
105	A	.....	.....do.....	6.400	3 5 5-10	6	5.5	2.9 5-10	1.6 3-10	1.1 6-10	2 8-10	8 5-10	.....
106	A	.....	.....do.....	6.400	3.5 5-10	6	5.5	2.9 5-10	1 6 3-10	1.1 6-10	2 8-10	8 5-10	.....
107	A	.....	.....do.....	6.400	3.5 5-10	6	5.5	2.9 5-10	1.6 3-10	1.1 6-10	2 8-10	8 5-10	.....
108	O	.....	.....do.....	6.300	3.5 5-10	6	5.5	2.9 5-10	1.6 3-10	1.1 6-10	2 8-10	8 5-10	.....
109	O	.....	.....do.....	6.300	3.5 5-10	6	5.5	2.9 5-10	1.6 3-10	1.1 6-10	2 8-10	8 5-10	.....
110	A	.....	.....do.....	6.400	3.5 5-10	6	5.4	2.9	1.6	1.1 5-10	2 8-10	8	.....
111	O	.....	.....do.....	6.300	3.5 5-10	6	5.4	2.9	1.6	1.1 5-10	2 8-10	8	.....
112	A	.....	.....do.....	6.400	3.5 5-10	6	5.4	2.9	1.6	1.1 5-10	2 8-10	8	.....
113	O	.....	.....do.....	6.300	3.5 5-10	6	5.5	2.9	1.6	1.1 5-10	2 8-10	8	.....
114	A	.....	.....do.....	6.400	3.4 5-10	3.4 5-10	5.4 5-10	2.9	1.6	1.1 5-10	2 8-10	8	.....
115	A	.....	.....do.....	6.300	3.5	3.5	5.5	2.9	1.6	1.1 5-10	2 8-10	8	.....
116	O	.....	.....do.....	6.300	3.5 5-10	3.5 5-10	5.5	2.9	1.6	1.1 5-10	2 8-10	8	.....
117	Y	.....	.....do.....	6.300	3.5 5-10	3.5 5-10	5.5	2.9	1.6	1.1 5-10	2 8-10	8	.....	No. 117 has pomillion broken off, and is unfit for the navy.

From 88 to 99, inclusive, are 32-pound carronades; all have raised vent fields bored for locks, have breech rings, except No. 90, which has none, and No. 93 has breech rings broken off. Nos. 90, 92, 93, 97, and 99, have holes for screws. No. 97 is an English Crown gun; all the others are American manufacture.

From 100 to 121, inclusive, are 32-pound carronades; all have raised vent fields for locks, and breech rings. From 100 to 109, inclusive, and No. 119, have no screw hole. From 110 to 121, inclusive, have screw holes, except No. 119, which has none. Nos. 120 and 121 are English Crown guns, and have raised sight over reinforce ring; all the others are American manufacture.

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to centre of nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.
118	A	.....	Carronade 32-pounder..	6.400	3.5	3.5	5.4	2.9	1.6	1.1 5-10	2 8-10	8	<i>Cwt. gr. lb.</i>	
119	A	.....	.....do.....	6.400	3.5	3.5	5 4 5-10	2.9	1.6	1.1 5-10	2 8-10	8	.....
120	A	V	.....do.....	6.300	3.6 1-10	3.6 1-10	5.3	2.7 5-10	1.5 5-10	1.1	2 8-10	8 3-10	.....
121	O	V	.....do.....	6.300	3.6 1-10	3.6 1-10	5.3	2.7 5-10	1.5 5-10	1.1	2 7-10	8 3-10	17 0 0	
122	A	.....	.....do.....	6.400	3.5	3.5	5.4	2.9	1.6	1.1 5-10	2 8-10	8	.....	From 122 to 125 are 32-pound carronades; all have raised vent fields for locks, breech rings, and hole for screw, except No. 122, which has the breech ring broken off. No. 125 is an English Crown gun; the others are American manufacture.
123	A	.....	.....do.....	6.400	3.5	3.5	5.2	2.9	1.6	1.1 5-10	2 8-10	8	.....
124	A	.....	.....do.....	6.400	3.5	3.5	5.2	2.9	1.6	1.1 5-10	2 8-10	8	.....
125	O	V	.....do.....	6.300	3.6 5-10	3.6 5-10	5.3 5-10	2.7 5-10	1.5 5-10	1.1	2 8-10	8	17 3 0	
126	A	.....	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	From 126 to 141, inclusive, are 32-pound carronades; all have raised vent fields bored for locks, breech rings, and hole for screw. American manufacture. Mounted on board the Franklin, 74.
127	A	.....	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	
128	A	.....	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	
129	A	.....	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	
130	A	5	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	
131	A	7	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	
132	A	8	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	
133	A	.....	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	
134	A	.....	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	
135	A	.....	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-1	8	19 0 0	
136	A	.....	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	
137	A	3	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	
138	A	14	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	
139	A	9	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	
140	A	11	.....do.....	6.400	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	
141	O	19	.....do.....	6.300	3.5	6 5-10	5.4	2.9	1.5 7-10	1.1	2 8-10	8	19 0 0	
142	A	.....	.....do.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-0	1.1 4-10	2 8-10	8	.....	From 142 to 163, inclusive, are 32-pound carronades; all have raised vent fields bored for locks, breech rings, and hole for screw. American manufacture. Mounted on board, and are part of the Brandywine's armament. (Not gradual increase.)
143	A	.....	.....do.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8	.....
144	A	.....	.....do.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8	.....
145	A	.....	.....do.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8	.....
146	A	.....	.....do.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8	.....
147	A	.....	.....do.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8	.....
148	A	.....	.....do.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8	.....
149	A	.....	.....do.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8	.....
150	A	.....	.....do.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8	.....
151	A	.....	.....do.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8	.....
152	A	.....	.....do.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8	.....
153	A	.....	.....do.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8	.....
154	A	.....	.....do.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8	.....

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of diameter.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to centre of the nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of the nave hole.	Length of nave.	Weight.	Remarks.	
													<i>Cwt. gr. lb.</i>		
155	A	Carronade 33-pounder..	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8		
156	Ado.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8		
157	Ado.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8		
158	Ado.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8		
159	Ado.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8		
160	Ado.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8		
161	Ado.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8		
162	Ado.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8		
163	Ado.....	6.400	3.5	6 5-10	5.3	2.8	1.5 8-10	1.1 4-10	2 8-10	8		
1		Carronade 12-pounder..	2.4 5-10	4	3.7 5-10	1.11	1.0 6-10	0.9 6-10	2	6	6 2 7		From 1 to 8, inclusive, are 12-pound carronades. Nos. 1, 2, 3, and 8 have breech rings and hole for screw. Nos. 4 and 5 have breech rings, but no screw hole. Nos. 6 and 7 have holes for screws, but no breech rings, and are American manufacture. The others are English guns.	
2		.....	.....do.....	2.4 5-10	4	3.7 5-10	1.11	.....	0.9 6-10	2	6	6 2 7	
3		.....	.....do.....	2.4 5-10	4	3.7 5-10	1.11	.....	0.9 6-10	2	6	6 2 0	
4		.....	.....do.....	2.4 5-10	4	3.7 5-10	1.11	.....	0.9 6-10	2	6	6 0 18	
5		.....	.....do.....	2.4 5-10	4	3.7 5-10	1.11	1.0 4-10	0.9 6-10	.....	.....	8 0 1	
6		.....	.....do.....	2.7 5-10	5	4.0 5-10	2.0	1.1 1-10	0.9 1-10	2	5 7-10	.....		
7		.....	.....do.....	.....	5	4.0 5-10	2.0	1.1 1-10	0.9 1-10	2	5 7-10	.....		
8		.....	.....do.....	2.4 5-10	4	3.7 5-10	1.11	1.0 6-10	0.9	2	6	6 0 18	
1		Carronade 68-pounder..	2.5 5-10	8	6.10	3.5	1.9 7-10	1.3 7-10	3 5-10	10 2-10	35 2 21		No. 1 is a 68-pound carronade; has vent field for lock, and a raised sight, and a breech ring, but no hole for screw. English Crown gun. From 1 to 12, inclusive, are 24-pound carronades; have vent fields bored for locks, breech rings, and hole for screw, except No. 12, which has the breech ring broken off. All have raised sights, and are English guns.
1	O	V	Carronade 24-pounder..	5.660	3.3	4 3-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 21		
2	O	.....	.....do.....	5.660	3.3	4 3-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 21
3	O	V	.....do.....	5.660	3.3	4 3-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 14	
4	O	V	.....do.....	5.660	3.3	4 3-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 18	
5	O	V	.....do.....	5.660	3.3	4 3-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	13 0 2	
6	O	.....	.....do.....	5.660	3.3	4 3-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	13 0 2
7	O	V	.....do.....	5.660	3.3	4 3-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	13 1 10	
8	O	V	.....do.....	5.660	3.3	4 3-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	13 1 14	
9	O	V	.....do.....	5.660	3.3	4 3-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	13 1 25	
10	O	V	.....do.....	5.660	3.3	4 3-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 25	
11	O	.....	.....do.....	5.660	3.3	4 3-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 25
12	O	.....	.....do.....	5.660	3.3	4 3-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 25
13	Odo.....	5.660	3.4	3 5-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 2 0	From 13 to 23, inclusive, are 24-pound carronades. All have vent fields bored for locks, breech rings, and hole for screw. English manufacture.	
14	O	.....	.....do.....	5.660	3.4	3 5-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 0
15	O	.....	.....do.....	5.660	3.4	3 5-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 1 0
16	O	.....	.....do.....	5.660	3.4	3 5-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	13 0 0
17	O	.....	.....do.....	6.660	3.4	3 5-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 0
18	O	.....	.....do.....	5.660	3.4	3 5-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 7

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to centre of nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of the nave hole.	Length of nave.	Weight.	Remarks.
19	O	V 12	Carronade 24-pounder.	5.660	3.4	3 5-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	Cut. gr. 15. 13 0 0	
20	O	V 10	.....do.....	5.660	3.4	3 5-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 21	
21	O	V	.....do.....	5.660	3.4	3 5-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 0	
22	O	V	.....do.....	5.660	3.4	3 5-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 2 4	
23	O		.....do.....	5.660	3.4	3 5-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 0	
24	O		.....do.....	5.660	3.4	3 5-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 14	
25	O	G W 1798	.....do.....	5.660	3.4	3 5-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 14	
26	O		.....do.....	5.660	3.4	3 5-10	4.9 5-10	2.4 5-10	1.4	0.11 5-10	2 7-10	7 2-10	12 3 11	
27	O		.....do.....	5.660	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	.....	From 27 to 42, inclusive, are 24-pound carronades. All have raised vent fields bored for locks, breech rings, and hole for screw. American manufacture.
28	O		.....do.....	5.660	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	.....
29	A		.....do.....	5.800	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	.....
30	O		.....do.....	5.660	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	.....
31	A		.....do.....	5.800	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	.....
32	A		.....do.....	5.800	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	.....
33	A		.....do.....	5.800	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	.....
34	A		.....do.....	5.800	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	.....
35	A		.....do.....	5.800	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	.....
36	A		.....do.....	5.800	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	.....
37	A		.....do.....	5.800	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	.....
38	A		.....do.....	5.800	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	.....
39	A		.....do.....	5.800	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	.....
40	O		.....do.....	5.660	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	.....
41	A		.....do.....	5.800	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	13 0 0	
42	A		.....do.....	5.800	3.3	4 5-10	4.10 3-10	2.5	1.4 2-10	1.0	2 5-10	8	13 0 0	
1	O		Carronade 18-pounder.	5.200	2.11	3 9-10	4.3 5-10	2.2	1.2 5-10	0.10 5-10	2 2-10	6 5-10	.....	From 1 to 12, inclusive, are 18 pound carronades. All have vent fields bored for locks, breech rings, and holes for screws. Are English guns, except Nos. 1, 4, and 12, which are supposed to be American.
2	O		.....do.....	5.200	3.0	3 7-10	4.4 5-10	2.3	1.2 5-10	0.10 5-10	2 4-10	6 9-10	10 0 8	
3	O	P	.....do.....	5.200	3.0	3 7-10	4.4 5-10	2.3	1.2 5-10	0.10 5-10	2 4-10	6 9-10	.....
4	O		.....do.....	5.200	2.11	3 9-10	4.3 5-10	2.2	1.2 5-10	0.10 5-10	2 2-10	6 5-10	10 0 0	
5	O		.....do.....	5.200	3.0	3 7-10	4.4 5-10	2.3	1.2 5-10	0.10 5-10	2 4-10	6 9-10	10 0 14	
6	O	V	.....do.....	5.200	3.0	3 7-10	4.4 5-10	2.3	1.2 5-10	0.10 5-10	2 4-10	6 9-10	9 3 14	
7	O	P	.....do.....	5.200	3.0	3 7-10	4.4 5-10	2.3	1.2 5-10	0.10 5-10	2 4-10	6 9-10	.....
8	O		.....do.....	5.200	3.0	3 7-10	4.4 5-10	2.3	1.2 5-10	0.10 5-10	2 4-10	6 9-10	9 3 14	
9	O		.....do.....	5.200	3.0	3 7-10	4.4 5-10	2.3	1.2 5-10	0.10 5-10	2 4-10	6 9-10	9 2 14	
10	O	P	.....do.....	5.200	3.0	3 7-10	4.4 5-10	2.3	1.2 5-10	0.10 5-10	2 4-10	6 9-10	.....
11	O		.....do.....	5.200	3.0	3 7-10	4.4 5-10	2.3	1.2 5-10	0.10 5-10	2 4-10	6 9-10	.....
12	O		.....do.....	5.200	2 11	3 9-10	4.3 5-10	2.2	1.2 5-10	0.10 5-10	2 4-10	6 9-10	.....
13	O		.....do.....	5.200	2.11	4	4.3 7-10	2.2	1.2 5-10	0.10 5-10	2 2-10	6 5-10	10 0 0	From 13 to 23, inclusive are 18-pound carronades. All have raised vent fields bored for locks, with raised sights, breech rings and holes for screws, and are English Crown guns.

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class number.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
14	O		Carronade 18 pounder..	5.200	2.11	4	.....	4.4 5-10	2.2	1.2 5-10	0.10 5-10	2 2-10	6 5-10	<i>Cwt. gr. lb.</i> 10 0 0	
15	O		.....do.....	5.200	2.11	4	.....	4.4 5-10	2.2	1.2 5-10	0 10 5-10	2 2-10	6 5-10	10 0 21	
16	O	V	.....do.....	5.200	2.11	4	.....	4.4 5-10	2.2	1.2 5-10	0.10 5-10	2 2-10	6 5-10	9 3 14	
17	O		.....do.....	5.200	2.11	4	.....	4.4 5 10	2.2	1.2 5 10	0.10 5-10	2 2-10	6 5-10	10 0 21	
18	O	V	.....do.....	5.200	2.11	4	.....	4.4 5-10	2.2	1.2 5-10	0.10 5-10	2 2 10	6 5 10	9 2 14	
19	O	V	.....do.....	5.200	2 11	4	.....	4 4 5-10	2.2	1.2 5-10	0.10 5-10	2 2-10	6 5-10	10 0 0	
20	O	V	.....do.....	5.200	2.11	4	.....	4.4 5-10	2.2	1.2 5-10	0.10 5-10	2 2 10	6 5-10	10 0 14	
21	O	V	.....do.....	5.200	2.11	4	.....	4.4 5 10	2.2	1.2 5-10	0.10 5-10	2 2-10	6 5-10	9 3 21	
22	O	V	.....do.....	5.200	2.11	4	.....	4.4 5-10	2.2	1.2 5-10	0.10 5-10	2 2-10	6 5-10	10 1 3	
23	O	V	.....do.....	5.200	2.11	4	.....	4.4 5-10	2 2	1.2 5-10	0.10 5-10	2 2-10	6 5-10	9 3 14	
24	O	V	.....do.....	5.200	2.11	4	.....	4.4 5-10	2.2	1.2 5 10	0.10 5-10	2 2-10	6 5-10	10 0 0	
25	O	V	.....do.....	5.200	2.11	4	.....	4.4 5-10	2.2	1.2 5 10	0.10 5-10	2 2-10	6 5-10	9 3 0	
26	O	V	.....do.....	5.200	2.11	4	.....	4.4 5-10	2.2	1.2 5-10	0.10 5-10	2 2-10	6 5-10	10 1 0	
27	A		.....do.....	5.300	3.0 5-10	4	.....	4.7 5-10	2.4 5 10	1.2 8-10	0.11	2 2-10	7	.....	From 27 to 32, inclusive, are 18-pound carronades; all have raised vent
28	A		.....do.....	5.300	3.0 5-10	4	.....	4.7 5-10	2.4 5-10	1.2 8 10	0.11	2 2-10	7	.....	fields bored for locks, breech rings, and hole for screw, and are
29	A		.....do.....	5.300	2 11	5 5-10	.....	4.5 3-10	2.4 5-10	1.2 8-10	0.11	2 2-10	7	.....	American manufacture.
30	A		.....do.....	5.300	3.0 5-10	4	.....	4.7 5-10	2.4 5-10	1.2 8-10	0.11	2 2-10	7	.....
31	A		.....do.....	5.300	3.0 5-10	4	.....	4.7 5-10	2.4 5-10	1.2 8 10	0.11	2 2-10	7	.....
32	A		.....do.....	5.300	3.0 5-10	4	.....	4.7 5-10	2.4 5-10	1.2 8-10	0.11	2 2-10	7	.....
71	O		Carronade 42 pounder..												
20	A		Carronade 32-pounder..												
1			Gunade 18-pounder....	5.200	3.0 5-10	5 8-10	1.1 3-10	4.4 5-10	2.4 5-10	1.2 5-10	0.11	5	5	.....	From 1 to 3, inclusive, are 18-pound gunades; have vent fields for
2			.....do.....	5.200	3.0 5-10	4	1.1 3-10	4.4	2.4 5-10	1.2 5 10	0.11	4 5-10	4 5-10	.....	locks, breech rings, and trunnions <i>below</i> the centre. English manu-
3			.....do.....	5.200	3.0 5-10	4	1.1 3-10	4.4	2.4 5-10	1.2 5-10	0.11	4 5-10	4 5-10	.....	facture.
1			Gunade 12-gounder		3.4	.....	0.11 5-10	4.3	2.2 5-10	1.3	0.9 5-10	3 5-10	4	9 0 14	No. 1 is a 12-pound gunade; has raised vent field, breech rings, trun-
1			Gunade 6-pounder		2.9	.....	0.9 2-10	3.4	1.9 5-10	0.10 5-10	0.7 7-10	3 2-10	3 2-10	.....	nions <i>below</i> the centre. English manufacture.
2			.....do.....		2.9	.....	0.9 2 10	3.4	1 9 5-10	0 10 5 10	0.7 7-10	.....	.....	.....	Nos. 1 and 2 are 6-pound gunades; have raised vent fields, breech rings,
1	A	15	Gunade 18-pounder ...	5.250	5.2 5-10	6 5-10	1.1 5-10	4.9	3.6 5-10	1.4	0.11 5-10	5	5	14 0 2	and trunnions <i>below</i> the centre, and are English manufacture.
2	A	25	.....do.....	5.250	5.2 5-10	6 5-10	1.1 5-10	4.9	3.6 5 10	1.4	0.11 5 10	5	5	14 0 0	From 1 to 11, inclusive, are 18-pound gunades, with tulip muzzles;
3	A	12	.....do.....	5.250	5.2 5-10	6 5-10	1.1 5-10	4.9	3.6 5 10	1.4	0.11 5-10	5	5	14 0 0	have vent fields, <i>no</i> breech rings, and trunnions in the centre. Sup-
4	A	13	.....do.....	5.250	5.2 5-10	6 5 10	1.1 5-10	4.9	3 6 5-10	1.4	0.11 5-10	5	5	14 0 11	posed to be English manufacture.
5	A	8	.....do.....	5.250	5.2 5-10	6 5 10	1.1 5-10	4.9	3.6 5-10	1.4	0.11 5-10	5	5	14 0 11	
6	A		.....do.....	5.250	5.2 5-10	6 5-10	1.1 5-10	4.9	3.6 5-10	1.4	0.11 5-10	5	5	14 0 3	
7	A		.....do.....	5.250	5 2 5-10	6 5-10	1.1 5-10	4.9	3.6 5-10	1.4	0.11 5-10	5	5	14 0 15	
8	A		.....do.....	5.250	5.2 5-10	6 5-10	1.1 5-10	4.9	3.6 5-10	1.4	0.11 5-10	5	5	14 0 15	
9	A		.....do.....	5.250	5.2 5-10	6 5-10	1.1 5-10	4.9	3.6 5-10	1.4	0.11 5-10	5	5	14 0 0	

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.	
10	A	Gunade 18-pounder	5.250	5.2 5-10	6 5-10	1.1 5-10	4.9	3.6 5-10	1.4	0.11 5-10	5	5	<i>Cwt. lb. qr.</i> 14 0 6	From 1 to 4, inclusive, are light 12-pounders, without vent fields; no breech rings; trunnions in the centre American manufacture, army pattern, unfit for the navy.	
11	A	.....	do.....	5.250	5.2 5 10	6 5-10	1.1 5-10	4.9	3.6 5-10	1.4	0.11 5-10	5	5	14 0 8	
1	V	.....	Light 12-pounder.....	4.580	4.8 5-10	.....	0.11 3-10	5.9	3.0	1.1 5-10	0.9 5-10	4 2-10	4 5-10	.....	
2	V	.....	do.....	4.580	4.8 5-10	.....	0.11 3-10	5.9	3.0	1.1 5-10	0.9 5-10	4 2-10	4 5 10	.....	
3	V	.....	do.....	4.580	4.8 5-10	.....	0.11 3-10	5.9	3.0	1.1 5-10	0.9 5 10	4 2-10	4 5-10	.....	
4	V	.....	do.....	4.580	4.8 5-10	.....	0.11 3-10	5.9	3.0	1.1 5-10	0.9 5 10	4 2-10	4 5-10	.....	
1	Medium 24-pounder....	5.750	7.3	1.4 3-10	8.6 5-10	4.4 5-10	1.7 3-10	1.1 7-10	5 6-10	5 6-10	38 3 6		Nos. 1 and 2 are medium 24-pounders; have raised vent fields bored for locks; have breech rings, and the trunnions are below the centre. American manufacture. The objections made to medium 33-pounders at page 57 are equally applicable to these two guns.
2	.....	.....	do.....	5.750	7.3	.....	1.4 3-10	8.6 5-10	4.4 5-10	1.7 3-10	1.1 7-10	5 6-10	5 6-10	39 0 7
1	Med. nondescript 24-pr	5.800	6.0	1.4	7.4	3.9 5-10	1.8	1.2	6	6	33 1 2		From 1 to 5, inclusive, are medium nondescript 24-pounders; all have raised vent fields bored for locks, and have breech rings, and their trunnions are below the centre; double fortified nondescript 24 pounders. English Crown guns, unfit for the navy.
2	.....	.....	do.....	5.800	6.0	.....	1.4	7.4	3.9 5 10	1.8	1.2	6	6	32 3 14
3	.....	.....	do.....	5.800	6.0	.....	1.4	7.4	3.9 5-10	1.8	1.2	6	6	33 0 25
4	.....	.....	do.....	5.800	6.0	.....	1.4	7.5	3.9 5-10	1.8	1.2	6	6	33 0 14
5	.....	.....	do.....	5.800	6.0	.....	1.4	7.4	3.9 5-10	1.8	1.2	6	6	33 0 14
1	P	1798 W G	Long 6-pounder.....	3.600	5.2	1.0	6.2	2.11	1.3	0.10 5-10	4	4 5-10	15 0 7	Nos. 1, 2, 3, are long 6-pounders. Nos. 1 and 2 have raised vent fields bored for locks, no breech rings, trunnions below the centre. No. 3 has no vent field, no breech ring, and has trunnions below the centre. Nos. 1 and 2 are foreign manufacture; No. 3 English make, and mounted on board the Franklin.	
2	.....	.....	do.....	3 000	4.8 5-10	.....	0.10 6-10	5.7	2.10	1.0 8-10	0.9 6-10	4	4 5-10	11 0 0
3	P	1798 W G	do.....	3.600	5.2	.....	1.0	6.2	2.11	1.3	0.10 5-10	4	4 5-10	15 0 4	
1	V	Long 4-pounder.....	3.200	5.1	0.10 5-10	6.0 5 10	3.0	1.1 1-10	0.10 2 10	3	3 5-10	11 2 26	From 1 to 6, inclusive, are long doubled fortified 4-pounders; all have raised vent fields bored for locks, no breech rings, trunnions below the centre. All English Crown guns.	
2	.....	V	do.....	3.200	5.1	.....	0.10 5-10	6.0 5 10	3.0	1.1 1-10	0.10 2 10	3	3 5-10	11 2 12
3	.....	V	do.....	3.200	5.1	.....	0.10 5-10	6.0 5-10	3.0	1.1 1-10	0.10 2-10	3	3 5-10	11 1 26
4	.....	V	do.....	3.200	5.1	.....	0.10 5-10	6.0 5-10	3.0	1.1 1-10	0.10 2-10	3	3 5-10	11 2 19
5	.....	V	do.....	3 200	5.1	.....	0.10 5-10	6.0 5 10	3.0	1.1 1-10	0.10 2-10	3	3 5-10	11 2 5
6	.....	V	do.....	3.200	5.1	.....	0.10 5-10	6.0 5-10	3.0	1.1 1-10	0.10 2-10	3	3 5-10	11 2 12
7 to	Medium 4 pounder.....	Varying in length from 4 feet 7 inches to 5 feet.	
1	A	V	Congreve 24-pounder...	5.800	70	1.5 2-10	8.4	4.0	18	1.0	6	6	40 2 0	Nos. 1 and 2 are Congreve 24-pounders; have raised vent fields bored for locks, with raised sights over the reinforce rings, breech rings, and trunnions below the centre. English Crown guns. (See p. 55.)	
2	A	V	do.....	5 800	70	.....	1.5 2-10	8.4	4.0	18	1.0	6	6	40 2 1	
1	B	48	Long 32 pounder.....	6.400	8.8	1.6 9-10	10.1	5.1	1.10	1.3 5-10	6 4-10	6 4-10	55 0 0	From 1 to 17, inclusive, are long 32-pounders. All have raised vent fields bored for locks, with breech rings, and trunnions in the centre. American manufacture. No. 17 is defective in casting and unfit for the navy.	
2	B	52	do.....	6.400	8.8	.....	1.6 9-10	10.1	5.1	1.10	1.3 5-10	6 4-10	6 4-10	55 0 0	
3	B	26	do.....	6.400	8.8	.....	1.6 9-10	10.1	5.1	1.10	1.3 5-10	6 4-10	6 4-10	54 3 0	
4	B	12	do.....	6.400	8.8	.....	1.6 9-10	10.1	5.1	1.10	1.3 5 10	6 4-10	6 4 10	60 0 0	
5	B	6	do.....	6.400	8.8	.....	1.6 9-10	10.1	5.1	1.10	1.3 5-10	6 4-10	6 4-10	60 0 0	
6	B	62	do.....	6.400	8.8	.....	1.6 9-10	10.1	5.1	1.10	1.3 5-10	6 4-10	6 4-10	55 0 0	

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
7	B	33	Long 32 pounder.....	6.400	8.8	1.6 9 10	10.1	5.1	1.10	1.3 5-10	6 4-10	6 4 10	<i>Cwt. gr. lb.</i> 55 1 14	
8	B	24	.....do.....	6.400	8.8	1.6 9-10	10.1	5.1	1.10	1.3 5-10	6 4-10	6 4-10	55 0 0	
9	B	61	.....do.....	6.400	8.8	1.6 9-10	10.1	5.1	1.10	1.3 5-10	6 4-10	6 4-10	55 0 0	
10	B		.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4 10	6 5-10	6 5-10	63 2 0	
11	B	P	.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 1 7	
12	B		.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 2 0	
13	B	P	.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 2 7	
14	B		.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 1 0	
15	B		.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 1 7	
16	B		.....do.....	6.400	8.6	1.6 5-10	10 0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 1 21	
17	V		.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5 10	6 5-10	63 1 0	
18	V		.....do.....	6.300	8.8	1.7	10.2	5.3	1.10 5-10	1.4	6 5-10	6 5-10	64 2 3	From 18 to 22, inclusive, are long 32-pounders; raised vent fields bored for locks, with breech rings, and have trunnions <i>below</i> the centre; are unfit for the navy, being too small in bore, except Nos. 19 and 20, which are not too small. Supposed to be American manufacture.
19	C		.....do.....	6.400	8.8	1.7	10.2	5.3	1.10 5-10	1.4	6 5-10	6 5-10	65 0 0	
20	C		.....do.....	6.400	8.8	1.7	10.2	5.3	1.10 5-10	1.4	6 5 10	6 5-10	64 1 0	
21	V		.....do.....	6.300	8.8	1.7	10.2	5.3	1.10 5-10	1.4	6 5-10	6 5 10	63 0 0	
22	V		.....do.....	6.300	8.8	1.7	10.2	5.3	1.10 5-10	1.4	6 5-10	6 5 10	65 3 0	
23	B	21	.....do.....	6.400	8.8	1.6 2-10	10.1	5.1	1.10	1.3 5-10	6 4-10	6 4-10	55 0 0	From 23 to 28, inclusive, are long 32-pounders; all have raised vent fields bored for locks; have breech rings, and trunnions <i>in</i> the centre, except Nos. 24 and 25, which have no breech rings. American manufacture.
24	B	54	.....do.....	6.400	8.8	1.6 2-10	10.1	5.1	1.10	1.3 5-10	6 4-10	6 4-10	55 0 0	
25	B	69	.....do.....	6.400	8.8	1.6 2-10	10.1	5.1	1.10	1.3 5-10	6 4-10	6 4-10	55 0 0	
26	B	63	.....do.....	6.400	8.8	1.6 2-10	10.1	5.1	1.10	1.3 5-10	6 4-10	6 4-10	55 0 0	
27	B	P	.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 1 7	
28	B	P	.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 1 21	
29	B	P	.....do.....	6.400	8.6	1.6 5-10	10 0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5 10	63 0 14	
30	B	P	.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 0 14	
31	B	P	.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 1 0	
32	B	P	.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 1 7	
33	B	P	.....do.....	6.400	8.6	1.6 5-10	10 0	5.0 5-10	1.10 8-10	1.3 4-10	6 5 10	6 5-10	63 1 0	
34	B	P	.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 1 0	
35	B	P	.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 0 21	
36	B	P	.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 1 21	
37	B	P	.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8 10	1.3 4-10	6 5-10	6 5-10	63 1 0	
38	B	P	.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.10 8-10	1.3 4-10	6 5-10	6 5-10	63 2 14	
39	V	P	.....do.....	6.300	8.8	1.7	10.2	5.3	1.10 5-10	1.4	6 5-10	6 5-10	65 0 0	From 39 to 48, inclusive, are long 32-pounders; all have raised vent fields bored for locks; have breech rings, and have trunnions <i>below</i> the centre. All are unfit for the navy, being too small in the bore, except No. 43, which is not too small. Supposed to be foreign manufacture.
40	V	P	.....do.....	6.300	8.8	1.7	10.2	5.3	1.10 5-10	1.4	6 5-10	6 5-10	63 3 0	
41	V	P	.....do.....	6.300	8.8	1.7	10.2	5.3	1.10 5-10	1.4	6 5-10	6 5-10	61 2 0	
42	V	P	.....do.....	6.300	8.8	1.7	10.2	5.3	1.10 5-10	1.4	6 5-10	6 5-10	63 0 0	
43	C	P	.....do.....	6.400	8.8	1.7	10.2	5.3	1.10 5 10	1.4	6 5-10	6 5-10	62 2 0	

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
44	V	P	Long 33-pounder.....	6.300	8.8	1.7	10.2	5.3	1.10 5-10	1.4	6 5-10	6 5-10	<i>Cwt, gr. lb.</i> 61 3 11	Nos. 49 and 50 are long 32-pdrs.; have raised vent fields bored for locks; have breech rings, and have trunnions <i>below</i> the centre. Are English manufacture. No. 51, long 32-pounder, unfit for the navy, being defective in the casting.
45	V	P	.....do.....	6.300	8.8	1.7	10.2	5.3	1.10 5 10	1.4	6 5-10	6 5-10	63 1 0
46	V	P	.....do.....	6.300	8 8	1.7	10 2	5.3	1.10 5-10	1.4	6 5-10	6 5-10	64 3 0
47	V	P	.....do.....	6.300	8.8	1.7	10.2	5.3	1.10 5-10	1.4	6 5 10	6 5-10	65 1 0
48	V	P	.....do.....	6.300	8 8	1.7	10.2	5.3	1.10 5-10	1.4	6 5-10	6 5-10	66 0 0
49	C	P	.....do.....	6.400	8.11 5-10	1.6	10.4 5-10	5 3	1.10	1.4 5-10	6 5-10	6 5-10	55 1 14
50	C	P 179 N G	.....do.....	6.400	8.11 5-10	1.6	10 4 5-10	5.3	1.10	1.4 5-10	6 5-10	6 5-10	55 1 0
51	V	P	.....do.....	6.400	8.6	1.6 5-10	10.0	5.0 5-10	1.0 5-10	1.3 4-10	6 5-10	6 5-10	63 1 4
52	B	P	.....do.....	6.400	8.5 5-10	1.7	10.0	5 0 5-10	1 11	1.3 5-10	6 5-10	6 5-10	63 1 14
53	B	P	.....do.....	6.400	8.5 5-10	1.7	10 0	5.0 5-10	1.11	1.3 5-10	6 5-10	6 5-10	63 2 14
54	B	P	.....do.....	6.400	8.5 5-10	1.7	10.0	5.0 5-10	1.11	1.3 5-10	6 5-10	6 5-10	63 1 14
55	B	P	.....do.....	6.400	8.5 5-10	1.7	10.0	5.0 5-10	1.11	1.3 5-10	6 5-10	6 5-10	63 0 7
56	B	P	.....do.....	6.400	8.5 5-10	1.7	10.0	5.0 5-10	1.11	1.3 5-10	6 5-10	6 5-10	63 0 21
57	B	P	.....do.....	6.400	8.5 5-10	1.7	10.0	5.0 5-10	1.11	1.3 5-10	6 5-10	6 5-10	63 1 14
58	B	68	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	54 3 8
59	B	4	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-12	6 5-10	6 5 10	60 0 0
60	B	51	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	54 2 6
61	B	21	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 2 0
62	B	40	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 0 0
63	B	8	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3 10	6 5-10	6 5-10	60 0 0
64	B	59	.....do.....	6.400	8.7 5-10	1.6 2 10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 0 0
65	B	35	.....do.....	6.400	8.7 5-10	1.6 2-10	10 1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 2 14
66	B	66	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5 10	55 2 0
67	B	64	.....do.....	6.400	8.7 5-10	1.6 2-10	10 1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	60 0 0
68	B	46	.....do.....	6.400	8.7 5 10	1 6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	60 0 0
69	B	69	.....do.....	6.400	8.7 5 10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	60 0 0
70	B	51	.....do.....	6.400	8.7 5 10	1.6 2-10	10 1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	60 0 0
71	B	50	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 3-10	6 5-10	60 0 0
72	B	34	.....do.....	6.400	8.7 5 10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 3 14
73	B	48	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 0 0
74	B	44	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5 10	55 0 0
75	B	47	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 0 0
76	B	43	.....do.....	6.400	8.7 5-10	1.6 2 10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 0 0
77	B	67	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1 3 3-10	6 5-10	6 5-10	55 0 0
78	B	41	.....do.....	6.400	8.7 5-10	1.6 2 10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 0 0
79	B	64	.....do.....	6.400	8.7 5 10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5 10	55 0 0
80	B	30	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 2 0

NOTE.—There must be an error in marking the weight on these guns; for it is manifest that guns, corresponding so nearly as they do in all their dimensions, cannot vary from five to eight hundredweight, as appears by their marks. I had no means of weighing them, but consider about sixty hundredweight to be the true weight.

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

9 74 A TOA

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
81	B	36	Long 32-pounder.	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	Cwt. qr. lb.	
82	B	29	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 0 0	
83	B	37 or 31	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 0 0	
84	B	49	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 0 0	
85	B	37	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 0 0	
86	B	10	.....do.....	6.400	8.7 5-10	1.6 2-10	10.1	5.1	1.10	1.3 3-10	6 5-10	6 5-10	55 0 0	
87	V		.....do.....	6.360	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 4-10	6 5-10	6 5-10	60 0 0	
88	O		.....do.....	6.420	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 4-10	6 5-10	6 5-10	63 3 0	
89	O		.....do.....	6.430	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 4-10	6 5-10	6 5-10	65 0 0	
90	V		.....do.....	6.360	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 4-10	6 5-10	6 5-10	61 0 0	
91	O		.....do.....	6.400	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 4-10	6 5-10	6 5-10	61 0 0	
92	V		.....do.....	6.300	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	64 0 0	
93	O		.....do.....	6.400	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	62 2 0	
94	O		.....do.....	6.400	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	62 3 14	
95	C		.....do.....	6.300	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	62 3 0	
96	V		.....do.....	6.340	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	64 1 4	
97	V		.....do.....	6.320	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	62 1 0	
98	V		.....do.....	6.360	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	64 3 0	
99	V		.....do.....	6.230	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	64 3 0	
100	V		.....do.....	6.300	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	65 0 0	
101	V		.....do.....	6.350	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	66 1 0	
102	V		.....do.....	6.350	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	63 3 0	
103	V		.....do.....	6.350	8.7 5-10	1.7	10.2 5-20	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	62 0 0	
104	V		.....do.....	6.350	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	63 0 0	
105	V		.....do.....	6.350	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	62 1 0	
106	V		.....do.....	6.350	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	62 2 0	
107	O		.....do.....	6.400	8.7 5-10	1.7	10.2 5-10	5.3 5-10	1.10 3-10	1.4 3-10	6 5-10	6 5-10	63 0 0	
108	C	P 1798 W G	.....do.....	6.400	8.11 5-10	1.5 7-10	10.4 5-10	5.3	1.10 3-10	1.4 5-10	6 5-10	6 5-10	55 1 9	
109	C	P 1798 W G	.....do.....	6.400	8.11 5-10	1.5 7-10	10.4 5-10	5.3	1.10 3-10	1.4 5-10	6 5-10	6 5-10	55 1 2	
110	C	P 1798 W G	.....do.....	6.400	8.11 5-10	1.5 7-10	10.4 5-10	5.3	1.10 3-10	1.4 5-10	6 5-10	6 5-10	55 1 2	
111	C	90	.....do.....	6.400	9.0	1.6 7-10	10.8	5.4	1.10 3-10	1.4	6 5-10	6 5-10	62 1 0	
112	O	82	.....do.....	6.400	9.0	1.6 7-10	10.8	5.4	1.10 3-10	1.4	6 5-10	6 5-10	63 2 11	
113	C	72	.....do.....	6.400	9.0	1.6 7-10	10.7 3-10	5.4	1.10 3-10	1.4	6 5-10	6 5-10	62 0 17	
114	C	79	.....do.....	6.400	9.0	1.6 7-10	10.7 3-10	5.4	1.10 3-10	1.4	4 5-10	6 5-10	62 2 0	
115	V		.....do.....	6.340	9.0	1.6 7-10	10.7 3-10	5.4	1.10 3-10	1.4	6 5-10	6 5-10	60 6 0	
116	B	P	.....do.....	6.400	9.0	1.6 7-10	10.7 3-10	5.4	1.10 3-10	1.4	6 5-10	6 5-10	63 2 7	
117	B		.....do.....	6.400	9.0	1.6 7-10	10.7 3-10	5.4	1.10 3-10	1.4	6 5-10	6 5-10	63 1 14	

From 87 to 107, inclusive, are long 32-pounders. All have raised vent fields bored for locks; have breech rings, and have trunnions below the centre; unfit for the navy, being too small in the bore, except Nos. 88, 89, 91, 93, 94, and 107. No. 98 very roughly cast. No. 91 doubtful. Are American manufacture.

Nos. 108, 109, and 110, are long 32-pounders; have raised vent fields bored for locks; have breech rings, and have trunnions below the centre. Are English Crown guns.

Nos. 111 and 112 are long 32-pounders; have raised vent fields bored for locks; have breech rings, and have trunnions below the centre. American manufacture.

From 113 to 127, inclusive, are long 32-pounders. All have raised vent fields bored for locks; have breech rings and have trunnions in the centre except the following, viz: Nos. 113, 144, and 115, which have trunnions below the centre. Nos. 123 and 127 have no breech rings, and 126 has its breech ring broken off. No. 115 is unfit for the navy, being only 6.340 in the bore. No. 127 is very badly bored, and is unfit for the navy. All are American manufacture.

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
													<i>Cwt. gr. lb.</i>	
118	B	.....	Long 32-pounder.....	6.400	9.0	1.6 7-10	10.7 3-10	5.4	1.10 3-10	1.4	6 5-10	6 5-10	63 1 21	
119	B	.....	.....do.....	6.400	9.0	1.6 7-10	10.7 3-10	5.4	1.10 3-10	1.4	6 5-10	6 5-10	63 1 7	
120	B	P	.....do.....	6.400	9.0	1.6 7-10	10.7 3-10	5.4	1.10 3-10	1.4	6 5-10	6 5-10	63 1 21	
121	B	.....	.....do.....	6.400	9.0	1.6 7-10	10.7 3-10	5.4	1.10 3-10	1.4	6 5-10	6 5-10	63 1 0	
122	B	1	.....do.....	6.400	8.8	1.6 7-10	10.1	5.2	1.9 8-10	1.3 4-10	6 5-10	6 5-10	60 0 0	
123	B	50	.....do.....	6.400	8.8	1.6 7-10	10.1	5.2	1.9 8-10	1.3 4-10	65-10	6 5-10	54 1 0	
124	B	16	.....do.....	6.400	8.8	1.6 7-10	10.1	5.2	1.9 8-10	1.3 4-10	6 5-10	6 5-10	60 0 0	
125	B	39	.....do.....	6.400	8.8	1.6 7-10	10.1	5.2	1.9 8-10	1.3 4-10	6 5-10	6 5-10	55 0 0	
126	B	32	.....do.....	6.400	8.8	1.6 7-10	10.1	5.2	1.9 8-10	1.3 4-10	6 5-10	6 5-10	55 0 0	
127	V	56	.....do.....	6.400	8.8	1.6 7-10	10.1	5.2	1.9 8-10	1.3 4-10	6 5-10	6 5-10	55 0 0	
128	B	P	.....do.....	6.400	8.6	1.7 2-10	10.0	5.0	1.11	1.3 6-10	6 5-10	6 5-10	68 1 7	
129	B	100	.....do.....	6.400	8.10	1.6 5-10	10.6	5.4	1.10	1.4	5-10	6 5-10	62 1 10	
130	B	79	.....do.....	6.400	8.7 5-10	1.6 -10	10.1 5-10	5.2	1.9 6-10	1.3 5-10	6 5-10	6 5-10	60 0 0	
131	B	97	.....do.....	6.400	8.10	1.6 5-10	10.5 5-10	5.4	1.10 2-10	1.3 5-10	6 5-10	5-10	62 0 4	
132	B	145	.....do.....	6.400	8.10	1.6 5-10	10.7	5.4	1.10 2-10	1.4	6 5-10	6 5-10	62 2 4	
133	C	71	.....do.....	6.400	9.0	1.6 5-10	10.7 5-10	5.4	1.9 6-10	1.3 5-10	6 5-10	6 5-10	61 3 17	
134	C	78	.....do.....	6.400	9.0	1.6 5-10	10.7 5-10	5.4	1.10	1.4	6 5-10	5-10	62 1 11	
135	C	73	.....do.....	6.400	9.0	1.6 5-10	10.7	5.4	1.10 5-10	1.3 7-10	6 5-10	6 5-10	62 1 3	
136	B	55	.....do.....	6.400	8.7 5-10	1.6 5-10	10.0 5-10	5.2	1.9 6-10	1.3 9-10	6 5-10	6 5-10	55 0 0	
137	C	75	.....do.....	6.400	9.0	1.6 5-10	10.6	5.4	1.10 4-10	1.3 7-10	6 5-10	6 5-10	62 0 19	
138	C	80	.....do.....	6.400	9.0	1.6 5-10	10.7 5-10	5.4	1.10 4-10	1.4 2-10	6 5-10	6 5-10	62 2 6	
139	B	28	.....do.....	6.400	8.7 5-10	1.6	10.1 5-10	5.2	1.9 6-10	1.3 4-10	6 5-10	6 5-10	60 0 0	
140	C	88	.....do.....	6.400	9.0	1.6 5-10	10.7	5.4	1.10 2-10	1.4	6 5-10	6 5-10	62 1 17	
141	B	40	.....do.....	6.400	8.7	1.6	10.1	5.2	1.9 6-10	1.3 2-10	6 5-10	6 5-10	55 0 0	
142	B	25	.....do.....	6.400	8.8	1.6	10.1	5.2	1.9 6-10	1.3 2-10	6 6-10	6 5-10	55 1 0	
143	C	.....	.....do.....	6.400	8.7	1.6 6-10	10.2 5-10	5.2 5-10	1.10 5-10	1.4 2-10	6 5-10	6 5-10	63 3 0	
144	C	25	.....do.....	6.400	8.7	1.6 6-10	10.2 5-10	5.2 5-10	1.10 5-10	1.4 2-10	6 5-10	6 5-10	64 0 0	
145	V	.....	.....do.....	6.340	8.7	1.6 6-10	10.2 5-10	5.2 5-10	1.10 5-10	1.4 2-10	6 5-10	6 5-10	64 2 11	
146	B	13	.....do.....	6.400	8.8	1.6 2-10	10.1	5.2	1.9 6-10	1.3 4-10	6 5-10	6 5-10	60 0 0	
147	B	.....	.....do.....	6.400	8.8	1.6 2-10	10.1	5.2	1.9 6-10	1.3 4-10	6 5-10	6 5-10	60 0 0	
148	B	58	.....do.....	6.400	8.8	1.6 2-10	10.1	5.2	1.9 6-10	1.3 4-10	6 5-10	6 5-10	60 0 0	
149	B	21	.....do.....	6.400	8.8	1.6 2-10	10.1	5.2	1.9 6-10	1.3 4-10	6 5-10	6 5-10	60 0 0	
150	B	19	.....do.....	6.400	8.8	1.6 2-10	10.1	5.2	1.9 6-10	1.3 4-10	6 5-10	6 5-10	60 0 0	
151	B	53	.....do.....	6.400	8.8	1.6 2-10	10.1	5.2	1.9 6-10	1.3 4-10	6 5-10	6 5-10	55 0 0	
152	B	.....	.....do.....	6.400	8.6	1.7 2-10	10.1	5.0	1.10 7-10	1.3 7-10	6 5-10	6 5-10	63 1 7	
153	B	P	.....do.....	6.400	8.6	1.7 2-10	10.1	5.0	1.10 7-10	1.3 7-10	6 5-10	6 5-10	63 1 7	
154	B	P	.....do.....	6.400	8.6	1.7 2-10	10.1	5.0	1.10 7-10	1.3 7-10	6 5-10	6 5-10	63 2 7	

From 128 to 142, inclusive, are long 32-pounders. All have raised vent fields bored for locks, and breech rings, except No. 136, which has no breech ring. Nos. 128, 129, 130, 131, 132, 136, 139, 141, and 142 have trunnions in the centre; Nos. 133, 134, 135, 137, and 140 have trunnions below the centre. All are American manufacture.

From 143 to 151, inclusive, are long 32-pounders. All have raised vent fields bored for locks, and have breech rings, except Nos. 148 and 151, which have none. Nos. 146, 147, 148, 149, and 150 have trunnions in the centre; Nos. 143, 144, and 145 have trunnions below the centre; No. 145 is unfit for the navy, being too small in the bore—is 6.340. All are American manufacture.

From 152 to 164, inclusive, are long 32-pounders. All have raised vent fields bored for locks; have breech rings, and have trunnions in the centre. Are American manufacture.

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnion.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
155	B	Long 32-pounder.....	6.400	8.6	1.7 2-10	10.1	5.0	1.10 7-10	1.3 7-10	6 5-10	6 5-10	63 1 14	From 165 to 181, inclusive, are long 32-pounders. All have raised vent fields bored for locks; have breech rings, and have trunnions in the centre. Are American manufacture.
156	B	.....	.....do.....	6.400	8.6	1.7 2-10	10.1	5.0	1.10 7-10	1.3 7-10	6 5-10	6 5-10	63 1 21
157	B	P	.....do.....	6.400	8.6	1.7 2-10	10.1	5.0	1.10 7-10	1.3 7-10	6 5-10	6 5-10	63 1 14
158	B	P	.....do.....	6.400	8.6	1.7 2-10	10.1	5.0	1.10 7-10	1.3 7-10	6 5-10	6 5-10	63 1 7
159	B	P	.....do.....	6.400	8.6	1.7 2-10	10.1	5.0	1.10 7-10	1.3 7-10	6 5-10	6 5-10	63 1 7
160	B	P	.....do.....	6.400	8.6	1.7 2-10	10.1	5.0	1.10 7-10	1.3 7-10	6 5-10	6 5-10	63 1 4
161	B	P	.....do.....	6.400	8.6	1.7 2-10	10.1	5.0	1.10 7-10	1.3 7-10	6 5-10	6 5-10	63 2 21
162	B	P	.....do.....	6.400	8.6	1.7 2-10	10.1	5.0	1.10 7-10	1.3 7-10	6 5-10	6 5-10	63 1 7
163	B	P	.....do.....	6.400	8.6	1.7 2-10	10.1	5.0	1.10 7-10	1.3 7-10	6 5-10	6 5-10	63 2 21
164	B	P	.....do.....	6.400	8.6	1.7 2-10	10.1	5.0	1.10 7-10	1.3 7-10	6 5-10	6 5-10	63 0 14
165	B	66	.....do.....	6.400	8.7	1.6	10.1	5.1	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0
166	B	60	.....do.....	6.400	8.7	1.6	10.1	5.1	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0
167	B	.....	.....do.....	6.400	8.7	1.6	10.1	5.1	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0
168	B	39	.....do.....	6.400	8.7	1.6	10.1	5.1	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0
169	B	33	.....do.....	6.400	8.7	1.6	10.1	5.1	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0
170	B	71	.....do.....	6.400	8.7	1.6	10.1	5.1	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0
171	B	74	.....do.....	6.400	8.7	1.6	10.1	5.1	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0
172	B	63	.....do.....	6.400	8.7	1.6	10.1	5.1	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0
173	B	65	.....do.....	6.400	8.7	1.6	10.1	5.1	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0
174	B	P	.....do.....	6.400	8.7	1.7	10.1	5.1	1.10 5-10	1.3 5-10	6 5-10	6 5-10	63 0 0
175	B	.....	.....do.....	6.400	8.11	1.6 5-10	10.7	5.3 5-10	1.10 3-10	1.3 9-10	6 2-10	6 2-10	62 2 17
176	B	134	.....do.....	6.400	8.11	1.6 5-10	10.7	5.3 5-10	1.10 3-10	1.3 9-10	6 2-10	6 2-10	62 0 15
177	B	.....	.....do.....	6.400	8.11	1.6 5-10	10.7	5.3 5-10	1.10 3-10	1.3 9-10	6 2-10	6 2-10	62 0 14
178	B	147	.....do.....	6.400	8.11	1.6 5-10	10.7	5.3 5-10	1.10 3-10	1.3 9-10	6 2-10	6 2-10	62 1 23
179	B	144	.....do.....	6.400	8.11	1.6 5-10	10.7	5.3 5-10	1.10 3-10	1.3 9-10	6 2-10	6 2-10	62 2 12
180	B	133	.....do.....	6.400	8.11	1.6 5-10	10.7	5.3 5-10	1.10 3-10	1.3 9-10	6 2-10	6 2-10	62 2 14
181	B	.....	.....do.....	6.400	8.11	1.6 5-10	10.7	5.3 5-10	1.10 3-10	1.3 9-10	6 2-10	6 2-10	62 2 0
182	B	142do.....	6.400	8.11	1.6 5-10	10.7	5.3 5-10	1.10 3-10	1.4	6 2-10	6 2-10	62 2 16	Nos. 182, 183, and 184 are long 32-pounders. All have raised vent fields bored for locks; have breech rings, and have trunnions in the centre.
183	B	105	.....do.....	6.400	8.11	1.6 5-10	10.7	5.3 5-10	1.10 3-10	1.4	6 2-10	6 2-10	61 2 14
184	B	148	.....do.....	6.400	8.11	1.6 5-10	10.7	5.3 5-10	1.10 3-10	1.4	6 2-10	6 2-10	62 2 17
185	B	70do.....	6.400	8.7	1.6	10.1 5-10	5.3 5-10	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0	From 185 to 194, inclusive, are long 32-pounders. All have raised vent fields bored for locks; have breech rings, and have trunnions in the centre; are mounted on board the Franklin, 74. From 185 to 194, inclusive, are American manufacture, and are said to be part of the Franklin's armament.
186	B	61	.....do.....	6.400	8.7	1.6	10.1 5-10	5.3 5-10	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0
187	B	58	.....do.....	6.400	8.7	1.6	10.1 5-10	5.3 5-10	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0
188	B	59	.....do.....	6.400	8.7	1.6	10.1 5-10	5.3 5-10	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0
189	B	41	.....do.....	6.400	8.9	1.6	10.1 5-10	5.3 5-10	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0
190	B	57	.....do.....	6.400	8.7	1.6	10.1 5-10	5.3 5-10	1.9 7-10	1.3 5-10	6 5-10	6 5-10	60 0 0
191	B	P 1	.....do.....	6.400	8.7	1.6	10.1 5-10	5.3 5-10	1.10 3-10	1.3 5-10	6 5-10	6 5-10	63 2 0

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
192	B	67	Long 32-pounder.....	6.400	8.7	1.6	10.1 5-10	5.3 5-10	1.9 7-10	1.3 5-10	6 5-10	6 5-10	Cwt. gr. lb.	
193	B	191	.....do.....	6.400	8.11	1.6 5-10	10.7	5.3 5-10	1.10 3-10	1.3 5-10	6 2-10	6 2-10	60 0 0	
194	B	146	.....do.....	6.400	8.11	1.6 5-10	10.7	5.3 5-10	1.10 3-10	1.3 5-10	6 2-10	6 2-10	62 2 9	
195	C	91	.....do.....	6.400	9.0 5 10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 9 14	
196	C	86	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 6	
197	C	85	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 22	
198	C	92	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 2 0	
199	C	10	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 2 14	
200	C	90	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 2 11	
201	C	64	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 2 17	
202	C	96	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 2 11	
203	C	97	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 11	
204	C	70	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 22	
205	C	81	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 3 6	
206	C	87	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 11	
207	C	03	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 17	
208	C	106	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 17	
209	C	83	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 22	
210	C	58	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 2 0	
211	C	107	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 2 2	
212	C	65	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 2	
213	C	94	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 2 22	
214	C	74	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 11	
215	C	95	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 0 22	
216	C	100	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 0	
217	C	84	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 11	
218	C	104	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 6	
219	C	89	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 2 11	
220	C	93	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 19	
221	C	68	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1 0	
222	C	102	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 0 0	
223	C	105	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 1	
224	C	98	.....do.....	6.400	9.0 5-10	1.6 5-10	10.7 5-10	5.3 5-10	1.10 4-10	1.4	6	6	62 0 22	
1	A	.....	Long 24-pounder.....	5.750	8.4	1.5 6-10	9.9	4.11 5-10	1.9	1.1 7-10	5 5-10	6	50 0 0	
2	A	N 68	.....do.....	5.750	8.4	1.5 6-10	9.9	4.11 5-10	1.9	1.1 7-10	5 5-10	6	49 3 0	
3	A	.....	.....do.....	5.750	8.4	1.5 6-10	9.9	4.11 5-10	1.9	1.1 7-10	5 5-10	6	50 0 0	
4	A	N 72	.....do.....	5.750	8.4	1.5 6-10	9.9	4.11 5-10	1.9	1.1 7-10	5 5-10	6	50 0 0	

From 195 to 224, inclusive, are long 32-pounders. All have raised vent fields bored for locks; have breech rings, and have trunnions *below* the centre. Are American manufacture. Mounted on board the Washington, 74. These guns were found in a very bad state on the Washington's lower deck; the breech rings on the axle of the carriage; trunnions loose, or out altogether, with more or less water in every gun; the surface of the bore scaly and considerably honeycombed.

From 1 to 11, inclusive, are long 24-pounders. All have raised vent fields bored for locks; have breech rings, and have trunnions *in* the centre, except No. 6, which has breech ring broken off. American manufacture.

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
5	A	N 71	Long 24-pounder.....	5.750	8.4	1.5 6-10	9.9	4.11 5-10	1.9	1.1 7-10	5 5-10	6	<i>Cwt. gr. lb.</i> 50 0 0	
6	A	N 85	.....do.....	5.750	8.4	1.5 6-10	9.9	4.11 5-10	1.9	1.1 7-10	5 5-10	6	50 0 0	
7	A	N 50	.....do.....	5.750	8.4	1.5 6-10	9.9	4.11 5-10	1.9	1.1 7-10	5 5-10	6	50 1 0	
8	A	N 58	.....do.....	5.750	8.4	1.5 6-10	9.9	4.11 5-10	1.9	1.1 7-10	5 5-10	6	50 1 0	
9	A	N 16	.....do.....	5.750	8.4	1.5 6-10	9.9	4.11 5-10	1.9	1.1 7-10	5 5-10	6	50 0 0	
10	A	N 31	.....do.....	5.750	8.4	1.5 6-10	9.9	4.11 5-10	1.9	1.1 7-10	5 5-10	6	50 1 0	
11	A	N 33	.....do.....	5.750	8.4	1.5 6-10	9.9	4.11 5-10	1.9	1.1 7-10	5 5-10	6	50 1 0	
12	C	P 1798	.....do.....	5.750	8.11 5-10	1.4 9-10	10.5	5.3	1.9	1.3	6	6	50 1 10	From 12 to 16, inclusive, are long 24-pounders. All have raised vent fields bored for locks; have breech rings, and have trunnions below the centre. Are English Crown guns.
13	C	.....do.....	.....do.....	5.750	8.11 5-10	1.4 9-10	10.5	5.3	1.9	1.3	6	6	50 2 0	
14	C	V	.....do.....	5.750	8.11 5-10	1.4 9-10	10.5	5.3	1.9	1.3	6	6	50 2 0	
15	C	V	.....do.....	5.750	8.11 5-10	1.4 9-10	10.5	5.3	1.9	1.3	6	6	50 2 0	
16	C	.....do.....	.....do.....	5.750	8.11 5-10	1.4 9-10	10.5	5.3	1.9	1.3	6	6	49 3 7	
17	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	9.4 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 2 0	From 17 to 25, inclusive, are long 24-pounders. All have raised vent fields bored for locks; have breech rings, and have trunnions below the centre. No. 24 has vent field broken off. Manufacture doubtful.
18	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	9.4 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 2 14	
19	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	9.4 5-20	1.8 5-10	1.3	5 8-10	5 8-10	48 1 0	
20	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	9.4 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 2 0	
21	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	9.4 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 2 0	
22	C	42	.....do.....	5.750	7.11	1.5 2-10	9.4	9.4 5-10	1.8 5-10	1.3	5 8-10	5 8-10	49 0 15	
23	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	9.4 5-10	1.8 5-10	1.3	5 8-10	5 8-10	49 0 0	
24	C	25	.....do.....	5.750	7.11	1.5 2-10	9.4	9.4 5-10	1.8 5-10	1.3	5 8-10	5 8-10	49 1 22	
25	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	9.4 5-10	1.8 5-10	1.3	5 8-10	5 8-10	47 1 26	
26	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	9.4 5-10	1.8 5-10	1.3	5 8-10	5 8-10	49 0 0	From 26 to 39, inclusive, are long 24-pounders. All have raised vent fields bored for locks; have breech rings, and have trunnions below the centre. Manufacture doubtful.
27	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	9.4 5-10	1.8 5-10	1.3	5 8-10	5 8-10	47 3 0	
28	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	9.4 5-10	1.8 5-10	1.3	5 8-10	5 8-10	49 1 0	
29	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	9.4 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 2 0	
30	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	4.9 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 2 0	
31	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	4.9 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 0 0	
32	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	4.9 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 2 0	
33	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	4.9 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 2 14	
34	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	4.9 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 0 0	
35	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	4.9 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 0 0	
36	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	4.9 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 2 14	
37	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	4.9 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 1 0	
38	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	4.9 5-10	1.8 5-10	1.3	5 8-10	5 8-10	49 0 0	
39	C	.....do.....	.....do.....	5.750	7.11	1.5 2-10	9.4	4.9 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 3 0	

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
40	V	Long 24-pounder.....	5.750	7.11	1.5 2-10	9.4	4.9 5-10	1.8 5-10	1.3	5 8-10	5 8-10	<i>Cwt. gr. lb.</i> 49 0 1	Nos. 40, 42, 44, and 54, long 24-pounders; all have raised vent fields, bored for locks, breech rings, and trunnions <i>below</i> the centre, except 45, which has trunnions in the centre. All are unfit for the navy, being very badly bored, and apparently strained in proving.
41	V	.....	.....do.....	5.750	7.11	1.5 2-10	9.4	4.9 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 3 0
42	V	.....	.....do.....	5.750	7.11	1.5 2-10	9.4	4.9 5-10	1.8 5-10	1.3	5 8-10	5 8-10	48 2 14
43	C	V	.....do.....	5.800	7.10	1.6	9.3 7-10	4.10	1.9 7-10	1.3	6	6 5-10	50 2 0
44	C	V	.....do.....	5.800	7.10	1.6	9.3 7-10	4.10	1.9 7-10	1.3	6	6 5-10	50 2 14
45	C	P 179 W G	.....do.....	5.800	7.10	1.6	9.3 7-10	4.10	1.9 7-10	1.3	6	6 5-10	50 2 23
46	C	V	.....do.....	5.800	8.11	1.5	10.4 5-10	5.2	1.9	1.3	6	6 5-10	50 2 0
47	C	.....	.....do.....	5.800	8.11	1.5	10.4 5-10	5.2	1.9	1.3	6	6 5-10	50 3 0
48	C	.....	.....do.....	5.800	8.11	1.5	10.4 5-10	5.2	1.9	1.3	6	6 5-10	50 1 0
49	C	P 1798 W G	.....do.....	5.800	8.11	1.5	10.4 5-10	5.2	1.9	1.3	6	6 5-10	50 1 10
50	A	.....	.....do.....	5.800	8.5	1.5 5-10	9.9 5-10	5.0	1.9	1.2	5 5-10	5 5-10	50 0 0
51	A	84	.....do.....	5.800	8.5	1.5 5-10	9.9 5-10	5.0	1.9	1.2	5 5-10	5 5-10	49 3 14
52	A	.....	.....do.....	5.800	8.5	1.5 5-10	9.9 5-10	5.0	1.9	1.2	5 5-10	5 5-10	50 0 0
53	A	41	.....do.....	5.800	8.5	1.5 5-10	9.9 5-10	5.0	1.9	1.2	5 5-10	5 5-10	50 0 0
54	V	.....	.....do.....	5.800	8.5	1.5 5-10	9.9 5-10	5.0	1.9	1.2	5 5-10	5 5-10	49 3 0
55	A	45	.....do.....	5.800	8.5	1.5 5-10	9.9 5-10	5.0	1.9	1.2	5 5-10	5 5-10	50 0 0
56	A	.....	.....do.....	5.800	8.5	1.5 5-10	9.9 5-10	5.0	1.9	1.2	5 5-10	5 5-10	50 0 0
57	V	.....	.....do.....	5.800	8.5	1.5 5-10	9.9 5-10	5.0	1.9	1.2	5 5-10	5 5-10	48 1 3
58	V	.....	.....do.....	5.800	8.5	1.5 5-10	9.9 5-10	5.0	1.9	1.2	5 5-10	5 5-10	48 3 21
59	V	.....	.....do.....	5.800	8.5	1.4 9-10	9.10	4.11 5-10	1.9	1.3 6-10	6	6	43 1 14
60	V	.....	.....do.....	5.800	8.5	1.4 9-10	9.10	4.11 5-10	1.9	1.3 6-10	6	6	45 1 14
61	V	.....	.....do.....	5.800	8.5	1.4 9-10	9.10	4.11 5-10	1.9	1.3 6-10	6	6	43 3 21
62	V	.....	.....do.....	5.800	8.5	1.4 9-10	9.10	4.11 5-10	1.9	1.3 6-10	6	6	47 3 7
63	V	.....	.....do.....	5.800	8.5	1.5 6-10	8.9	4.5	1.9 5-10	1.4 6-10	6	6	.....
64	C	34	.....do.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 2-10	5 8-10	5 8-10	48 3 16
65	C	.....	.....do.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 2-10	5 8-10	5 8-10	48 3 0
66	C	.....	.....do.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 2-10	5 8-10	5 8-10	47 3 0
67	C	.....	.....do.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 2-10	5 8-10	5 8-10	47 0 14
68	C	.....	.....do.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 2-10	5 8-10	5 8-10	40 1 1
69	V	.....	.....do.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 2-10	5 8-10	5 8-10	48 2 0
70	C	.....	.....do.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 2-10	5 8-10	5 8-10	48 2 0
71	V	.....	.....do.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 2-10	5 8-10	5 8-10	48 2 10
72	V	.....	.....do.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 2-10	5 8-10	5 8-10	48 2 0
73	C	.....	.....do.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 2-10	5 8-10	5 8-10	48 2 0
74	C	18	.....do.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 2-10	5 8-10	5 8-10	49 1 0
75	C	.....	.....do.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 2-10	5 8-10	5 8-10	48 2 14
76	C	.....	.....do.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 3-10	5 8-10	5 8-10	49 1 0

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.	
													<i>Cwt. gr. lb.</i>		
77	C		Long 24-pounder.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 3-10	5 8-10	5 8-10	48 0 0		
78	W		do.....	5.800	8.0	1.5	9.4	4.9 5-10	1.9	1.3 3-10	5 8-10	5 8-10	48 1 14		
79	A	77	do.....	5.800	8.4 5-10	1.5 5-10	9.9	5.0	1.9	1.1 5-10	5 8-10	5 8-10	50 0 0	From 79 to 84, inclusive, are long 32-pounders; all have raised vent fields, bored for locks, except No. 84, which has its vent field broken off. Nos. 79, 80, 81, and 82 have trunnions in the centre. Nos. 83 and 84 have trunnions below the centre. Nos. 79, 80, and 82 have breech rings. Nos. 81, 83, and 84 are without breech rings. American manufacture.	
80	A	43	do.....	5.800	8.4 5-10	1.5 5-10	9.9	5.0	1.9	1.1 5-10	5 8-10	5 8-10	50 1 14		
81	A	83	do.....	5.900	8.4 5-10	1.5 5-10	9.9	5.0	1.9	1.1 5-10	5 8-10	5 8-10	49 2 21		
82	A	4	do.....	5.850	8.4 5 10	1.5 5-10	9.9	5.0	1.9	1.1 5-10	5 8-10	5 8-10	50 0 0		
83	C	20	do.....	5.800	9.1 5-10	1.4 5-10	10.6	5.2	1.8	1.2	5 8-10	5 8-10	49 0 0		
84	C		do.....	5.800	9.1 5-10	1.4	10.6	5.2	1.8	1.2	5 8-10	5 8-10	49 0 0		
85	C	P 1798 W G	do.....	5.800	8.5 5-10	1.4 8-10	9.10	4.11	1.8 5-10	1.3 5-10	5 8-10	6	47 3 0		From 85 to 92, inclusive, are long 24-pounders; all have raised vent fields, bored for locks, have breech rings and trunnions below the centre. Are English Crown guns.
86	C	V	do.....	5.800	8.11	1.4 5-10	10.4	5.1 5-10	1.8 5-10	1.3 2-10	5 8-10	6	50 1 7		
87	C	V	do.....	5.800	8.11	1.4 5-10	10.4	5.1 5-10	1.8 5-10	1.3 2-10	5 8-10	6	50 2 4		
88	C	V	do.....	5.800	8.11	1.4 5-10	10.4	5.1 5-10	1.8 5-10	1.3 2-10	5 8-10	6	49 3 21		
89	C	P 1798 W G	do.....	5.800	8.11	1.4 5-10	10.4	5.1 5-10	1.8 5-10	1.3 2-10	5 8-10	6	49 3 2		
90	C	P 1798 W G	do.....	5.800	8.11	1.4 5-10	10.4	5.1 5-10	1.8 5-10	1.3 2-10	5 8-10	6	50 1 16		
91	C	P 1798 W G	do.....	5.800	8.11	1.4 5-10	10.4	5.1 5-10	1.8 5-10	1.3 2-10	5 8-10	6	49 2 21		
92	C	P 1798 W G	do.....	5.800	8.11	1.4 5-10	10.4	5 1 5-10	1.8 5-10	1.3 2-10	5 8-10	6	49 3 4		
93	V		do.....	5.800	8.5	1.5 5-10	9.10	4.11 5-10	1.9	1.3 6-10	6	6	48 2 14		
94	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 3 0	No. 93 long 32-pounder, foreign make, trunnions below the centre, old, rough, honeycombed, and unfit for the navy.	
95	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 3 0		
96	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 3 0		From 94 to 116, inclusive, are long 24-pounders; all have raised vent fields for locks, have breech rings, and have trunnions below the centre, except No. 113, which has breech rings broken off.
97	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 2 0		
98	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 2 0		
99	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 3 0		
100	C		do.....	5.800	7.10 5 10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 1 14		
101	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 2 14		
102	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 1 11		
103	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 1 14		
104	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 1 14		
105	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	46 2 0		
106	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 2 14		
107	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	49 1 14		
108	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 1 14		
109	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	49 0 0		
110	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 3 14		
111	C		do.....	5.800	7.10 5-10	1.5 2-10	9.4	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 2 0		
112	V	8	do.....	5.800	7.10 5-10	1.6 1-10	9.4	4.10	1.9 5-10	1.3	5 7-10	5 7-10	50 0 0	No. 112 ring-bored, and strained in proving; is unfit for the navy.	
113	C		do.....	5.800	7.10 5-10	1.5 2-10	9.5	4.10	1.8 5-10	1.3	5 7-10	5 7-10	48 3 22		

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.	
114	C	Long 24-pounder.....	5.800	7.10 5-10	1.6 1-10	9.4	4.10	1.9 5-10	1.3	5 7-10	5 7-10	<i>Cwt. gr. lb.</i> 47 2 14	From 117 to 123, inclusive, are long 24-pounders; all have raised vent fields and breech rings, trunnions in the centre, except Nos. 117, 118, and 121, which have had their breech rings broken off, or never had any.	
115	C	48	.....do.....	5.800	7.10 5-10	1.5 2-10	9.5	4.10	1.8 5-10	1.3	5 7-10	5 7-10	49 0 0	
116	C	46	.....do.....	5.800	7.10 5-10	1.5 2-10	9.5	4.10	1.8 5-10	1.3	5 7-10	5 7-10	49 0 6	
117	A	.....	.....do.....	5.800	8.4 5-10	1.5 6-10	9.9	4.10	1.9	1.1 7-10	5 7-10	5 7-10	50 0 0
118	A	73	.....do.....	5.800	8.4 5-10	1.5 6-10	9.9	4.10	1.9	1.1 7-10	5 7-10	5 7-10	50 0 0	
119	A	73	.....do.....	5.800	8.4 5-10	1.5 6-10	9.9	4.10	1.9	1.1 7-10	5 7-10	5 7-10	50 2 0	
120	A	81	.....do.....	5.800	8.4 5-10	1.5 6-10	9.9	4.10	1.9	1.1 7-10	5 7-10	5 7-10	49 2 0	
121	A	.....	.....do.....	5.800	8.4 5-10	1.5 6-10	9.9	4.10	1.9	1.1 7-10	5 7-10	5 7-10	50 2 0
122	A	60	.....do.....	5.800	8.4 5-10	1.5 6-10	9.9	4.10	1.9	1.1 7-10	5 7-10	5 7-10	49 3 0	
123	Vdo.....	5.800	9.2	1.4	10.6 5-10	5.2	1.8	1.1 7-10	5 7-10	5 7-10	49 2 0		No. 123, bore deeply honeycombed, and unfit for the navy.
124	C	Vdo.....	5.820	8.11 5-10	1.4 7-10	10.4	5.1 5-10	1.9	1.3 2-10	5 7-10	5 7-10	50 1 10		From 124 to 134, inclusive, are long 24-pounders; all have raised vent fields, bored for locks, have breech rings, and have trunnions below the centre; are English Crown guns.
125	C	V	.....do.....	5.820	8.11 5-10	1.4 7-10	10.4	5.1 5-10	1.9	1.3 2-10	5 7-10	6	50 1 17	
126	C	V	.....do.....	5.820	8.11 5-10	1.4 7-10	10.4	5.1 5-10	1.9	1.3 2-10	5 7-10	6	.....	
127	C	V	.....do.....	5.820	8.11 5-10	1.4 7-10	10.4	5.1 5-10	1.9	1.3 2-10	5 7-10	6	.....	
128	C	V	.....do.....	5.820	8.11 5-10	1.4 7-10	10.4	5.1 5-10	1.9	1.3 2-10	5 7-10	6	.....	
129	.....	V	.....do.....	5.820	8.11 5-10	1.4 7-10	10.4	5.1 5-10	1.9	1.3 2-10	5 7-10	6	.....	
130	C	V	.....do.....	5.820	8.11 5-10	1.4 7-10	10.4	5.1 5-10	1.9	1.3 2-10	5 7-10	6	.....	
131	C	V	.....do.....	5.820	8.11 5-10	1.4 7-10	10.4	5.1 5-10	1.9	1.3 2-10	5 7-10	6	.....	
132	C	V	.....do.....	5.820	8.11 5-10	1.4 7-10	10.4	5.1 5-10	1.9	1.3 2-10	5 7-10	6	.....	
133	C	V	.....do.....	5.820	8.11 5-10	1.4 7-10	10.4	5.1 5-10	1.9	1.3 2-10	5 7-10	6	.....	
134	C	V	.....do.....	5.820	8.11 5-10	1.4 7-10	10.4	5.1 5-10	1.9	1.3 2-10	5 7-10	6	.....	
1	A	8	Long 18-pounder.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.0 5-10	5	5	From 1 to 45, inclusive, are long 18-pounders; all have raised vent fields, bored for locks; no breech rings, and have trunnions in the centre.	
2	A	.....	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.0 5-10	5	5	.....	
3	A	.....	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.0 5-10	5	5	.....	
4	A	.....	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.0 5-10	5	5	.....	
5	A	6	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.0 5-10	5	5	.....	
6	A	.....	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....	
7	A	23	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....	
8	A	.....	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....	
9	A	4	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....	
10	A	.....	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....	
11	A	P	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....	
12	A	26	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....	
13	A	.....	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....	
14	A	.....	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....	
15	A	P	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....	
16	Ado.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	These guns are not deemed suitable for ships; they are too long to be used on board a frigate of the second class, and it is presumed that large ships will always mount heavier metal. These objections apply equally to Nos. 46, 47, 48, 49, 50, 51, 52, 53, and 54, long 18-pounders.	

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
17	A		Long 18-pounder.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	<i>Cwt. qr. lb.</i>	
18	A		.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
19	A		.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5 10	1.7 3-10	1.1 5-10	5	9	.....
20	A		.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
21	A	P	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
22	A	5	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
23	A		.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
24	A		.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
25	A		.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
26	A		.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
27	A		.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
28	A		.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
29	A		.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
30	A	27	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
31	A	P 3	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
32	A	1	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
33	A	2	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
34	A	P	.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
35	A		.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
36	A		.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
37	A	2	.....do.....	8.5 5-10	8.5 5-10	1. 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
38	A		.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
39	A		.....do.....	8.5 5-10	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	.....
40	A	7	.....do.....	5.280	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	40 0 7	
41	A	P	.....do.....	5.280	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-13	5	9	39 3 0	
42	A		.....do.....	5.280	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	40 2 7	
43	V		.....do.....	5.280	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	40 0 0	No. 43 defective in casting, and unfit for the navy. American manufacture, army pattern.
44	A	3	.....do.....	5.280	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	38 3 14	
45	A		.....do.....	5.280	8.5 5-10	1.3 4-10	9.9	4.10 5-10	1.7 3-10	1.1 5-10	5	9	40 1 11	
46	B		.....do.....	5.310	9.0 5-10	1.4 7-10	10.7	5.0	1.8 8-10	1.1 8-10	5 4-10	5 4-10	.....	Nos. 46, 47, and 48 are long 18-pounders, have <i>sunk</i> vent fields, no breech rings, trunnions <i>below</i> the centre. Foreign manufacture.
47	B		.....do.....	5.310	9.0 5-10	1.4 7-10	10.7	5.0	1.8 8-10	1.1 8-10	5 4-10	5 4-10	.....
48	B		.....do.....	5.310	9.0 5-10	1.4 7-10	10.7	5.0	1.8 8-10	1.1 8-10	5 4-10	5 4-10	.....
49	B	V 616	.....do.....	5.450	8.9 5-10	1.3 6-10	9.10 5-10	4.10	1.7 7-10	1.0 5-10	5 5-10	5 4-10	40 2 1	Nos. 49, 50, and 51 are long 18-pounders, all have trunnions <i>below</i> the centre, and are without breech rings. Nos. 49 and 50 have raised vent fields <i>let into</i> the gun. No. 51 has raised vent field. Are English Crown guns. Nos. 52 and 53 are long 18-pounders, have raised vent fields bored for locks, have breech rings, and trunnions <i>in</i> the centre. Are American manufacture.
50	B	V 6306	.....do.....	5.450	8.8	1.3 6-10	10.0	5.1 5-10	1.7	1.0 5-10	5 5-10	5 4-10	40 0 15	
51	B	VV 27	.....do.....	5.300	8.4	1.3 6-10	9.10	5.0	1.7 5-10	1.3	5 5-10	5 4-10	40 1 0	
52	A	15do.....	5.300	8.6	1.3 5-10	9.10	4.11	1.7	1.1	5	5 4-10	38 3 14	
53	A	Pdo.....	5.300	8.6	1.3 5-10	9.10	4.11	1.7	5	5 4-10	40 0 14	

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Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
54	B	Long 18-pounder.	5.300	9.0 5-10	1.3 5-10	10.6	5.0	1.8 6-10	1.1 7-10	5 5-10	5 4-10	<i>Cwt. gr. lb.</i>	No. 54, long 18-pounder, has a sunk vent field, no breech ring, and has trunnions below the centre. American manufacture.
1	2	Medium 18-pounder....	5.300	7.0	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 4-10	29 2 0	From 1 to 21, inclusive, and 25, are medium 18-pounders; all have plain vent fields, no breech rings, and have trunnions in the centre, except No. 21, which has a raised vent field <i>let into</i> the gun. Are American manufacture. Most of these guns being under 30 cwt., I very much question their ability to do good service in the navy.
2	.....	63	.....do.....	5.300	7.0	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 4-10	29 2 4
3	.....	76	.....do.....	5.300	7.0	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	29 2 17
4	.....	9	.....do.....	5.300	7.0	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	30 0 7
5	.....	20	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	29 3 0
6	.....	.....	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	29 3 8
7	.....	19	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	29 3 3
8	.....	46	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	29 1 17
9	.....	.....	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	30 0 0
10	.....	50	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	30 0 0
11	.....	2	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	29 3 6
12	.....	49	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	32 0 6
13	.....	29	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	29 3 12
14	.....	7	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	29 3 21
15	.....	23	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	29 3 8
16	.....	15	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	23 3 6
17	.....	18	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	29 3 3
18	.....	12	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	29 3 0
19	.....	28	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	29 3 17
20	.....	11	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	29 2 2
21	.....	58	.....do.....	5.300	7.2	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	29 3 19
22	B	Ship 18-pounder	5.280	7.2	1.4	8.5 5-10	4.3 5-10	1.7	1.1 5-10	5 3-10	5 5-10	36 1 0	Nos. 22, 23, and 24 are ship 18-pounders; all have raised vent fields bored for locks; have trunnions below the centre. No. 22 has no breech ring. Nos. 23 and 24 have breech rings. Appear to be American manufacture.
23	B	.....	.....do.....	5.280	7.2	1.4	8.5 5-10	4.3 5-10	1.7	1.1 5-10	5 3-10	5 5-10	36 1 17
24	B	.....	.....do.....	5.280	7.2	1.4	8.5 5-10	4.3 5-10	1.7	1.1 5-10	5 3-10	5 5-10	36 0 23
25	.....	55	.....do.....	5.300	7.0	1.2 5-10	8.4	4.3 5-10	1.6 8-10	1.0 5-10	5 3-10	5 5-10	30 0 6
1	A	V	Long 12-pounder.....	4.640	7.0	1.2 4 10	8.2	4.1 5-10	1.6	1.1 3-10	4 8-10	4 8-10	From 1 to 10, inclusive, are long 12-pounders; all have raised vent fields bored for locks; trunnions below the centre. From 1 to 7, inclusive, have breech rings. Nos. 8, 9, and 10 have no breech rings. All are English Crown guns, of different patterns, (supposed to have been captured on the lakes during the late war.) It will be seen that these guns, <i>although they may be used on the same deck, and with the same carriages</i> , do not precisely correspond in many of their dimensions. I think they ought not to be retained in the navy.
2	A	V	.....do.....	4.640	7.0	1.2 4-10	8.2	4.1 5-10	1.6	1.1 3-10	4 8-10	4 8-10	.....
3	A	V	.....do.....	4.640	7.0	1.2 4-10	8.2	4.1 5-10	1.6	1.1 3-10	4 8-10	4 8-10	.....
4	A	V	.....do.....	4.640	7.0	1.2 4-10	8.2	4.1 5-10	1.6	1.1 3-10	4 8-10	4 8-10	.....
5	A	WG 1795	.....do.....	4.620	8.0	1.2 6-10	9.2	4.5 5-10	1.5 7-10	1.0 5-10	4 7 10	4 7-10	33 0 7
6	A	V	.....do.....	4.620	8.0	1.2 6-10	9.2	4.5 5-10	1.5 7-10	1.0 5-10	4 7-10	4 7-10	.....
7	A	Clyde, 1798	.....do.....	4.670	7.0	1.3	8.2	4.2	1.5 6-10	1.1 5-10	4 7-10	5	.....
8	A	.....	.....do.....	4.670	7.0	1.3	8.3	4.2	1.5 6-10	1.1 5-10	4 7-10	5	.....
9	A	.....	.....do.....	4.670	7.0	1.3	8.3	4.2	1.5 6-10	1.1 5-10	4 7-10	5	29 0 10
10	A	V	.....do.....	4.670	7.0	1.3	8.3	4.2	1.5 6-10	1.1 5-10	4 7-10	5	29 3 1

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to forward part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
11	V	13	Ship 12-pounder	6.2	1.2 7-10	7.2	3.7 5-10	1.5	1.1	5	4 5-10	<i>Cwt. gr. lb.</i> 26 0 21	From 11 to 15, inclusive, are ship 12-pounders; all have raised vent fields, no breech rings, and have trunnions <i>below</i> the centre; are old guns, <i>honey-combed</i> , ill-shaped, and unfit for the navy.	
12	V	19	do	6.2	1.2 7-10	7.2	3.7 5-10	1.5	1.1	5	4 5-10	26 2 7		
13	V	12	do	6.2	1.2 7-10	7.2	3.7 5-10	1.5	1.1	5	4 5-10	26 0 21		
14	V	20	do	6.2	1.2 7-10	7.2	3.7 5-10	1.5	1.1	5	4 5-10	26 2 24		
15	V	3	do	6.2	1.2 7 10	7.2	3.7 5-10	1.5	1.1	5	4 5-10	26 1 14	No. 16, honeycombed, and too large in the bore, being 4.780; unfit for the navy. From 17 to 33, inclusive, are long 12-pounders; all have raised vent fields, bored for locks; have breech rings, and trunnions <i>below</i> the centre, except Nos. 21, 22, and 24, which have no breech rings. All are English guns, of different patterns.	
16	V	do	do	4.780	6.2	1.2 7-10	7.2	3.7 5-10	1.5	1.1	5	4 5-10		23 3 14
17	A	V	Long 12-pounder	4.600	7.0 5-10	1.2 6-10	9.2 4-10	4.6	1.5 7-10	1.0 5-10	4 5-10	5		32 3 14
18	A	V	do	4.600	7.0 5-10	1.2 6-10	9.2 4-10	4.9	1.5 7-10	1.0 5-10	4 5-10	5		32 3 14
19	A	V	do	4.600	7.6 5-10	1.2 6-10	9.8	4.9	1.5 7-10	1.0 5-10	4 5-10	5		34 0 18
20	A	V	do	4.600	7.6 5-10	1.2 6-10	9.8	4.9	1.5 7-10	1.0 5-10	4 5-10	5		34 0 25
21	A	V	do	4.680	7.0	1.2 7-10	8.4 to 8.2	4.1 5-10	1.5 7-10	1.1 3-10	4 5-10	4 8-10		29 2 10
22	A	do	do	4.680	7.0	1.2 7-10	8.4 to 8.2	4.1 5-10	1.5 7-10	1.1 3-10	4 5-10	4 8-10		29 3 10
23	A	V	do	4.600	7.0	1.2 7-10	8.4 to 8.2	4.1 5-10	1.5 7-10	1.1 3-10	4 5-10	4 8-10		29 0 17
24	A	V	do	4.680	7.0	1.2 7-10	8.4 to 8.2	4.1 5-10	1.5 7-10	1.1 3-10	4 5-10	4 8-10		29 0 1
25	A	do	do	4.680	7.0	1.2 7-10	8.4 to 8.2	4.1 5-10	1.5 7-10	1.1 3-10	4 5-10	4 8-10		29 0 0
26	A	V	do	4.680	7.0	1.2 7-10	8.4 to 8.2	4.1 5-10	1.5 7-10	1.1 3-10	4 5-10	4 8-10		29 0 3
27	A	do	do	4.680	7.0	1.2 7-10	8.4 to 8.2	4.1 5-10	1.5 7-10	1.1 3-10	4 5-10	4 8-10		29 0 0
28	A	V	do	4.680	7.0	1.2 7-10	8.4 to 8.2	4.1 5-10	1.5 7-10	1.1 3-10	4 5-10	4 8-10		29 2 1
29	A	V	do	4.680	7.0	1.2 7-10	8.4 to 8.2	4.1 5-10	1.5 7-10	1.1 3-10	4 5-10	4 8-10		29 2 17
30	A	V	do	4.680	7.0	1.2 7-10	8.4 to 8.2	4.1 5-10	1.5 7-10	1.1 3-10	.....	.....		29 1 7
31	A	V	do	4.680	7.0	1.2 7-10	8.4 to 8.2	4.1 5-10	1.5 5-10	1.1 3-10	.....	.....	20 0 2	
32	A	do	do	4.680	7.0	1.2 7-10	8.4 to 8.2	4.1 5-10	1.5 5-10	1.1 3-10	.....	.....	29 0 0	
33	A	V	do	4.680	7.0	1.2 7-10	8.4 to 8.2	4.1 5-10	1.5 5-10	1.1 3-10	.....	.....	29 2 3	
34	A	P Bacon Preston 1796	Ship 12-pounder	4.600	6.5	1.1 5-10	7.9 5-10	4.0	1.5 3-10	1.1 6-10	.....	4 5-10	25 0 2	From 34 to 38, inclusive, are ship 12-pounders; all have raised vent fields for locks; have breech rings, and have trunnions <i>below</i> the centre, except the following, viz: No. 39 has a plain vent field; Nos. 34, 36, 38, and 39, have no breech rings; Nos. 35 and 37 have breech rings; No. 36 has the trunnion in the centre. All these are of foreign manufacture, mostly English, from the lakes, and unfit for the navy.
35	A	do	do	4.600	6.3	1.2 2-10	7.3 5-10	3.8	1.5	1.0	.....	5	23 1 0	
36	A	HF	do	4.660	5.11	1.2 2-10	7.1	3.8	1.5	1.1	.....	4 5-10	.....
37	A	NX	do	4.580	6.2	1.1 7-10	7.4 7-10	3.9	1.4 5-10	1.0	.....	4 5-10	23 3 16	
38	A	do	do	4.560	5.10	1.0 8-10	6.10 8-10	3.6	1.4 2-10	1.0 2-10	.....	.....	18 2 24	
39	A	do	Long 12-pounder	4.700	8.7	1.1 7-10	9.8	4.9	1.5 5-10	1.0 2-10	4	4 2-10	.....
40	A	V	do	4.680	7.0	1.3	8.3	4.3	1.5 5-10	1.0 8-10	4 5-10	4 5-10	28 2 17	Nos. 39, 40, and 41, long 12-pounders; have raised vent fields bored for locks; breech rings, and trunnions <i>below</i> the centre. Are English Crown guns.
41	A	V	do	4.680	7.0	1.3	8.3	4.3	1.5 5-10	1.1 5-10	4 5-10	4 5-10	29 1 15	
1	A	V	Long 9-pounder	4.250	7.0	.....	8.3	4.2	1.5	1.1 2-10	4 5-10	4 5-10	25 0 0	
2	A	V	do	4.200	7.0	.....	8.3	4.2	1.5	1.1 2-10	.....	.....	24 2 12	
3	A	V	do	4.250	7.0	.....	8.3	4.2	1.5	1.1 2-10	.....	.....	24 2 26	
4	A	V	do	4.250	7.0	.....	8.3	4.2	1.5	1.1 2-10	.....	.....	24 3 0	
5	A	V	do	4.300	7.0	.....	8.3	4.2	1.5	1.1 2-10	.....	.....	24 1 23	

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.	
6	A	V	Long 9-pounder.....	4.300	7.0	1.1 5-10 to 1.2 3-10	8.3	4.2	1.5	1.1 2-10			<i>Cwt. gr. lb.</i> 24 2 7	From 27 to 42, inclusive, are long 9-pounders; all have raised vent fields bored for locks; have breech rings, and have trunnions in the centre; are American manufacture. The great length and weight of these guns render them unfit, as a battery, for any class of vessels now belonging to the navy, or that hereafter will probably be built; besides, the diameter of the bore is below the medium standard. No. 29, long 9-pounder, honeycombed, badly cast, unfit for the navy.	
7	A	V	.....do.....	4.300	7.1 5-10		8.2	4.1	1.5	1.1 2-10			26 1 20	
8	A	V	.....do.....	4.300	7.1 5-10		8.2	4.1	1.5	1.1 2-10			24 3 12	
9	A	V	.....do.....	4.300	7.1 5-10		8.2	4.1	1.5	1.1 2-10			24 2 18	
10	A	V	.....do.....	4.300	7.1 5-10		8.2	4.1	1.5	1.1 2-10	4 5-10	4 5-10	24 2 26	
11	A	V	.....do.....	4.300	7.1 5-10		8.2	4.1	1.5	1.1 2-10	4 5-10	4 5-10	24 2 19	
12	A	V	.....do.....	4.300	7.1 5-10		8.2	4.1	1.5	1.1 2-10	4 5-10	4 5-10	24 1 17	
13	A	V	.....do.....	4.300	7.1 5-10		8.2	4.1	1.5	1.1 2-10	4 5-10	4 5-10	24 2 5	
14	A	V	.....do.....	4.300	7.1 5-10		8.2	4.1	1.5	1.1 2-10	4 5-10	4 5-10	24 3 5	
15	A	V	.....do.....	4.300	7.1 5-10		8.2	4.1	1.5	1.1 2-10	4 5-10	4 5-10	24 2 0	
16	A	V	.....do.....	4.300	7.1 5-10		8.3	4.2	1.5	1.1 2-10	4 5-10	4 5-10	25 0 8	
17	A	V	.....do.....	4.300	7.7		8.9 5-10	4.5	1.5	1.1 2-10	4 5-10	4 5-10	26 3 0	
18	A	V	.....do.....	4.350	7.6		8.9	4.5	1.5	1.1 2-10	4 5-10	4 5-10	25 3 6	
19	A	V	.....do.....	4.250	7.0		8.4	4.2	1.5	1.1 2-10	4 5-10	4 5-10	25 3 10	
20	A	V	.....do.....	4.300	7.0		8.2	4.1	1.5	1.1 2-10	4 5-10	4 5-10	24 3 5	
21	A	V	.....do.....	4.300	7.0		8.3	4.2	1.5	1.1 2-10	4 5-10	4 5-10	26 1 12	
22	A	V	.....do.....	4.300	7.0		8.3	4.2	1.5	1.1 2-10	4 5-10	4 5-10	24 3 6	
23	A	V	.....do.....	4.300	7.1		8.3	4.2	1.5	1.1 2-10	4 5-10	4 5-10	26 0 5	
24	A	V	.....do.....	4.400	7.7		8.9	4.5	1.5	1.1 2-10	4 5-10	4 5-10	25 3 24	
25	A	V	.....do.....	4.250	6.7		7.8 5-10	4.0	1.5	1.1 2-10	4 5-10	4 5-10	23 0 16	
26	A	V	.....do.....	4.300	7.0		8.3	4.2	1.5	1.1 2-10	4 5-10	4 5-10	26 1 12	
27	Vdo.....	4.180	6.11 5-10		1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10		24 3 17
28	Vdo.....	4.180	6.11 5-10		1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10		24 3 14
29	V	Vdo.....	4.180	6.11 5-10		1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10		24 1 21
30	Vdo.....	4.180	6.11 5-10		1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10		24 2 21
31	Vdo.....	4.180	6.11 5-10		1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10		24 1 21
32	Vdo.....	4.180	6.11 5-10		1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10		24 2 1
33	.....	V	.....do.....	4.180	6.11 5-10	1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10	24 2 14
34	.....	V	.....do.....	4.180	6.11 5-10	1.1 3.10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10	24 2 0
35	.....	V	.....do.....	4.180	6.11 5-10	1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2 10	24 2 1
36	.....	.....	.....do.....	4.180	6.11 5-10	1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10	24 2 0
37	.....	P	.....do.....	4.180	6.11 5-10	1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10	24 2 7
38	.....	P	.....do.....	4.180	6.11 5-10	1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10	24 2 0
39	.....	P	.....do.....	4.180	6.11 5-10	1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10	24 1 2
40	.....	.....	.....do.....	4.180	6.11 5-10	1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10	24 2 21
41	.....	I	.....do.....	4.180	6.11 5-10	1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10	24 2 7
42	.....	P	.....do.....	4.180	6.11 5-10	1.1 3-10	8.1 5-10	4.1 5-10	1.4 4-10	0.10 6-10	4	4 2-10	24 2 14

Inspection return of ordnance at the United States navy yard, Brooklyn, New York—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
43			Long 9-pounder.....	4.320	6.3	1.0	7.3	3.7	1.2 2-10	0.11	4	4	<i>Cwt. gr. lb.</i>	From 43 to 53 are long 9-pounders; have raised vent fields bored for locks; no breech rings, and have trunnions <i>below</i> the centre, except 46 and 51, which have trunnions in the <i>centre</i> . Nos. 47 and 48 have breech rings. All foreign manufacture, mostly English, various patterns, and ought not to be retained in the navy. No. 46 much honeycombed.
44			.....do.....	4.320	6.3	1.0	7.3	3.7	1.2 2-10	0.11			
45			.....do.....	4.240	5.0	0.11 5-10	6.0 5-10	3.0	1.2 5-10	0.11	4 2-10	4 2-10	
46	V	V	.....do.....	4.400	5.3 5-10	1.0 7-10	6.4 5-10	3.5	1.3	1.0	4	4	
47			.....do.....	4.200	6.6 5-10	1.1	7.7 5-10	3.10	1.4 3-10	1.0	4	4	23 2 24
48			.....do.....	4.240	5.9 5-10	1.0 5-10	6.8 5-10	3.5	1.3	0.11	4	4	18 0 23
49			.....do.....	4.240	6.8 5-10	1.0	7.9	3.9	1.3	0.10	4 2-10	4 2-10	19 0 7
50			.....do.....	4.240	6.8 5-10	1.0	7.9	3.9	1.3	0.10	4 2-10	4 2-10	19 0 15
51		H F	.....do.....	4.280	5.7	1.1	6.8 2-10	3.5 5-10	1.3 5-10	0.11 5-10	4	4	
52		H F	.....do.....	4.280	5.7	1.1	6.8 2-10	3.5 5-10	1.3 5-10	0.11 5-10	4	4	
53			.....do.....	4.340	6.0 5-10	1.0 8-10	7.1 5-10	3.7	1.4 5-10	1.0 2-10	4	4	20 8 7
54	A		.....do.....	4.200	7.6 5-10	1.1 5-10	8.1	4.0	1.4 8-10	1.0 2-10	4 5-10	4 5-10	26 0 16
55	A		.....do.....	4.200	7.6 5-10	1.1 5-10	8.1	4.0	1.4 8-10	1.0 2-10	4 5-10	4 5-10	26 0 7
56			.....do.....	4.200	5.7	1.0	6.9	.....	1.3	0.11 2-10	.....	.....	18 1 1
57			.....do.....	4.200	5.7	1.0	6.9	.....	1.3	.....	.....	.....	18 1 1
58			.....do.....	4.200	5.9	1.0 5-10	6.8 5-10	.....	1.3	.....	.....	.....	18 0 17
59			.....do.....	4.200	5.9	1.0 5-10	6.8 5-10	.....	1.3	.....	.....	.....	18 1 4

THOS. AP. CATESBY JONES,
 Captain and Inspector of Ordnance, United States Navy.

Recapitulation of gradual increase and classed guns at Brooklyn, New York.

Nature of ordnance.	Class letter.	Brooklyn, New York.		
		Gradual increase.	Repairs.	New sloops.
42-pounders, long		26		
42-pounders, carronades	A		67	
Do.....	O	71	57	
33-pounders, long.....	A	171		
Do.....	B		135	
Do.....	C		56	
32-pounders, medium	B		70	
Do.....	C		18	
32-pounders, carronades	A	20	131	
Do.....	O		30	
24-pounders, long.....	A	20	27	
Do.....	C		89	
24-pounders, Congreve.....	A		2	
24-pounders, carronades	A		12	
Do.....	O		30	
18-pounders, long	A		46	
Do.....	B		7	
18-pounders, ship	B		3	
18-pounders, carronades	A		6	
Do.....	O		26	
12-pounders, long.....	A		30	
12-pounders, ship.....	A		5	
9-pounders, long	A		28	
Do.....	O			
9-pounders, medium.....	A			
18-pounders, gunades	A		11	

Recapitulation of condemned and unclassed guns at Brooklyn, New York.

Nature of ordnance.	Brooklyn, New York.		
	Defective from time or accident.	Defective in workmanship.	Service'ble, but unclassified.
68-pounder, carronade			
32-pounders, long.....		32	
32-pounders, carronade.....	1	1	
24-pounders, long	10	8	
24-pounders, medium			2
24-pounders, medium nondescript.....			5
18-pounder, long.....		1	
18-pounders, medium			22
18-pounders, gunades.....			3
12-pounders, ship.....	6		
12-pounders, light		4	
12-pounders, carronades			8
12-pounder, gunade.....			1
9-pounders, carriage guns	2		20
6-pounders, carriage guns.....			3
6-pounders, gunades			2
4-pounders, carriage guns.....			22

Inspection return of ordnance at the United States navy yard, Philadelphia, Pennsylvania.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.	
1	B	Ship 18-pounder	5.200	7.2 5-10	1.4	8.5	4.3 5-10	1.6 2-10	1.1 3-10	5 2-10	5 8-10	<i>Cwt. gr. lb.</i> 36 1 11	Nos. 1 and 2 are ship 18-pounders; have raised vent fields bored for locks; have breech rings, and trunnions <i>below</i> the centre. Manufacture doubtful. No. 3, ship 18-pounder; raised vent field for lock; no breech ring; trunnions <i>below</i> the centre. English Crown gun. From 4 to 11, inclusive, are ship 18-pounders. All have raised vent fields; have breech rings, and have trunnions <i>below</i> the centre. Are English Crown guns. Are mounted as a saluting battery. From 12 to 34, inclusive, are ship 18-pounders. All have raised vent fields; have breech rings, and have their trunnions <i>below</i> the centre, except No. 22, which has no breech ring. These guns are at the old military arsenal, near the Schuylkill. No. 20 is much strained by service or in proving, and is unfit for the navy.	
2	B	.....	.....do.....	5.200	7.2 5-10	1.4	8.5	4.3 5-10	1.6 2-10	1.1 3-10	5 2-10	5 8-10	36 0 13
3	B	V	.....do.....	5.300	7.0 5-10	1.2 3-10	8.4	4.4	1.5 7-10	1.1 6-10	4 6-10	5	20 3 22	
4	B	P W G 1798	.....do.....	5.300	7.5 5-10	1.3 7-10	8.9	4.4	1.7 6-10	1.2 7-10	5	5 5-10	37 1 17	
5	B	P W G 1978	.....do.....	5.300	7.5 5-10	1.3 7-10	8.9	4.4	1.7 6-10	1.2 7-10	5	5 5-10	37 3 20	
6	B	P W G 1978	.....do.....	5.300	7.5 5-10	1.3 7-10	8.9	4.4	1.7 6.10	1.2 7-10	5	5 5-10	37 2 16	
7	B	P W G 1978	.....do.....	5.250	7.5 5-10	1.3 7-10	8.9	4.4	1.7 6-10	1.2 7-10	5	5 5-10	38 0 3	
8	B	P W G 1798	.....do.....	5.300	7.5 5-10	1.3 7-10	8.9	4.4	1.7 6-10	1.2 7-10	5	5 5-10	37 3 3	
9	B	P W G 1798	.....do.....	5.300	7.5 5-10	1.3 7-10	8.9	4.4	1.7 6-10	1.2 7-10	5	5 5-10	37 2 0	
10	B	P W G 1798	.....do.....	5.300	7.5 5-10	1.3 7-10	8.9	4.4	1.7 6-10	1.2 7-10	5	5 5-10	37 3 24	
11	B	P W G 1798	.....do.....	5.250	7.5 5-10	1.3 7-10	8.9	4.4	1.7 6-10	1.2 7-10	5	5 5-10	37 2 24	
12	B	.....	.....do.....	5.250 to 5.300	7.2 5-10	1.4	8.5	4.3	1.7 2-10	1.1 5-10	5	5	36 0 17
13	B	.....	.....do.....		7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5	36 1 18
14	R	.....	.....do.....		7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5	36 1 15
15	B	.....	.....do.....		7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5	36 2 21
16	B	.....	.....do.....		7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5	36 1 12
17	B	.....	.....do.....		7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5	36 2 17
18	Bdo.....		5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5		36 2 16
19	Bdo.....		5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5		36 3 7
20	Vdo.....		5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5		36 1 1
21	Bdo.....		5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5		36 0 1
22	Bdo.....		5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5		36 1 2
23	Bdo.....		5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5		36 1 4
24	B	.....	.....do.....	5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5	36 1 1
25	B	.....	.....do.....	5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5	36 0 23
26	B	.....	.....do.....	5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5	36 1 3
27	B	.....	.....do.....	5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5	36 0 15
28	B	.....	.....do.....	5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5	36 1 3
29	B	.....	.....do.....	5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5	36 0 17
30	B	.....	.....do.....	5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5	36 0 5
31	B	.....	.....do.....	5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5	36 0 14
32	B	.....	.....do.....	5.250	7.2 5-10	1.4	8.5	4.4	1.7 2-10	1.1 5-10	5	5	36 0 13
33	B	P W G 1798	.....do.....	5.250	7.5 5-10	1.3 7-10	8.8 5-10	4.5	1.7 6-10	1.2 5-10	5	5	38 0 24	
34	B	P W G 1798	.....do.....	5.250	7.5 5-10	1.3 7-10	8.8 5-10	4.5	1.7 6-10	1.2 5-10	5	5	37 0 3	
1	B	15	Long 32-pounder.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2.10	6 5-10	60 0 0		

Inspection return of ordnance at the United States navy yard, Philadelphia, Pennsylvania—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.	
2	B	18	Long 32-pounder.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2-10	6 5-10	Cwt. gr. lb. 60 0 0	From 1 to 15, inclusive, are long 32-pounders. All have raised vent fields bored for locks; have breech rings, and have trunnions in the centre. All are American manufacture. No. 13 has a defective trunnion, and is unfit for the navy.	
3	B	1	.....do.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2-10	6 5-10	60 0 0	
4	B	3	.....do.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2-10	6 5-10	60 0 0	
5	B	25	.....do.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2-10	6 5-10	60 0 0	
6	B	22	.....do.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2-10	6 5-10	60 0 0	
7	B	20	.....do.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2-10	6 5-10	60 0 0	
8	B	14	.....do.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2-10	6 5-10	60 0 0	
9	B	11	.....do.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2-10	6 5-10	60 0 0	
10	B	20	.....do.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2-10	6 5-10	60 0 0	
11	B	5	.....do.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2-10	6 5-10	60 0 0	
12	B	24	.....do.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2-10	6 5-10	60 0 0	
13	V	2	.....do.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2-10	6 5-10	60 0 0	
14	B	27	.....do.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2-10	6 5-10	60 0 0	
15	B	20	.....do.....	6.420	8.9	1.5 7-10	10.1	5.1	1.9 4-10	1.3 2-10	6 2-10	6 5-10	60 0 0	
16	C	do.....	6.400	8.8	1.6 7-10	10.3	5.3	1.10 3-10	1.4	6 2-10	6 5-10	63 3 0		Nos. 16, 17, and 18, are long 32-pounders; have raised vent fields for locks; breech rings, and trunnions below the centre. No. 17, bore only 6.380; unfit for the navy. All are American manufacture.
17	V		.....do.....	6.380	8.8	1.6 7-10	10.3	5.3	1.10 3-10	1.4	6 2-10	6 5-10	63 1 0	
18	C		.....do.....	6.450	8.8	1.6 7-10	10.3	5.3	1.10 3-10	1.4	6 2-10	6 5-10	63 1 0	
1		3	Long 9-pounder.....	4.220	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.11	4 2-10	4 2-10	24 0 7		From 1 to 25, inclusive, are long 9-pounders. All have raised vent fields, breech rings, and trunnions in the centre. Said to be prize guns, captured during the late war with Great Britain.—(See remarks at page 580 against 9-pounders, from No. 27 to 42.)
2		5	.....do.....	4.220	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.10 5-10	4 2-10	4 2-10	24 0 7	
3			.....do.....	4.160	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.10 5-10	4 2-10	4 2-10	24 1 21	
4			.....do.....	4.160	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.11	4 2-10	4 2-10	24 1 21	
5		4	.....do.....	4.220	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.11	4 2-10	4 2-10	24 0 7	
6		18	.....do.....	4.220	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.11	4 2-10	4 2-10	24 0 7	
7		13	.....do.....	4.220	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.11	4 2-10	4 2-10	24 0 7	
8		2	.....do.....	4.220	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.11	4 2-10	4 2-10	24 0 7	
9			.....do.....	4.160	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.10 5-10	4 2-10	4 2-10	24 2 7	
10			.....do.....	4.160	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.10 5-10	4 2-10	4 2-10	24 2 0	
11			.....do.....	4.160	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.10 5-10	4 2-10	4 2-10	24 3 14	
12			.....do.....	4.160	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.10 5-10	4 2-10	4 2-10	24 3 0	
13			.....do.....	4.220	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.11	4 2-10	4 2-10	24 0 7	
14		8	.....do.....	4.160	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.10 5-10	4 2-10	4 2-10	24 0 7	
15		10	.....do.....	4.220	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.11	4 2-10	4 2-10	24 0 7	
16		12	.....do.....	4.220	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.11	4 2-10	4 2-10	24 0 7	
17			.....do.....	4.160	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.10 5-10	4 2-10	4 2-10	25 0 0	
18			.....do.....	4.160	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.10 5-10	4 2-10	4 2-10	24 2 21	
19			.....do.....	4.160	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.10 5-10	4 2-10	4 2-10	24 2 7	
20			.....do.....	4.160	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.10 5-10	4 2-10	4 2-10	25 0 7	

Inspection return of ordnance at the United States navy yard, Philadelphia, Pennsylvania—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
21	Long 9-pounder.....	4.220	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.11	4 2-10	4 2-10	<i>Cut. gr. lb.</i> 24 2 21	<p>Nos. 1, 2, and 3 are old thimble fortified 9 pounders, honeycombed, and badly bored; unfit for the navy.</p> <p>From 1 to 5, inclusive, are long and ship 12-pounders. All have raised vent fields bored for locks; no breech rings, and have trunnions <i>below</i> the centre, except No. 1, which has a breech ring. Manufacture doubtful. No. 3 is honeycombed, and cast badly; unfit for the navy.</p> <p>Nos. 6, 7, and 8 are ship 12-pounders. All have raised vent fields, breech rings, and have trunnions <i>below</i> the centre. Manufacture doubtful.</p> <p>From 9 to 14, inclusive, are long 12-pounders. All have raised vent fields; have breech rings, and trunnions <i>below</i> the centre. Are English Crown guns. <i>These guns are at the arsenal near the Schuylkill, and are only fit for pivot or chase guns for the small vessels.</i></p> <p>From 15 to 33, inclusive, are ship 12-pounders. All have raised vent fields; have breech rings, and have trunnions <i>below</i> the center. Supposed to be American manufacture. <i>These guns are at the arsenal near the Schuylkill. No. 29, bore too long; want of breech metal; unfit for the navy.</i></p>
22	.....	.....	.....do.....	4.160	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.10 5-10	4 2-10	4 2-10	24 3 21
23	.....	.....	.....do.....	4.160	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.10 5-10	4 2-10	4 2-10	24 3 21
24	.....	.....	.....do.....	4.160	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.10 5-10	4 2-10	4 2-10	24 2 14
25	.....	10	.....do.....	4.220	7.0 5-10	1.1	8.2	4.0 5-10	1.3 5-10	0.11	4 2-10	4 2-10	24 0 7
1	V	.....	Ship 9-pounder.....	.....	.....	.....	7.10	.....	.....	.....	.....	.....	.....
2	V	.....	.....do.....	.....	.....	.....	7.10	.....	.....	.....	.....	.....	.....
3	V	.....	.....do.....	.....	.....	.....	7.10	.....	.....	.....	.....	.....	.....
1	A	.....	Ship 12-pounder.....	4.620	6.4 5-10	1.1 6-10	7.4	3.7	1.4	1.0	4 5-10	4 2-10	23 3 21
2	A	.....	Long 12-pounder.....	4.620	7.3	1.0 6-10	8.3	4.0	1.4	0.11	4 5-10	4 5-10	24 1 18
3	V	.....	.....do.....	4.620	7.3	1.0 6-10	8.3	4.0	1.4	0.11	4 5-10	4 5-10	25 1 14
4	A	.....	Ship 12-pounder.....	4.620	6.5 5-10	1.1	7.9	3.11	1.5 5-10	1.0	4 5-10	4 5-10	.....
5	A	.....	.....do.....	4.620	6.5 5-10	1.1	7.9	3.11	1.5 5-10	1.0	4 5-10	4 5-10	.....
6	A	.....	.....do.....	4.620	6.3	1.1 5-10	7.4	3.9	1.3 8-10	1.0	4 5-10	4 5-10	23 3 7
7	A	.....	.....do.....	4.620	6.3	1.1 5-10	7.4	3.9	1.3 8-10	1.0	4 5-10	4 5-10	23 3 22
8	A	.....	.....do.....	4.620	6.3	1.1 5-10	7.4	3.9	1.3 8-10	1.0	4 5-10	4 5-10	23 1 21
9	A	P 1798 W G	Long 12-pounder.....	4.600	8.0	1.2 2-10	9.2	4.6	1.5 8-10	1.0 5-10	4 5-10	4 5-10	33 0 10	
10	A	P 1798 W G	.....do.....	4.600	8.0	1.2 2-10	9.2	4.6	1.5 8-10	1.0 5-10	4 5-10	4 5-10	33 0 24
11	A	P 1789 W G	.....do.....	4.600	8.0	1.2 2-10	9.2	4.6	1.5 8-10	1.0 5-10	4 5-10	4 5-10	33 0 13
12	A	P 1798 W G	.....do.....	4.600	8.0	1.2 2-10	9.2	4.6	1.5 8-10	1.0 5-10	4 5-10	4 5-10	33 0 10
13	A	P 1798 W G	.....do.....	4.600	8.0	1.2 2-10	9.2	4.6	1.5 8-10	1.0 5-10	4 5-10	4 5-10	33 0 17
14	A	P 1798 W G	.....do.....	4.600	8.0	1.2 2-10	9.2	4.6	1.5 8-10	1.0 5-10	4 5-10	4 5-10	33 0 3
15	A	.....	Ship 12-pounder.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 3 14
16	A	.....	.....do.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 3 7
17	A	.....	.....do.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 3 23
18	A	.....	.....do.....	4 620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 1 7
19	A	.....	.....do.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 0 12
20	A	.....	.....do.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 0 1
21	A	.....	.....do.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 3 18
22	A	.....	.....do.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 3 24
23	A	.....	.....do.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 3 17
24	A	.....	.....do.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 2 17
25	A	.....	.....do.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 3 21
26	A	.....	.....do.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 3 21
27	A	.....	.....do.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 3 19
28	A	.....	.....do.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 1 12
29	V	.....	.....do.....	4.620	6.5 5-10	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 3 7

Inspection return of ordnance at the United States navy yard, Philadelphia, Pennsylvania—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomition.	Length from extremity of pomition to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.	
30	A	Ship 12-pounder.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	<i>Cwt. gr. lb.</i> 23 3 14	From 34 to 48, inclusive, are ship 12 pounders. All have raised vent fields, no breech rings, and have trunnions below the centre. Supposed American manufacture. At the arsenal near the Schuylkill.	
31	A	.....	do.....	4.620	6.2	1 1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4.5-10	23 3 18	
32	A	.....	do.....	4 020	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0 11 6-10	4 5-10	4 5-10	23 2 1	
33	A	.....	do.....	4.620	6.2	1.1 5-10	7.4	3.9 5-10	1.4 2-10	0.11 6-10	4 5-10	4 5-10	23 2 7	
34	A	.....	do.....	4.560	6.2	1.1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 1 3	
35	A	.....	do.....	4.560	6.2	1.1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 1 7	
36	A	.....	do.....	4.560	6.2	1.1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 1 4	
37	A	.....	do.....	4.560	6.2	1.1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 1 2	
38	A	.....	do.....	4.560	6.2	1.1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 1 1	
39	A	.....	do.....	4.560	6.2	1.1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 1 7	
40	A	.....	do.....	4.560	6.2	1.1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 0 17	
41	A	.....	do.....	4.560	6.2	1.1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 1 3	
42	A	.....	do.....	4.560	6.2	1.1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 1 1	
43	A	.....	do.....	4.560	6.2	1 1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 1 0	
44	A	.....	do.....	4.560	6.2	1.1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 0 2	
45	A	.....	do.....	4.560	6.2	1.1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 1 4	
46	A	.....	do.....	4.560	6.2	1.1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 0 23	
47	A	.....	do.....	4.560	6.2	1.1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 1 15	
48	A	.....	do.....	4.560	6.2	1.1 6-10	7.5 5-10	3.10	1.4 5-10	1.0 5-10	4 5-10	4 5-10	24 1 3	
1	A	Carronade 42-pounder..	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9		From 1 to 30, inclusive, are 42-pound carronades. All have raised vent fields, breech rings, and holes for screws. Thickness of nave ring only 1 2-10 inch. Are American manufacture.
2	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
3	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
4	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
5	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
6	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
7	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
8	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
9	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
10	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-20	9	.....	
11	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
12	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
13	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
14	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
15	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
16	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
17	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	
18	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....	

Inspection return of ordnance at the United States navy yard, Philadelphia, Pennsylvania—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
													<i>Cwt. gr. lb.</i>	
19	A	.....	Carronade 42-pounder..	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....
20	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	2.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....
21	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	5.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....
22	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	5.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....
23	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	5.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....
24	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	5.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....
25	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	5.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....
26	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	5.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....
27	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	5.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....
28	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	5.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....
29	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	5.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....
30	A	.....	do.....	7.018	3.10	6 5-10	5.8 4-10	5.8 5-10	1.7 5-10	1.2 4-10	3 2-10	9	.....
1	O	475, 1797	Carronade 24-pounder..	5.620	3.3	4	4.9 5-10	2.5	1.3 2-10	0.11	2 5-10	7	.....	No. 1 is a 24-pound carronade, has a raised vent field bored for lock, raised sight, breech ring, and hole for screw. English Crown gun.
1	.....	.....	Carronade 12-pounder.....	.....	2.5	2 5-10	3.8	1.11	1.0 3-10	0.9 2-10	1 8-10	5 8-10	6 1 0	No. 1 is a 12-pound carronade, has a raised vent field bored for lock, raised sight, breech ring, and hole for screw. English Crown gun.
1	O	.....	Carronade 18-pounder..	5.200	3.0 5-10	4 8-10	4.6	2.3	1.3 5-10	0.11 2-10	2 5-10	6 5-10	.....	From 1 to 8, inclusive, are 18-pound carronades; all have raised vent fields bored for locks, breech rings, and hole for screw. Are part of the Cyane's armament.
2	O	.....	do.....	5.200	3.0 5-10	4 8-10	4.6	2.3	1.3 5-10	0.11 2-10	2 5-10	6 5-10	.....
3	O	.....	do.....	5.200	3.0 5-10	4 8-10	4.6	2.3	1.3 5-10	0.11 2-10	2 5-10	6 5-10	.....
4	O	.....	do.....	5.200	3.0 5-10	4 8-10	4.6	2.3	1.3 5-10	0.11 2-10	2 5-10	6 5-10	.....
5	O	.....	do.....	5.200	3.0 5-10	4 8-10	4.6	2.3	1.3 5-10	0.11 2-10	2 5-10	6 5-10	.....
6	O	.....	do.....	5.200	3.0 5-10	4 8-10	4.6	2.3	1.3 5-10	0.11 2-10	2 5-10	6 5-10	.....
7	O	.....	do.....	5.200	3.0 5-10	4 8-10	4.6	2.3	1.3 5-10	0.11 2-10	2 5-10	6 5-10	.....
8	O	.....	do.....	5.200	3.0 5-10	4 8-10	4.6	2.3	1.3 5-10	0.11 2-10	2 5-10	6 5-10	.....
9	O	P G & S 1811	do.....	5.200	2.11 5-10	4	4.4	2.2	1.2 2-10	0.10 2-10	2 2-10	6 5-10	9 2 8	Nos. 9 and 10 are 18-pound carronades, have raised vent fields bored for locks, have breech rings, and holes for screws. Are English Crown guns.
10	O	V	do.....	5.200	2.11 5-10	4	4.4	2.2	1.2 2-10	0.10 2-10	2 2-10	6 5-10	10 1 0	
						Length of chamber.		Centre of nave.			Diameter of nave hole.	Length of nave.		
1	O	.....	Carronade 32-pounder..	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 0	From 1 to 20, inclusive, are 32-pound carronades. All have raised vent fields bored for locks, raised sights, have breech rings, and holes for screws. All are English Crown guns. Are part of the Cyane's armament.
2	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 0	
3	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 0	
4	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 7	
5	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 0	
6	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 0	
7	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 0	
8	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 0	

Inspection return of ordnance at the United States navy yard, Philadelphia, Pennsylvania—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomilion.	Centre of nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.
9	O	.....	Carronade 32-pounder..	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	<i>Cwt. gr. lb.</i> 17 0 0	
10	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 21	
11	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 4	
12	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 0	
13	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 0	
14	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 14	
15	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 0	
16	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 7	
17	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 21	
18	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 0	
19	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 21	
20	O	.....	do.....	6.250	3.6 7-10	5	5.3 5-10	2.9	1.5 3-10	1.0 7-10	2 8-10	8	17 0 0	
21	A	.....	do.....	6.400	3.4 5-10	6.5-10	5.4 2-10	2.7 5-10	1.6	1.1 3-10	2 8-10	8	17 0 0	No. 21 is a 32-pound carronade, has a raised vent field bored for lock; no breech ring, with hole for screw. American manufacture.
						Diameter immediately forward of trunnions.		Fore part of trunnion.			Diameter of trunnion.	Length of trunnion.		
1	V	.....	Medium 9-pounder..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Nos. 1 and 2 are medium 9-pounders, are very old, ill-shaped, and one trunnion broken off, and unfit for the navy.
2	V	.....	do.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	No. 3 is a medium 9-pounder, has a raised vent field bored for lock, has a breech ring, and the trunnions are below the centre. American manufacture.
3	A	.....	do.....	4.200	5.8	1.0 5-10	6.8 5-10	3.5	1.3 5-10	0.10 7-10	4	4 5-10	18 1 9	No. 1 is a long 6-pounder; old, badly cast, and unfit for the navy.
1	V	.....	Long 6-pounder.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	From 1 to 15, inclusive, are old French or Spanish 9 and 12-pounders, long guns; are roughly cast, honeycombed inside, have large touch holes, and are unfit for the navy—weighing from 23 cwt. 2 qrs. to 26 cwt. 2 qrs. each.
1 to 15	V	.....	9 and 12-pounder.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Nos. 1 and 2 are short 4-pounders; are old French or Spanish guns; are roughly cast, honeycombed inside; have large touch-holes, and are unfit for the navy.
1	V	.....	Short 4-pounder.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	From 1 to 4, inclusive, are long 18-pounders; sunken vent fields, no breech rings, trunnions below the centre. Manufacture doubtful.—(See note against long 18-pounders, at page 576.)
2	V	.....	do.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	From 5 to 9, inclusive, are long 18-pounders. All have raised vent fields, breech rings, and have trunnions below the centre. Are English Crown guns, and are at the military arsenal near the Schuylkill.
1	B	.....	Long 18-pounder.....	5.280	9.0 5-8	1.4 6-10	10.6 5-10	4.11 5-10	1.8 6-10	1.1 2-10	5 5-10	5 5-10	.....	.....
2	B	.....	do.....	5.280	9.0 5-8	1.4 6-10	10.6 5-10	4.11 5-10	1.8 6-10	1.1 2-10	5 5-10	5 5-10	.....	.....
3	B	.....	do.....	5.280	9.0 5-8	1.4 6-10	10.6 5-10	4.11 5-10	1.8 6-10	1.1 2-10	5 5-10	5 5-10	.....	.....
4	B	.....	do.....	5.280	9.0 5-8	1.4 6-10	10.6 5-10	4.11 5-10	1.8 6-10	1.1 2-10	5 5-10	5 5-10	.....	.....
5	B	P 1798 W G	do.....	5.280	8.5 5-10	1.4	9.8 5-10	4.10	1.7 6-10	1.2 5-10	5	5	43 2 23	.....
6	B	P 1798 W G	do.....	5.250	8.5 5-10	1.4	9.8 5-10	4.10	1.7 6-10	1.2 5-10	5	5	44 0 9	.....
7	B	P 1798 W G	do.....	5.280	8.5 5-10	1.4	9.8 5-10	4.10	1.7 6-10	1.2 5-10	5	5	43 2 16	.....
8	B	P 1798 W G	do.....	5.280	8.5 5-10	1.4	9.8 5-10	4.10	1.7 6-10	1.2 5-10	5	5	43 2 16	.....
9	B	P 1798 W G	do.....	5.280	8.5 5-10	1.4	9.8 5-10	4.10	1.7 6-10	1.2 5-10	5	5	43 3 9	.....

RECAPITULATION

Of gradual increase and classed guns at Philadelphia, Pennsylvania.

Nature of ordnance.	Class letter.	Philadelphia, Penn.		
		Gradual increase.	Repairs.	New sloops.
42-pounders, long		32		
42-pounders, carronades.....	A		30	
42-pounders.....do.....	O	42		
32-pounders, long.....	A	66		
32-pounders, long.....	B		14	
32-pounders, long.....	C		2	
32-pounders, carronades.....	A		1	
32-pounders.....do.....	O		20	
24-pounders, long.....	A	20		
24-pounders, light.....				4
24-pounders, carronades.....	O		1	
18-pounders, long.....	A	1		
18-pounders, long.....	B		9	
18-pounders, ship.....	B		33	
18-pounders, carronades.....	O		10	
12-pounders, long.....	A		7	
12-pounders, ship.....	A		39	
12-pounders, medium.....	A		1	

RECAPITULATION

Of condemned and unclassed guns at Philadelphia, Pennsylvania.

Nature of ordnance.	Philadelphia, Penn.		
	Defective from time or accident.	Defective in workmanship.	Servicable, but unclassed.
32-pounders, long.....		2	
18-pounders, ship.....	1		
12-pounders, long.....	1		
12-pounders, ship.....		1	
12-pounders, carronades.....			1
9-pounders, carriage guns.....	5		25
6-pounders.....do.....	1		
4-pounders.....do.....		2	
9 and 12-pounders.....do.....	15		

Inspection return of ordnance at the United States navy yard at Gosport, Virginia.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
1	V	French 18-pounder, ship	5.800	<i>Cwt. gr. lb.</i> 38 0 0	Nos. 1 and 2, French ship 18-pounders; ill-shaped, and roughly cast; large touch-holes and large bore; are unfit for the navy.
2	V	.....	do.	5.800	.....	.....	.....	.....	.....	.....	.....	.....	38 0 0
1	V	Long 32-pounder	6.600	49 2 12	Nos. 1 and 2 are French 24's, bored out to 32-pounders; ill-shaped, and roughly cast; large bores, and unfit for the navy.
2	V	.....	do.	6.600	.....	.....	.....	.....	.....	.....	.....	.....	47 2 7
1	V	Medium 18-pounder	5.250	6.3	1.1 5-10	7.4 2-10	3.8	1.3 5-10	1.0	4 2-10	5	22 2 9	Nos. 1, 2, and 3 are medium 18-pounders; are American 12-pounders rebored, and are unfit for the navy, only weighing about 22 cwt.
2	V	.....	do.	5.250	6.3	1.1 5-10	7.4 2 10	3.8	1.3 5-10	1.0	4 2-10	5	22 3 0
3	V	do.	5.250	6.3	1.1 5-10	7.4 2-10	3.8	1.0	4 2-10	5	22 3 0	From 1 to 13, inclusive, are long 32-pounders; all have raised vent fields for locks; have breech rings, and have trunnions in the centre; American manufacture.
1	B	48	Long 32-pounder	6.400	8.8 7-10	1.6	10.1 5-10	5.1 5-10	1.9 7-10	1.3 5-10	6 2-10	6	60 0 0	
2	B	52	do.	6.400	8.9	1.6	10.1 5-10	5.1 5-10	1.9 7-10	1.3 5-10	6 2-10	6	60 0 0	
3	B	150	do.	6.400	8.10 5-10	1.6	10.6 5-10	5.3 5-10	1.9 7-10	1.3 5-10	6 2-10	6	62 2 9	
4	B	36	do.	6.400	8.8 8-10	1.6	10.1 5-10	5.1 5-10	1.9 5-10	1.3 5-10	6 2-10	6	60 0 0	
5	B	55	do.	6.400	8.8 8-10	1.6	10.1 5-10	5.1 5-10	1.9 5-10	1.3 5-10	6 2-10	6	60 0 0	
6	B	37	do.	6.400	8.8 8-10	1.6	10.1 5-10	5.1 5-10	1.9 5-10	1.3 5-10	6 2-10	6	60 0 0	
7	B	50	do.	6.400	8.8 8-10	1.6	10.1 5-10	.....	1.9 5-10	1.3 5-10	6 2-10	6	60 0 0
8	B	1	do.	6.400	8.8 5-10	1.6	10.2 2-10	.....	1.9 5-10	1.3 5-10	6 2-10	6	60 0 0
9	B	96	do.	6.400	8 11	1.6	10.6 7-10	5.3 5-10	1.9 5-10	1.3 5-10	6 2-10	6	62 1 0	
10	B	107	do.	6.400	8.9 5-10	1.6	10.5 1-10	5.3 5-10	1.9 5-10	1.3 5-10	6 2-10	6	62 2 4	
11	B	28	do.	6.400	8.10	1.6	10.6	5.3 5-10	1.9 5-10	1.3 5-10	6 2-10	6	61 3 20	
12	B	72	do.	6.500	8.8	1.6	10.1 5-10	5.1 5-10	1.9 5-10	1.3 5-10	6 2-10	6	62 0 0	
13	B	56	do.	6.500	8.8	1.6	10.1 5-10	5.1 5-10	.....	1.3 5-10	6 2-10	6	60 0 0
1	A	V	Congrove 24-pounder	5.800	6.11 8-10	1.5 1-10	8.4 1-10	4.0 2-10	1.7 6-10	1.0	5 9-10	6	40 3 27	Nos. 1 and 2 are Congrove 21-pounders; have raised vent fields bored for locks; have breech rings, and have trunnions below the centre; are English Crown guns. See remarks against this description of guns at the Charlestown, Massachusetts, navy yard, page 544.
2	A	V	do.	5.800	6.11 8-10	1.5 1-10	8.4 1-10	4.0 2-10	1 7 6-10	1.0	5 9-10	6	40 2 27	
1	A	Ship 12-pounder	4.600	6.6 5-10	1.1 5-10	7.9 6-10	3.11 4-10	1.4 9-10	1.1 2-10	4 7-10	4 7-10	Nos. 1 and 2 are English long 12-pounders; have raised vent fields bored for locks; no breech rings, and have trunnions below the centre.
2	A	.....	do.	4.700	6.6 5-10	1.1	7.9 1-10	4.0	1.4 8-10	1.1 2-10	4 7-10	4 7-10	23 2 0
1	V	Ship 18-pounder	5.280	7.2 to 7.4	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 1 7	From 1 to 31, inclusive, are ship 18-pounders; all have raised vent fields bored for locks; have breech rings, and trunnions below the centre; are the Congress's armament; American manufacture; roughly cast; honeycombed; and have large touch-holes; are unfit for the navy.
2	V	.....	do.	5.320	7.2 to 7.4	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 0 15
3	V	.....	do.	5.380	7.2 to 7.4	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 0 7
4	V	.....	do.	5.230	7.2 to 7.4	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	35 3 23
5	V	.....	do.	5.230	7.2 to 7.4	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 1 0
6	V	.....	do.	5 230	7.2 to 7.4	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	35 3 0
7	V	.....	do.	5.260	7.2 to 7.4	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 0 4
8	V	.....	do.	5.220	7.2 to 7.4	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	35 3 14
9	V	.....	do.	5.300	7.2 to 7.4	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	35 3 26
10	V	.....	do.	5.280	7.2 to 7.4	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 1 2
11	V	.....	do.	5.200	7.2 to 7.4	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-1	5 5-10	36 0 19

Inspection return of ordnance at the United States navy yard at Gosport, Virginia—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnions.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
12	V		Ship 18-pounder	5.300	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	<i>Cwt. gr. lb.</i> 36 1 20	
13	V		do	5.280	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 2 6	
14	V		do	5.280	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	35 3 17	
15	V		do	5.280	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 2 0	
16	V		do	5.300	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 0 1	
17	V		do	5 300	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 0 9	
18	V		do	5.280	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	35 3 24	
19	V		do	5.300	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 2 14	
20	V		do	5.300	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 0 20	
21	V		do	5.280	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	35 3 19	
22			do	5.300	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 0 14	
23			do	5.280	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 2 20	
24			do	5.300	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 0 8	
25			do	5.300	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 0 5	
26			do	5.300	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 1 7	
27			do	5.280	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 2 8	
28			do	5.280	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 0 4	
29			do	5.300	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1 1 2-10	5 4-10	5 5-10	36 1 14	
30			do	5.300	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 2 0	
31			do	5.280	7.2 to 7.4½	1.3 8-10	8.5	4.3	1.7	1.1 2-10	5 4-10	5 5-10	36 2 7	
32	B	V GR	do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 2 21	From 32 to 58, inclusive, English Crown guns, ship 18-pounders; all have raised vent fields bored for locks, breech rings, and trunnions below the centre. Part of the Macedonian's armament.
33			do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 2 18	
34			do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	37 3 0	
35			do	5.300	7.5 5-10	1.3 3-10	8.9 5-60	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 2 0	
36			do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 0 25	
37			do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 0 2	
38			do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	39 0 14	
39			do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	37 0 3	
40			do	5.300	7.5 5-01	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 0 17	
41			do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 2 7	
42			do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 3 21	
43			do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 3 14	
44			do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 1 0	
45			do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 3 27	
46			do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 1 4	
47			do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 3 14	
48			do	5.300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 0 7	

Inspection return of ordnance at the United States navy yard at Gosport, Virginia—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.	
49	Ship 18-pounder	5,300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	<i>Cwt. gr. lb.</i> 38 0 7	From 1 to 23, inclusive, are long 18-pounders; all have raised vent fields for locks, have breech rings, and have trunnions in the centre; army pattern; American manufacture. Nos. 23 and 24 are too small in the bore, only 5.250, and are unfit for the navy.	
50	.....	.....	do.....	5,300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	37 3 14
51	.....	.....	do.....	5,300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 0 4
52	.....	.....	do.....	5,300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 1 10
53	.....	.....	do.....	5,300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 1 0
54	.....	.....	do.....	5,300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 2 0
55	.....	.....	do.....	5,300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	39 0 0
56	.....	.....	do.....	5,300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 1 17
57	.....	.....	do.....	5,300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 0 5
58	.....	.....	do.....	5,300	7.5 5-10	1.3 3-10	8.9 5-10	4.5	1.7 6-10	1.2 3-10	5 5-10	5 5-10	38 3 4
1	A	84	Long 18-pounder.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	39 3 7		From 1 to 23, inclusive, are long 18-pounders; all have raised vent fields for locks, have breech rings, and have trunnions in the centre; army pattern; American manufacture. Nos. 23 and 24 are too small in the bore, only 5.250, and are unfit for the navy.
2	.....	87	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	39 2 23	
3	.....	53	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14	
4	.....	53	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14	
5	.....	54	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14	
6	.....	38	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14	
7	.....	56	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14	
8	.....	32	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14	
9	.....	30	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14	
10	A	40	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
11	A	39	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
12	A	56	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
13	A	48	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
14	A	37	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
15	A	43	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
16	A	34	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
17	A	42	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
18	A	31	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
19	A	44	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
20	A	52	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
21	A	51	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
22	A	41	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
23	V	45	do.....	5,250	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	40 0 0		
24	V	46	do.....	5,250	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
25	A	63	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 18		
26	A	49	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		
27	A	23	do.....	5,300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5 5-10	38 3 14		

Inspection return of ordnance at the United States navy yard at Gosport, Virginia—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
28	A	5	Long 18 pounder,	5.400	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5-10	<i>Cwt. gr. lb.</i> 38 3 14	
29	V	58do.....	5.300	8.6 5-10	1.3 2-10	9.10	4.11	1.6 5-10	1.1 8-10	5 2-10	5-10	38 3 8	No. 29 has defective trunnion; has a plain vent field.
30	B	20do.....	5.300	8.7	1.2 4-10	9.10	4.11	1.5 5-10	1.0 5-10	5 8-10	5-10	34 3 4	No. 30, a long 18-pounder, has no breech ring, and has its trunnion below the centre.
1	B	Medium 32-pounder.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 0 17	From 1 to 32, inclusive, are medium 32-pounders; all have raised vent fields bored for locks; no breech rings, and trunnions in the centre; American manufacture; a part of the Java's armament.
2	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 1 0
3	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 0 7
4	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 0 0
5	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 0 21
6	B	.....	.....do.....	6.500	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 3 0
7	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 2 0
8	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 0 0
9	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 0 0
10	B	.....	.....do.....	6.500	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 2 4
11	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 2 21
12	B	.....	.....do.....	6.500	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 1 0
13	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 0 2
14	B	.....	.....do.....	6.500	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 2 0
15	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 0 14
16	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 0 0
17	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 2 4
18	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 1 0
19	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 0 14
20	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 3 0
21	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 2 16
22	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 2 0
23	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 1 0
24	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 3 11
25	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 0 1
26	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 0 0
27	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	52 2 0
28	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 1 4
29	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 1 5
30	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 0 0
31	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	50 2 10
32	B	.....	.....do.....	6.450	7.8 5-10	1.6	9.2 5-10	4.8	1.9 5-10	1.3 8-10	6	6	51 1 0

9 91—A TOA

Inspection return of ordnance at the United States navy yard at Gosport, Virginia—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
1	A	84	Long 24-pounder.....	5,800	8.4	1.5 5-10	9.9 2-10	4 11 5-10	1.9	1.2	6	5 7-10	<i>Cwt, gr. lb.</i> 50 0 0	From 1 to 40, inclusive, are 24-pounders; all have raised vent fields bored for locks; all have trunnions in the centre. Nos. 1 to 7, inclusive, and 22 and 31 have breech rings; the rest have no breech rings; the trunnions are slightly tapered. From 8 to 40, inclusive, are part of the Guerriere's armament; all are American manufacture. These guns are roughly cast, and the touch-holes are large and badly bored, departing from 1 to 3 inches from the proper direction; some pricking the cartridge on the side, some in the <i>bottom</i> , and some forward of the centre. It will also be seen that these guns vary very much in diameter of the bore, the difference between the largest and the smallest being .250. The manifest want of skill in the manufacture of these guns, which, it is believed, were cast at Hughes's foundery, in Maryland, during the late war; and the fact that one of them did burst on board the Guerriere the first time she had occasion to use them, renders them improper guns to be retained in the navy, for, I imagine, no commander or crew would have perfect confidence in them.
2	A	38	.....do.....	5,800	8.4	1.5 5-10	9.9 2-10	4,11 5-10	1.9	1.2	6	5 7-10	49 3 0
3	A	47	.....do.....	5,800	8.4	1.5 5-10	9.9 2-10	4,11 5-10	1.9	1.2	6	5 7-10	50 0 0
4	A	61	.....do.....	5,800	8.4	1.5 5-10	9.9 2-10	4,11 5-10	1.9	1.2	6	5 7-10	50 0 0
5	A	37	.....do.....	5,800	8.4	1.5 5-10	9.9 2-10	4,11 5-10	1.9	1.2	6	5 7-10	48 3 0
6	A	49	.....do.....	5,800	8.4	1.5 5-10	9.9 2-10	4,11 5-10	1.9	1.2	6	5 7-10	50 2 0
7	A	20	.....do.....	5,800	8.4	1.5 5-10	9.9 2-10	4,11 5-10	1.9	1.2	6	5 7-10	49 0 0
8	A	P	.....do.....	5,900	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
9	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
10	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
11	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
12	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
13	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
14	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
15	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
16	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
17	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
18	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
19	A	P	.....do.....	5,950	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
20	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
21	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
22	A	2	.....do.....	5,900	8.4 5-10	1.5 5-10	9.9 2-10	4,11 5-11	1.9	1.2	6	5 7-10	50 1 0
23	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
24	A	P	.....do.....	5,900	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
25	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
26	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
27	A	P	.....do.....	5,900	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
28	A	P	.....do.....	5,720	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
29	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
30	A	P	.....do.....	5,800	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
31	A	P 75	.....do.....	5,800	8.4 5-10	1.5 5-10	9.9 2-10	4,11 5-10	1.9	1.2	6	5 7-10	.....
32	A	P	.....do.....	5,720	8.3	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	50 1 7
33	A	P	.....do.....	5,800	8.3 5-10	1.5 3-10	9.8 5-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
34	A	P	.....do.....	5,900	8.6	1.5 3-10	9.7 3-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
35	A	P	.....do.....	5,800	8.3 5-10	1.5 3-10	9.7 3-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
36	A	P	.....do.....	5,800	8.3 5-10	1.5 3-10	9.7 3-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....
37	A	P	.....do.....	5,800	8.3 5-10	1.5 3-10	9.7 3-10	4,10 5-10	1.8 6-10	1.2	6	5 7-10	.....

Inspection return of ordnance at the United States navy yard at Gosport, Virginia—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
													<i>Cwt. gr. lb.</i>	
38	A	P	Long 24-pounder.....	5.800	8.3 5-10	1.5 3-10	9.7 3-10	4.10 5-10	1.8 6-10	1.2	6	5 7-10	
39	A	Pdo.....	5.800	8.3 5-10	1.5 3-10	9.7 3-10	4.10 5-10	1.8 6-10	1.2	6	5 7-10	
40	A	Pdo.....	5.700	8.0 5-10	1.5 3-10	9.6 5-10	4.10 5-10	1.8 6-10	1.2	6	5 7-10	
						Length of chamber.		Centre of nave.			Diameter of nave hole.	Length of nave.		
1	A	P	Carronade 32-pounder..	6.400	3.4 5-10	6	5.4 5-10	2.9 5-10	1.5 1-10	1.0 8-10	3	8	From 1 to 33 are 32-pounder carronades; all have raised vent fields for locks, and all have holes for screws and breech rings. From 1 to 10, inclusive, are American manufacture, and from 11 to 33 English Crown guns, and are part of the Macedonian's armament.
2	A		.....do.....	6.400	3.5 4-10	5 6-10	5.3 5-10	2.9 5-10	1.5 1-10	1.0 8-10	3	8	.....
3	V		.....do.....	6.200	3.5 4-10	5 6-10	5.3 5-10	2.9 5-10	1.5 1-10	1.1 5-10	3	8	.....
4	A		.....do.....	6.400	3.5	6 5-10	5.3 5-10	2.9 5-10	1.5 1-10	1.0 9-10	3	8	.....
5	A		.....do.....	6.400	3.5	6 5-10	5.3 5-10	2.9 5-10	1.5 1-10	1.0 9-10	3	8	.....
6	A		.....do.....	6.400	3.5	6 5-10	5.3 5-10	2.9 5-10	1.5 5-10	1.1	3	8	.....
7	A		.....do.....	6.400	3.5	6 5-10	5.3 5-10	2.9 5-10	1.5 5-10	1.0 9-10	3	8	.....
8	A		.....do.....	6.400	3.2 5-10	7 4-10	5.4 5-10	2.9 5-10	1.5 5-10	1.1	3	8	.....
9	A		.....do.....	6.400	3.5	6 3-10	5.4	2.9 5-10	1.5 3-10	1.0 9-10	3	8	.....
10	V		.....do.....	6.200	3.5	6 3-10	5.4	2.9 5-10	1.5 5-10	1.0 9-10	3	8	.....
11	O	V	.....do.....	6.200	3.7	4 8-10	5.3 3-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 1 18
12	O	V	.....do.....	6.200	3.7	4 8-10	5.3 3-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 1 25
13	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.3	2.7	1.5 2-10	1.0 6-10	2 6-10	8	16 3 14
14	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.3	2.7	1.5 2-10	1.0 6-10	2 6-10	8	16 3 4
15	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.3	2.7	1.5 2-10	1.0 6-10	2 6-10	8	16 3 7
16	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.3	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 0 0
17	O	V	.....do.....	6.200	3.7	4 8-10	5.4 2-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 0 2
18	O	V	.....do.....	6.200	3.7	4 8-10	5.4 2-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 0 14
19	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.3	2.7	1.5 2-10	1.0 6-10	2 6-10	8	16 3 18
20	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.3	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 0 4
21	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.4 2-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 1 10
22	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.3 5-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 0 16
23	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.4	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 1 2
24	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.4	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 0 23
25	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.4 2-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 0 27
26	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.4 5-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 1 2
27	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.4 5-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 0 26
28	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.4 1 10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 0 26
29	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.4 2-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 0 20
30	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.4 2-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 1 11
31	O	P 1798 WG	.....do.....	6.200	3.7	4 8-10	5.4 2-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 1 2

Inspection return of ordnance at the United States navy yard at Gosport, Virginia—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to centre of nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.	
32	O	P 1798 W G	Carronade 32-pounder ..	6.200	3.7	4 8-10	5.3 5-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	<i>Cwt. gr. lb.</i> 17 0 16	From 34 to 50, inclusive, are 32-pound carronades; all have raised vent fields bored for locks; have breech rings and hole for screw. American manufacture. Said to be a part of the Ontario's original armament, but in consequence of the irregular length of their chambers they have been taken off her. The objection is certainly a substantial one. Nos. 38, 43, 49, and 50 are of this lot.	
33	O	P 1798 W G	.....do.....	6.200	3.7	4 8-10	5.4 5-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 0 25	
34	A	P 1798 W G	.....do.....	6.400	3.5 5-10	6 2-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
35	A	P 1798 W G	.....do.....	6.400	3.5 5-10	6 2-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
36	A	P 1798 W G	.....do.....	6.400	3.5 5-10	6 2-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
37	A	P 1798 W G	.....do.....	6.400	3.5 5-10	6 2-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
38	A	P 1798 W G	.....do.....	6.400	3.3 5-10	7 7-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
39	A	P 1798 W G	.....do.....	6.400	3.5 2-10	6 2-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
40	A	P 1798 W G	.....do.....	6.400	3.5 2-10	5 6-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
42	A	P 1798 W G	.....do.....	6.400	3.5 2-10	5 6-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
43	A	P 1798 W G	.....do.....	6.400	3.3 5-10	7 9-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
44	A	P 1798 W G	.....do.....	6.400	3.5 1-10	6 2-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
45	A	P 1798 W G	.....do.....	6.400	3.5 5-10	6	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
46	A	P 1798 W G	.....do.....	6.400	3.5	6 1-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
47	A	P 1798 W G	.....do.....	6.400	3.5 4-10	6 2-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
48	A	P 1798 W G	.....do.....	6.400	3.5 4-10	6 2-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
49	A	P 1798 W G	.....do.....	6.400	3.4	7 8-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
50	A	P 1798 W G	.....do.....	6.400	3.4 2-10	7 2-10	5.4	2.9	1.5 5-10	1.1	3	8 5-10	.....	
51	Ado.....do.....	6.400	3.5	6 4-10	5.4	2.9	1.5 3-10	1.1	2 7-10	8		From 51 to 62, inclusive, are 32-pound carronades; all have vent fields for locks. Nos. 51 and 52 have screw holes and breech rings. From 53 to 62, inclusive, have no screw holes nor breech rings. All are American manufacture.
52	A	.....do.....	.....do.....	6.400	3.5	6 4-10	5.4	2.9	1.5 3-10	1.1	2 7-10	8	.....	
53	A	.....do.....	.....do.....	6.400	3.5 5-10	5 7-10	5.4 5-10	2.9	1.5 3-10	1.1 6-10	2 7-10	8	.....	
54	A	.....do.....	.....do.....	6.400	3.5 5-10	5 7-10	5.4 5-10	2.9	1.5 3-10	1.1 6-10	2 7-10	8	.....	
55	A	.....do.....	.....do.....	6.400	3.6 2-10	5 6-10	5.4 5-10	2.9	1.5 3-10	1.1 6-10	2 7-10	8	.....	
56	A	.....do.....	.....do.....	6.400	3.5 5-10	6 6-10	5.4 5-10	2.9	1.5 3-10	1.1 6-10	2 7-10	8	.....	
57	A	.....do.....	.....do.....	6.400	3.5 5-10	6 6-10	5.4 5-10	2.9	1.5 3-10	1.1 6-10	2 7-10	8	.....	
58	A	.....do.....	.....do.....	6.400	3.5 5-10	6 2-10	5.4 5-10	2.9	1.5 3-10	1.1 6-10	2 7-10	8	.....	
59	A	.....do.....	.....do.....	6.400	3.7 3-10	4 2-10	5.4 5-10	2.9	1.5 3-10	1.1 6-10	2 7-10	8	.....	
60	A	.....do.....	.....do.....	6.400	3.5 2-10	6 4-10	5.4 5-10	2.9	1.5 3-10	1.1 6-10	2 7-10	8	.....	
61	A	.....do.....	.....do.....	6.400	3.5 2-10	6 4-10	5.4 5-10	2.9	1.5 3-10	1.1 6-10	2 7-10	8	.....	
62	A	.....do.....	.....do.....	6.400	3.5 2-10	6 4-10	5.4 5-10	2.9	1.5 3-10	1.1 6-10	2 7-10	8	.....	
63	Ado.....do.....	6.400	3.5 5-10	6 2-10	5.4	2.9	1.5 3-10	1.1 6-10	2 7-10	8	No. 63 same as and said to be a part of the Ontario's armament.	
64	O	Vdo.....	6.200	3.7	4 8-10	5.4 5-10	2.7	1.5 2-10	1.0 6-10	2 6-10	8	17 1 0	No. 64 same as and said to be a part of the Macedonian's armament.	
1	Ado.....	Carronade 42-pounder ..	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 7-10	1.2	3	8	From 1 to 20, inclusive, are 42-pound carronades; all have vent fields bored for locks, breech rings, and holes for screws. American manufacture, and part of the Guerriere's armament.	
2	A	.....do.....	.....do.....	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 7-10	1.2	3	8	.....	
3	A	.....do.....	.....do.....	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 7-10	1.2	3	8	.....	
4	A	.....do.....	.....do.....	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 7-10	1.2	3	8	.....	
5	A	.....do.....	.....do.....	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 7-10	1.2	3	8	.....	

Inspection return of ordnance at the United States navy yard at Gosport, Virginia—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to centre of nave.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.
													<i>Cwt. gr. lb.</i>	
6	A		Carronade 42-pounder ..	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 7-10	1.2	3	8		
7	A		do	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 7-10	1.2	3	8		
8	A		do	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 7-10	1.2	3	8		
9	A		do	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 7-10	1.2	3	8		
10	A		do	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 7-10	1.2	3	8		
11	A		do	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 7-10	1.2	3	8		
12	A		do	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 7-10	1.2	3	8		
13	A		do	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 7-10	1.2	3	8		
14	A		do	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 7-10	1.2	3	8		
15	A		do	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 8-10	1.2	3	8		
16	A		do	7.040	3.10	6 6-10	5.8 5-10	2.8 2-10	1.5 8-10	1.2	3	8		
17	A		do	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 8-10	1.2	3	8		
18	A		do	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 8-10	1.2	3	8		
19	A		do	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 8-10	1.2	3	8		
20	A		do	7.040	3.10	6 9-10	5.8 5-10	2.8 2-10	1.5 8-10	1.2	3	8		
21	O		do	6.900	3.9	7	5.8 5-10	2.9	1.6 6-10	1.2 8-10	2 8-10	8		
22	O		do	6.900	3.9	7	5.8 5-10	2.9	1.6 6-10	1.2 8-10	2 8-10	8		From 21 to 25, inclusive, are 42-pound carronades; all have vent fields for locks; no breech rings nor holes for screws. American manufacture.
23	O		do	6.900	3.9	7	5.8 5-10	2.9	1.6 6-10	1.2 8-10	2 8-10	8		
24	O		do	6.900	3.9	7	5.8 5-10	2.9	1.6 6-10	1.2 8-10	2 8-10	8		
25	O		do	6.900	3.9	7	5.8 5-10	2.9	1.6 6-10	1.2 8-10	2 8-10	8		
1	A		Carronade 24-pounder ..	5.800	3.1 5-10	5 4-10	4.9 2-10	2.4 5-10	1.3 7-10	1.0 1-10	2 4-10	7 5-10		From 1 to 5, inclusive, are 24-pound carronades; all have vent fields for locks; no breech rings nor holes for screws. American manufacture.
2	A		do	5.800	3.1 5-10	5 4-10	4.9 2-10	2.4 5-10	1.3 7-10	1.0 1-10	2 4-10	7 5-10		
3	A		do	5.800	3.1 5-10	5 4-10	4.9 2-10	2.4 5-10	1.3 7-10	1.0 1-10	2 4-10	7 5-10		
4	A		do	5.800	3.1 5-10	5 4-10	4.9 2-10	2.4 5-10	1.3 7-10	1.0 1-10	2 4-10	7 5-10		
5	A		do	5.800	3.1 5-10	5 4-10	4.9 2-10	2.4 5-10	1.3 7-10	1.0 1-10	2 4-10	7 5-10		
1	A		Carronade 18-pounder ..	5.350	3.0 3-10	5 5-10	4.8	2.3	1.3 1-10	0.10 5-10	2	6 9-10		From 1 to 5, inclusive, are 18-pound carronades; all have raised vent fields for locks; no breech rings nor holes for screws. Are American manufacture.
2			do	5.350	3.0 3-10	5 5-10	4.8	2.3	1.3 1-10	0.10 5-10	2	6 9-10		
3			do	5.350	3.0 3-10	5 5-10	4.8	2.3	1.3 1-10	0.10 5-10	2	6 9-10		
4			do	5.350	3.0 3-10	5 5-10	4.8	2.3	1.3 1-10	0.10 5-10	2	6 9-10		
5	O		do	5.200	3.0 3-10	5 5-10	4.8	2.3	1.3 1-10	0.10 5-10	2	6 9-10		
6		P 1813	do	5.200	3.0	4	4.4 2-10	2.1	1.3 2-10	0.10 5-10	2 2-10	6 6-10	10 0 0	From 6 to 14, inclusive, are 18-pound carronades; all have raised vent fields bored for locks; have breech rings and screw holes. They are English Crown guns.
7		V	do	5.200	3.0	4	4.4 2-10	2.1	1.3 2-10	0.10 5-10	2 2-10	6 6-10	10 0 08	
8			do	5.200	3.0	4	4.4 2-10	2.1	1.3 2-10	0.10 5-10	2 2-10	6 6-10		
9			do	5.200	3.0	4	4.4 2-10	2.1	1.3 2-10	0.10 5-10	2 2-10	6 6-10		
10			do	5.200	3.0	4	4.4 2-10	2.1	1.3 2-10	0.10 5-10	2 2-10	6 6-10		
11		P 1811	do	5.200	3.0	4	4.4 2-10	2.1	1.3 2-10	0.10 5-10	2 2-10	6 6-10	9 2 6	
12		P 1798	do	5.200	3.0	4	4.4 2-10	2.1	1.3 2-10	0.10 5-10	2 2-10	6 6-10		

Inspection return of ordnance at the United States navy yard at Gosport, Virginia—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to centre of nave.	Extreme diameter at breech.	Extreme diameter at the muzzle.	Diameter of nave hole.	Length of nave.	Weight.	Remarks.
13	V	Carronade 18-pounder.	5.200	3.0	4	4.4 2-10	2.1	1.3 2-10	0.10 5-10	2 2-10	6 6-10	<i>Cwt. gr. lb.</i> 10 0 4	No. 15 is an 18-pound carronade; has a composition vent field for lock; has a breech ring and hole for screw. American manufacture. Nos. 16, 17, and 18, are 18-pound carronades. All have raised vent fields bored for locks, breech rings, and no hole for screw. Are American manufacture. From 1 to 18, inclusive, are 12-pound carronades. Nos. 1, 2, 3, and 4, have raised vent fields bored for locks, breech rings, but no hole for screw. Nos. 5, 6, 7, 8, 9, and 10, have vent fields for locks; no breech rings nor hole for screw. From 1 to 10, inclusive, are American manufacture. From 11 to 18, inclusive, are English guns. All have raised vent fields bored for locks, breech rings, and screw holes.
14	P 1813	.....do.....	5.200	3.0	4	4.4 2-10	2.1	1.3 2-10	0.10 5-10	2 2-10	6 6-10	9 1 19	
15do.....	5.200	3.5 5-00	5	5.0	2.5 5-10	1.3 5-10	0.11 5-19	2 5 10	7		
16	A		.....do.....	5.400	2.11	3	4.3 5-10	2.1 5-10	1.2 2-10	0.10 1-10	2 2-10	6 3-10	
17do.....	5.400	2.11	3	4.3 5-10	2.1 5-10	1.2 2-10	0.10 1-10	2 2-10	6 3-10		
18do.....	5.400	2 11	3	4.3 5-10	2.1 5-10	1.2 2-10	0.10 1-10	2 2-10	6 3-10		
1		Carronade 12-pounder.	4.850	3.0 5-10	4	4.3 5-10	2.1 5-10	1.0	0.9	2 1-10	6 4-10		
2do.....	4.750										
3do.....	4.750										
4do.....	4.750										
5do.....	4.600	2.8	5 3-00		1.11 5-10	1.8 2-10	0.9 5-10		5 5-10		
6do.....											
7do.....											
8do.....											
9do.....											
10do.....											
11do.....		2.5	3 4-10	3.7	1.11	1.1	0.9		5 8-10		
12	V	.....do.....										6 0 7	
13	V	.....do.....										6 0 0	
14	P	.....do.....										6 2 7	
15do.....											
16do.....											
17do.....										6 0 23	
18do.....	4.600	2.5	3 4-10	3.7	1.11	1.1	0.9	2 1-10	5 8-10	6 0 0	
24	A		Carronade 12-pounder.		4.6	Including chamber.	6.8 5-10	3.1 5-10	1.9 4-10	1.3 4-10	3	8 5-10		
50	O	do.....		4.6		6.8 5-10	3.1 5-10	1.9 4-10	1.3 4-10	3	8 5-10		

Inspection return of ordnance at the United States navy yard at Gosport, Virginia—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
1	P	Long 9-pounder.....	4.350	6.1	1.0 6-10	7.1 6-10	3.6 2-10	1.4 2-10	1.0 1-10	4 2-10	4 2-10	<i>Cwt. gr. lb.</i> 19 2 7	Nos. 1 to 6, inclusive, are long 9-pounders. All have raised vent fields for locks; no breech rings; have trunnions <i>below</i> the centre; are foreign manufacture—French or Spanish.—(See note against long 9-pounder at page 579.) Nos. 5 and 6 are long 9-pounders; have raised vent fields bored for locks; no breech rings; trunnions below the centre. American manufacture.
2	P	.....do.....	4.350	6.1	.....	1.0 6-10	7.1 6-10	3.6 2-10	1.4 2-10	1.0 1-10	4 2-10	4 2-10	19 2 14	
3	P	.....do.....	4.350	6.1	.....	1.0 6-10	7.1 6-10	3.6 2-10	1.4 2-10	1.0 1-10	4 2-10	4 2-10	19 2 0	
4	P	.....do.....	4.350	6.1	.....	1.0 6-10	7.1 6-10	3.6 2-10	1.4 2-10	1.0 1-10	4 2-10	4 2-10	19 2 0	
5do.....	4.300	6.9	.....	0.11 7-10	7.9	3.8	1.2 6-10	0.10 2-10	4 2-10	4 2-10	19 0 14	
6do.....	4.300	6.9	.....	0.11 7-10	7.9	3.8	1.2 6-10	0.10 2-10	4 2-10	4 2-10	19 2 14	
7	15do.....	4.300	7.1 3-10	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	Nos. 7 to 23, inclusive, are long 9-pounders; have raised vent fields for locks; have breech rings, and trunnions <i>in</i> the centre. Army pattern. American manufacture.—(See note against similar guns at page 580.)
8	9	.....do.....	4.300	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
9	P	.....do.....	4.200	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 2 14	
10	28	.....do.....	4.200	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
11	31	.....do.....	4.200	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
12	36	.....do.....	4.350	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
13	27	.....do.....	4.200	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
14	32	.....do.....	4.300	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
15	33	.....do.....	4.200	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
16	23	.....do.....	4.200	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
17	20	.....do.....	4.200	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
18	21	.....do.....	4.300	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
19	10	.....do.....	4.300	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
20	31	.....do.....	4.200	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
21	26	.....do.....	4.200	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
22	25	.....do.....	4.300	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
23	11	.....do.....	4.200	7.1 3-10	.....	1.1	8.2 2-10	4.1	1.3 6-10	0.11	4 2-10	4 2-10	24 0 7	
1	35	Columbiad 50-pounder..	7.350	4.6	8	1.6	6.3 5-10	3.5 2-10	1.9	1.4 2-10	6 9-10	6 2-10	35 2 9	Nos. 1 and 2 are 50-pound columbiads; have raised vent fields; are without breech rings, and have trunnions <i>in</i> the centre. American manufacture.
2	32	.....do.....	7.350	4.6	8	1.6	6.3 5-10	3.5 2-10	1.9	1 4 2-10	6 9-10	6 2-10	35 1 1	
1	V	Long 4-pounder.....	Nos. 1 and 2, long 9-pounders, are ill-shaped and unfit for the navy. From 1 to 8, inclusive, are 12-pound gunades. All have breech rings; trunnions below the centre. English manufacture. Nos. 4 and 5 are unfit for the navy, the others will answer for boat guns.
2	V	.....	.....do.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1	Gunade 12-pounder....	4.600	3.0 5-10	4 7-10	1.0	4.3 8-10	2.4	1.0 9-10	0.8 7-10	1 4-10	4	.....
2do.....	4.600	3.0 5-10	4 7-10	1.0	4.3 8-10	2.4	1.0 9-10	0.8 7-10	1 4-10	4	.....
3do.....	4.600	3.0 5-10	4 7-10	1.0	4.3 8-10	2.4	1.0 9-10	0.8 7-10	1 4-10	4	.....
4	V	.....	.....do.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	V	.....	.....do.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	P 1807	.....do.....	4.600	3.9 8-10	4	0.11 1-10	4.10 1-10	2.5 7-10	1.1 7-10	0.9 5-10	3 4-10	3 7-10	9 2 18	
7	P 1807	.....do.....	4.600	3.9 8-10	4	0.11 1-10	4.10 1-10	2.5 7-10	1.1 7-10	0.9 5-10	3 4-10	3 7-10	9 2 20	
8do.....	4.600	3.2 5-10	.....	0.11 5-10	4.0	2.3	1.2 7-10	0.9 5-10	3 5-10	4	9 0 0	

Inspection return of ordnance at the United States navy yard at Gosport, Virginia—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Length of chamber.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
1 to 15			Gunade 9-pounder.....											<i>Cwt. qr. lb.</i>	From 1 to 14 vary from 3 feet 9 inches to 4 feet 9 inches in length, and weigh from 6 cwt. 3 qrs. to 7 cwt. 3 qrs.
16 to 18			do.....	4.200	3 4 5-10		0.10 6-10	4.0	2.4	1.0 3-10	0.8 5-10	3 2-10	3 3-10	7 0 10	From 1 to 16, inclusive, are 9-pound gunades. All have plain vent fields; have breech rings, and have trunnions below the centre.
19 to 21			do.....	4.200	4 4 5-10		0.10 6-10	4.0	2.4	1.0 3-10	0.8 5-10	3 2-10	3 3-10	7 0 10	Nos. 15 and 16 are mounted as field-pieces in the navy yard.
22 to 26			Gunade 6-pounder.....	3.600	2 8 5-10		0.9 2-10	3.6	2.1	1.0 2-10	0.7 5-10	3 3-10	3 3-10	4 to 5 cwt.	From 1 to 6, inclusive, are 6-pound gunades. All have breech rings, and have trunnions below the centre.
27 to 30	2 of this inspection.		Gunade 12-pounder.....	4.600	3 3 5-10	3 6-10	0.11 5-10	4.3 3-10	2.3 1-10	1.1 7-10	0.8 8-10	4 7-10	4 7-10		From 1 to 12, inclusive, are 12-pound gunades. All have raised vent fields for locks; have breech rings and trunnions in the centre.
31 to 32	10 of this description.		.....		2 5 6-10	2 2-10	0.11	3.7 5-10	1.11	1.0 4-10	0.9 1-10	4 7-10	4 7-10		Foreign manufacture. Mounted as a saluting battery on board the Java.
33 to 38			Gunade 9-pounder....		3.11½		0.10 5-10	4.8 7-10	2.5	1.0 5-10	0.9	3 7-10	3 7-10	12 0 9	From 1 to 8, inclusive, are 9-pound gunades. All have raised vent fields for locks; have breech rings, and trunnions below the centre. Foreign manufacture. Mounted as a saluting battery on board the Java.

Recapitulation of gradual increase and classed guns at Gosport, Virginia.

Nature of ordnance.	Class letter.	Gosport, Virginia.		
		Gradual increase.	Repairs.	New sloops.
42-pounders, long.....	A	64		
42-pounders, carronades.....	A	24	20	
42-pounders, carronades.....	O	50	5	
32-pounders, long.....	A	118		
32-pounders, long.....	B		13	
32-pounders, medium.....	B		32	
32-pounders, carronades.....	A		26	
32-pounders, carronades.....	O		24	
24-pounders, light.....	A		2	18
24-pounders, congrve.....	A		5	
24-pounders, carronades.....	A		26	
18-pounders, long.....	A		1	
18-pounders, long.....	B		27	
18-pounders, shlp.....	B		7	
18-pounders, carronades.....	A		11	
18-pounders, carronades.....	O			
12-pounders, shlp.....	A		2	

Recapitulation of condemned and unclassed guns at Gosport, Virginia.

Nature of ordnance.	Gosport, Virginia.		
	Defective from time or accident.	Defective in workmanship.	Serviceable, but unclassified.
60-pounders, columbiad.....			
32-pounders, long.....			
32-pounders, carronades.....			
24-pounders, long.....		46	
18-pounders, long.....			
18-pounders, shlp.....	31	3	
18-pounders, medium.....	6		
12-pounders, carronades.....			
12-pounders, gunades.....		2	18
9-pounders, carriage guns.....			23
9-pounders, gunades.....			24
6-pounders, gunades.....			26
4-pounders, carriage guns.....		2	

Inspection return of ordnance at the United States navy yard at Washington, D. C.

991-A TOA

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
1	C	76	Long 32-pounder.....	6.400	9.2	1.6 5-10	10.7 5-10	5.4	1.10 3-10	1.4	6	6	Cwt. gr. lb.	From 1 to 25, inclusive, are long 32-pounders; all have raised vent fields for locks, and have breech rings. From 1 to 10, inclusive, have trunnions <i>below</i> the centre. From 11 to 25, inclusive, have trunnions <i>in</i> the centre. All are American manufacture.
2	C	69	.....do.....	6.400	9.2	1.6 5-10	10.7 5-10	5.4	1.10 3-10	1.4	6	6	61 3 11
3	C	77	.....do.....	6.400	9.2	1.6 5-10	10.7 5-10	5.4	1.10 3-10	1.4	6	6	62 0 23
4	C	59	.....do.....	6.400	9.2	1.6 5-10	10.7 5-10	5.4	1.10 3-10	1.4	6	6	62 0 11
5	C	61	.....do.....	6.400	9.2	1.6 5-10	10.7 5-10	5.4	1.10 3-10	1.4	6	6	62 1 22
6	C	60	.....do.....	6.400	9.2	1.6 5-10	10.7 5-10	5.4	1.10 3-10	1.4	6	6	62 3 17
7	C	63	.....do.....	6.400	9.2	1.6 5-10	10.7 5-10	5.4	1.10 3-10	1.4	6	6	62 1 17
8	C	2	.....do.....	6.400	9.2	1.6 5-10	10.7 5-10	5.4	1.10 3-10	1.4	6	6	62 2 17
9	C	67	.....do.....	6.400	9.2	1.6 5-10	10.7 5-10	5.4	1.10 3-10	1.4	6	6	62 2 17
10	C	66	.....do.....	6.400	9.2	1.6 5-10	10.7 5-10	5.4	1.10 3-10	1.4	6	6	62 2 6
11	B	14	.....do.....	6.400	8.11	1.6 5-10	10.7	5.4	1.10 3-10	1.4	6	6	62 2 19
12	B	119	.....do.....	6.400	8.11	1.6 5-10	10.7	5.4	1.10 3-10	1.4	6	6	62 1 11
13	B	102	.....do.....	6.400	8.11	1.6 5-10	10.7	5.4	1.10 3-10	1.4	6	6	62 1 22
14	B	111	.....do.....	6.400	8.11	1.6 5-10	10.5	5.4	1.10 3-10	1.4	6	6	61 2 21
15	B	101	.....do.....	6.400	8.11	1.6 5-10	10.6	5.4	1.10 3-10	1.4	6	6	61 3 4
16	B	95	.....do.....	6.400	8.11	1.6 5-10	10.6	5.4	1.10 3-10	1.4	6	6	62 1 14
17	B	62	.....do.....	6.450	8.8	1.6 5-10	10.2	5.1 5-10	1.9 5-10	1.3 7-10	6	6	60 0 0
18	B	45	.....do.....	6.450	8.8	1.6 5-10	10.2	5.1 5-10	1.9 5-10	1.3 7-10	6	6	55 0 0
19	B	113	.....do.....	6.400	8.11	1.6 5-10	10.7	5.4	1.10 3-10	1.4	6	6	62 3 5
20	B	138	.....do.....	6.400	8.11	1.6 5-10	10.7	5.4	1.10 3-10	1.4	6	6	62 2 15
21	B	125	.....do.....	6.400	8.11	1.6 5-10	10.7	5.4	1.4	1.4	6	6	62 2 17
22	B	199	.....do.....	6.400	8.11	1.6 5-10	10.7	5.4	1.4	1.4	6	6	62 2 23
23	B	139	.....do.....	6.400	8.11	1.6 5-10	10.7	5.4	1.4	1.4	6	6	62 2 17
24	B	131	.....do.....	6.400	8.11	1.6 5-10	10.7	5.4	1.4	1.4	6	6	62 2 12
25	B	136	.....do.....	6.400	8.11	1.6 5-10	10.7	5.4	1.4	1.4	6	6	62 2 14
Two brass long 32-pounders.....														
1	C	IIF 11	Medium 32-pounder.....	6.430	7.7	1.5 5-10	9.3 5-10	4.8	1.9 8-10	1.3 3-10	6	6 5-10	50 3 6	Captured at Tripoli. From 1 to 17, inclusive, are medium 32-pounders; all have raised vent fields for locks, breech rings, and have trunnions <i>in</i> the centre, except Nos. 1 and 6, which have trunnions <i>below</i> the centre. Nos. 10 and 11 have no breech rings, or have had them broken off. All are American manufacture.
2	B	75	.....do.....	6.430	7.7	1.5 5-10	9.3 5-10	4.9	1.9 8-10	1.3 3-10	6	6 5-10	49 3 5
3	B	76	.....do.....	6.430	7.9	1.5 5-10	9.3 5-10	4.9	1.9 8-10	1.3 3-10	6	6 5-10	49 1 18
4	B	82	.....do.....	6.430	7.9	1.5 5-10	9.3 5-10	4.9	1.9 8-10	1.3 3-10	6	6 5-10	49 2 23
5	B	83	.....do.....	6.430	7.9	1.5 5-10	9.3 5-10	4.9	1.9 8-10	1.3 3-10	6	6 5-10	49 0 6
6	C	HF 14	.....do.....	6.430	7.9	1.5 5-10	9.3 5-10	4.8	1.9 8-10	1.3 3-10	6	6 5-10	50 3 0
7	B	81	.....do.....	6.430	7.9	1.5 5-10	9.3 5-10	4.9	1.9 8-10	1.3 3-10	6	6 5-10	49 0 14
8	B	78	.....do.....	6.430	7.9	1.5 5-10	9.3 5-10	4.9	1.9 8-10	1.3 3-10	6	6 5-10	49 2 12
9	B	86	.....do.....	6.430	7.9	1.5 5-10	9.3 5-10	4.9	1.9 8-10	1.3 3-10	6	6 5-10	49 2 12
10	B	85	.....do.....	6.430	7.9	1.5 5-10	9.3 5-10	4.9	1.9 8-10	1.3 3-10	6	6 5-10	49 3 13
11	B	80	.....do.....	6.430	7.9	1.5 5-10	9.3 5-10	4.9	1.9 8-10	1.3 3-10	6	6 5-10	49 2 0

Inspection return of ordnance at the United States navy yard at Washington, D. C.—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.
19	B	HF 71	Medium 32-pounder.....	6.430	7.9	1.5 5-10	9.3 5-10	4.9	1.9 8-10	1.3 3-10	6	6 5-10	<i>Cwt. gr. lb.</i> 49 2 22	
13	B	84do.....	6.430	7.9	1.5 5-10	9.3 5-10	4.9	1.9 8-10	1.3 3-10	6	6 5-10	48 2 23	
14	B	73do.....	6.430	7.9	1.5 5-10	9.3 5-10	4.9	1.6 8-10	1.3 3-10	6	6 5-10	49 2 18	
15	B	74do.....	6.430	7.9	1.5 5-10	9.3 5-10	4.9	1.9 8-10	1.3 3-10	6	6 5-10	49 1 18	
16	B	79do.....	6.430	7.9	1.5 5-10	9.3 5-10	4.9	1.9 8-10	1.3 3-10	6	6 5-10	49 1 18	
17	B	HF 64do.....	6.430	7.9	1.5 5-10	9.3 5-10	4.9	1.9 8-10	1.3 3-10	6	6 5-10	49 3 6	
1	B	WG 1798	Long 18-pounder.....	5.300	8.5	1.3 5-10	9.8	4.10 5-10	1.6 5-10	1.2	5 3-10	5	43 0 7	From 1 to 7, inclusive, are long 18-pounders; all have raised vent fields for locks, and have breech rings. Nos. 1 and 2 have trunnions <i>below</i> the centre, and are English manufacture. Nos. 3 to 7, inclusive, have trunnions in the centre, and are American manufacture.
2	B	WG 1798	.....do.....	5.300	8.5	1.3 5-10	9.8	4.10 5-10	1.6 5-10	1.2	5 3-10	5	42 2 7
3	A	43	.....do.....	5.300	8.5	1.3 5-10	9.10	5.0	1.6 5-10	1.0 8-10	5 2-10	5	40 2 5
4	A	76	.....do.....	5.300	8.5	1.3 5-10	9.10	5.0	1.6 5-10	1.0 8-10	5 2-10	5	39 3 7
5	A	16	.....do.....	5.300	8.5	1.3 5-10	9.10	5.0	1.6 5-10	1.0 8-10	5 2-10	5	40 1 10
6	A	75	.....do.....	5.300	8.5	1.3 5-10	9.10	5.0	1.6 5-10	1.0 8-10	5 2-10	5	39 2 23
7	A	74	.....do.....	5.300	8.5	1.3 5-10	9.10	5.0	1.6 5-10	1.0 8-10	5 2-10	5	39 2 22
1	B	WG 1798	Ship 4-pounder.....	5.300	2.5 8-10	1.3 7-10	8.8 5-10	4.5	1.7 6-10	1.2 5-10	5 3-10	5	38 2 16	From 1 to 13, inclusive, are ship 18-pounders; all have raised vent fields for locks, no breech rings, and trunnions <i>below</i> the centre. All are English Crown guns, except Nos. 2 and 3, which are American. No. 2 has breech ring broken off. Nos. 1 and 3 have breech rings.—(See general remarks against light guns.)
2	B	.....	.....do.....	5.300	7.2	1.3 7-10	8.5	4.3	1.7	1.1 5-10	5 1-10	5 8-10	36 0 0
3	B	.....	.....do.....	5.300	7.3	1.3 7-10	8.6 5-10	4.4	1.7	1.1 5-10	5 4-10	5 3-10	36 0 0
4	B	V	.....do.....	5.300	7.0 5-10	1.2 8-10	8.3	4.3	1.5 3-10	1.1 5-10	4 7-10	4 7-10	29 2 15
5	B	V	.....do.....	5.300	7.0 5-10	1.2 8-10	8.3	4.3	1.5 3-10	1.1 5-10	4 7-10	4 7-10	29 1 11
6	B	V	.....do.....	5.300	7.0 5-10	1.2 8-10	8.3	4.3	1.5 3-10	1.1 5-10	4 7-10	4 7-10	29 2 13
7	B	V	Ship 18-pounder.....	5.300	7.0 5-10	1.2 8-10	8.3	4.3	1.5 3-10	1.1 5-10	4 7-10	4 7-10	29 2 9	
8	B	V	.....do.....	5.300	7.0 5-10	1.2 8-10	8.3	4.3	1.5 3-10	1.1 5-10	4 7-10	4 7-10	29 3 12
9	B	V	.....do.....	5.300	7.0 5-10	1.2 8-10	8.3	4.3	1.5 3-10	1.1 5-10	4 7-10	4 7-10	29 3 1
10	B	V	.....do.....	5.300	7.0 5-10	1.2 8-10	8.3	4.3	1.5 3-10	1.1 5-10	4 7-10	4 7-10	29 0 1
11	B	V	.....do.....	5.300	7.0 5-10	1.2 8-10	8.3	4.3	1.5 3-10	1.1 5-10	4 7-10	4 7-10	29 2 15
12	B	V	.....do.....	5.300	7.0 5-10	1.2 8-10	8.3	4.3	1.5 3-10	1.1 5-10	4 7-10	4 7-10	29 2 1
13	B	V	.....do.....	5.300	7.0 5-10	1.2 8-10	8.3	4.3	1.5 3-10	1.1 5-10	4 7-10	4 7-10	29 1 8
1	A	Ship 12-pounder.....	4.630	6.3	1.1	7.3	3.9	1.3 5-10	0.11 2-10	4	4 5-10	21 1 21	From 1 to 6, inclusive, are ship 12-pounders; all have raised vent fields, no breech rings, and have trunnions <i>in</i> the centre, except No. 1, which has trunnions <i>below</i> the centre. Supposed American manufacture.
2	A	HF	.....do.....	4.560	6.0	1.1 8-10	7.0 5-10	3.7 5-10	1.4 8-10	1.1	4 6-10	4 6-10	.....
3	A	HF	.....do.....	4.560	6.0	1.1 8-10	7.0 5-10	3.7 5-10	1.4 8-10	1.1	4 6-10	4 6-10	.....
4	A	HF	.....do.....	4.560	6.0	1.1 8-10	7.0 5-10	3.7 5-10	1.4 8-10	1.1	4 6-10	4 6-10	.....
5	A	HF	.....do.....	4.560	6.0	1.1 8-10	7.0 5-10	3.7 5-10	1.4 8-10	1.1	4 6-10	4 6-10	.....
6	A	HF	.....do.....	4.560	6.0	1.1 8-10	7.0 5-10	3.7 5-10	1.4 8-10	1.1	4 6-10	4 6-10	.....
1	V	Long 9-pounder.....	4.300	7.0 5-10	1.1	8.3	4.1	1.4 2-10	1.1	4 3-10	4 5-10	24 3 5	From 1 to 9, inclusive, are long 9-pounders. Nos. 1, 2, 3, and 9, are English Crown guns; have raised vent fields, <i>no</i> breech rings, and have trunnions <i>below</i> the centre. From 4 to 8, inclusive, have raised vent fields bored for locks, have breech rings, and have trunnions in the centre. Are American manufacture, army patterns.
2	.....	V	.....do.....	4.300	7.0 5-10	1.1	8.3	4.1	1.4 2-10	1.1	4 3-10	4 5-10	23 2 14
3	.....	V	.....do.....	4.380	7.6	1.1	8.9	4.5	1.4 2-10	1.1	4 3-10	4 2-10	25 3 20
4	.....	22	.....do.....	4.300	7.0 5-10	1.1 2-10	8.2	4.1 5-10	1.4	0.10 5-10	4 3-10	4 2-10	24 0 7
5	.....	11	.....do.....	4.240	7.0 5-10	1.1 2-10	8.2	4.1 5-10	1.4	0.10 5-10	4 3-10	4 2-10	24 0 17

Inspection return of ordnance at the United States navy yard at Washington, D. C.—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomilion.	Length from extremity of pomilion to fore-part of trunnion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunnion.	Length of trunnion.	Weight.	Remarks.	
6	24	Long 9-pounder.....	4.300	7.0 5-10	1.1 2-10	8.2	4.1 5-10	1.4	0.10 5-10	4 3-10	4 2-10	<i>Cwt. gr. lb.</i> 24 0 17	From 1 to 6, inclusive, are heavy 6-pounders; all have raised vent fields, no breech rings, and have trunnions below the centre; are English Crown guns.	
7	.....	35	.....do.....	4.240	7.0 5-10	1.1 2-10	8.2	4.1 5-10	1.4	0.10 5-10	4 3-10	4 2-10	24 0 7
8	.....	34	.....do.....	4.240	7.0 5-10	1.1 2-10	8.2	4.1 5-10	1.4	0.10 5-10	4 3-10	4 2-10	24 1 4
9	.....	Y	.....do.....	4.230	7.1	1.1	8.3 5-10	4.2	1.4 8-10	1.1 2-10	4 4-10	4 4-10	25 3 23
1	.....	WG 1798	Heavy 6-pounder.....	3.740	5.2	0.11 7-10	6.2	3.1	1.3	0.10 2-10	4 2-10	4 2-10	14 3 21	
2	.....	WG 1798	.....do.....	3.740	5.2	0.11 7-10	6.2	3.1	1.3	0.10 2-10	4 2-10	4 2-10	15 0 14
3	.....	WG 1798	.....do.....	3.740	5.2	0.11 7-10	6.2	3.1	1.3	0.10 2-10	4 2-10	4 2-10	14 3 21
4	.....	WG 1798	.....do.....	3.740	5.2	0.11 7-10	6.2	3.1	1.3	0.10 2-10	4 2-10	4 2-10	15 0 10
5	.....	WG 1798	.....do.....	3.740	5.2	0.11 7-10	6.2	3.1	1.3	0.10 2-10	4 2-10	4 2-10	14 3 17
6	.....	WG 1798	.....do.....	3.740	5.2	0.11 7-10	6.2	3.1	1.3	0.10 2-10	4 2-10	4 2-10	14 3 7
1	A	Bacon	Ship 12-pounder.....	4.580	6.5 5-10	1.1 5-10	7.8 8-10	4.0	1.4 6-10	1.0 7-10	4 6-10	4 6-10	23 2 14		From 1 to 15, inclusive, are ship 12-pounders; all have raised vent fields for locks, no breech rings, and have trunnions below the centre; are English Crown guns.
2	A	.....	.....do.....	4.580	6.1 5-10	1.1 5-10	7.4 8-10	3.10	1.4 6-10	1.0 7-10	4 6-10	4 6-10	.....	
3	A	.....	.....do.....	4.580	6.1 5-10	1.1 5-10	7.4 8-10	3.10	1.4 6-10	1.0 7-10	4 6-10	4 6-10	.....	
4	A	.....	.....do.....	4.580	6.1 5-10	1.1 5-10	7.4 8-10	3.10	1.4 6-10	1.0 7-10	4 6-10	4 6-10	.....	
5	A	.....	.....do.....	4.580	6.1 5-10	1.1 5-10	7.4 8-10	3.10	1.4 6-10	1.0 7-10	4 6-10	4 6-10	.....	
6	A	1796	.....do.....	4.650	6.6	1.1 2-10	7.9 5-10	3.11 5-10	1.5 2-10	1.1 8-10	4 6-10	4 6-10	25 2 7	
7	A	1796	.....do.....	4.650	6.6	1.1 2-10	7.9 5-10	3.11 5-10	1.5 2-10	1.1 8-10	4 6-10	4 6-10	25 1 21	
8	A	.....	.....do.....	4.650	6.6	1.1 2-10	7.9 5-10	3.11 5-10	1.5 2-10	1.1 8-10	4 6-10	4 6-10	.....	
9	A	.....	.....do.....	4.650	6.6	1.1 2-10	7.9 5-10	3.11 5-10	1.5 2-10	1.1 8-10	4 6-10	4 6-10	.....	
10	A	1796	.....do.....	4.650	6.6	1.1 2-10	7.9 5-10	3.11 5-10	1.5 2-10	1.1 8-10	4 6-10	4 6-10	25 2 0	
11	A	1796	.....do.....	4.650	6.6	1.1 2-10	7.9 5-10	3.11 5-10	1.5 2-10	1.1 8-10	4 6-10	4 6-10	25 1 21	
12	A	.....	.....do.....	4.650	6.6	1.1 2-10	7.9 5-10	3.11 5-10	1.5 2-10	1.1 8-10	4 6-10	4 6-10	.....	
13	A	1796	.....do.....	4.650	6.6	1.1 2-10	7.9 5-10	3.11 5-10	1.5 2-10	1.1 8-10	4 6-10	4 6-10	25 0 14	
14	A	.....	.....do.....	4.650	6.6	1.1 2-10	7.9 5-10	3.11 5-10	1.5 2-10	1.1 8-10	4 6-10	4 6-10	.....	
15	A	.....	.....do.....	4.650	6.6	1.1 2-10	7.9 5-10	3.11 5-10	1.5 2-10	1.1 8-10	4 6-10	4 6-10	.....	
16	Ado.....	4.580	6.2 5-10	1.1	7.4 5-10	3.9 5-10	1.4	0.10 8-10	4 4-10	4 4-10	23 3 15	Nos. 16 and 17 are ship 12-pounders; have raised vent fields bored for locks, have breech rings, and have trunnions below the centre; are English Crown guns; the muzzles of these guns have been reduced by turning them down to carronade shape. From 18 to 28, inclusive, are ship 12-pounders; all have raised vent fields for locks, and have trunnions below the centre. From 18 to 32, inclusive, have breech rings. From 32 to 38, inclusive, no breech rings. To 32, make doubtful. From 33 to 38, inclusive, are English Crown guns. These guns are mounted as a saluting battery, and are not fit for much else, being of very irregular bore.	
17	A	.....	.....do.....	4.580	6.2 5-10	1.1	7.4 5-10	3.9 5-10	1.4	0.10 8-10	4 4-10	4 4-10	23 2 17
18	A	.....	.....do.....	4.580	6.3	1.1 2-10	7.4	3.9	1.4	1.0	4 4-10	4 4-10	24 3 24
19	A	.....	.....do.....	4.580	6.3	1.1 2-10	7.4	3.9	1.4	1.0	4 4-10	4 4-10	24 2 10
20	A	.....	.....do.....	4.580	6.3	1.1 2-10	7.4	3.9	1.4	1.0	4 4-10	4 4-10	23 3 10
21	A	.....	.....do.....	4.560	6.3	1.1 2-10	7.4	3.9	1.4	1.0	4 4-10	4 4-10	23 2 25
22	A	.....	.....do.....	4.560	6.3	1.1 2-10	7.4	3.9	1.4	1.0	4 4-10	4 4-10	23 2 20
23	A	.....	.....do.....	4.560	6.3	1.1 2-10	7.4	3.9	1.4	1.0	4 4-10	4 4-10	23 3 10
24	A	.....	.....do.....	4.560	6.3	1.1 2-10	7.4	3.9	1.4	1.0	4 4-10	4 4-10	23 3 10
25	A	.....	.....do.....	4.800	6.3	1.1 2-10	7.4	3.9	1.4	1.0	4 4-10	4 4-10	23 3 7
26	A	.....	.....do.....	4.780	6.3	1.1 2-10	7.4	3.9	1.4	1.0	4 4-10	4 4-10	23 3 7
27	+do.....	4.840	6.3	1.1 2-10	7.4	3.9	1.4	0.10 6-10	4 4-10	4 4-10	23 3 7		No. 27 + is badly bored.

Inspection return of ordnance at the navy yard at Washington, D. C.—Continued.

Index number.	Class letter.	Marks.	Nature of ordnance.	Diameter of bore.	Length of bore.	Diameter immediately forward of trunnions.	Extreme length from muzzle to pomillion.	Length from extremity of pomillion to fore-part of trunion.	Extreme diameter at the breech.	Extreme diameter at the muzzle.	Diameter of trunion.	Length of trunion.	Weight.	Remarks.
28	A	o	Ship 12-pounder	4.600	6.3	1.1 2-10	7.4	3.9	1.4	0.10 6-10	4 4-10	4 4-10	Cwt. gr. lb. 23 2 21	
29	A		do	4.760	6.3	1.1 2-10	7.4	3.9	1.4	0.10 6-10	4 4-10	4 4-10	23 0 0	
30	A		do	4.760	6.3	1.1 2-10	7.4	3.9	1.4	0.10 6-10	4 4-10	4 4-10	23 3 21	
31	A		do	4.580	6.3	1.1 2-10	7.4	3.9	1.4	0.10 6-10	4 4-10	4 4-10	23 3 2	
32	A		do	4.560	6.3	1.1 2-10	7.4	3.9	1.4	0.10 6-10	4 4-10	4 4-10	23 2 16	
33	A		do	4.580	6.2	1.1 4-10	7.5	3.9	1.4 7-10	1.0 6-10	4 4-10	4 3-10	.....
34	A		do	5.580	6.2	1.1 4-10	7.5	3.9	1.4 7-10	1.0 6-10	4 4-10	4 3-10	.....
35	A		do	4.640	6.2	1.1 4-10	7.5	3.9	1.4 7-10	1.0 6-10	4 4-10	4 3-10	.....
36	A	1796	do	4.640	6.2	1.1 4-10	7.5	3.9	1.4 7-10	1.0 6-10	4 4-10	4 3-10	25 1 7	
37	A	1796	do	4.680	6.2	1.1 4-10	7.5	3.9	1.4 7-10	1.0 6-10	4 4-10	4 3-10	21 1 14	
38	A		do	4.700	6.2	1.1 4-10	7.5	3.9	1.4 7-10	1.0 6-10	4 4-10	4 3-10	25 1 14	
1			Medium 6-pounder	3.680	4.8	0.10 3-10	5.7	2.10 5-10	1.1	0.9 5-10	4	4	10 0 2	From 1 to 10, inclusive, are medium 6-pounders. Nos. 1 to 4, inclusive, have sunk vent fields, no breech rings, and have trunnions below the centre. Nos. 5 to 10, inclusive, have raised vent fields, are without breech rings, and have trunnions in the centre; make doubtful.
2			do	3.680	4.8	0.10 3-10	5.7	2.10 5-10	1.1	0.9 5-10	4	4	10 0 1	
3			do	3.680	4.8	0.10 3-10	5.7	2.10 5-10	1.1	0.9 5-10	4	4	.....
4			do	3.680	4.8	0.10 3-10	5.7	2.10 5-10	1.1	0.9 5-10	4	4	.....
5		HF	do	3.680	4.5 5-10	0.11 5-10	5.5 5-10	2.10 5-10	1.1 5-10	0.10 1-10	3 5-10	3 5-10	.....
6		HF	do	3.680	4.5 5-10	0.11 5-10	5.5 5-10	2.10 5-10	1.1 5-10	0.10 1-10	3 5-10	3 5-10	.....
7		HF	do	3.680	4.5 5-10	0.11 5-10	5.5 5-10	2.10 5-10	1.1 5-10	0.10 1-10	3 5-10	3 5-10	.....
8		HF	do	3.680	4.5 5-10	0.11 5-10	5.5 5-10	2.10 5-10	1.1 5-10	0.10 1-10	3 5-10	3 5-10	.....
9		HF	do	3.680	4.5 5-10	0.11 5-10	5.5 5-10	2.10 5-10	1.1 5-10	0.10 1-10	3 5-10	3 5-10	.....
10		HF	do	3.680	4.5 5-10	0.11 5-10	5.5 5-10	2.10 5-10	1.1 5-10	0.10 1-10	3 5-10	3 5-10	.....
1	A	V	Congreve 24-pounder	5.800	7.0	1.4 8-10	8.4	4.1	1.8	1.0	5 2-10	5 2-10	.....	No. 1 is an English Congreve 24-pounder; has a raised vent field bored for lock; breech rings and trunnions below the centre.
1			Short 4-pounder	3.240	4.1 5-10	0.10 2-10	5.1	2.8 5-10	1.0 3-10	0.9 2-10	3 5-10	3 5-10	.....	Nos. 1 and 2 are short 4-pounders; have sunk vent fields, no breech rings, and have trunnions below the centre; make doubtful.
2			do	3.240	4.1 5-10	0.10 2-10	5.1	2.8 5-10	1.0 3-10	0.9 2-10	3 5-10	3 5-10	.....
1			Gunade 6-pounder	3.680	2.7 8-10	0.8 2-10	3.5 5-10	1.9	0.10 7-10	0.7 5-10	3 5-10	3 5-10	.....	Nos. 1 and 2 are gunade 6-pounders; have plain vent fields, have breech rings, and have trunnions in the centre; make doubtful.
2			do	3.680	2.7 8-10	0.8 2-10	3.5 5-10	1.9	0.10 7-10	0.7 5-10	3 5-10	3 5-10	.....
1			Carronade 12-pounder	.....	2.9*	0.8 2-10	3.11	.....	1.1	0.9 5-10	Nave.	Nave.	.....	* And chambered.
2			do	.....	2.9	0.8 2-10	3.11	.....	1.1	0.9 5-10	2	6 5-10	.....
3			do	.....	2.9	0.8 2-10	3.11	.....	1.1	0.9 5-10	2	6 5-10	.....
4			do	.....	2.9	0.8 2-10	3.11	.....	1.1	0.9 5-10	2	6 5-10	.....
1	O		Carronade 32-pounder	6.300	.....	.....	.....	.....	.....	.....	.....	.....	.....	These guns are marked condemned by yard survey; supposed to be experiment guns.
2	A		do	6.400	.....	.....	.....	.....	.....	.....	.....	.....	.....
3	A		do	6.400	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	A		do	6.400	.....	.....	.....	.....	.....	.....	.....	.....	.....
45	A		do	6.400	.....	.....	.....	.....	.....	.....	.....	.....	.....
5	O		Carronade 42-pounder	6.800	.....	.....	.....	.....	.....	.....	.....	.....	.....

Recapitulation of gradual increase and classed guns at Washington.

Nature of ordnance.	Class letter.	Washington.		
		Gradual increase.	Repairs.	New sloop.
42-pounders, long	O	11		
42-pounders, carronades.....	O	4		
32-pounders, long	A	33		
32-pounders, long	B		15	
32-pounders, long	C		10	
32-pounders, medium	B		15	
32-pounders, medium	C		2	
32-pounders, carronades.....	A	46	3	
32-pounders, carronades.....	O		1	
24-pounders, long	A	1		
24-pounders, Congreve.....	A		1	
18-pounders, long	A		5	
18-pounders, long	B		2	
18-pounders, ship	B		13	
12-pounders, ship	A		44	

Recapitulation of condemned and unclassed guns at Washington.

Nature of ordnance.	Washington.		
	Defective from time or accident.	Defective in workmanship.	Serviceable, but unclassed.
12-pounders, carronades.....			4
9-pounders, carriage guns.....			9
6-pounders, carriage guns	1		15
6-pounders, gunades			2
4-pounders, carriage guns.....			2

THOS. AP GATESBY JONES, Captain and Inspector of Ordnance, United States Navy.

23D CONGRESS.]

No. 609.

[2D SESSION.]

ANNUAL STATEMENT OF THE ARMS MADE AND EXPENSES INCURRED AT THE NATIONAL ARMORIES IN 1834.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES MARCH 3, 1835.

WAR DEPARTMENT, March 2, 1835.

SIR: I have the honor to transmit a statement of the expenditures incurred and the arms manufactured at the national armories in the year 1834, prepared in conformity with the provisions of the act of April 2, 1794.

Very respectfully, your most obedient servant,

LEW. CASS.

HON. JOHN BELL, Speaker of the House of Representatives.

Statement of the expenditures made at the national armories, and of the arms, &c., manufactured therein, during the year 1834.

	Expenditures.				
	For buildings, canals, and other permanent improvements.	For the manufacture of arms.	For the manufacture of Hall's rifles.	For miscellaneous expenses not embraced in the foregoing.	Total amount expended.
Springfield, Massachusetts.....	\$12,295 44	\$171,889 41		\$388 18	\$184,573 03
Harper's Ferry, Virginia.....	45,033 16	133,822 04	\$40,000 00	1,550 28	220,410 48
Total.....	57,333 60	305,711 45	40,000 00	1,938 46	404,983 51

	Arms, &c., manufactured.										
	Muskets, complete.	Hall's rifles.	Screw-drivers.	Wipers.	Ball screws.	Spring vices.	Flint caps.	Arm chests.	Bullet moulds.	Flasks for rifles.	Belts for rifles.
Springfield, Massachusetts.....	14,000		14,706	22,063	1,458	2,032	15,400				
Harper's Ferry, Virginia..	12,000	970	25,941	22,360	6,896	47	6,000	74	47	4,734	1,040
Total	26,000	970	40,647	44,423	8,354	2,079	21,400	74	47	4,734	1,040

Statement in detail of the operations of the armory at Springfield, Massachusetts.

DR.

For value of component parts of arms on hand December 31, 1833.....	\$84, 112 22
For value of unwrought materials on hand December 31, 1833.....	41, 889 12
For this amount expended during the year, comprising all the payments made by the paymaster.....	\$185, 504 03
From which deduct the amount of rents of houses received from workmen.....	931 00
	<u>184, 573 03</u>
For value of 1,800 pounds of powder received from storekeeper, for proving musket barrels, at 20 cents.....	360 00
For 4,004 pounds of lead received from storekeeper, for proving musket bar- rels, at 4 cents.....	160 16
	<u>\$311, 094 53</u>

CR.

By amount expended for permanent improvements, per foregoing statement..	\$12, 295 44
Arms and equipments made, viz :	
14,000 muskets, complete, average cost of each \$11 05 ³³⁷ / ₁₀₀₀	\$154, 703 37
14,706 screw-drivers, average cost of each 8 cents.....	1, 176 48
22,063 wipers, average cost of each 12½ cents.....	2, 757 87
1,458 ball screws, average cost of each 15 cents.....	218 70
2,032 spring vices, average cost of each 30 cents.....	609 60
15,400 lead flint caps, average cost of each 1 cent.....	154 00
	<u>159, 620 02</u>
By this amount expended in preserving arms, and for miscellaneous purposes not incidental to the manufacture of arms.....	388 18
By value of supplies furnished Fort Monroe arsenal and Fort Trumbull.....	180 68
By value of component parts of arms on hand December 31, 1834.....	90, 770 42
By value of unwrought materials on hand December 31, 1834.....	47, 839 79
	<u>\$311, 094 53</u>

Statement in detail of the operations of the armory at Harper's Ferry, Virginia.

DR.

For value of component parts of arms on hand December 31, 1833.....	\$51, 406 06
For value of unwrought materials on hand December 31, 1833.....	54, 392 81
For this amount expended during the year, comprising all the payments made by the paymaster.....	\$223, 839 18
From which deduct the amount of rents received.....	3, 428 70
	<u>220, 410 48</u>
For value of supplies received from the Washington arsenal, viz:	
2,152 pounds of powder, at 20 cents per pound.....	\$430 40
10,000 pounds of lead, at 4 cents per pound.....	400 00
	<u>830 40</u>
	<u>\$327, 039 75</u>

CR.

By amount expended in permanent improvements, per foregoing statement...	\$45, 038 16
Arms and equipments made, viz :	
12,000 muskets, complete, average cost of each \$11 66 ³⁵⁸ / ₁₀₀₀	\$139, 981 58
21,400 wipers, average cost of each 13 cents.....	2, 784 60
6,896 ball screws, average cost of each 15 cents.....	1, 034 40
6,000 flint caps, average cost of each 1 cent.....	60 00
25,001 screw-drivers, average cost of each 7 cents.....	1, 750 07
74 arm-chest, average cost of each \$2 14 ³ / ₄	158 50
	<u>145, 769 15</u>
By this amount expended in preserving arms, and for miscellaneous purposes not incidental to the manufacture of arms.....	1, 550 28
By amount expended in the manufacture of Hall's rifles.....	40, 000 00
By value of supplies furnished the Allegheny arsenal.....	167 00
By value of component parts of arms on hand December 31, 1834.....	40, 491 14
By value of unwrought materials on hand December 31, 1834.....	54, 024 02
	<u>\$327, 039 75</u>

G. BOMFORD, Colonel of Ordnance.

ORDNANCE OFFICE, Washington, March 2, 1835.

23D CONGRESS.]

No. 610.

[2D SESSION.

ARMY REGISTER FOR THE YEAR 1835.

COMMUNICATED TO THE SENATE MARCH 3, 1835.

GENERAL AND STAFF OFFICERS.

Names and rank.	Date of commission.	Brevet and staff appointments.	Remarks.
Alexander Macomb, maj. gen.	May 24, 1828..		
Edmund P. Gaines, brig. general	March 9, 1814..	Maj. gen. bvt., Aug. 15, 1814..	
Winfield Scott.....do.....	.....do.....	Maj. gen. bvt., July 25, 1814..	
ADJUTANT GENERAL'S DEPARTMENT.			
Roger Jones, colonel	March 7, 1825..	Adjutant general; major general by brevet, June 7, 1832.	
INSPECTOR GENERAL'S DEPARTMENT.			
John E. Wool, colonel.....	April 29, 1816..	Inspector general; brig. general bvt., April 29, 1826.	
George Croghan ..do.....	Dec. 21, 1825..	Inspector general.....	
QUARTERMASTER GENERAL'S DEPARTMENT.			
Thomas S. Jesup, brig. general.	May 8, 1818..	Quartermaster general; major gen. bvt., May 8, 1828.	
William Linnard, major.....	May 12, 1813..	Quartermaster; lieut. col. bvt., June 15, 1825.	
Henry Stanton ..do.....	May 13, 1820..	Quartermaster; lieut. col. bvt., May 13, 1830.	
Trueman Cross ..do.....	May 22, 1826..	Quartermaster.....	
Joshua B. Brant ..do.....	Dec. 28, 1832..	.....do.....	
<i>(20 assistant quartermasters taken from the line.)</i>			
SUBSISTENCE DEPARTMENT.			
George Gibson, colonel.....	April 18, 1818..	Com'ry general of subsistence; brig. gen. bvt., Apr. 29, 1826.	
James H. Hook, commissary ..	March 10, 1829..	Quartermaster; major brevet, May 20, 1823.	
Capt Jos. P. Taylor.....do.....	.....do.....	Assistant quartermaster	
<i>(50 assistant commissaries taken from the subalterns of the line.)</i>			

ENGINEER DEPARTMENT.

Charles Gratiot, commandant of the corps of engineers, brevet brigadier general, chief engineer.
 John J. Abert, topographical engineer, brevet lieutenant colonel in charge of the topographical bureau.

PAY AND MEDICAL DEPARTMENTS.

No.	Names.	Rank.	Date of commission.	Brevets and former commissions.	Remarks.
PAY DEPARTMENT.					
1	Nathan Towson	Paymaster general.	May 8, 1822	Brig. gen. bvt., June 30, '34.	Washington.
1	Benjamin F. Larned.....	Paymaster	Nov. 24, 1815	Capt. bvt., Aug. 15, 1814..	Detroit, Mich. Territory.
2	David S. Townsend.....	.....do.....	April 29, 1816	Maj. bvt., July 27, 1814..	Boston, Massachusetts.
3	Daniel Randall .....	.....do.....	July 21, 1818	.....	New York.
4	Charles H. Smith.....	.....do.....	Nov. 24, 1819	.....	Norfolk, Va.
5	A. A. Massias .....	.....do.....	Dec. 12, 1820	Captain, July 1, 1809.....	.....
6	T. P. Andrews .....	.....do.....	May 22, 1822	.....	Washington.
7	Edmund Kirby.....	.....do.....	Aug. 5, 1824	Captain, May 1, 1824	Brownsville, N. Y.
8	L. G. De Russey.....	.....do.....	Sept. 21, 1826	Captain, Dec. 11, 1825	Natchitoches, La.
9	Robert A. Forsyth .....	.....do.....	Sept. 10, 1831	.....	Detroit.
10	Adam D. Stewart.....	.....do.....	Jan. 14, 1833	.....	Jefferson Barracks, Mo.
11	William S. Harney.....	.....do.....	May 1, 1833	Captain, May 14, 1825 .....	.....
12	John S. Lytle.....	.....do.....	Feb. 27, 1834	.....	Charleston, S. C.
MEDICAL DEPARTMENT.					
1	Joseph Lovell.....	Surgeon general	April 18, 1818	.....	Washington.
1	Thomas Lawson	Surgeon	May 21, 1813	.....	New Orleans.
2	Thomas G. Mower .....	.....do.....	June 30, 1814	.....	New York.
3	B. F. Harney .....	.....do.....	Aug. 17, 1814	.....	Baton Rouge.
4	W. V. Wheaton .....	.....do.....	Sept. 4, 1816	.....	West Point.

MEDICAL DEPARTMENT—Continued.

No.	Names.	Rank.	Date of commission.	Brevets and former commissions.	Remarks.
MEDICAL DEP'T—Continued.					
5	William Beaumont.....	Surgeon.....	Nov. 26, 1827	-----	Fort Crawford.
6	Lyman Foot.....	do.....	March 5, 1831	-----	Fort Winnebago.
7	Clement A. Finlay.....	do.....	July 13, 1832	-----	Jefferson Barracks.
8	Prestley H. Craig.....	do.....	do.....	-----	Fort Jesup.
9	Richard S. Satterlee.....	do.....	do.....	-----	Fort Howard.
10	Zina Pitcher.....	do.....	July 15, 1832	-----	Fort Monroe.
11	Samuel G. I. De Camp.....	do.....	Dec. 1, 1833	-----	Fort Gibson.
12	Edward Macomb.....	do.....	Nov. 1, 1834	-----	Fort Leavenworth.
1	James H. Sargent.....	Assistant surgeon.....	June 1, 1821	P. S., April 24, 1816.....	Fort Constitution.
2	William Turner.....	do.....	do.....	do.....	Fort Wolcott.
3	Foster Swift.....	do.....	do.....	do.....	-----
4	T. I. C. Monroe.....	do.....	do.....	P. S., April 29, 1816.....	Fort Wood, N. Y.
5	Sylvester Day.....	do.....	do.....	P. S., April 18, 1818.....	Fort Preble.
6	Joseph Eaton.....	do.....	do.....	do.....	Fort Trumbull.
7	Joseph P. Russell.....	do.....	do.....	P. S., August 10, 1818.....	Fort Columbus.
8	Richard Weightman.....	do.....	do.....	P. S., August 21, 1818.....	Fort King.
9	Robert French.....	do.....	do.....	P. S., April 12, 1820.....	Fort McHenry.
10	Benjamin King.....	do.....	do.....	S. M., October 14, 1818.....	Washington, D. C.
11	John A. Brereton.....	do.....	July 1, 1821	-----	Fort Independence.
12	Hamilton S. Hawkins.....	do.....	Jan. 20, 1824	-----	Fort Severn.
13	Alfred W. Elwes.....	do.....	May 9, 1825	-----	Fort Hamilton.
14	Robert C. Wood.....	do.....	May 28, 1825	-----	-----
15	Lawrence Sprague.....	do.....	June 22, 1825	-----	Fort Sullivan.
16	Joel Martin.....	do.....	Aug. 15, 1825	-----	Arsenal, Augusta, Ga.
17	Thomas S. Bryant.....	do.....	Oct. 5, 1825	-----	Fort Washington.
18	Philip Minis.....	do.....	April 12, 1826	-----	Castle Pinckney.
19	Henry A. Stinnecke.....	do.....	May 8, 1826	-----	Fort Johnston.
20	Robert Archer.....	do.....	Aug. 5, 1826	-----	Fort Monroe.
21	William L. Wharton.....	do.....	Sept. 1, 1828	-----	Fort Moultrie.
22	James B. Sullivan.....	do.....	May 5, 1829	-----	Fort Jesup.
23	Ephraim M. Blane.....	do.....	Nov. 17, 1829	-----	Oglethorpe Barracks.
24	Charles S. Tripler.....	do.....	Oct. 30, 1830	-----	Hancock Barracks.
25	William A. Berry.....	do.....	April 25, 1831	-----	Fort Macon.
26	Edward Worrell.....	do.....	Feb. 24, 1832	-----	Fort Gratiot.
27	Philip Maxwell.....	do.....	July 13, 1832	-----	Fort Dearborn.
28	Henry L. Heiskell.....	do.....	do.....	-----	Fort Brooke.
29	Benjamin B. Hogan.....	do.....	do.....	-----	Fort Morgan.
30	Charles McDougall.....	do.....	do.....	-----	Fort Winnebago.
31	Lucius O'Brien.....	do.....	do.....	-----	Fort Towson.
32	S. Etting Myers.....	do.....	do.....	-----	Key West.
33	Burton Randall.....	do.....	Oct. 21, 1832	-----	Fort Wood, La.
34	Nathan S. Jarvis.....	do.....	March 2, 1833	-----	Fort Snelling.
35	Richard Clark.....	do.....	do.....	-----	Fort Brady.
36	Adam N. McLaren.....	do.....	do.....	-----	Fort Crawford.
37	Benjamin F. Fellowes.....	do.....	do.....	-----	Fort Leavenworth.
38	Samuel W. Hales.....	do.....	July 23, 1833	-----	Regiment of dragoons.
39	George F. Turner.....	do.....	do.....	-----	Fort Mackinac.
40	M. C. Leavenworth.....	do.....	Sept. 1, 1833	-----	Fort Towson.
41	J. J. B. Wright.....	do.....	Oct. 25, 1833	-----	Fort Des Moines.
42	Willison Hughey.....	do.....	do.....	-----	Jefferson Barracks.
43	John B. Porter.....	do.....	do.....	-----	Regiment of dragoons.
44	John Emerson.....	do.....	do.....	-----	Fort Armstrong.
45	Henry Holt.....	do.....	Dec. 31, 1831	-----	Fort Gibson.
46	Thomas Henderson.....	do.....	do.....	-----	West Point.
47	John B. Wells.....	do.....	Feb. 1, 1834	-----	Fort Pike.
48	John M. Cuyler.....	do.....	April 1, 1834	-----	Baton Rouge.
49	Madison M. Mills.....	do.....	do.....	-----	Fort Mitchell, Ga.
50	William Hammond.....	do.....	June 1, 1834	-----	Fort Coffee.
51	John S. Gatlin.....	do.....	Aug. 3, 1834	-----	Fort Jackson.
52	George R. Clarke.....	do.....	Nov. 1, 1834	-----	Fort King.
53	Joseph H. Bailey.....	do.....	Nov. 28, 1834	-----	Fort Gibson.
54	Leonard C. McPhail.....	do.....	Nov. 30, 1834	-----	Fort Jackson.
55	Lewis A. Birdsall.....	do.....	Dec. 29, 1834	-----	Oglethorpe Barracks.
PURCHASING DEPARTMENT.					
1	Callender Irvine.....	Commissary general of purchases.	Aug. 8, 1812	-----	Philadelphia.
1	Edward S. Fayssoux.....	Storekeeper.....	Aug. 24, 1833	-----	Philadelphia.
2	Charles L. Litle.....	do.....	Nov. 1, 1833	-----	New York.

CORPS OF ENGINEERS.

No.	Names and rank.	Date of commission.	Brevets and former commissions.
COLONEL.			
1	Charles Gratiot.....	May 24, 1828.....	Brig. gen. bvt., May 24, 1828.
LIEUTENANT COLONEL.			
1	Joseph G. Totten.....	May 24, 1828.....	Col. brevet, September 11, 1824.

CORPS OF ENGINEERS—Continued.

No.	Names and rank.	Date of commission.	Brevets and former commissions.
MAJORS.			
1	Sylvanus Thayer.....	May 24, 1828	Lieut. col. bvt., March 3, 1823.
2	R. E. De Russey.....	December 22, 1830	Lieut. col. bvt., June 30, 1834, Supt. Mil. Academy.
CAPTAINS.			
1	John L. Smith.....	August 29, 1820	Major brevet, August 29, 1830.
2	George Blaney.....	July 1, 1824	Major brevet, June 30, 1834.
3	William H. Chase.....	January 1, 1825	
4	Richard Delafield.....	May 24, 1828	
5	Andrew Talcott.....	December 22, 1830	Brevet, October 1, 1830.
6	William A. Eliason.....	March 5, 1832	
FIRST LIEUTENANTS.			
1	Thomas J. Leslie.....	March 31, 1819	Paymaster, Mil. Acad.; capt. bvt., March 31, 1829.
2	Cornelius A. Ogden.....	July 1, 1824	Captain brevet, June 30, 1834.
3	Henry Brewerton.....	January 1, 1825	
4	Stephen Tuttle.....	May 24, 1828	
5	George Dutton.....	December 22, 1830	
6	Joseph Mansfield.....	March 5, 1832	
SECOND LIEUTENANTS.			
1	Alexander H. Bowman.....	July 1, 1825	
2	Thompson S. Brown.....	.....do.....	Military Academy.
3	William H. C. Bartlett.....	July 1, 1826	
4	Robert E. Lee.....	July 1, 1829	Engineer office.
5	Alexander J. Swift.....	July 1, 1830	
6	Roswell Park.....	July 1, 1831	
BREVET SECOND LIEUTENANTS.			
1	Fred. A. Smith.....	July 1, 1833	
2	Jon. G. Barnard.....	.....do.....	
3	Geo. W. Cullum.....	.....do.....	Engineer office.
4	Rufus King.....	.....do.....	
5	William Smith.....	July 1, 1834	
6	John Sanders.....	.....do.....	

TOPOGRAPHICAL ENGINEERS.

MAJORS, BREVET.			
1	John J. Abert.....	November 22, 1814	Lieutenant colonel brevet, November 22, 1824.
2	James Kearney.....	April 29, 1816	Lieutenant colonel brevet, April 29, 1826.
3	Stephen H. Long.....	.....do.....	Lieutenant colonel brevet, April 29, 1826.
4	Hartman Bach.....	August 1, 1832	Brevet, July 24, 1828.
5	Wm. G. McNeill.....	January 28, 1834	Brevet, January 27, 1833.
6	James D. Graham.....	September 14, 1834	
<i>Assistant Topographical Engineers.</i>			
CAPTAINS, BREVET.			
1	Wm. Turnbull.....	August 20, 1831	
2	William H. Swift.....	August 1, 1832	
3	W. G. Williams.....	January 28, 1834	
4	A. Canfield.....	September 14, 1834	

ORDNANCE DEPARTMENT.

COLONEL.			
1	George Bomford.....	May 30, 1832	Brevet, February 9, 1825.
LIEUTENANT COLONEL.			
1	George Talcott.....	.....do.....	Inspector of arsenals and armories.
MAJORS.			
1	Henry K. Craig.....	.....do.....	Brevet, Dec. 23, 1823, inspector of small arms.
2	William J. Worth.....	.....do.....	Lieut. col. bvt., July 25, 1824.
CAPTAINS.			
1	Rufus L. Baker.....	.....do.....	Major brevet, May 21, 1827.
2	James W. Ripley.....	.....do.....	Captain, August 1, 1825.
3	Richard Bache.....	.....do.....	Inspec. cannon and founderies; bvt., June 15, 1827.
4	John Symington.....	.....do.....	Brevet, May 17, 1830.
5	William H. Bell.....	.....do.....	
6	Edward Harding.....	.....do.....	
7	Alfred Mordecai.....	.....do.....	
8	Benjamin Huger.....	.....do.....	
9	James A. J. Bradford.....	.....do.....	
10	John Hills.....	July 13, 1832	

REGIMENT OF DRAGOONS.

No.	Names and rank.	Date of commission.	Brevets and former commissions.	No.	Names and rank.	Date of commission.	Brevets and former commissions.
	COLONEL.			5	Jefferson Davis.....	March 4, 1833	
1	Henry Dodge	March 4, 1833		6	Lan. P. Lupton .....	.....do.....	
	LIEUTENANT COLONEL.			7	Thomas Swords.....	.....do.....	A. Q. M.
1	S. W. Kearney.....	.....do.....		8	T. B. Wheelock	Sept. 19, 1833	
	MAJOR.			9	J. W. Hamilton .....	.....do.....	Adjutant.
1	Richard B. Mason .....	.....do.....	Brevet, July 31, 1829.	10	Benj. D. Moore.....	.....do.....	
	CAPTAINS			11	C. F. M. Noland .....	.....do.....	
1	Clifton Wharton.....	.....do.....	Capt, April 22, 1830.		SECOND LIEUTENANTS.		
2	Edw. V. Sumner.....	.....do.....		1	James Allen	March 4, 1833	2d Lieut., July 1, 1829. E. duty.
3	Eustace Trenor.....	.....do.....		2	J. H. K. Burgwin .....	.....do.....	2d Lieut., July 1, 1830.
4	David Hunter.....	.....do.....		3	J. S. Van Derveer.....	.....do.....	2d Lieut., July 1, 1830.
5	Lemuel Ford.....	Aug. 15, 1833		4	A. M. Lea .....	.....do.....	Bvt., July 1, 1831.
6	Nathan Boone.....	.....do.....		5	J. W. Shaumburg.....	Sept. 19, 1833	
7	Jesse B. Browne.....	.....do.....		6	Enoch Steen .....	.....do.....	
8	Jesse Bean.....	.....do.....		7	J. L. Watson .....	.....do.....	
9	Matthew Duncan .....	.....do.....		8	B. A. Terrett.....	Nov. 7, 1833	
10	David Perkins.....	Nov. 4, 1833		9	Wm. Eustis.....	Mar. 17, 1834	Bvt., July 1, 1830.
	FIRST LIEUTENANTS.			10	L. B. Northrop.....	July 21, 1834	Bvt., July 1, 1831.
1	P. St. G. Cooke	March 4, 1833			BREVET SECOND LIEUTENANTS.		
2	I. P. Simonton.....	.....do.....		1	G. P. Kingsbury.....	July 1, 1832	
3	Ab. Van Buren.....	.....do.....	Aid to Maj. Gen. Macomb.	2	James M. Bowman.....	.....do.....	
4	James F. Izard.....	.....do.....		3	Asbury Ury.....	.....do.....	
				4	A. G. Edwards.....	.....do.....	
				5	Henry Turner	July 1, 1834	

FIRST REGIMENT OF ARTILLERY.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
	COLONEL.			9	John Farley	Aug. 1, 1832	
1	A. Eustis.....	Nov. 17, 1834	Brig. gen. bvt., June 30, 1834.	10	Francis Taylor	Jan. 31, 1833	A. C. S.
	LIEUTENANT COLONEL.			11	A. D. Mackay	Feb. 4, 1833	
1	J. B. Walbach	May 30, 1832	Col. bvt., May 1, 1825.	12	James R. Irwin.....	May 31, 1833	A. C. S.
	MAJOR.			13	John McClellan.....	Sept. 30, 1833	
1	Wm. Gates .....	.....do.....	Brevet, March 3, 1823.	14	John Williamson .....	.....do.....	
	CAPTAINS.			15	John H. Winder.....	Nov. 30, 1833	A. C. S.
1	S. Churchill.....	Aug. 15, 1813	Maj. bvt., Aug. 15, 1823.	16	Eben. S. Sibley	Mar. 6, 1834	Engineer duty.
2	Milo Mason.....	May 17, 1816	Maj. bvt., May 17, 1826.	17	William Maynadier	May 31, 1834	Ordinance.
3	Hy. Whiting.....	March 3, 1817	Maj. bvt., March 17, 1824. A.Q.M.	18	Rich'd C. Tilghman	Oct. 23, 1834	Engineer duty.
4	F. Whiting.....	Sept. 10, 1819	Maj. bvt., Sept. 10, 1829.		SECOND LIEUTENANTS.		
5	H. Saunders.....	Nov. 4, 1823	Maj. bvt., Nov. 4, 1833.	1	Edmund French	July 1, 1828	
6	R. M. Kirby	Aug. 5, 1824	Maj. bvt., Sept. 17, 1824.	2	William Palmer .....	.....do.....	Ordinance.
7	Giles Porter.....	Sept. 30, 1833	Brevet, Feb. 1, 1833.	3	Miner Knowlton.....	July 1, 1829	Mil. Academy.
8	J. Howard.....	Mar. 6, 1834	Brevet, Nov. 1, 1833.	4	John F. Kennedy.....	.....do.....	
9	D. Van Ness.....	Oct. 23, 1834	Brevet, Nov. 4, 1833.	5	John W. Barry.....	July 1, 1830	A. C. S.
	FIRST LIEUTENANTS.			6	James H. Prentis.....	.....do.....	Adj. Gen. office.
1	Timothy Green.....	April 20, 1818	Capt. bvt., Ap'1 20, 1828. A.C.S.	7	J. B. Magruder.....	.....do.....	
2	Justin Dimick.....	May 1, 1824	Capt. bvt., May 1, 1834. Ord.	8	Geo. W. Turner.....	July 1, 1831	
3	Lemuel Gates.....	Feb. 11, 1825		9	Jacob Ammen.....	.....do.....	Mil. Academy.
4	D. D. Tompkins.....	Mar. 1, 1825		10	J. W. Bailey.....	July 1, 1832	Mil. Academy.
5	George D. Ramsay.....	Mar. 1, 1826	Adjutant.	11	Henry G. Sill.....	.....do.....	Top. duty.
6	Chas. Dimmock.....	Feb. 20, 1828	A. Q. M.	12	Geo. Watson.....	May 31, 1833	Bvt., July 1, 1832.
7	L. B. Webster.....	May 30, 1832		13	Wm. H. Pettes.....	Sept. 30, 1833	Bvt., July 1, 1832.
8	George Nauman.....	.....do.....		14	L. Sitgreaves.....	.....do.....	Bvt., July 1, 1832.
				15	F. H. Smith.....	Nov. 30, 1833	Bvt., July 1, 1833.
					BREVET SECOND LIEUTENANTS.		
				16	David B. Harris	Mar. 6, 1834	Bvt., July 1, 1833.
				17	E. A. Capron	May 31, 1834	Mil. Acad.
				18	David E. Hale.....	Oct. 23, 1834	Bvt., July 1, 1833.
					BREVET SECOND LIEUTENANTS.		
				1	T. A. Morris.....	July 1, 1834	Bvt., Eng. duty.
				2	R. T. P. Allen.....	.....do.....	Bvt., Top. duty.
				3	Epaphras Kibby.....	.....do.....	
				4	John F. Lee.....	.....do.....	
				5	C. B. Chalmers.....	.....do.....	
				6	L. A. B. Walbach.....	.....do.....	

SECOND REGIMENT OF ARTILLERY.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
	COLONEL.			7	Wm. C. DeHart	Oct. 10, 1831	Bvt., July 1, 1830. Aide-de-camp to Bvt. Major General Scott.
1	Wm. Lindsay	April 26, 1832	Bvt., March 12, 1823.	8	J. A. Chambers	Jan. 28, 1832	Bvt., July 1, 1830. A. C. S.
	LIEUTENANT COLONEL.			9	J. A. d'Lagnel	May 30, 1832	Bvt., July 1, 1830. A. C. S.
1	Ichabod B. Crane	Nov. 3, 1832	Bvt., Nov. 13, 1823.	10	C. F. Smith	do	Mil. Academy.
	MAJOR.			11	Const. Smith	do	
1	J. F. Heileman	Nov. 17, 1834	Bvt., May 5, 1823.	12	Fr. L. Dancy	Nov. 3, 1832	A. C. S.
	CAPTAINS.			13	M. M. Clark	Dec. 31, 1833	A. Q. M.
1	Frs. S. Belton	July 31, 1817		14	John B. Grayson	April 30, 1834	A. C. S.
2	R. A. Zantzinger	Dec. 12, 1818	Maj. bvt., Aug. 15, 1824.	15	Hugh W. Mercer	Oct. 10, 1834	
3	J. Mountfort	Aug. 11, 1819	Maj. bvt., Sept. 11, 1824.	16	Joseph L. Locke	Nov. 17, 1834	A. C. S.
4	Thos. C. Legate	May 13, 1820	Maj. bvt., May 13, 1830.	17	Thomas B. Adams	Dec. 1, 1834	Ordnance.
5	N. Baden	April 1, 1824	Maj. bvt., April 1, 1834.	18	John Mackay	Dec. 31, 1834	Engineer duty.
6	Jo. P. Taylor	July 6, 1825	Commissary.		SECOND LIEUTENANTS.		
7	Gus. S. Drane	May 30, 1832	Bvt., Nov. 15, 1827.	1	John C. Casey	July 1, 1829	
8	G. W. Gardiner	Nov. 3, 1832	Bvt., April 20, 1828.	2	Wm. E. Basinger	July 1, 1830	
9	C. S. Merchant	Nov. 17, 1834	Bvt., April 20, 1828.	3	W. S. Chandler	do	
	FIRST LIEUTENANTS.			4	Thos. B. Linnard	do	
1	Charles Mellon	April 20, 1818	Capt. bvt., April 20, 1828.	5	R. H. K. Whitley	do	Ordnance.
2	Allen Lowd	do	Capt. bvt., April 20, 1828.	6	H. E. Prentiss	July 1, 1831	
3	H. W. Fitzhugh	do	Capt. bvt., April 20, '28. A. Q. M.	7	R. H. Peyton	do	
4	H. S. Mallory	May 31, 1819	Capt. bvt., May 31, 1829. Ord.	8	A. A. Humphreys	do	Top. duty.
5	S. McKenzie	Feb. 20, 1825		9	George W. Ward	July 1, 1832	Top. duty.
6	James Green	May 31, 1826	Adjutant.	10	Robert P. Smith	do	
				11	Joseph C. Vance	Dec. 31, 1833	Bvt., July 1, 1832. Engineer duty.
				12	W. B. Burnett	April 1, 1834	Bvt., July 1, 1832. Top. duty.
				13	T. F. J. Wilkinson	April 30, 1834	Bvt., July 1, 1832.
				14	Edm. Schriver	July 31, 1834	Bvt., July 1, 1833. Mil. Acad.
				15	H. Loughborough	Oct. 10, 1834	Bvt., July 1, 1834. Engineer duty.
				16	J. Duncan	Nov. 17, 1834	Bvt., July 1, 1834.
				17	W. T. Stockton	Dec. 1, 1834	Bvt., July 1, 1834.
				18	J. E. Henderson	Dec. 31, 1834	Bvt., July 1, 1834. Top. duty.

THIRD REGIMENT OF ARTILLERY.

	COLONEL.			8	John L'Engle	Dec. 11, 1825	A. Q. M.
1	W. K. Armistead	Nov. 12, 1818	Brig. gen. bvt., Nov. 12, 1828.	9	H. Garner	Feb. 26, 1827	Adjutant.
	LIEUTENANT COLONEL.			10	F. N. Barbarin	Feb. 28, 1827	Ordnance.
1	James Bankhead	April 26, 1832	Bvt., Aug. 15, 1823.	11	Martin Burk	May 1, 1828	Ordnance.
	MAJOR.			12	R. D. A. Wade	Sept. 10, 1828	A. C. S.
1	Alex. S. Brooks	April 26, 1832	Lieut. col. bvt., Sept. 11, 1824.	13	Cam. Graham	Sept. 11, 1828	
	CAPTAINS.			14	W. S. Maitland	Dec. 31, 1828	
1	M. P. Lomax	Nov. 17, 1814	Maj. bvt., Nov. 17, 1824.	15	Geo. S. Greene	May 31, 1829	A. C. S.
2	Felix Ansart	Nov. 28, 1819	Maj. bvt., Nov. 28, 1829.	16	R. P. Parrott	Aug. 27, 1831	Ordnance office.
3	Aeneas Mackay	Dec. 31, 1822	Maj. bvt., Dec. 31, 1832. A. Q. M.	17	J. W. Harris	June 30, 1833	
4	W. L. McClintock	Aug. 11, 1823	Maj. bvt., Aug. 11, 1833.	18	Robert Anderson	do	
5	Thomas Childs	Oct. 1, 1826			SECOND LIEUTENANTS.		
6	C. M. Thruston	Feb. 17, 1827		1	William Bryant	July 1, 1826	
7	Elijah Lyon	Feb. 20, 1827		2	Edw. B. White	do	Top. duty.
8	Upton S. Fraser	May 1, 1828	Bvt., Jan. 1, 1827.	3	Dan. S. Herring	do	
9	T. W. Lendrum	Dec. 31, 1828		4	John Child	July 1, 1827	
	FIRST LIEUTENANTS.			5	N. B. Buford	do	M. Academy.
1	J. R. Vinton	Sept. 30, 1819	Capt. bvt., Sept. 30, 1829. A. C. S.	6	George Fetterman	do	Top. duty.
2	R. B. Lee	Oct. 31, 1819	Capt. bvt., Oct. 31, 1829.	7	Albert E. Church	July 1, 1828	M. Academy.
3	Samuel Ringgold	May 8, 1822	Capt. bvt., May 8, 1832. Ord.	8	Robert E. Temple	do	Office Eng. Dep.
4	W. S. Newton	Dec. 31, 1822	Capt. bvt., Dec. 31, 1832. Ord.	9	Joseph A. Smith	July 1, 1829	Mil. Academy.
5	W. B. Davidson	Jan. 1, 1825		10	William R. McKee	do	Eng. duty.
6	D. H. Vinton	April 7, 1825		11	Frs. Vinton	July 1, 1830	
7	Z. J. D. Kinsley	Aug. 30, 1825	M. Academy.	12	Benj. Poole	do	Top. duty.
				13	Edwin Rose	do	Top. duty.
				14	Geo. H. Talcott	June 30, 1833	Bvt., July 1, 1831.
				15	Eras. D. Keyes	Aug. 31, 1833	Bvt., July 1, 1832. Office Eng. Dep.
				16	William Wall	Sept. 30, 1833	Bvt., July 1, 1832.
				17	James H. Simpson	Nov. 30, 1833	Bvt., July 1, 1832.
				18	R. W. Lee	Sept. 14, 1834	Bvt., July 1, 1833.
					BREVET 2D LEUTS.		
				1	Robert R. Mudge	July 1, 1833	Mil. Academy.
				2	John A. Thomas	do	Mil. Academy.
				3	John H. Allen	do	
				4	C. A. Fuller	July 1, 1834	Top. duty.
				5	M. S. Miller	do	

FOURTH REGIMENT OF ARTILLERY.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
	COLONEL.			6	S. B. Dusenbery	March 1, 1825	A. Q. M.
1	J. R. Fenwick	May 8, 1822	Brig. gen. bvt., Mar. 18, 1823.	7	Edw. C. Ross	Nov. 27, 1826	
	LIEUTENANT COLONEL.			8	John B. Scott	July 31, 1827	A. C. S.
1	Roger Jones	Nov. 17, 1834	Brig. gen. bvt., June 7, 1832. Adj. gen.	9	Horace Bliss	Dec. 31, 1827	Engineer duty.
	MAJOR.			10	John Pickell	May 28, 1831	Engineer duty.
1	A. C. W. Fanning	Nov. 3, 1832	Lt. col. bvt., Aug. 15, 1824.	11	A. Beckley	July 31, 1831	
	CAPTAINS.			12	F. Searle	Aug. 20, 1831	
1	B. K. Pierce	Oct. 1, 1813	Maj. bvt., Oct. 1, 1823.	13	F. L. Jones	Jan. 31, 1832	
2	M. M. Payne	March 2, 1814	Maj. bvt., Mar. 2, 1824.	14	G. W. Long	Feb. 2, 1832	
3	John Erving	April 25, 1818	Maj. bvt., April 25, 1828.	15	W. P. Bainbridge	May 30, 1832	
4	L. Whiting	May 21, 1822	Maj. bvt., May 21, 1832.	16	H. A. Wilson	do	
5	J. L. Gardner	Nov. 1, 1823	Maj. bvt., Nov. 1, 1833.	17	R. C. Smead	Sept. 30, 1832	Engineer duty.
6	John Munroe	March 2, 1825	Brevet, July 25, 1824.	18	W. F. Hopkins	Sept. 14, 1834	M. Academy.
7	Jac. Schmuck	April 11, 1825	Brevet, Sept. 26, 1828.		SECOND LIEUTENANTS.		
8	Patrick H. Galt	May 15, 1829	Brevet, May 23, 1830.	1	W. A. Thornton	July 1, 1825	Ordnance.
9	J. M. Washington	May 30, 1832		2	Thomas J. Cram	July 1, 1826	M. Academy.
	FIRST LIEUTENANTS.			3	M. C. Ewing	do	Top. duty.
1	Harvey Brown	Aug. 23, 1821	Capt. bvt., Aug. 23, 1831. A. C. S.	4	D. H. Tufts	do	Ordnance.
2	Samuel Cooper	July 6, 1821	Capt. bvt., July 6, 1831. Aid to Maj. Gen Macomb.	5	Charles O. Collins	July 1, 1828	
3	Charles Ward	July 20, 1822	Capt. bvt., July 20, 1832. Ord.	6	John F. Lane	do	
4	H. A. Thompson	Dec. 31, 1822	Capt. bvt., Dec. 31, 1832. Adj.	7	James Barnes	July 1, 1829	M. Academy.
5	W. W. Morris	Aug. 11, 1823		8	J. E. Johnston	do	Top. duty.
				9	Charles Pettigru	do	Ordnance.
				10	Franklin E. Hunt	do	Engineer duty.
				11	Thos. J. Lee	July 1, 1830	
				12	Simon H. Drum	do	
				13	S. C. Ridgeley	July 1, 1831	M. Academy.
				14	Wm. H. Emory	do	
				15	Benj. S. Ewell	July 1, 1832	M. Academy.
				16	John N. Macomb	Sept. 30, 1833	Bvt., July 1, 1832. Top. duty.
				17	Edward Deas	Oct. 31, 1833	Bvt., July 1, 1832.
				18	Alfred Brush	Sept. 14, 1834	Bvt., July 1, 1832. Eng. Dep.
					BREVET SECOND LIEUTENANTS.		
				1	John H. Miller	July 1, 1833	
				2	James L. Davis	do	
				3	Alex. E. Shiras	do	
				4	Robert H. Archer	July 1, 1832	
				5	Wm. G. Freeman	July 1, 1834	

FIRST REGIMENT OF INFANTRY.

	COLONEL.			2	J. J. Abercrombie	Sept. 26, 1828	
1	Z. Taylor	April 4, 1832	Brevet, April 20, 1829.	3	A. S. Miller	May 31, 1829	
	LIEUTENANT COLONEL.			4	J. W. Kingsbury	Aug. 1, 1830	A. C. S.
1	Wm. Davenport	April 4, 1832		5	W. L. Harris	Dec. 31, 1830	A. C. S.
	MAJOR.			6	E. Backus	July 28, 1831	
1	John Bliss	July 15, 1831	Brevet, May 13, 1823.	7	O. Cross	Dec. 31, 1831	Engineer duty.
	CAPTAINS.			8	T. B. W. Stockton	Mar. 4, 1833	A. Q. M.
1	G. Loomis	April 7, 1819	Maj. bvt., April 7, 1829.	9	Joseph H. Lamotte	July 11, 1833	
2	T. F. Smith	April 25, 1819	Maj. bvt., April 25, 1829.	10	Jonas K. Greenough	Dec. 10, 1830	Engineer duty.
3	E. A. Hitchcock	Dec. 31, 1824			SECOND LIEUTENANTS.		
4	W. R. Jouett	May 1, 1829		1	Eros G. Mitchell	July 1, 1828	
5	Thos. Barker	May 31, 1829		2	J. R. B. Gardinier	do	
6	S. Shannon	July 28, 1831	Brevet, Feb. 23, 1830. A. Q. M.	3	Sid. Burbank	July 1, 1829	
7	Sam. McRee	Dec. 31, 1831		4	Seth Eastman	do	M. Academy.
8	Wm. Day	Oct. 26, 1832		5	E. R. Williams	do	
9	Thos. P. Gwynne	Mar. 4, 1833		6	Lloyd J. Beall	July 1, 1830	Adjutant.
10	Jefferson Vail	July 11, 1833		7	George Wilson	do	
	FIRST LIEUTENANTS.			8	E. A. Ogden	July 1, 1831	
1	W. M. Boyce	June 30, 1825		9	Ingham Wood	Sept. 30, 1833	Bvt., July 1, 1831.
				10	Tho. M. Hill	Dec. 10, 1830	Bvt., July 1, 1832.
					BREVET SECOND LIEUTENANTS.		
				1	Wm. H. Storer	July 1, 1832	
				2	John Beach	do	
				3	Geo. H. Pegram	July 1, 1833	
				4	James McClure	do	
				5	Wm. H. Price	July 1, 1834	

SECOND REGIMENT OF INFANTRY.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
COLONEL.				FIRST LIEUTENANTS.			
1	Hugh Brady -----	July 6, 1812	Brig. gen. bvt., July 6, 1822.	1	John Bradley -----	Oct. 2, 1822	Capt. bvt., Oct. 2, 1832.
LIEUTENANT COLONEL.				2	Samuel L. Russell....	Dec. 31, 1827	A. C. S.
1	Alexander Cummings	Aug. 20, 1828		3	Carlos A. Waite	May 1, 1828	A. Q. M.
MAJOR.				4	J. S. Gallagher.....	Feb. 2, 1830	Adjutant.
1	A. R. Thompson.....	Mar. 4, 1833	Bvt., May 1, 1824.	5	T. Morris.....	May 26, 1830	
CAPTAINS.				6	J. J. B. Kingsbury..	Sept. 13, 1831	
1	N. S. Clark.....	Oct. 1, 1814	Maj. bvt., July 25, 1824.	7	J. R. Smith.....	Mar. 22, 1832	A. C. S.
2	W. V. Cobbs.....	Mar. 31, 1819	Maj. bvt., March 31, 1829.	8	Hannibal Day.....	April 4, 1832	
3	W. Hoffman.....	May 1, 1819	Maj. bvt., May 1, 1829.	9	W. Bloodgood	Dec. 28, 1832	
4	G. Dearborn	Sept. 30, 1819	Maj. bvt., Sept. 30, 1829.	10	S. P. Heintzelman ..	Mar. 4, 1833	
5	T. Staniford	Mar. 1, 1820	Maj. bvt., Mar. 1, 1830.	SECOND LIEUTENANTS.			
6	B. A. Boynton	Jan. 8, 1823	Maj. bvt., Jan. 8, 1833.	1	Amos B. Eaton.....	July 1, 1826	A. C. S.
7	Owen Ransom.....	Jan. 25, 1823	Maj. bvt., Jan. 25, 1833.	2	Silas Casey	do.....	
8	Seth Johnson	Sept. 13, 1831	Brevet, May 1, 1829.	3	Abner R. Hetzel.....	July 1, 1827	A. Q. M.
9	John Chitz.....	April 4, 1832	Bvt., Dec. 31, 1829.	4	James W. Penrose...	July 1, 1828	A. C. S.
10	E. K. Barnum	Dec. 28, 1832	Bvt., Dec. 31, 1830.	5	Edwin R. Long.....	July 1, 1829	
				6	James M. Hill.....	July 1, 1830	
				7	J. H. Leavenworth...	do.....	
				8	Geo. W. Patten.....	do.....	
				9	J. M. Clendenin....	Mar. 4, 1833	Bvt., July 1, 1830.
				10	Jacob Brown.....	Oct. 6, 1834	Bvt., July 1, 1832.
				BREVET SECOND LIEUTENANTS.			
				1	James V. Bomford..	July 1, 1832	
				2	I. R. D. Burnett....	July 1, 1833	
				3	H. W. Wessells	do.....	
				4	J. W. Anderson.....	do.....	
				5	Thos. H. Johns.....	do.....	
				6	Richard S. Smith....	July 1, 1834	Top. duty.

THIRD REGIMENT OF INFANTRY.

COLONEL.				2	Hy. Bainbridge.....	June 6, 1827	
1	Jas. B. Many	July 21, 1834	Brevet, June 1, 1831.	3	George Wright.....	Sept. 23, 1827	Adjutant.
LIEUTENANT COLONEL.				4	J. W. Cotton.....	Oct. 4, 1827	
1	Josiah H. Vose	April 23, 1830		5	E. B. Alexander.....	Dec. 29, 1827	A. Q. M.
MAJOR.				6	E. B. Birdsall	Feb. 17, 1829	
1	John Fowle.....	Mar. 4, 1833	Brevet, June 10, 1824. M. Acad.	7	Nat. S. Harris.....	Sept. 11, 1829	
CAPTAINS.				8	Joseph Bonnell.....	July 15, 1831	
1	J. Garland.....	May 7, 1817	Maj. bvt., May 7, 1827, War Office.	9	W. R. Montgomery...	Aug. 31, 1833	
2	J. S. Nelson	Aug. 13, 1819	Maj. bvt., Aug. 13, 1829.	10	Edw. B. Babbitt....	Mar. 31, 1834	A. C. S.
3	W. G. Belknap.....	Feb. 1, 1822	Maj. bvt., Feb. 1, 1832.	SECOND LIEUTENANTS.			
4	John B. Clark.....	Mar. 18, 1826		1	Richard W. Colcock..	July 1, 1826	Engineer duty.
5	Andrew Lewis.....	June 6, 1827		2	Nath. C. Macrae.....	do.....	
6	T. J. Harrison.....	Sept. 23, 1827		3	Alex. G. Baldwin....	do.....	
7	James Dean.....	Oct. 4, 1827		4	Jefferson Van Horne.	July 1, 1827	
8	Hy. H. Loring	July 15, 1831	Brevet, Oct. 17, 1830.	5	Thomas Cutts.....	July 1, 1828	
9	Benj. Walker	Aug. 31, 1833		6	A. G. Blanchard.....	Aug. 31, 1833	Bvt., July 1, 1829.
10	L. N. Morris.....	Oct. 31, 1833		7	James H. Taylor.....	Oct. 31, 1833	Bvt., July 1, 1830.
				8	Step. B. Legate.....	do.....	Bvt., July 1, 1830.
				9	Wm. O. Kello	Jan. 11, 1834	Bvt., July 1, 1832.
				10	Henry Swartwout....	Mar. 31, 1834	Bvt., July 1, 1832.
				BREVET SECOND LIEUTENANTS.			
				1	Jas. F. Cooper	July 1, 1834	Top. duty.
				2	Geo. P. Field	do.....	
				3	Cary H. Fry	do.....	
				4	T. O. Barnwell.....	do.....	
				5	J. L. Coburn.....	do.....	
				6	P. N. Barbour.....	do.....	

FOURTH REGIMENT OF INFANTRY.

COLONEL.				CAPTAINS.			
1	D. L. Clinch	April 20, 1819	B. G. bvt., Apr. 20, 1829.	1	J. S. McIntosh	Mar. 8, 1817	Maj. bvt., Mar. 8, 1827.
LIEUTENANT COLONEL.				2	J. M. Glassell.....	Feb. 10, 1818	Maj. bvt., Feb. 10, 1828.
1	D. E. Twiggs	July 15, 1831		3	Francis L. Dade.....	Feb. 24, 1818	Maj. bvt., Feb. 24, 1828.
MAJOR.				4	Philip Wager	May 8, 1818	Maj. bvt., May 8, 1828.
1	William S. Foster ..	July 7, 1826	Lieut. col. bvt., Aug. 15, 1824.	5	Henry Wilson.....	April 20, 1819	Maj. bvt., April 20, 1829.

FOURTH REGIMENT OF INFANTRY—Continued.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
CAPTAINS—Continued.				SECOND LIEUTENANTS.			
6	R. M. Sands	April 30, 1819	Maj. bvt., April 30, 1829.	1	Samuel R. Alston	July 1, 1825	Top. office.
7	Wm. W. Lear	May 1, 1824	Maj. bvt., May 1, 1834.	2	Washington Hood	July 1, 1827	
8	G. W. Allen	Jan. 25, 1829	Bvt., Jan. 1, 1829.	3	Chileab S. Howe	July 1, 1829	
9	J. Page	April 30, 1831	Bvt., Jan. 1, 1829.	4	Rd. B. Screven	do	
10	Wm. M. Graham	July 6, 1832	Brevet, Aug. 11, 1829.	5	Rob. C. Buchanan	July 1, 1830	
FIRST LIEUTENANTS.				6	D. A. Manning	do	
1	A. W. Thornton	April 25, 1823	Capt. bvt., April 25, 1833. A. C. S.	7	Chas. H. Larned	July 1, 1831	
2	Wm. Martin	Mar. 25, 1826	A. C. S.	8	Bradford R. Alden	Sept. 15, 1833	
3	P. Morrison	Aug. 26, 1826	Aid to Bvt. Maj. Gen. Gaines.	9	Fred. Wilkinson	Feb. 18, 1834	
4	Geo. A. McCall	Jan. 25, 1829	Adj. Gen.'s office. A. Q. M.	10	Wm. W. S. Bliss	Mar. 31, 1834	
				BREVET SECOND LIEUTENANTS.			
5	L. Thomas	Mar. 17, 1829	A. C. S.	1	Benjamin Alvord	July 1, 1833	Top. duty.
6	R. D. C. Collins	Nov. 3, 1829	A. Q. M.	2	John L. Hooper	do	
7	Elias Phillips	Mar. 30, 1831	A. C. S.	3	J. W. McCrabb	do	
8	Gov. Morris	April 30, 1831	A. Q. M.	4	Abram C. Myers	do	
9	F. D. Newcomb	July 6, 1832	A. C. S.	5	Henry L. Scott	do	
10	Timothy Paige	Mar. 4, 1833	A. Q. M.	6	E. Robinson	July 1, 1834	
				7	J. Graham	do	

FIFTH REGIMENT OF INFANTRY.

COLONEL.				2	St. Clair Denny	Nov. 30, 1827	A. Q. M.
1	Geo. M. Brooke	July 15, 1831	Brig. gen. bvt., Sept. 17, 1824.	3	Anthony Drane	Aug. 20, 1828	
LIEUTENANT COLONEL.				4	Al. Johnston	Aug. 22, 1828	
1	Enos Cutler	April 23, 1826		5	L. T. Jamison	April 23, 1830	
MAJOR.				6	John M. Berrien	Dec. 31, 1830	
1	John Green	Oct. 31, 1833	Brevet, Sept. 25, 1824.	7	Moses E. Merrill	March 4, 1833	
CAPTAINS.				8	Eph. K. Smith	do	
1	T. F. Hunt	May 20, 1820	Maj. bvt., June 16, 1828. A. Q. M.	9	Alexander S. Hooe	Oct. 1, 1833	
2	J. Plympton	June 1, 1821	Maj. bvt., June 1, 1831.	10	Alexander J. Center	Dec. 31, 1834	
3	D. Wilcox	April 1, 1822	Maj. bvt., April 1, 1832.	SECOND LIEUTENANTS.			
4	Nathan Clarke	June 29, 1824	Maj. bvt., June 29, 1834. Office of C. G. S.	1	Edgar M. Lacy	July 1, 1827	A. C. S.
5	Thos. Hunt	Sept 27, 1824		2	Isaac Lynde	do	
6	M. Scott	Aug. 16, 1828		3	Robert E. Clary	July 1, 1828	
7	G. Lowe	Aug. 20, 1828		4	James L. Thompson	do	
8	J. B. F. Russell	April 23, 1830		5	Caleb Sibley	July 1, 1829	
9	Jos. M. Baxley	March 4, 1833		6	J. T. Collinsworth	July 1, 1830	
10	W. E. Cruger	Oct. 1, 1833		7	C. C. Daveiss	do	
				8	W. Chapman	Mar. 4, 1833	
				9	Moses Scott	Oct. 1, 1833	
				10	H. P. Vancleve	Dec. 31, 1834	
				BREVET SECOND LIEUTENANTS.			
1	W. Alexander	Oct. 31, 1825		1	Thos. Stockton	July 1, 1831	Engineer duty.
				2	R. B. Marcy	July 1, 1832	
				3	Daniel Ruggles	July 1, 1833	
				4	J. C. Reid	do	
				5	G. Bryan	July 1, 1834	

SIXTH REGIMENT OF INFANTRY.

COLONEL.				4	Z. C. Palmer	Feb. 15, 1826	Engineer duty.	
1	Henry Atkinson	April 15, 1814	Brig. gen. bvt., May 13, 1820.	5	W. N. Wickliffe	do		
LIEUTENANT COLONEL.				6	Henry Smith	July 7, 1826		
1	Dan Baker	May 1, 1829	Brevet, Aug. 9, 1822.	7	Thos. Noel	May 1, 1827		
MAJOR.				8	Jas. Rogers	Aug. 30, 1828		
				9	Geo. C. Hutter	May 12, 1829		
				10	G. W. Waters	March 4, 1833		
				FIRST LIEUTENANTS.				
1	-----	-----	-----	1	Levi M. Nute	July 7, 1826		A. Q. M.
				2	M. W. Batman	Dec. 20, 1826		
				3	Geo. Andrews	Feb. 11, 1827		
				4	Asa Richardson	May 1, 1827		
1	Bennet Riley	Aug. 6, 1818	Maj. bvt., Aug. 6, 1828.	5	John Nichols	Oct. 31, 1827		
2	I. Clark, jr.	Aug. 27, 1822	Maj. bvt., Aug. 27, 1832. A. Q. M.	6	G. H. Crosman	Aug. 30, 1828		
3	Jacob Brown	April 7, 1825		7	J. Van Swearingen	May 12, 1829		
				8	Joseph S. Worth	April 22, 1830		
				9	H. St. J. Linden	Mar. 4, 1833		
				10	Gustavus Dorr	do		

SIXTH REGIMENT OF INFANTRY—Continued.

No.	Names and rank.	Date of commission.	Brevets and staff appointments.	No.	Names and rank.	Date of commission.	Brevets and staff appointments.
SECOND LIEUTENANTS.				BREVET SECOND LIEUTENANTS.			
1	Jos. D. Searight	July 1, 1826		1	John Conrad	July 1, 1831	
2	F. J. Brooke	do	Adjutant.	2	Geo. H. Griffin	July 1, 1832	
3	Nathaniel J. Eaton	July 1, 1827	A. C. S.	3	Jacob E. Blake	July 1, 1833	Military Acad.
4	Robert Sevier	July 1, 1828		4	John P. Center	do	
5	Thomas F. Drayton	do	Top. duty.	5	G. H. Ringgold	do	
6	William Hoffman	July 1, 1829		6	Jos. P. Harrison	do	
7	Alber'e Cady	do	Engineer duty.	7	W. S. Ketchum	July 1, 1834	
8	Jona. Freeman	do	Engineer duty.				
9	T. L. Alexander	July 1, 1830					
10	J. S. Williams	May 31, 1834	Bvt., July 1, 1831, Eng. duty.				

SEVENTH REGIMENT OF INFANTRY.

COLONEL.				4	D. S. Miles	April 30, 1833	Adjutant.
1	M. Arbuckle	Mar. 16, 1820	Brig. gen. bvt., Mar. 16, 1830.	5	W. Seawell	July 12, 1833	
LIEUTENANT COLONEL.				6	L. F. Carter	Dec. 15, 1833	A. C. S.
1	W. Whistler	July 21, 1834		7	Gabriel J. Rains	Jan. 28, 1834	
MAJOR.				8	S. W. Moore	May 31, 1834	
1	Sullivan Burbank	Aug. 20, 1828	Lieut. col. bvt., July 25, 1824.	9	William W. Mather	Dec. 4, 1834	M. Academy.
CAPTAINS.				10	John P. Davis	Dec. 31, 1834	A. C. S.
1	George Birch	Aug. 31, 1816	Maj. bvt., Aug. 31, 1826.	SECOND LIEUTENANTS.			
2	Nath. Young	Jan. 1, 1819	Maj. bvt., Jan. 1, 1829.	1	T. H. Holmes	July 1, 1829	
3	Trueman Cross	Sept. 27, 1819	Q. M.	2	Samuel Kinney	July 1, 1830	
4	N. G. Wilkinson	July 31, 1824		3	Richard H. Ross	do	
5	John Stuart	June 30, 1828		4	Geo. W. Cass	Mar. 4, 1833	Bvt., July 1, 1832. Engineer duty.
6	E. S. Hawkins	Nov. 10, 1829		5	Daniel P. Whiting	Dec. 15, 1833	Bvt., July 1, 1832.
7	Charles Thomas	April 30, 1833	A. Q. M.	6	Roger S. Dix	Jan. 28, 1834	Bvt., July 1, 1832. Top. duty.
8	James L. Dawson	do		7	Richard C. Gatlin	May 31, 1834	Bvt., July 1, 1832.
9	Francis Lee	May 31, 1834		8	A. F. Seaton	Sept. 28, 1834	Bvt., July 1, 1833.
10	J. R. Stephenson	Dec. 31, 1834		9	G. R. Paul	Dec. 4, 1834	Bvt., July 1, 1834.
FIRST LIEUTENANTS.				10	S. G. Simmons	Dec. 31, 1834	Bvt., July 1, 1834. Top. duty.
1	Jos. A. Phillips	June 30, 1828	M. Academy.	BREVET SECOND LIEUTENANTS.			
2	J. E. Newell	Nov. 10, 1829		1	H. McKavett	July 1, 1834	
3	N. Tillinghast	June 30, 1830		2	J. G. Reed	do	Top. duty.
				3	A. Harris	do	
				4	F. Britton	do	
				5	A. Montgomery	do	

NOTE.—This mark ^o affixed to any officer's name denotes a voluntary transfer, which is the cause of his anomalous regimental position.

LINEAL RANK OF ARTILLERY OFFICERS.

No.	Names and rank.	Date of commission.	Regiment.	Remarks.
COLONELS.				
1	W. K. Armistead	Nov. 12, 1818	3d artillery	
2	John R. Fenwick	May 8, 1822	4th artillery	
3	William Lindsay	April 26, 1832	2d artillery	
4	Abraham Eustis	Nov. 17, 1834	1st artillery	
LIEUTENANT COLONELS.				
1	James Bankhead	April 26, 1832	3d artillery	
2	John B. Walbach	May 30, 1832	1st artillery	
3	Ichabod B. Crane	Nov. 3, 1832	2d artillery	
4	Roger Jones	Nov. 17, 1834	4th artillery	Adjutant general.
MAJORS.				
1	Alex. S. Brooks	April 26, 1832	3d artillery	
2	William Gates	May 30, 1832	1st artillery	
3	A. C. W. Fanning	Nov. 3, 1832	4th artillery	
4	J. F. Heileman	Nov. 17, 1834	2d artillery	
CAPTAINS.				
1	Sylvester Churchill	Aug. 15, 1813	1st artillery	
2	B. K. Pierce	Oct. 1, 1813	4th artillery	

LINEAL RANK OF ARTILLERY OFFICERS—Continued.

No.	Names and rank.	Date of commission.	Regiment.	Remarks.
CAPTAINS—Continued.				
3	M. M. Payne.....	Mar. 2, 1814	4th artillery	Assistant quartermaster.
4	M. P. Lomax.....	Nov. 17, 1814	3d artillery	
5	Milo Mason.....	May 17, 1816	1st artillery	
6	Henry Whiting.....	Mar. 3, 1817	1st artillery	
7	Francis S. Belton.....	July 31, 1817	2d artillery	
8	J. Erving.....	April 25, 1818	4th artillery	
9	R. A. Zantzinger.....	Dec. 12, 1818	2d artillery	
10	John Mountfort.....	Aug. 11, 1819	2d artillery	
11	F. Whiting.....	Sept. 10, 1819	1st artillery	
12	Felix Ansart.....	Nov. 28, 1819	3d artillery	
13	Thomas C. Legate.....	May 13, 1820	2d artillery	Assistant quartermaster.
14	L. Whiting.....	May 21, 1822	4th artillery	
15	Aeneas Mackay.....	Dec. 31, 1822	3d artillery	
16	W. L. McClintock.....	Aug. 11, 1823	3d artillery	
17	J. L. Gardner.....	Nov. 1, 1823	4th artillery	
18	H. Saunders.....	Nov. 4, 1823	1st artillery	
19	N. Baden.....	April 1, 1824	2d artillery	
20	R. M. Kirby.....	Aug. 5, 1824	1st artillery	
21	John Munroe.....	Mar. 2, 1825	4th artillery	
22	Jac. Schmuck.....	April 11, 1825	4th artillery	
23	Jos. P. Taylor.....	July 6, 1825	2d artillery	Commissary.
24	Thomas Childs.....	Oct. 1, 1826	3d artillery	
25	Charles M. Thruston.....	Feb. 17, 1827	3d artillery	
26	Elijah Lyon.....	Feb. 20, 1827	3d artillery	
27	U. S. Fraser.....	May 1, 1828	3d artillery	
28	Thomas W. Lendrum.....	Dec. 31, 1828	3d artillery	
29	Patrick H. Galt.....	May 15, 1829	4th artillery	
30	Gustavus S. Drane.....	May 30, 1832	2d artillery	
31	Geo. W. Gardiner.....	Nov. 3, 1832	2d artillery	
32	John M. Washington.....	May 30, 1832	4th artillery	
33	Giles Porter.....	Sept. 30, 1833	1st artillery	
34	Joshua Howard.....	March 6, 1834	1st artillery	
35	David Van Ness.....	Oct. 23, 1834	1st artillery	
36	Charles S. Merchant.....	Nov. 17, 1834	2d artillery	

LINEAL RANK OF INFANTRY OFFICERS.

COLONELS.				
1	Hugh Brady.....	July 6, 1812	2d infantry	
2	Henry Atkinson.....	April 15, 1814	6th infantry	
3	Duncan L. Clinch.....	April 20, 1819	4th infantry	
4	Matthew Arbuckle.....	Mar. 16, 1820	7th infantry	
5	George M. Brooke.....	July 15, 1831	5th infantry	
6	Zachariah Taylor.....	April 4, 1832	1st infantry	
7	James B. Many.....	July 21, 1834	3d infantry	
LIEUTENANT COLONELS.				
1	Enos Cutler.....	April 28, 1826	5th infantry	
2	Alexander Cummings.....	Aug. 20, 1828	2d infantry	
3	Daniel Baker.....	May 1, 1829	6th infantry	
4	Josiah H. Vose.....	April 23, 1830	3d infantry	
5	David E. Twiggs.....	July 15, 1831	4th infantry	
6	William Davenport.....	April 4, 1832	1st infantry	
7	William Whistler.....	July 21, 1834	7th infantry	
MAJORS.				
1	William S. Foster.....	July 7, 1826	4th infantry	Military Academy.
2	Sullivan Burbank.....	Aug. 20, 1828	7th infantry	
3	John Bliss.....	July 15, 1831	1st infantry	
4	Alex. R. Thompson.....	March 4, 1833	2d infantry	
5	John Fowle.....	March 4, 1833	3d infantry	
6	John Green.....	Oct. 31, 1833	5th infantry	
7	.....	April 4, 1832	6th infantry
CAPTAINS.				
1	Newman S. Clark.....	Oct. 1, 1814	2d infantry	
2	George Birch.....	Aug. 31, 1816	7th infantry	
3	J. S. McIntosh.....	Mar. 8, 1817	4th infantry	
4	John Garland.....	May 7, 1817	3d infantry	
5	James M. Glassell.....	Feb. 10, 1818	4th infantry	
6	F. L. Dade.....	Feb. 24, 1818	4th infantry	
7	Philip Wager.....	May 8, 1818	4th infantry	
8	Bennet Riley.....	Aug. 6, 1818	6th infantry	
9	Nathaniel Young.....	Jan. 1, 1819	7th infantry	
10	W. V. Cobbs.....	Mar. 31, 1819	2d infantry	
11	Gustavus Loomis.....	April 7, 1819	1st infantry	
12	Henry Wilson.....	April 20, 1819	4th infantry	
13	Thomas F. Smith.....	April 25, 1819	1st infantry	

LINEAL RANK OF INFANTRY OFFICERS—Continued.

No.	Names and rank.	Date of commission.	Regiment.	Remarks.
CAPTAINS—Continued.				
14	Richard M. Sands	April 30, 1819	4th infantry	
15	William Hoffman	May 1, 1819	2d infantry	
16	Joseph S. Nelson	Aug. 13, 1819	3d infantry	
17	Trueman Cross	Sept. 27, 1819	7th infantry	Quartermaster.
18	Greenleaf Dearborn	Sept. 30, 1819	2d infantry	
19	Thomas Staniford	Mar. 1, 1820	2d infantry	
20	Thomas F. Hunt	May 20, 1820	5th infantry	A. Q. M.
21	J. Plympton	June 1, 1821	5th infantry	
22	W. G. Belknap	Feb. 1, 1822	3d infantry	
23	Delafayette Wilcox	April 1, 1822	5th infantry	
24	I. Clark	Aug. 27, 1822	6th infantry	A. Q. M.
25	B. A. Boynton	Jan. 8, 1823	2d infantry	
26	Owen Ransom	Jan. 25, 1823	2d infantry	
27	William W. Lear	May 1, 1824	4th infantry	
28	Nathan Clark	June 29, 1824	5th infantry	
29	N. G. Wilkinson	July 31, 1824	7th infantry	
30	Thomas Hunt	Sept. 27, 1824	5th infantry	Office Com. Gen. of Sub.
31	Ethan A. Hitchcock	Dec. 31, 1824	1st infantry	
32	Jacob Brown	April 7, 1825	6th infantry	
33	Zalmon C. Palmer	Feb. 15, 1826	6th infantry	
34	William N. Wickliffe	do.....	6th infantry	
35	John B. Clark	Mar. 18, 1826	3d infantry	
36	Henry Smith	May 7, 1826	6th infantry	
37	Thomas Noel	May 1, 1827	6th infantry	
38	Andrew Lewis	June 6, 1827	3d infantry	
39	Thomas J. Harrison	Sept. 23, 1827	3d infantry	
40	James Dean	Oct. 4, 1827	3d infantry	
41	John Stuart	June 30, 1828	7th infantry	
42	Martin Scott	Aug. 16, 1828	5th infantry	
43	Gideon Lowe	Aug. 20, 1828	5th infantry	
44	Jason Rogers	Aug. 30, 1828	6th infantry	
45	George W. Allen	Jan. 25, 1829	4th infantry	
46	William R. Jouett	May 1, 1829	1st infantry	
47	George C. Hutter	May 12, 1829	6th infantry	
48	Thomas Barker	May 31, 1829	1st infantry	
49	Edgar S. Hawkins	Nov. 10, 1829	7th infantry	
50	J. B. F. Russell	April 23, 1830	5th infantry	
51	John Page	April 30, 1831	4th infantry	
52	Henry H. Loring	July 15, 1831	3d infantry	
53	Samuel Shannon	July 28, 1831	1st infantry	A. Q. M.
54	Seth Johnson	Sept. 13, 1831	2d infantry	
55	Samuel McRee	Dec. 31, 1831	1st infantry	
56	John Clitz	April 4, 1832	2d infantry	
57	William M. Graham	July 6, 1832	4th infantry	
58	William Day	Oct. 26, 1832	1st infantry	
59	Ephraim K. Barnum	Dec. 28, 1832	2d infantry	
60	Joseph M. Baxley	Mar. 4, 1833	5th infantry	
61	Thomas P. Gwynne	do.....	1st infantry	
62	George W. Waters	do.....	6th infantry	
63	Charles Thomas	April 30, 1833	7th infantry	A. Q. M.
64	James L. Dawson	do.....	7th infantry	
65	Jefferson Vail	July 11, 1833	1st infantry	
66	Benjamin Walker	Aug. 31, 1833	3d infantry	
67	William E. Cruger	Oct. 1, 1833	5th infantry	
68	Lewis N. Morris	Oct. 31, 1833	3d infantry	
69	Francis Lee	May 31, 1834	7th infantry	
70	J. R. Stephenson	Dec. 31, 1834	7th infantry	

RELATIVE RANK

Of the field officers and captains of the dragoons, artillery and infantry.

No.	Names, rank, and date of commission.	Regiment and corps.	Brevets.	Remarks.
COLONELS.				
1	Hugh Brady, July 6, 1812.....	2d infantry ..	Brig. gen. bvt., July 6, 1822	
2	Henry Atkinson, April 15, 1814.....	6th infantry ..	Brig. gen. bvt., May 13, 1820	
3	W. K. Armistead, November 12, 1818.....	3d artillery ..	Brig. gen. bvt., November 12, 1828	
4	Duncan L. Clinch, April 20, 1819.....	4th infantry ..	Brig. gen. bvt., April 20, 1829	
5	Matthew Arbuckle, March 16, 1820.....	7th infantry ..	Brig. gen. bvt., March 16, 1830	
6	John R. Fenwick, May 8, 1822.....	4th artillery ..	Brig. gen. bvt., March 18, 1823	
7	George M. Brooke, July 15, 1831.....	5th infantry ..	Brig. gen. bvt., September 17, 1824	
8	Zachariah Taylor, April 4, 1832.....	1st infantry ..	Brevet, April 20, 1829	
9	William Lindsay, April 26, 1832.....	2d artillery ..	Brevet, March 12, 1823	
10	Henry Dodge, March 4, 1833.....	Dragoons .....	.....
11	James B. Many, June 21, 1834.....	3d infantry ..	Brevet, June 1, 1831	
12	Abram Eustis, November 17, 1834.....	1st artillery ..	Brig. gen. bvt., June 30, 1834.....	

RELATIVE RANK—Continued.

No.	Names, rank, and date of commission.	Regiment and corps.	Brevets.	Remarks.
LIEUTENANT COLONELS.				
1	Enos Cutler, April 28, 1826	5th infantry		
2	Alexander Cummings, August 20, 1828	2d infantry		
3	Daniel Baker, May 1, 1829	6th infantry	Brevet, August 9, 1822	
4	Josiah H. Vose, April 23, 1830	3d infantry		
5	David E. Twiggs, July 15, 1831	4th infantry		
6	William Davenport, April 4, 1832	1st infantry		
7	James Bankhead, April 26, 1832	3d artillery	Brevet, August 15, 1823	
8	John B. Walbach, May 30, 1832	1st artillery	Col. bvt., May 1, 1825	
9	Ichabod B. Crane, November 3, 1832	2d artillery	Brevet, Nov. 13, 1823	
10	Stephen W. Kearney, March 4, 1833	Dragoons		
11	William Whistler, July 21, 1834	7th infantry		
12	Roger Jones, November 17, 1834	4th artillery	Brig. gen. bvt., June 7, 1832	
MAJORS.				
1	W. S. Foster, July 7, 1826	4th infantry	Lieut. col. bvt., Aug. 15, 1824	
2	Sullivan Burbank, August 20, 1828	7th infantry	Lieut. col. bvt., July 25, 1824	
3	John Bliss, July 15, 1831	1st infantry	Brevet, May 13, 1823	
4	Alexander S. Brooks, April 26, 1832	3d artillery	Lieut. col. bvt., Sept. 11, 1824	
5	William Gates, May 30, 1832	1st artillery	Brevet, March 3, 1823	
6	A. C. W. Fanning, November 3, 1832	4th artillery	Lieut. col. bvt., Aug. 15, 1824	
7	Alex. R. Thompson, March 4, 1833	2d infantry	Brevet, May 1, 1824	
8	John Fowle, March 4, 1833	3d infantry	Brevet, June 10, 1824	
9	Richard B. Mason, March 4, 1833	Dragoons	Brevet, July 31, 1829	
10	John Green, October 31, 1833	5th infantry	Brevet, September 25, 1824	
11	Julius F. Heileman, November 17, 1834	2d artillery	Bvt., May 5, 1823	
12	_____, April 4, 1832	6th infantry		
CAPTAINS.				
1	Sylvester Churchill, August 15, 1813	1st artillery	Maj. bvt., August 15, 1823	
2	Benjamin K. Pierce, October 1, 1813	4th artillery	Maj. bvt., October 1, 1823	
3	M. M. Payne, March 2, 1814	4th artillery	Maj. bvt., March 2, 1824	
4	Newman S. Clarke, October 1, 1814	2d infantry	Maj. bvt., July 25, 1824	
5	M. P. Lomax, November 17, 1814	3d artillery	Maj. bvt., November 17, 1824	
6	Milo Mason, May 17, 1816	1st artillery	Maj. bvt., May 17, 1826	
7	George Birch, August 31, 1816	7th infantry	Maj. bvt., August 31, 1826	
8	Henry Whiting, March 3, 1817	1st artillery	Maj. bvt., March 17, 1824	
9	J. S. McIntosh, March 8, 1817	4th infantry	Maj. bvt., March 8, 1827	
10	John Garland, May 7, 1817	3d infantry	Maj. bvt., May 7, 1827	
11	Francis S. Belton, July 31, 1817	2d artillery		
12	James M. Glassell, February 10, 1818	4th infantry	Maj. bvt., February 10, 1828	
13	Francis L. Dade, February 24, 1818	4th infantry	Maj. bvt., February 24, 1828	
14	J. Erving, April 25, 1818	4th artillery	Maj. bvt., April 25, 1828	
15	Philip Wager, May 8, 1818	4th infantry	Maj. bvt., May 8, 1828	
16	Bennet Riley, August 6, 1818	6th infantry	Maj. bvt., August 6, 1828	
17	R. A. Zantzinger, December 12, 1818	2d artillery	Maj. bvt., August 15, 1824	
18	Nathaniel Young, January 1, 1819	7th infantry	Maj. bvt., January 1, 1829	
19	W. V. Cobbs, March 31, 1819	2d infantry	Maj. bvt., March 31, 1829	
20	Gustavus Loomis, April 7, 1819	1st infantry	Maj. bvt., April 7, 1829	
21	Henry Wilson, April 20, 1819	4th infantry	Maj. bvt., April 20, 1829	
22	Thomas F. Smith, April 25, 1819	1st infantry	Maj. bvt., April 25, 1829	
23	Richard M. Sands, April 30, 1819	4th infantry	Maj. bvt., April 30, 1829	
24	William Hoffman, May 1, 1819	2d infantry	Maj. bvt., May 1, 1829	
25	John Mountfort, August 11, 1819	2d artillery	Maj. bvt., September 11, 1824	
26	J. S. Nelson, August 13, 1819	3d infantry	Maj. bvt., August 13, 1829	
27	F. Whiting, September 10, 1819	1st artillery	Maj. bvt., September 10, 1829	
28	Trueman Cross, September 27, 1819	7th infantry		
29	Greenleaf Dearborn, September 30, 1819	2d infantry	Maj. bvt., September 30, 1829	
30	Felix Ansart, November 28, 1819	3d artillery	Maj. bvt., November 28, 1829	
31	Thomas Staniford, March 1, 1820	2d infantry	Maj. bvt., March 1, 1830	
32	Thomas C. Legate, May 13, 1820	2d artillery	Maj. bvt., May 13, 1830	
33	Thomas F. Hunt, May 20, 1820	5th infantry	Maj. bvt., June 16, 1828	
34	J. Plympton, June 1, 1821	5th infantry	Maj. bvt., June 1, 1831	
35	W. G. Belknap, February 1, 1822	3d infantry	Maj. bvt., February 1, 1832	
36	D. Wilcox, April 1, 1822	5th infantry	Maj. bvt., April 1, 1832	
37	Levi Whiting, May 21, 1822	4th artillery	Maj. bvt., May 21, 1832	
38	I. Clark, jr., August 27, 1822	6th infantry	Maj. bvt., August 27, 1832	
39	Aeneas Mackay, December 31, 1822	3d artillery	Maj. bvt., December 31, 1832	
40	Benjamin A. Boynton, January 8, 1823	2d infantry	Maj. bvt., January 8, 1833	
41	Owen Ransom, January 25, 1823	2d infantry	Maj. bvt., January 25, 1833	
42	W. L. McClintock, August 11, 1823	3d artillery	Maj. bvt., August 11, 1833	
43	J. L. Gardner, November 1, 1823	4th artillery	Maj. bvt., November 1, 1833	
44	Henry Saunders, November 4, 1823	1st artillery	Maj. bvt., November 4, 1833	
45	N. Baden, April 1, 1824	2d artillery	Maj. bvt., April 1, 1834	
46	W. W. Lear, May 1, 1824	4th infantry	Maj. bvt., May 1, 1834	
47	Nathaniel Clark, June 29, 1824	5th infantry	Maj. bvt., June 29, 1834	
48	N. G. Wilkinson, July 31, 1824	7th infantry		
49	R. M. Kirby, August 5, 1824	1st artillery	Maj. bvt., September 17, 1824	
50	Thomas Hunt, September 27, 1824	5th infantry		
51	Ethan A. Hitchcock, December 31, 1824	1st infantry		
52	John Munroe, March 2, 1825	4th artillery		
53	Jacob Brown, April 7, 1825	6th infantry		
54	J. Schmuck, April 11, 1825	4th artillery	Brevet, July 25, 1824	
55	Joseph P. Taylor, July 6, 1825	2d artillery		

RELATIVE RANK—Continued.

No.	Names, rank, and date of commission.	Regiment and corps.	Brevets.	Remarks.
CAPTAINS—Continued.				
56	Z. C. Palmer, February 15, 1826	6th infantry		
57	W. N. Wickliffe, February 15, 1826	6th infantry		
58	John B. Clark, March 18, 1826	3d infantry		
59	Henry Smith, July 7, 1826	6th infantry		
60	Thomas Childs, October 1, 1826	3d artillery		
61	Charles M. Thruston, February 17, 1827	3d artillery		
62	Elijah Lyon, February 20, 1827	3d artillery	Brevet, January 1, 1827	
63	Thomas Noel, May 1, 1827	6th infantry		
64	Andrew Lewis, June 6, 1827	3d infantry		
65	Thomas J. Harrison, September 23, 1827	3d infantry		
66	James Dean, October 4, 1827	3d infantry		
67	U. S. Fraser, May 1, 1828	3d artillery		
68	John Stuart, June 30, 1828	7th infantry		
69	Martin Scott, August 16, 1828	5th infantry		
70	Gideon Lowe, August 20, 1828	5th infantry		
71	Jason Rogers, August 30, 1828	6th infantry		
72	Thomas W. Lendrum, December 31, 1828	3d artillery		
73	George W. Allen, January 25, 1829	4th infantry	Brevet, January 1, 1829	
74	William R. Jouett, May 1, 1829	1st infantry		
75	George C. Hutter, May 12, 1829	6th infantry		
76	Patrick H. Galt, May 15, 1829	4th artillery	Brevet, September 26, 1828	
77	Thomas Barker, May 31, 1829	1st infantry		
78	Edgar S. Hawkins, November 10, 1829	7th infantry		
79	J. B. F. Russell, April 23, 1830	5th infantry		
80	John Page, April 30, 1831	4th infantry	Brevet, January 1, 1829	
81	Henry H. Loring, July 15, 1831	3d infantry	Brevet, October 17, 1830	
82	Samuel Shannon, July 28, 1831	1st infantry	Brevet, February 23, 1830	
83	Seth Johnson, September 13, 1831	2d infantry	Brevet, May 1, 1829	
84	Samuel McRee, December 31, 1831	1st infantry		
85	John Clitz, April 4, 1832	2d infantry	Brevet, December 31, 1829	
86	Gustavus S. Drane, May 30, 1832	2d artillery	Brevet, November 15, 1827	
87	John M. Washington, May 30, 1832	4th artillery	Brevet, May 23, 1830	
88	W. M. Graham, July 6, 1832	4th infantry	Brevet, August 11, 1829	
89	Wm. Day, October 26, 1832	1st infantry		
90	George W. Gardiner, November 3, 1832	2d artillery	Brevet, April 20, 1828	
91	Ephraim K. Barnum, December 28, 1832	2d infantry	Brevet, December 31, 1830	
92	Clifton Wharton, March 4, 1833	Dragoons	Captain, April 22, 1830	(Former commission.)
93	E. V. Sumner, March 4, 1833	Dragoons		
94	Joseph M. Baxley, March 4, 1833	5th infantry		
95	Thomas P. Gwynne, March 4, 1833	1st infantry		
96	George W. Waters, March 4, 1833	6th infantry		
97	Eustace Trenor, March 4, 1833	Dragoons		
98	David Hunter, March 4, 1833	Dragoons		
99	Charles Thomas, April 30, 1833	7th infantry		
100	James L. Dawson, April 30, 1833	7th infantry		
101	Jefferson Vail, July 11, 1833	1st infantry		
102	Lemuel Ford, August 15, 1833	Dragoons		
103	Nathan Boone, August 15, 1833	Dragoons		
104	Jesse B. Browne, August 15, 1833	Dragoons		
105	Jesse Bean, August 15, 1833	Dragoons		
106	Mathew Duncan, August 15, 1833	Dragoons		
107	Benjamin Walker, August 31, 1833	3d infantry		
108	Giles Porter, September 30, 1833	1st artillery	Brevet, February 1, 1833	
109	William E. Cruger, October 1, 1833	5th infantry		
110	Lewis N. Morris, October 31, 1833	3d infantry		
111	David Perkins, November 4, 1833	Dragoons		
112	Joshua Howard, March 6, 1834	1st artillery	Brevet, November 1, 1833	
113	Francis Lee, May 31, 1834	7th infantry		
114	David Van Ness, October 23, 1834	1st artillery	Brevet, November 4, 1833	
115	J. R. Stephenson, December 31, 1834	7th infantry		
116	C. S. Merchant, November 17, 1834	2d artillery	Brevet, April 20, 1828	

LIST OF GRADUATES

Of the Military Academy attached to the army as supernumerary brevet second lieutenants.

No.	Names.	Regiment.	No.	Names.	Regiment.
1831.					
1	Thomas Stockton	5th infantry	8	John Beach	1st infantry
2	John Conrad	6th infantry	9	Gaines P. Kingsbury	Dragoons
			10	James M. Bowman	Dragoons
			11	Asbury Ury	Dragoons
			12	Albert G. Edwards	Dragoons
1832.					
3	Randolph B. Marcy	5th infantry			
4	Robert H. Archer	4th artillery	13	F. A. Smith	Corps of eng
5	James V. Bomford	2d infantry	14	Jonathan G. Barnard	Corps of eng
6	Wm. H. Storer	1st infantry	15	George W. Cullum	Corps of eng
7	George H. Griffin	6th infantry	16	Rufus King	Corps of eng

LIST OF GRADUATES—Continued.

No.	Names.	Regiment.	No.	Names.	Regiment.
1833—Continued.					
17	John H. Miller	4th artillery	41	John Sanders	Corps of eng.
18	Robert R. Mudge	3d artillery	42	Thomas A. Morris	1st artillery
19	John A. Thomas	3d artillery	43	Robert T. P. Allen	1st artillery
20	James L. Davis	4th artillery	44	Epaphras Kibby	1st artillery
21	John H. Allen	3d artillery	45	John F. Lee	1st artillery
22	Alexander E. Shiras	4th artillery	46	Charles A. Fuller	3d artillery
23	Benjamin Alvord	4th infantry	47	Charles B. Chalmers	1st artillery
24	Isaac R. D. Burnett	2d infantry	48	Morris S. Miller	3d artillery
25	Jacob E. Blake	6th infantry	49	William G. Freeman	4th artillery
26	John L. Hooper	4th infantry	50	Louis A. B. Walbach	1st artillery
27	John W. McCrabb	4th infantry	51	James F. Cooper	3d infantry
28	Henry W. Wessells	2d infantry	52	George P. Field	3d infantry
29	John P. Center	6th infantry	53	Cary H. Fry	3d infantry
30	George H. Pegram	1st infantry	54	Henry S. Turner	Dragoons
31	Abraham C. Myers	4th infantry	55	Thomas O. Barnwell	3d infantry
32	George H. Ringgold	6th infantry	56	Henry McKavett	7th infantry
33	Daniel Ruggles	5th infantry	57	Goode Bryan	5th infantry
34	James W. Anderson	2d infantry	58	Joseph L. Coburn	3d infantry
35	James McClure	1st infantry	59	James G. Reed	7th infantry
36	J. Chester Reid	5th infantry	60	Philip N. Barbour	3d infantry
37	Thomas H. Johns	2d infantry	61	Arnold Harris	7th infantry
38	Joseph P. Harrison	6th infantry	62	Richard S. Smith	2d infantry
39	Henry L. Scott	4th infantry	63	Eustace Robinson	4th infantry
1834.					
40	William Smith	Corps of eng.	64	William S. Ketchum	6th infantry
			65	Forbes Britton	7th infantry
			66	John Graham	4th infantry
			67	William H. Price	1st infantry
			68	Alexander Montgomery	7th infantry

MILITARY ACADEMY, WEST POINT, NEW YORK.

INSPECTOR.

Brevet Brigadier General Charles Gratiot, colonel of the corps of engineers, chief engineer, (*ex officio*), inspector of the Military Academy.

ACADEMIC STAFF.

SUPERINTENDENT AND COMMANDANT.

Rvt. Lieut. Col. R. E. De Russey, major corps of engineers.

PROFESSOR OF MATHEMATICS.

Charles Davies, A. M.

ASSISTANT PROFESSORS.

Second Lieutenant Albert E. Church, third artillery.
 Second Lieutenant Benjamin S. Ewell, fourth artillery.
 Second Lieutenant Jacob Ammen, first artillery.
 Second Lieutenant Wm. W. S. Bliss, fourth infantry.
 Cadet Charles I. Whiting, first class.
 Cadet Fisher A. Lewis, second class.
 Cadet Daniel P. Woodbury, second class.

CHAPLAIN AND PROFESSOR OF RHETORIC.

Rev. Thomas Warner.

ASSISTANT PROFESSORS.

Second Lieutenant J. Allen Smith, third artillery.
 Second Lieutenant Francis H. Smith, first artillery.

PROFESSOR OF ENGINEERING.

Dennis H. Mahan.

ASSISTANT PROFESSORS.

Second Lieutenant Samuel C. Ridgeley, fourth artillery.
 Second Lieutenant David B. Harris, first artillery.
 Brevet Second Lieutenant Jacob E. Blake, sixth infantry.

ACTING PROFESSOR OF NATURAL PHILOSOPHY.

Second Lieutenant W. H. C. Bartlett, corps of engineers.

ASSISTANT PROFESSORS.

Second Lieutenant T. Jefferson Cram, fourth artillery.
 Second Lieutenant Napoleon B. Buford, third artillery.

INSTRUCTOR OF TACTICS, AND COMMANDANT OF CADETS.

Major John Fowle, third infantry.

ASSISTANT INSTRUCTORS.

Second Lieutenant James Barnes, 4th artillery.
 Second Lieutenant Edmund Schriver, second artillery.
 Brevet Second Lieutenant Robert R. Mudge, third artillery.
 Brevet Second Lieutenant J. A. Thomas, third artillery.

INSTRUCTOR OF ARTILLERY.

First Lieutenant Zebina J. D. Kinsley, third artillery.

TEACHERS OF THE FRENCH LANGUAGE.

Claudius Berard.
 Julian Molinar.

ASSISTANTS.

Second Lieutenant Minor Knowlton, first artillery.
 Second Lieutenant Bradford R. Alden, fourth infantry.

TEACHER OF DRAWING.

Robert W. Weir.

ASSISTANT.

Second Lieutenant Seth Eastman, first infantry.

ACTING PROFESSOR OF CHEMISTRY AND MINERALOGY.

First Lieutenant W. Penn Hopkins, fourth artillery, A. M.

ASSISTANT PROFESSORS.

First Lieutenant William W. Mather, seventh infantry
 Second Lieutenant Jacob W. Bailey, first artillery.

SWORD MASTER.

Albert Jumel.

MILITARY STAFF.

ADJUTANT.

First Lieutenant Charles F. Smith, second artillery.

QUARTERMASTER.

First Lieutenant Joseph A. Phillips, seventh infantry.

PAYMASTER AND TREASURER.

Bvt. Capt. Thomas J. Leslie, first lieut. corps of engineers.

SURGEON.

Walter V. Wheaton.

ASSISTANT SURGEON.

Thomas Henderson.

Officers of the army attached to and on duty at the Military Academy.

Engineers	3
Artillery	18
Infantry	7
Medical staff	2
Total	30

Resignations, &c., since the publication of the last Register.

RESIGNATIONS.

CAPTAIN.

Bvt. Major Russel B. Hyde, 7th infantry, December 31, 1834.

FIRST LIEUTENANTS

Daniel Tyler, 1st artillery, May 31, 1834.
 Bvt. Captain James S. Abeel, 2d artillery, December 31, 1834.
 Bvt. Captain William Wells, 2d artillery, December 1, 1834.
 John Archer, 3d infantry, March 31, 1834.
 James Engle, 5th infantry, December 31, 1834.

SECOND LIEUTENANTS.

James Clyman, dragoons, May 31, 1834.
 James Allen, 2d artillery, July 31, 1834.
 Philip St. George Cocke, 2d artillery, April 1, 1834.
 Thomas J. McKean, 4th infantry, March 31, 1834.
 Albert S. Johnston, 6th infantry, May 31, 1834.

BREVET SECOND LIEUTENANTS.

Curran Pope, 2d artillery, December 31, 1834.
 Henry Du Ponte, 4th artillery, June 15, 1834.

STAFF.

Asher Phillips, paymaster, January 17, 1834.
 J. P. C. Macmahon, surgeon, October 30, 1834.
 Lucius Abbott, assistant surgeon, March 31, 1834.
 Richard Wayne, assistant surgeon, January 31, 1834.
 Charles W. Handy, assistant surgeon, May 31, 1834.
 John M. Gardner, assistant surgeon, November 30, 1834.
 Edward H. Courtney, prof. natural philosophy, Dec. 31, 1834.
 C. R. Leslie, teacher of Drawing, April 15, 1834.

DEATHS.

Bvt. Brig. Gen. James House, col. 1st artillery, Nov. 17, 1834.
 Bvt. Brig. Gen. Henry Leavenworth, col. 3d inf., July 21, 1834.
 Capt. Henry W. Griswold, 1st artillery, October 23, 1834.
 Capt. Matthew A. Patrick, 1st artillery, March 6, 1834.
 Bvt. Capt. Robert L. Armstrong, 2d artillery, Oct. 10, 1834.
 1st Lieut. Abram C. Fowler, 2d artillery, April 30, 1834.
 1st Lieut. George W. Garey, 1st infantry, December 10, 1834.
 2d Lieut. Wm. Bradford, dragoons, March 17, 1834.
 2d Lieut. George W. McClure, dragoons, July 21, 1834.
 2d Lieut. Theop. B. Brown, 3d artillery, September 14, 1834.
 2d Lieut. Elbridge G. Eastman, 2d infantry, October 6, 1834.
 2d Lieut. Samuel K. Cobbs, 3d infantry, January 11, 1834.
 2d Lieut. Joseph Ritner, 4th infantry, February 18, 1834.
 2d Lieut. James West, 7th infantry, September 28, 1834.
 Bvt. 2d Lieut. George D. Dimon, 1st infantry, Sept. 16, 1834.

STAFF.

Colonel William Piatt, paymaster, August 16, 1834.
 Captain Thomas Wright, paymaster, November 9, 1834.
 Bvt. Lieut. Col. John Anderson, top. eng., Sept. 14, 1834.
 Bvt. Lieut. Col. P. H. Perrault, top. eng., January 28, 1834.
 Samuel B. Smith, assistant surgeon, November 28, 1834.
 James W. Roper, assistant surgeon, March 23, 1834.
 John M. Thomas, assistant surgeon, December 28, 1834.
 Charles B. Welsh, assistant surgeon, August 2, 1834.

DROPPED.

Capt. Benjamin L. E. Bonneville, 7th infantry, May 31, 1834.
 1st Lieut. Thomas Johnston, 7th infantry, December 4, 1834.

The following list of cadets is attached to the Army Register conformably to a regulation for the government of the Military Academy requiring the names of the most distinguished cadets, not exceeding five in each class, to be reported for this purpose at each annual examination.

REPORTED AT THE EXAMINATION IN JUNE, 1834.

Names.	Studies in which each cadet particularly excels.
FIRST CLASS.	
William Smith -----	Mathematics, natural and experimental philosophy, chemistry and mineralogy, engineering, French language, drawing, rhetoric and moral and political science, artillery, and tactics.
John Sanders -----	Mathematics, natural and experimental philosophy, chemistry and mineralogy, engineering, French language, rhetoric and moral and political science, artillery, and tactics.
Harrison Loughborough ---	Mathematics, natural and experimental philosophy, chemistry and mineralogy, engineering, French language, rhetoric and moral and political science, artillery, and tactics.
Thomas A. Morris -----	Mathematics, natural and experimental philosophy, chemistry and mineralogy, engineering, rhetoric and moral and political science, artillery, and tactics.
Robert T. P. Allen -----	Mathematics, natural and experimental philosophy, chemistry and mineralogy, engineering, rhetoric and moral and political science, artillery, and tactics.
SECOND CLASS.	
Charles J. Whiting -----	Natural and experimental philosophy, chemistry, and drawing.
John H. Martindale -----	
George W. Morel -----	
Charles H. Bigelow -----	
George M. Legate -----	
THIRD CLASS.	
James L. Mason -----	Mathematics and French.
Danville Leadbetter -----	Mathematics, French, and drawing.
M. C. Meigs -----	
Alexander Hamilton -----	
Barnabas Conkling -----	
FOURTH CLASS.	
John W. Gunnison -----	Mathematics and French.
Henry W. Benham -----	
Edwin W. Morgan -----	Mathematics.
Alexander B. Dyer -----	
John Bratt -----	

Organization of the army of the United States.

	Major general.	Brigadier generals.	Adjutant general.	Inspectors general.	Quartermaster general.	Quartermasters.	Commissary general of subsistence.	Commissaries.	Surgeon general.	Surgeons.	Assistant surgeons.	Paymaster general.	Paymasters.	Commissary general of purchases.	Military storekeepers.	Colonels.	Lieutenant colonels.	Majors.	Captains.	First lieutenants.	Second lieutenants.	Sergeant majors.	Quartermaster sergeants.	Sergeants.	Corporals.	Principal musicians.	Chief buglers.	Buglers.	Musicians.	Farrers and blacksmiths.	Artificers.	Enlisted men for ordnance.	Privates.	Total commissioned.	Total non-commissioned officers, musicians, artificers, and privates.	Aggregate.
General staff.....	1	2	1	2	1	4	1	2																									14	14		
Medical department.....									1	12	55		14																				68	68		
Pay department.....												1	14																				15	15		
Purchasing department.....														1	2																		3	3		
Corps of engineers.....																1	1	2	6	6	6												22	22		
Topographical engineers.....																	6	4														10	10			
Ordnance department.....																1	1	2	10					44							250	14	294	308		
Regiment of dragoons.....																1	1	1	10	11	10	1	1	40	40	1	2	20	10		600	34	715	749		
Four regiments of artillery.....																4	4	4	36	72	72	4	4	144	144			72	108		1,512	192	1,988	2,180		
Seven regiments of infantry.....																7	7	7	70	70	70	7	7	210	280	14		140		2,940	231	3,593	3,820			
Grand aggregate.....	1	2	1	2	1	4	1	2	1	12	55	1	14	1	2	14	14	22	136	159	158	12	12	438	464	15	2	20	212	10	108	250	5,052	603	6,595	7,198

Component parts of regiments and companies.

	Colonel.	Lieutenant colonel.	Major.	Adjutant.	Captains.	1st lieutenants.	2d lieutenants.	Sergeant major.	Quartermaster sergeant.	Sergeants.	Corporals.	Principal musicians.	Chief buglers.	Buglers.	Musicians.	Farrers and blacksmiths.	Artificers.	Privates.	Total commissioned.	Total non-commissioned officers, musicians, and privates.	Aggregate.
A regiment of dragoons.....	1	1	1	1	10	11	10	1	1	40	40	1	2	20		10		600	34	715	749
A company of dragoons.....					1	1	1			4	4			2		1		60	3	71	74
A regiment of artillery.....	1	1	1	1	9	18	18	1	1	36	36				18		27	378	48	497	545
A company of artillery.....					1	2	2			4	4				2		3	42	5	55	60
A regiment of infantry.....	1	1	1	1	10	10	10	1	1	30	40	2			20			420	33	514	547
A company of infantry.....					1	1	1			3	4				2			42	3	51	54

The adjutants, being taken from subalterns of the line, are not included in the aggregate of their respective regiments.

A list of the military posts and arsenals.

No.	Posts.	State or Territory.	Post office.	Permanent commanders.	Regiment.
EASTERN DEPARTMENT.					
1	Fort Winnebago	Michigan Territory.	Fort Winnebago	Lieut. Col. Cutler	5th infantry.
2	Fort Brady	do	Sault Ste. Marie	Brevet Major Cobbs	2d infantry.
3	Fort Mackinac	do	Michilimackinac	Captain Clitz	2d infantry.
4	Fort Howard	do	Menomonieville	Bvt. Brig. Gen. Brooke	5th infantry.
5	Fort Dearborn	Illinois.	Chicago	Major Green	5th infantry.
6	Fort Gratiot	Michigan Territory.	Fort Gratiot	Brevet Major Hoffman	2d infantry.
7	Fort Niagara	New York.	Youngstown		
8	Madison Barracks	do	Sackett's Harbor	Lieut. Col. Cummings	2d infantry.
9	Hancock Barracks	Maine	Houlton	Brevet Major Clark	2d infantry.
10	Fort Sullivan	do	Eastport	Bvt. Lieut. Col. Brooks	3d artillery.
11	Fort Preble	do	Portland	Brevet Major McClintock	3d artillery.
12	Fort Constitution	New Hampshire	Portsmouth	Brevet Major Ansart	3d artillery.
13	Fort Independence	Massachusetts	Boston		
14	Fort Wolcott	Rhode Island	Newport	Brevet Major Lomax	3d artillery.
15	Fort Trumbull	Connecticut.	New London	Brevet Major Payne	4th artillery.
16	West Point	New York	West Point	Bvt. Lieut. Col. De Russey	Engineers.
17	Fort Columbus	do	New York	Brevet Major L. Whiting	4th artillery.
18	Fort Hamilton	do	do	Brevet Major Pierce	4th artillery.
19	Fort McHenry	Maryland.	Baltimore.	Bvt. Brig. Gen. Fenwick	4th artillery.
20	Fort Severn	do	Annapolis	Bvt. Col. Walbach	1st artillery.
21	Fort Washington	do	Fort Washington	Brevet Major Mason	1st artillery.
22	Fort Monroe	Virginia	Old Point Comfort	Bvt. Brig. Gen. Armistead	3d artillery.
23	Fort Johnston	North Carolina	Smithville	Brevet Major Churchill	1st artillery.
24	Fort Macon	do	Beaufort	Brevet Major Kirby	1st artillery.
25	Fort Moultrie	Cha'ston harbor, S C.	Charleston	Major Gates	1st artillery.
26	Castle Pinckney				
27	Augusta Arsenal	Georgia	Augusta	Colonel Lindsay	2d artillery.
28	Oglethorpe Barracks	do	Savannah	Captain Merchant	2d artillery.
29	Fort Marion	Florida	St. Augustine	Captain Drane	2d artillery.
WESTERN DEPARTMENT.					
1	Fort Snelling	Upper Mississippi	Fort Snelling	Major Bliss	1st infantry.
2	Fort Crawford	Michigan	Prairie du Chien	Col. Z. Taylor	1st infantry.
3	Fort Armstrong	Illinois.	Rock Island	Lieut. Col. Davenport	1st infantry.
4	Fort Des Moines	Michigan	Des Moines	Lieut. Col. Kearney	Dragoons.
5	Fort Leavenworth	Right bank of the Missouri, near the Little Platte.	Fort Leavenworth	Colonel Dodge	Dragoons.
6	Jefferson Barracks	Missouri	Jefferson Barracks	Bvt. Brig. Gen. Atkinson	6th infantry.
7	Fort Gibson	Arkansas	Fort Gibson	Bvt. Brig. Gen. Arbuckle	7th infantry.
8	Fort Coffee	do	Choctaw Agency	Captain Stuart	7th infantry.
9	Fort Jesup	Louisiana.	Fort Jesup	Colonel Many	3d infantry.
10	Fort Towson	Arkansas	Fort Towson	Lieutenant Colonel Vose	3d infantry.
11	Baton Rouge	Louisiana.	Baton Rouge	Bvt. Major Glassell	4th infantry.
12	New Orleans	do	New Orleans	Lieut. Col. Twiggs	4th infantry.
13	Fort Jackson	do	Fort Jackson	Captain Gardiner	2d artillery.
14	Fort Wood	do	New Orleans	Brevet Captain Lowd	2d artillery.
15	Fort Pike	do	Petite Coquille	Bvt. Maj. Mountfort	2d artillery.
16	Fort Morgan	Alabama	Mobile	Captain Belton	2d artillery.
17	Fort Pickens	Florida	Pensacola	Bvt. Maj. Zantzinger	2d artillery.
18	Fort Brooke	do	Seminole Agency		
19	Fort King	do	do	Bvt. Brig. Gen. Clinch	4th infantry.
20	Key West	do	Key West	Brevet Major Dade	4th infantry.
21	Fort Mitchell	Alabama	Creek Agency	Brevet Major McIntosh	4th infantry.
ARSENALS.					
1	Kennebec	Maine	Augusta	Captain Ripley	Ordnance.
2	Watertown	Massachusetts.	Watertown	Major Craig	Ordnance.
3	Champlain	Vermont	Vergennes	Brevet Captain Ward	4th artillery.
4	Watervliet	New York	Watervliet	Bvt. Lieut. Col. Worth	Ordnance.
5	Rome	do	Rome	Brevet Captain Mallory	2d artillery.
6	Allegheny	Pennsylvania.	Pittsburg	Bvt. Major Baker	Ordnance.
7	Frankford	do	Frankfort	Captain Mordecai	Ordnance.
8	Pikesville	Maryland.	Pikesville	Lieutenant Maynadier	1st artillery.
9	Washington	District of Columbia	Washington	Captain Bache	Ordnance.
10	Belona	Virginia	Belona		
11	St. Louis	Missouri	St. Louis	Captain Symington	Ordnance.
12	Mount Vernon	Alabama	Mount Vernon	Captain Harding	Ordnance.
13	Baton Rouge	Louisiana.	Baton Rouge	Brevet Captain Newton	3d artillery.

The western department comprises all west of a line drawn from the southernmost point of East Florida to the northwest extremity of Lake Superior, taking in the whole of Tennessee and Kentucky; and the eastern department all east of such line, including Fort Winnebago.

The headquarters of the general-in-chief are in the District of Columbia.

The headquarters of the western department are at Memphis, Tennessee.

The headquarters of the eastern department are in the city of New York.

Those officers whose stations are changed by transfers and promotions will report for duty accordingly.

By order:

R. JONES, *Adjutant General.*

[2D CONGRESS.]

No. 611.

[2D SESSION.]

STATEMENT FROM THE COLONEL OF ORDNANCE ON THE BUSINESS OF THAT BUREAU
AND THE NECESSITY FOR AN INCREASE OF THE OFFICERS OF THAT CORPS.

COMMUNICATED TO THE SENATE MARCH 3, 1836.

ORDNANCE OFFICE, *Washington, February 22, 1836.*

SIR: In answer to the communication of the Hon. C. Johnson of the 5th instant, which you referred to this office, inquiring whether any clerkships have been omitted to be reported in the diplomatic bill, or new clerks be necessary in this department, I have the honor to state that by the act of April 20, 1818, (vol. 6 U. S. Laws, page 319,) three clerks were authorized for the office of this department, at the following rates of compensation, viz: one at \$1,150 per annum, one at \$1,000 per annum, and one at \$800 per annum. These have been regularly reported; but owing to the great increase of duties in this office for several years past, it became indispensably necessary to employ additional clerks to those authorized by the act of 1818 for the performance of the current duties; and when it is taken into consideration the immense extent of a department, the operations of which are progressing throughout the whole country, embracing the armament of fortifications, of the troops, of the militia, and the supervision of all the arsenals and armories, it will be perceived that three clerks were insufficient. Large sums of money are annually appropriated for the above objects; the accounts for which, together with those of the property in charge of this department, amounting to many millions of dollars, are regularly and strictly examined in accordance with the ordnance regulations. The duties, therefore, performed in this office are necessarily of the most important character, and involve a degree of practical and general knowledge of military operations which can only be acquired by long attention and perseverance.

The number of clerks and assistant clerks at present employed in this office is eight, and the compensation paid to each is as follows, viz: one at \$1,150 per annum, one at \$1,000 per annum, two at \$800 per annum, and four at \$665 per annum. With a less number it would be impossible for the department to proceed with its operations with a proper degree of energy and efficiency. The duties performed by the clerks are enumerated in the paper marked A, herewith transmitted. It is therefore respectfully and earnestly recommended that that number, with one messenger, be authorized by Congress, and that they be placed on the same footing with the clerks and messengers in the other bureaus of the War Department of similar importance.

I have the honor to be, sir, respectfully, your obedient servant,

GEORGE BOMFORD, *Colonel of Ordnance.*Hon. LEWIS CASS, *Secretary of War.*

P. S.—By a calculation made some time since, it was found that the nature of the ordnance and ordnance stores in charge of the ordnance department *proper* amounts to upwards of fifteen millions of dollars. This estimate is exclusive of the property at the forts and in the hands of the troops.

A BILL for the better regulation of the ordnance department.

SECTION 1. *Be it enacted, &c.,* That the President of the United States be, and he is hereby, authorized to add to the corps of ordnance, whenever he may deem it expedient to increase the same, ten first and ten second lieutenants, to be selected from the army; and that the pay and emoluments of the officers of the said corps shall be the same as those allowed to the officers of the regiment of dragoons.

SECTION 2. *Be it enacted, &c.,* That all officers and enlisted men of the ordnance department shall be subject to the rules and articles of war.

SECTION 3. *Be it enacted, &c.,* That all letters and packages to and from the chief of the ordnance department which may relate to his official duties shall be free of postage.

Reasons for the proposed act for the better regulation of the ordnance department.

The importance and extent of the duties confided to the ordnance department demand that all proper aid should be afforded for their prompt and efficient discharge.

Although the law provides for the selection of lieutenants from the regiments of artillery to assist in the performance of ordnance duty, the requisite number can seldom be spared from their companies, and at this time in particular the detail is broken down by demands for the service in Florida. The officer commanding one of the principal arsenals of construction is now without a single assistant. Another arsenal of construction is in charge of an artillery officer. Two extensive arsenals now erecting are supervised—one by an artillery officer, the other by a military storekeeper. Two other arsenals are in charge of storekeepers—one important arsenal and another of less consequence in charge of ordnance sergeants. The whole force of the department is devoted to providing the *materiel* called for at the present crisis, for arming the forts, and the frequent change of officers cannot but impair its energies and impede its operations. Previous to the reduction in 1821 the corps numbered forty-four officers. The proposed increase will make it consist of thirty-four, which is the least number than can be considered sufficient to perform the duties, extended as they have become since that period.

Pay, &c.—By the act of the 14th of May, 1812, ordnance officers were allowed the rank and pay of infantry officers, with additional rations, and to the captains forage. The law of February 8, 1815, gave to all ordnance officers the pay of dragoons, with the exception of forage to those below the rank of field officers. This pay was continued till the reduction in 1821. The public duties of an officer in command of an arsenal require him to travel in a limited circuit to procure necessary supplies, and the existing

regulations do not permit a charge for transportation when the distance travelled is less than twenty miles. The command of an arsenal is equal to the command of a company in all matters relating to responsibility. The captain of a company receives and issues the clothing and arms for his company and makes the quarterly returns. The captain at an arsenal performs the same duty, and is further responsible for large amounts of public property in his charge, and makes the various returns quarterly, semi-annually, and annually. He does not command a company in the technical sense of the term; but he commands men, and is responsible for their arms and clothing.

ORDNANCE OFFICE, *Washington, January 26, 1836.*

23D CONGRESS.]

No. 612.

[2D SESSION.]

COMMUNICATION FROM THE SECRETARY OF WAR ON THE EXPEDIENCY OF OBTAINING MORE LAND FOR FORT McHENRY, NEAR BALTIMORE.

COMMUNICATED TO THE SENATE DECEMBER 13, 1831.

[But not being found on the files when sought for, and being found out of place, is here inserted.]

DEPARTMENT OF WAR, *December 10, 1831.*

SIR: In compliance with a resolution of the Senate, dated 14th of January last, directing the Secretary of War "to report to the Senate in the first week of the next session of Congress whether any land adjoining Fort McHenry be necessary for the safety of the fortifications, and if any, what number of acres, and at what price the same may be purchased," I have the honor to enclose a report from the chief engineer recommending the purchase of twenty-five acres for that object, in which I concur.

I have the honor to be, very respectfully, your obedient servant,

LEWIS CASS.

The PRESIDENT OF THE SENATE of the *United States.*

ENGINEER DEPARTMENT, *Washington, December 10, 1831.*

SIR: The views of this department on the subject of the purchase of additional land near Fort McHenry are represented in the accompanying report, made in pursuance of a resolution of the Senate of the United States, which was referred by you to this office.

I am, respectfully, sir, your obedient servant,

C. GRATIOT, *Brigadier General, Chief Engineer.*

The Hon. SECRETARY OF WAR.

FORT ADAMS, *Newport Harbor, Rhode Island, July 13, 1831.*

SIR: The undersigned have the honor to present a report on the subject of the following resolution of the Senate, committed to them by your letter of June 15, 1831:

"IN THE SENATE OF THE UNITED STATES, *January 14, 1831.*

"Resolved, That the Secretary of War be directed to report to the Senate in the first week of the next session of Congress whether any land adjoining Fort McHenry be necessary for the safety of the fortifications; and if any, what number of acres, and at what price the same may be purchased."

Believing that in the report of the commissioners appointed to examine the southern coast with a view to the selection of a site for the southern naval depot we might find presented to government the general principles on which the defence of the approaches to the city of Baltimore must depend, we refer to the report, which was made in February, 1819, and is signed by L. Warrington, captain United States navy; J. D. Elliot, captain United States navy; Bernard, brigadier general; W. K. Armistead, colonel of engineers; W. McRee, major of engineers.

Concurring fully in the views there expressed, we deem the position of Fort McHenry of secondary importance. The work is, however, already constructed; it is in good condition, and we think should be maintained as a part of the system of defence. Although this work ought by no means to be the sole reliance of the city against an attack either by land or water—against the former especially it presents no obstacles—still it will tend to augment considerably the impediments to attacks by vessels alone, and will serve other purposes of use and convenience.

In the event of an attack merely naval, the importance of this second barrier up to the period of the entire completion of the lower works—a day yet, probably, very remote—is manifest; and even after that day, such vessels as might succeed in forcing the lower barrier would encounter in this one adequate, under the circumstances, to prevent further progress. It will guard the city and the shipping in the inner harbor from boat enterprises, which might, under cover of darkness, by passing under Sollers's Point and the battery "on the extreme end of the flat of Sollers's Point," elude the lower works. It will afford a convenient point of embarkation for troops or stores destined for the lower works, especially in case a line

of obstructions shall have been, for greater security, thrown across from this point to the Lazaretto. It will be convenient as one of the points of concentration for troops arriving to the relief of the city, enabling them, by steam or other boats, to reach with greater despatch any point below on either shore—in front, in flank, or in rear of an enemy.

Such considerations as these, leading us to the conclusion above stated, namely, that Fort McHenry should be maintained as a part of the system of defence, we come now to the particular subject submitted to us.

The present boundary of the public ground scarcely extends on the land side beyond the limits of the fort, and a large brick building, rising high above the parapets, and completely commanding the fort, has long stood within a few yards of the walls. If this fort were ever placed under circumstances admitting the slow operations of a siege, still the feebleness of the work and the nature of the ground would render all labors of that sort nearly superfluous; at least all distant labors. At the distance of three or four hundred yards the ground assumes, with some abruptness, a lower level unseen by the work, which level is of some extent. It is short of this low ground, therefore, that the chief action of the fort, as to resistance of attack, is restricted. By taking this distance as a new boundary of the public ground, we shall preserve to the fort its full powers, and we shall, moreover, protect it from the command of buildings which may be erected on the contiguous private lands. These buildings will have a greater altitude than the fort, but, while thus remote, the fire of musketry will be too uncertain to hasten the reduction of the work.

In conclusion, therefore, we have to state that it is, in our opinion, absolutely necessary that the public boundary should be extended considerably landward, and we recommend that the new boundary be a straight line across the Neck, distant from the northwest salient of the fort 300 yards, corresponding with the eastern side of Martin street, on Poppleton's map of Baltimore.

The private land comprised within this limit will be twenty-five acres. The cost thereof will be about ten thousand dollars.

We have, &c.,

JOS. G. TOTTEN, *Lieut. Col. Engineers, Bvt. Col.*
A. MORDECAI, *Lieut. Engineers.*

Brigadier General CHARLES GRATIOT, *Chief Engineer.*

24TH CONGRESS.]

No. 613.

[1ST SESSION.]

ANNUAL REPORT OF THE SECRETARY OF WAR, SHOWING THE CONDITION OF THAT DEPARTMENT IN 1835.

COMMUNICATED TO CONGRESS, WITH THE ANNUAL MESSAGE OF THE PRESIDENT, DECEMBER 8, 1835.

DEPARTMENT OF WAR, *November 30, 1835.*

SIR: In conformity with your instructions, and with the usage of this department, I have the honor to lay before you a statement of its operations during the past season, and reports from the various bureaus, exhibiting in detail their respective proceedings, as far as these appear to be sufficiently important for communication in the usual annual statements.

The general positions of the army remain the same as at the time of my last report. Some movements, however, have taken place which it is proper should be specially brought before you.

Fourteen companies have been placed under the command of General Clinch, in Florida, with a view to impose a proper restraint upon the Seminole Indians, who have occasionally evinced an unquiet spirit, and to insure the execution of the treaty stipulations providing for the removal of these Indians. As soon as this takes place these troops will resume their proper positions.

The regiment of dragoons has been usefully employed in penetrating into the Indian country; in exhibiting to the Indians a force well calculated to check or to punish any hostilities they may commit, and in adding to our geographical knowledge of those remote regions. Colonel Kearney, with one detachment, marched through the country between the Des Moines and Mississippi rivers; Colonel Dodge, with another, made an excursion south of Missouri towards the Rocky mountains; and Major Mason, with a third, joined by a detachment of infantry, was employed in duties connected with the assemblage of a body of Indians at the Cross Timbers, near the Great Western Prairie, for the purpose of establishing permanent pacific relations between the remote wandering bands and the United States and the more agricultural Indians, who have migrated under the public faith to that region, or who seemed disposed to improve their condition by more settled habits. The duties committed to these troops have been well performed.

The information concerning the discipline and *morale* of the army is satisfactory. The officers are engaged in a great diversity of duties, growing out of various acts of Congress, many of which have no direct connexion with their professional avocations. These duties are satisfactorily executed, and the expenditures to which they lead are generally made with fidelity and accounted for with promptitude.

I beg leave to ask your attention to the report of the chief engineer, in relation to the state of the corps under his command. The number of officers in that corps is not sufficient for the performance of the various duties committed to it. The consequence is that in some instances the public works have been neglected or delayed, and in others they have been prosecuted by those who had not the necessary professional skill and experience. Persons in civil life possessed of competent scientific knowledge will not often enter into the temporary service of the government for such compensation as is provided by law for the engineer officers. The progress of improvement through the country creates a demand for those qualifications which are required in the military and topographical engineer service; and a higher rate of

compensation is allowed than it has been the usage of this department to grant. A gradual and moderate addition to the corps offers the only remedy for this state of things; and I am satisfied that considerations of economy, as well as a due regard to the proper execution of a most important class of public works, call for this arrangement.

The same considerations apply in a considerable degree to the topographical corps, and I ask your favorable consideration for the measure recommended by the officer at the head of it. One of the plans suggested will accomplish the object without any addition to the public expenditures, and will make adequate provisions for a branch of service connected with the defence of the country, and which has also the advantage of furnishing information that may prove highly valuable to every portion of the community.

Agreeably to a provision in an act of the last session of Congress that part of the Cumberland road between the town of Cumberland and the Ohio river has been surrendered to and accepted by the States through which it passes; and arrangements have been made, by the authority of these States, for the collection of such tolls as will keep it in proper repair. The funds appropriated for the completion of this road have been applied to the object and will be fully adequate to its attainment. The work, with the exception of some of the bridges and of a few necessary repairs, is nearly finished and is passable in its whole extent. All accounts concur in representing it as constructed in the most faithful manner. Captain Delafeld, who has superintended the operations, and the officers engaged with him, are entitled to commendation for the zeal and professional ability they have displayed.

The United States are exonerated from all future claims on account of this road, while competent provision has been made for its preservation.

The progress in the other works of internal improvement is shown in the report of the chief engineer. Among these, one of the most remarkable, as well from its great importance as from the unexpected facility with which it has so far been executed, is the removal of the raft over Red river. An immense body of timber, extending one hundred and eleven miles along that stream, had covered a large portion of its surface and interrupted all communication. This has probably been collecting for ages; and not only was this great natural highway thus shut up by it, but a fertile and extensive region along the river was inundated, and the whole country in its vicinity subject to local diseases having their origin in this submersion.

This work has been in progress upon the present system little more than two years, and the whole expenditure, including a sum of twenty-three thousand dollars, which was applied in previous experiments that failed, has been about one hundred and thirty-five thousand dollars. It is estimated that an additional appropriation of forty thousand seven hundred and thirteen dollars will be required to complete it; and which, with the sum of ten thousand dollars now in the treasury, will make for the whole cost one hundred and eighty-five thousand seven hundred and thirteen dollars. The river has been cleared for a distance of eighty-eight miles, and there yet remain twenty-three miles of obstructions to remove. This portion it is expected will be finished early in the next season if the necessary appropriations are made in time.

Before the present plan of effecting this work was adopted, there were various projects suggested for its accomplishment; but the most sanguine projector could not have anticipated such a great physical change as is already taking place within the time and the means that have been devoted to the work. A loose estimate of the land which will be reclaimed and rendered valuable by this improvement, which has been made by Colonel Brookes, formerly Indian agent in Louisiana, and intimately acquainted with the region upon Red river, places it at upwards of a million of acres; and it will form one of the most productive districts in the Union. This operation, as a mere matter of pecuniary value, will return many times the amount expended upon it.

I have brought the subject to your view at this time, not only on account of its intrinsic importance, but from the encouragement it affords to the introduction and prosecution of a system of improvement by which the public lands upon the lower Mississippi and some of its tributaries may be reclaimed from their present condition and rendered fit for agricultural purposes. Whether the object be attainable within the limits of a reasonable expense, there are not satisfactory data for determining. But its great results to the country, in health, in power, and in wealth, are obvious.

No appropriations having been made at the last session of Congress for the prosecution of the works upon the fortifications, it has been deemed proper to submit additional estimates for these objects. And as some of the forts first commenced have been completed, estimates have also been approved by you for the commencement of others, which have been recommended by the board of engineers in the continuation of the system of defence devised by them and submitted to Congress. A number of our most important harbors and inlets are yet either wholly undefended or so partially protected as to render their situation altogether insecure in the event of exposure to hostile attempts. An adherence to the general plan of defence, and a gradual prosecution of the work as the national finances and other considerations may justify, seem to be demanded by a just regard to the circumstances of the country as well as by the experience which the events of the last war forced upon us.

In addition, however, to these permanent fortifications, there are some of our most extensive roadsteads in which floating steam batteries ought to be employed. Among these are the Chesapeake and Delaware bays, and the harbor of New York. The peculiar situation of these estuaries, as well with relation to their exposure as to the best measures for their defence, and the immense value of the navigation and commerce of which they are the outlets and inlets, render their security a matter of deep interest to the whole country. When the present system of defence was projected, I understand the board of engineers contemplated the eventual construction of these movable batteries as a part of their plan. The great improvements which have since taken place in all that relates to the application of the power of steam furnish additional motives for providing these co-operative defences. Alternately protecting and protected by the fixed batteries, these movable ones will be found to be of the highest importance. In fact, with an adequate force of this description stationed in the vicinity of our permanent military works, and enabled to take refuge under their cover whenever necessary, a hostile fleet would scarcely venture to pass the position, and thereby expose itself to the hazard of annoyance in detail, and of being captured or destroyed whenever a calm, a change of wind, or any other of the many accidents to which a maritime force is liable, might furnish a favorable opportunity for the action of the steam batteries. Our Atlantic frontier will not be properly secured till this means of efficient co-operation in its defence is introduced.

In my last annual report I communicated the facts which appeared to render it proper that the

operations upon two of the most important works, Fort Calhoun and the Delaware breakwater, should be temporarily suspended. Experiments have been made to test the effects and probable extent of the causes which were in operation, and which threatened to injure, if not destroy, the utility of these works. It is believed that the depression of the foundation of Fort Calhoun is so nearly checked that further danger is not to be apprehended. But, as will be seen by the report of the quartermaster general, the experiments at the breakwater have not been so decisive as to settle the question connected with that work; and it has been thought best to ask of Congress an appropriation only for one hundred thousand dollars, which, under any probable circumstances, can be judiciously expended. It is to be hoped that the experiments which will be continued, and the scientific examination it is proposed to make next season, will furnish data for a just conclusion on the subject of this important structure, and indicate either that the causes which have threatened to injure its utility have produced their full effect, or that they may be counteracted by some change in the original plan. This artificial harbor is too valuable to an extensive commerce peculiarly exposed not to engage every effort in completing it and preserving it from destruction.

The report of the visitors appointed to inspect the Military Academy, and the documents transmitted by them, are submitted for your consideration, together with the suggestions they have made, and which are calculated, in their opinion, to promote the efficiency of that institution. These annual examinations by a body of highly respectable citizens, called from various parts of the country, are not only useful as checks upon any improper tendency to which all public establishments are more or less liable, but they are satisfactory when they bear testimony to the value of the system and to the correctness of its administration; and practically advantageous by the suggestions they offer. That improvements may be made in the several departments of the Military Academy cannot be doubted; nor can it be doubted that a thorough examination by Congress of its various concerns, whether administrative, financial, or instructive, would be highly useful, and would tend to its permanent melioration. Its results, so far as these can be judged by the character, conduct, and qualifications of the officers of the army, about two-thirds of whom have been educated at this institution, have been decidedly beneficial. The standard of acquirement for the military profession has been raised; habits of discipline and subordination, necessary first to learn before the duty of command can be properly executed, have been acquired; elementary knowledge peculiarly adapted to a military life has been more extensively and accurately taught, and we have been better enabled to keep pace with those improvements which the nations of Europe have made and are making in this important branch of modern science.

Agreeably to your permission, I have introduced into the estimates an additional sum for the armament of the fortifications. Without going into any unnecessary detail upon this subject at the present time, I will barely remark that this measure is called for by the actual state of our preparations, and by a provident regard for the duty of self-defence. If no increase takes place in this branch of the service, many years must elapse before our fortifications and arsenals are sufficiently provided.

A resolution passed the House of Representatives at the last session requiring the Secretary of War to procure certain information having relation to the establishment of a national foundry in the District of Columbia. The information which has been collected will be communicated in obedience to the resolution; but I am so impressed with the importance of the measure, that I am induced to bring it to your notice in this report.

The United States have no establishment for the manufacture of cannon. The supplies wanted, as well for the field artillery of the army and militia as for the armament of the fortifications, are now procured from four private foundries—one near Richmond, one at Georgetown, one opposite West Point, and one at Pittsburg—which appear to have been established at several periods in the expectation that their products would be received by the government as the public necessities might require, and at such prices as might, from time to time, be judged reasonable. As there is no private demand for this manufacture in our country, it is obvious that no person would make the requisite preparations, which are understood to demand considerable investments and the employment of skilful workmen practically acquainted with this branch of business, unless expectations of a just reimbursement were held out. Contracts for limited periods have from time to time been made, providing for the delivery of stipulated quantities; but, as I had the honor to communicate to you in my annual report of November 21, 1831, the act of Congress of March 3, 1809, seems to present serious difficulties in the way of such an arrangement, and since that time no formal contract has been made for the supply of cannon. The proprietors of these foundries have been annually informed that, if the appropriations would permit, and if cannon of designated quality and size were fabricated, these would be purchased. In this manner the subject has lingered, without any action on the part of Congress, and without any authority on the part of this department to make more efficient arrangements. During the present year the appropriation for the armament of the fortifications has been principally expended in procuring iron gun-carriages; and the foundries have not been employed in the fabrication of cannon for the military branch of the service. It is believed that this circumstance, by deranging their operations, has been seriously injurious; and if it again occur, it may induce some of them to discharge the workmen specially employed upon this business, and who may hereafter be collected with great difficulty. The government now depends upon this temporary and uncertain arrangement for the supply of this indispensable element of national defence. The circumstances which required a change I had the honor to submit four years since. They have lost none of their force during the period which has intervened; and, independently of the considerations presented, having relation to the uncertain condition of these establishments, there are others, bearing upon the quality of the material and of the workmanship, which render it important that the government should be its own manufacturer of this article. The cost of cannon, while this is kept within a reasonable limit, is not an object compared with the two qualities of strength and lightness. With the exertions of the present manufacturers of cannon, so far as the necessary facts are known to me, I have reason to be satisfied. But it is sufficiently obvious that in a branch of business where a slight difference in the material and slight neglect in the process may produce irremediable mischief, and where, from causes not easily ascertained, these defects may disclose themselves in the midst of the most active service and after the guns have resisted all the usual proofs, the manufacture of the article should be carried on where these neglects are least likely to happen; where, in fact, there can be no interest to use any other than the best materials nor to employ any other than the most skilful artisans. Time and experience are necessary to found and perfect an establishment for this purpose upon a scale suited to our wants.

It does not seem necessary to exhibit in detail the number of cannon now in the possession of the government and distributed in its forts, arsenals, and temporary posts; and the number that will be

required to complete the armament of the fortifications already constructed, of those in the process of construction, and of those projected, and the number necessary for the proper demands of field service. It is sufficient to observe here, that the quantity is far more than enough to justify extensive and vigorous arrangements; and this without reference to the accidents of time and service, which must always operate to reduce the stock on hand.

Such an establishment as the one contemplated could be employed as well for the navy as for the army; but, while I allude to its general usefulness, it is proper I should avoid all details peculiarly appropriate to another department.

The defective organization of the militia is universally acknowledged. But little practical utility results from the administration of the present system, and if this great element of national defence is worth preservation and improvement, it is time the whole subject should be examined, and that a plan suited to the exigencies of the country should be adopted. I am unwilling to believe that there are such inherent difficulties in this subject as to render it impracticable, or even very difficult, to organize this great force, so peculiarly adapted to our institutions, and in such a manner as to render it active and efficient in those junctures when the country may be called on to exert its power. I presume few would be found to advocate the maintenance of a standing military force adequate to all the purposes of peace and war. When, therefore, those exigencies arise, from which no nation can expect exemption, and which call for an extension of our physical means, we must resort to an increase of the army or to the embodying of the militia. It is obvious, from the extent of the country, that we can never keep at all the exposed points such a permanent force as circumstances may occasionally require. The natural and, in fact, the necessary dependence must be upon the militia; and if it be unorganized, we shall be found without the means to repel a foreign enemy or to repress internal disturbances, should these evils occur. To depend upon organizing a system when the exigency arises is to reject all the lessons of experience, and to procrastinate for examination what should then be the subject of action. Besides, a permanent plan of organization should be devised in a time of leisure and peace, so that it may be introduced and thoroughly known before the force provided by it is required to be exerted. It should, as much as possible, be engrafted upon the habits of the country, and become a part of our institutions. The basis of an efficient organization of the militia must be a selection, for instruction and service, of that part of the population best qualified for these duties. Age and physical capacity present the proper considerations for such a selection. The principle is stated, with his usual force, by Mr. Jefferson in his message to Congress of December, 1805, wherein he said:

“Whether it will be necessary to augment our land forces will be decided by occurrences, probably, in the course of your session. In the meantime you will consider whether it would not be expedient for a state of peace, as well as of war, so to organize or class the militia as would enable us, on a sudden emergency, to call for the service of the younger portions, unincumbered with the old and those having families. Upwards of three hundred thousand able-bodied men, between the ages of eighteen and twenty-six years, which the last census shows we may now count within our limits, will furnish a competent number for offence or defence in any point where they may be wanted, and will give time for raising regular forces after the necessity of them shall become certain; and the reducing to the early period of life all its active services cannot but be desirable to our younger citizens, of the present as well as future times, inasmuch as it engages to them in more advanced age a quiet and undisturbed repose in the bosom of their families. I cannot, then, but earnestly recommend to your early consideration the expediency of so modifying our militia system as, by a separation of the more active part from that which is less so, we may draw from it, when necessary, an efficient corps fit for real and active service, and to be called in regular rotation.”

Had the general principles here recommended been practically adopted and a corresponding system established, with the necessary details, first for instruction and then for active service, it cannot be doubted that the course of events which marked the commencement of the late war would have been avoided, and an immense expenditure of blood and treasure saved to the nation. The warning voice which was not heeded then may perhaps be heard now; and if it is, it may produce incalculable benefits.

A board of officers of the army and militia was organized some years since, under the instructions of this department and by virtue of a resolution of Congress, for the purpose of examining this subject and of devising a practicable plan for the organization, improvement, and efficient action of the militia. Their report contains the outline of a *projet* which, with some modifications, appears to me to combine as many advantages as any other that can probably be adopted. The basis was a classification of the adult male population of the United States, and a selection of as many persons from it, above the age of twenty-one years, as should be necessary to complete the number required to be enrolled and organized at all times for actual service, beginning in all cases with the youngest above the prescribed age. Their report stopped at the number they deemed necessary for constant equipment. As regards instruction and preparation, this limitation is no doubt proper; but still it would probably be deemed advisable so far to organize the whole body, within certain ages, as to produce a classification and to afford the requisite facilities for calling them into service in succession, should any contingency demand a larger force than the first division could supply. This arrangement would render available for the defence of the country its whole physical force—not that any event could require it all to be embodied at the same time, but because a particular section might sometimes be peculiarly exposed, and call for the services of a large proportion of its population; and the continuance of the pressure might render it necessary to discharge in succession those who had performed their prescribed terms, and to require the services of others.

A mere organization would avail but little, unless inducements were held out for proper instruction and equipment. And I consider, therefore, some provision for elementary instruction and for such equipment as may be necessary to excite a proper emulation indispensable to any improvement of our militia system—indispensable, I may add, to its very existence. An arrangement for these objects would embrace the first class only. It would, to be sure, involve expense; for an adequate compensation must be allowed to the persons required to be embodied at these schools of instruction a few days in the year. And it would probably be found expedient to continue the present plan of voluntary corps, with some changes, and to require them also to meet for improvement. It is in vain to expect that the whole adult male population of the country can or will furnish themselves with the articles required by law, or that their collection for any number of days they can afford to devote to this object, and under the usual circumstances of such assemblages, can produce any beneficial effect to themselves or their country. Already in a number of the States the system has sunk under the weight of public opinion; and the practical question now is, whether we shall remain, in fact, defenceless, or resort to a large standing military force

in time of peace—that just dread of all free governments—or adopt an efficient plan which will prepare for the public defence the greatest force at the least cost and without danger. The blessings we have inherited cannot be preserved without exertion nor without expense. It were idle to sit still and flatter ourselves with the hope that war is never to overtake us; and it would be worse to delay all efficient organization of our physical means till the time for its active employment arrives. Nearly fifty years have elapsed since the adoption of the present Constitution. During all that time no essential change has been made in our militia system, and it has gradually declined in utility and efficiency, and in public confidence, and there is reason to fear its entire abandonment unless it undergoes important modifications. In this long interval the value of the system seems to have been appreciated by all the Presidents of the United States, as well those who, from the habits of their lives, could best estimate its value by their personal observation, as by those whose opinions may have been well formed from the course of events having relation to this matter; and in their annual communications, commencing with the inaugural address of General Washington, this subject has been almost constantly pressed upon the attention of Congress. For the purpose of showing its importance in the opinion of these eminent citizens I have caused their communications to be examined, and find that the subject has been presented to the legislature and the nation no less than thirty-one times in their official recommendations. I indulge the hope that the present state of public affairs may lead to a re-examination of the system, and to such changes as may render it permanently useful.

I am gratified in being able to announce to you that the Indians residing east of the Mississippi river appear to be yielding to the conviction that their removal to the territory assigned for their residence in the west offers the only rational prospect of any permanent improvement in their condition, and that this measure is essential to their prosperity. Both in the north and south the reports of the officers having charge of this matter are encouraging, and we may anticipate the full establishment of our present policy, and with the fairest prospects of success, if the pre-existing prejudices, which have so long operated to retard our efforts, can be removed.

The considerations which render this change of residence necessary are sufficiently obvious, and are founded upon the results that have heretofore attended our intercourse with the Indians. The causes which have so long continued to reduce and depress them in their present situation within our borders are yet in active operation. Their food, derived from the chase, is disappearing. Their habits are inveterate and they cannot or will not accommodate themselves to the new circumstances which press upon them in time to save themselves from extinction. And, above all, their contact with a white population has entailed and is entailing upon them evils which, if not checked, must lead to their ruin. They appear to acquire with much greater facility the vices than the virtues of civilized life; and during the whole period they have been known to us they have abandoned themselves, with strange improvidence, to the use of ardent spirits. From my own observation of the Indian character I consider the indulgence of this habit as the great barrier against any improvement of that portion of this race which, from their position, are enabled at pleasure to gratify this propensity. The difficulty of putting a stop to this traffic while the Indians are intermingled with our citizens is sufficiently obvious. And if they are to be rescued from its effects, they must be removed beyond the sphere of the traffic. This is certainly one of the most prominent reasons for the faithful prosecution of the system, and Congress, apparently impressed with its force, has provided by law that all ardent spirits found in the Indian country may be destroyed. The agents of the government will not now be compelled, as formerly, to resort to legal process for the interdiction of this traffic, at the hazard of the trouble, expense, and uncertainty attending such prosecutions upon a remote frontier.

I consider the experiments which have recently been made to provide for the maintenance of the Indians, by reservations for their use, and with the power of alienation, however guarded, to have wholly failed. These tracts are too often sold for a very inadequate consideration, and the amount received is dissipated in expenditures either positively injurious or altogether useless.

As soon as the remaining tribes shall have been established in the west, we may look forward to a happier destiny for the Indians. And if this expectation be disappointed, the failure must be attributed to the inveterate habits of this people and not to the policy of the government. The arrangements for the comfortable establishment of the Indians have been projected upon a scale suited to their wants and condition and to the duties of the United States. With a view to appreciate the advantages which have been secured to them, I deem it proper briefly to recapitulate the provisions that have been made. These are not applicable in all their details to each tribe, as some receive more and some less in amount, while certain articles are given to some and not to others. But the general principles of distribution apply to all. An extensive country has been reserved for them and has been divided into districts for the several tribes. To this they are removed at the expense of the United States.

They are provided with the necessary subsistence for one year after they reach their new residence. Annuities, in specie, to a greater or less amount are payable to each tribe.

Agricultural instruments, domestic animals, seed corn, salt, looms, cards, spinning wheels, iron, steel, cloths, blankets, rifles, ammunition, and other articles are distributed among them.

Mills are erected and kept in operation. Council-houses, churches, and dwelling-houses for chiefs are built.

Mechanics are engaged and supported, schools are established and maintained, and the missionary institutions among them are aided from the treasury of the United States.

These are the principal arrangements made for the benefit of this unfortunate people, who will soon have been removed, at great expense, when this new system will be in full operation, and where their peculiar institutions can be preserved, with such modifications as a progressive state of improvement may require. They will be separated, too, from the settled portions of the country by a fixed boundary, beyond which our population cannot pass.

The operations of the department of Indian affairs are shown in detail by the report of the commissioner and by that of the commissary general of subsistence. It was anticipated that a considerable body of the Creeks of Alabama would, ere this, have been on their way to the west. But recent information induces the belief that their journey has been postponed, but under circumstances which will probably insure their early removal in the spring. The treaty with the Seminoles of Florida for their removal is in the process of execution. A portion of the tribe were not prepared to go at the time arrangements were first proposed to be made for their removal, and when, by the treaty, they might have been required to depart. At their earnest solicitations the measure was postponed until the coming

winter, and assurances were given by them that they would then be prepared to remove. A majority avow their readiness to comply with their engagements, and will no doubt quietly go as soon as the arrangements for their departure shall have been completed. But some of them exhibit a refractory spirit, and evince a disposition to remain. As they now hold no land in Florida and would become a lawless banditti if suffered to remain, their pretensions cannot be submitted to. They will, probably, when the time for operation arrives, quietly follow their countrymen. Should they not, measures will be adopted to insure this course, equally dictated by a just regard to their own welfare as well as to that of our citizens in the vicinity of their residence.

Governor Stokes, General Arbuckle, and Major Armstrong were appointed commissioners to make a treaty with the roving tribes of Indians who inhabit the great western prairie, with the view of establishing permanent pacific relations between these predatory tribes and the United States, and also between the same tribes and the other Indians of that region. The lamented death of Major Armstrong deprived the government of the services of that valuable officer; but the other commissioners succeeded in effecting a pacification, which I hope will lead to a friendly intercourse among all the tribes in that quarter.

Under the authority of an act of the last session of Congress, an arrangement has been made by Colonel Brookes with the Caddo Indians, for the cession of their claims to land in the State of Louisiana and Territory of Arkansas. This will be submitted to you at the proper time for the consideration of the Senate.

I have the honor to be, with great respect, your obedient servant,

LEWIS CASS.

The PRESIDENT of the *United States*.

List of documents accompanying the report of the Secretary of War.

- No. 1.—Major general commanding the army. Report and statements from A to E.
- No. 2.—Quartermaster general. Report.
- No. 3.—Commissary general of subsistence. Report and statement.
- No. 4.—Paymaster general. Report and statement.
- No. 5.—Commissary general of purchases. Report and statements from I to 4.
- No. 6.—Surgeon general. Report.
- No. 7.—Chief engineer. Report and statements, and copies, from A to S.
- No. 8.—Chief of topographical bureau. Report, statement, and copy of bill.
- No. 9.—Colonel of ordnance. Report and statements from A to I.

No. 1.

REPORT OF THE MAJOR GENERAL OF THE ARMY.

HEADQUARTERS OF THE ARMY, *Washington, December, 1835.*

SIR: In compliance with the instructions contained in your letter of the 4th of September, I have the honor to submit herewith the under-mentioned statements and returns:

A report showing the organization of the army, and its force and distribution, marked A.

A general return of the army, marked B.

Distribution of the troops in the eastern department, marked C.

Distribution of the troops in the western department, marked D.

Statement showing the number of recruits enlisted in the army from the 1st of January to the 30th of September, 1835, together with the amount of recruiting funds advanced to officers of the army, and accounted for by them, for the same period, marked E.

Inspectors General Wool and Croghan are engaged in inspecting the troops—the former, those along the coast as far as New Orleans, inclusive, and the latter, those on the frontiers beyond the Mississippi.

The reports which have been received represent the army in a respectable condition as respects their police and general discipline, and as improved in tactics as their dispersed condition will allow. The supplies are regularly received and of good quality.

The dragoons, divided into three squadrons, have made tours during the past season through almost the whole of the country west of the Mississippi below the 44th degree of north latitude; and there is no doubt that their presence has had the effect of keeping the Indians quiet, and of preventing those depredations and hostilities which, before the raising of this regiment, had so frequently occurred on the frontiers. This corps has been found well adapted to the service on which it has been employed, and it is, I am happy to say, in an improving condition. The arms are found to fulfil the expectations entertained of them, and with the adoption of some modifications of the equipments recommended by Colonel Dodge and other field officers, the dragoons may be regarded as a very efficient corps, and a valuable acquisition to the military establishment.

Respectfully submitted.

ALEX. MACOMB, *Major General, Commanding in Chief.*

HON. LEWIS CASS, *Secretary of War.*

A.

Organization of the army of the United States, 1835.

	Major general.	Brigadier general.	Adjutant general.	Inspectors general.	Quartermaster general.	Quartermasters.	Commissary general of subsistence.	Commissaries.	Surgeon general.	Surgeons.	Assistant surgeons.	Paymaster general.	Paymasters.	Commissary general of purchases.	Military storekeepers.	Colonels.	Lieutenant colonels.	Majors.	Adjutants.	Captains.	First lieutenants.	Second lieutenants.	Sergeant majors.	Quartermaster sergeants.	Sergeants.	Corporals.	Principal musicians.	Chief buglers.	Buglers.	Musicians.	Farrers and blacksmiths.	Artificers.	Enlisted men for ordnance.	Privates.	Total commissioned.	Total non-commissioned officers, musicians, artificers, and privates.	Aggregate.
General staff.....	1	2	1	2	1	4	1	2																										14	14	14	
Medical department.....									1	12	55																								68	68	68
Pay department.....												1	14																						15	15	15
Purchasing department.....														1	2																				3	3	3
Corps of engineers.....																1	1	2		6	6	6													22	22	22
Topographical engineers.....																																			10	10	10
Ordnance department.....																1	1	2		10					44							250		14	294	308	
Regiment of dragoons.....																1	1	1		10	11	10	1	1	40	40	1	2	20		10		600	34	715	749	
First regiment of artillery.....																1	1	1		9	18	18	1	1	36	36				18		27		378	48	497	545
Second regiment of artillery.....																1	1	1		9	18	18	1	1	36	36				18		27		378	48	497	545
Third regiment of artillery.....																1	1	1		9	18	18	1	1	36	36				18		27		378	48	497	545
Fourth regiment of artillery.....																1	1	1		9	18	18	1	1	36	36				18		27		378	48	497	545
Aggregate of artillery.....																4	4	4		36	72	72	4	4	144	144				72		108		1,512	192	1,988	2,180
First regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2			20				420	33	514	547
Second regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2			20				420	33	514	547
Third regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2			20				420	33	514	547
Fourth regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2			20				420	33	514	547
Fifth regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2			20				420	33	514	547
Sixth regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2			20				420	33	514	547
Seventh regiment of infantry.....																1	1	1		10	10	10	1	1	30	40	2			20				420	33	514	547
Aggregate of infantry.....																7	7	7		70	70	70	7	7	210	280	14			140				2,940	231	3,598	3,829
Grand aggregate.....	1	2	1	2	1	4	1	2	1	12	55	1	14	1	2	14	14	22		136	159	158	12	12	438	464	15	2	20	212	10	108	250	5,052	603	6,595	7,198

NOTE.—The law authorizes the appointment of any number of assistant commissaries of subsistence and twenty assistant quartermasters, to be taken from the line of the army. The former are confined to the rank of lieutenants.

HEADQUARTERS OF THE ARMY, Washington, November 30, 1835.
 ADJUTANT GENERAL'S OFFICE, Washington, November 30, 1835.

ALEX. MACOMB, Major General, Commanding in chief.
 R. JONES, Adjutant General.

B.—General return of the army of the United States—Continued.

1835.]

REPORT OF THE SECRETARY OF WAR.

	PRESENT.													ABSENT.						PRESENT AND ABSENT.							
	On extra or daily duty.						In arrest or confinement.							Commissioned officers.	Non-commiss'ed officers, musicians, artificers, and privates.	Detached service.			With leave, or on furlough.			Non-commiss'ed officers, &c., in confinement, sick, &c.	Total.	Aggregate.			
	Field officers.	Captains.	Subalterns.	Non-commissioned officers.	Musicians.	Artificers.	Privates.	Field officers.	Captain.	Subalterns.	Non-commissioned officers.	Musicians.	Artificer.			Privates.	Field officers.	Captains.	Subalterns.	Non-commiss'ed officers, musicians, artificers, and privates.	Field officers.				Captains.	Subalterns.	Non-commiss'ed officers, musicians, artificers, and privates.
General staff.....																									14		
Medical department.....																									68		
Pay department.....																									15		
Purchasing department.....																									2		
Corps of engineers.....																									28		
Topographical engineers.....																									10		
Ordnance department.....																				1				214	228		
Regiment of dragoons*.....			2	5	1	1	51	1	1	2			15	31	552	2	5	108			2			1	661	701	
First regiment of artillery.....				5		3	24				1		23	29	435	1	14	7		2	7	3	3		448	501	
Second regiment of artillery.....	1			3		1	20				3	1	23	23	418	2	17	8		1	9		8		434	485	
Third regiment of artillery.....			2	5		2	12					1	16	24	419	1	23	30		1	6	2			451	506	
Fourth regiment of artillery.....		2	2	5			45				1		13	22	436			21		2		5	2	3	443	491	
Aggregate of artillery.....		3	4	18		7	101				5	2	75	98	1,708	4	75	47		4	27	7	14		1,776	1,983	
First regiment of infantry.....			4	6			58			1			34	22	404	3	9	1		2	1	1	6		412	449	
Second regiment of infantry.....			3	8	1		49				6	1	38	24	480	1	1	8	16	2	6	6	6		508	550	
Third regiment of infantry.....			2	4			38						22	23	456	1	3	7	4	1	5	1	3		464	504	
Fourth regiment of infantry.....			2	7			16			1	1	2	42	20	403	3	11	2	2	2	3	2	8		414	453	
Fifth regiment of infantry.....			4	2			37						35	15	401	1	5	9	77	2	10	1	13		492	534	
Sixth regiment of infantry.....	1		2	3			16				1		44	22	456	4	8	2	2	2	5		8		466	507	
Seventh regiment of infantry.....		1	1	4			69				1	1	21	18	465	3	7	15	1	3	9	4	1		485	526	
Aggregate of infantry.....		2	18	34	1		283			2	9	4	236	144	3,064	3	22	59	117	3	12	39	15	45	3,241	3,523	
Recruits and unattached soldiers.....																									579	579	
Grand aggregate.....		5	24	57	2	8	435		1	3	16	6	1	326	273	5,324	3	28	139	272	3	17	68	22	60	6,471	7,151

* Of the total number of the regiment of dragoons, "present and absent," 100 recruits now on the march are included. It is calculated that they will join by the 31st of December.

NOTE.—One captain of the second regiment of artillery, holding an appointment in the "general staff," is omitted in the "aggregate" of his regiment, being reported and included in the "aggregate" of the general staff.

C.—Position and distribution of the troops of the eastern department, under the command of Brevet Major General Winfield Scott.

No.	Posts.	Situation.	Commanding officers.	Regiments.	Number of companies.	PRESENT.																	
						For duty.																	
						Colonels.	Lieutenant colonels.	Majors.	Adjutants.	Surgeons.	Assistant surgeons.	Captains.	First lieutenants.	Second lieutenants.	Bvt. second lieutenants.	Sergeant majors.	Quartermaster serg'ts.	Sergeants.	Corporals.	Principal musicians.	Musicians.	Artificers.	Privates.
1	Fort Winnebago	Portage, Fox, and Wisconsin rivers	Major Green	5th infantry	4						1	2	2	1			12	15		5		108	
2	Fort Brady	Sault Ste. Marie, Michigan Territory	Bvt. Major Cobbs	2d infantry	2						1	1		1	1		6	5		2		56	
3	Fort Maekinac	Michilmackinac, Michigan Territory	Captain Clitz	do.	2						2	1	2	1			5	6		3		54	
4	Fort Howard	Green Bay, Michigan Territory	Bvt. Brig. Gen. Brooke	5th infantry	4	1			1	1		1	1	1	1	1	6	3	2	2		60	
5	Fort Dearborn	Head of Lake Michigan, Illinois	Bvt. Maj. Wilcox	do.	2						1	2		1	1		6	7		1		71	
6	Fort Gratiot	Outlet of Lake Huron, Michigan Territory	Bvt. Major Hoffman	2d infantry	2						1	1		1	1	1	6	7		4		54	
7	Fort Niagara	New York, New York	(Garrison withdrawn)																				
8	Madison Barracks	Sackett's Harbor, New York	Lieut. Col. Cummings	2d infantry			1		1							1		1				5	
9	Hancock Barracks	Houlton, Maine	Bvt. Major Dearborn	do.	4						1	1	3	4	2		9	9	1	5		116	
10	Fort Sullivan	Eastport, Maine	Major Churchill	3d artillery	1			1		1	1		1			4	3		2	3		37	
11	Fort Preble	Portland, Maine	Bvt. Major McClintock	do.	1							1	1			4	4		2	2		35	
12	Fort Constitution	Portsmouth, New Hampshire	Bvt. Major Ansart	do.	1						1	1		2		5	4		1	3		27	
13	Fort Independence	Boston, Massachusetts	(Garrison withdrawn)																				
14	Fort Wolcott	Newport, Rhode Island	Bvt. Major Lomax	3d artillery	1						1	1	1			4	2		2	3		26	
15	Fort Trumbull	New London, Connecticut	Bvt. Lieut. Col. Fanning	4th artillery	1			1		1	1	1	1			5	2		2	3		31	
16	Military Academy	West Point, New York	Bvt. Lieut. Col. De Russey	Detachment												1	3			1		11	
17	Fort Columbus	New York, New York	Lieut. Col. Brooks	4th artillery	1						1	1	1	1		5	3		2	2		41	
18	Fort Hamilton	do. do.	do.	do.	3		1			1	2		1	2		9	9		5	6		74	
19	Fort Lafayette	do. do.	do.	do.	1						1		1			4	3		2			29	
20	Fort McHenry	Baltimore, Maryland	Bvt. Brig. Gen. Fenwick	do.	1	1			1	1						4	2		2	2		35	
21	Fort Severn	Annapolis, Maryland	Bvt. Col. Wallbach	1st artillery	1		1			1		1				5	2		2	2		25	
22	Fort Washington	Left bank of Potomac, Maryland	Major Gates	do.	1			1		1	1	1				2	2		1	2		29	
23	Washington Arsenal	Greenleaf's Point, Washington, D. C.	Bvt. Major Mason	do.	1							1		1		2	3		2	1		29	
24	Fort Monroe	Old Point Comfort, Virginia	Bvt. Brig. Gen. Armistead	1st, 3d, and 4th artillery	4	1	1		1	1		2	5	2	1	1	14	8		5	6	115	
25	Fort Johnston	Near Smithville, North Carolina	Bvt. Maj. Saunders	1st artillery	1							1	1	1		3	3		2	2		36	
26	Fort Macon	Near Beaufort, North Carolina	Bvt. Major Kirby	do.	1							1	1	1		5	3		2	3		30	
27	Fort Moultrie	Charleston harbor, South Carolina	Bvt. Brig. Gen. Eustis	do.	1						1	1	2	1		4	3		1			27	
28	Castle Pinckney	do. do.	do.	do.	1	1				1	1		1			4	4		2	2		33	
29	Augusta Arsenal	Augusta, Georgia	Colonel Lindsay	2d artillery	1	1		1		1	1		1	1	1	4	2		1	2		28	
30	Oglethorpe Barracks	Savannah, Georgia	Captain Merchant	do.	1						1	1	1			4	2		2	1		22	
31	Fort Marion	St. Augustine, Florida	Captain Drane	do.	1						1	1		1		4	3		2	3		31	
						5	4	3	5	2	18	30	24	25	11	5	4	146	122	4	65	47	1,275

C.—Position and distribution of the troops of the eastern department, &c.—Continued.

No.	Posts.	Situation.	Commanding officers.	Regiments.	Number of companies.	PRESENT.																		Commissioned officers.	Non-commissioned officers, musicians, artificers, and privates.				
						Sick.						On extra or daily duty.						In arrest or confinement.											
						Field officers.	Surgeons.	Captains.	First lieutenants.	Second lieutenants.	Bvt. second lieutenants.	Non-commiss'd officers.	Musicians.	Artificers.	Privates.	Field officers.	Captains.	First lieutenants.	Second lieutenants.	Bvt. second lieutenants.	Non-commiss'd officers.	Musicians.	Artificers.			Privates.			
1	Fort Winnebago	Portage, Fox, and Wisconsin rivers	Maj. Green	5th infantry	4	1					13									17						19	8	190	
2	Fort Brady	Sault Ste. Marie, M. T.	Bvt. Maj. Cobbs	2d infantry	2						6									11						5	4	96	
3	Fort Mackinac	Michillmackinac, M. T.	Capt. Clitz	do	2						4									11						3	6	88	
4	Fort Howard	Green Bay, M. T.	Bvt. Brig. Gen. Brooke	5th infantry	4						4	1	1							21						17	6	120	
5	Fort Dearborn	Head of Lake Michigan, Ill.	Bvt. Maj. Wilcox	do	2						3	1								1						3	6	93	
6	Fort Gratiot	Outlet of Lake Huron, M. T.	Bvt. Maj. Hoffman	2d infantry	2						6	1	1							9						3	6	91	
7	Fort Niagara	New York, N. Y.	(Garrison withdrawn)																										
8	Madison Barracks	Sackett's Harbor, N. Y.	Lieut. Col. Cummings	2d infantry																1									
9	Hancock Barracks	Houlton, Me.	Bvt. Maj. Dearborn	do	4						4									14						4	2	25	
10	Fort Sullivan	Eastport, Me.	Maj. Churchill	3d artillery	1						1									1									
11	Fort Preble	Portland, Me.	Bvt. Maj. McClintock	do	1						1									1									
12	Fort Constitution	Portsmouth, N. H.	Bvt. Maj. Ansart	do	1						1									1						1	6	4	
13	Fort Independence	Boston, Mass.	(Garrison withdrawn)																										
14	Fort Wolcott	Newport, R. I.	Bvt. Maj. Lomax	3d artillery	1						3															3	3	45	
15	Fort Trumbull	New London, Conn.	Bvt. Lieut. Col. Fanning	4th artillery	1						1									5									
16	Military Academy	West Point, N. Y.	Bvt. Lieut. Col. De Russey	Detachment																						2	5	54	
17	Fort Columbus	New York harbor, N. Y.	Lieut. Col. Brooks	4th artillery	1						1															2	5	54	
18	Fort Hamilton	do	do	do	3						15	1								20						4	8	146	
19	Fort Lafayette	do	do	do	1						2									6						1	4	48	
20	Fort McHenry	Baltimore, Md.	Bvt. Brig. Gen. Fenwick	do	1						2									2						8	5	60	
21	Fort Severn	Annapolis, Md.	Bvt. Col. Walbach	1st artillery	1			1	1	2	2									9						1	5	51	
22	Fort Washington	Left bank of Potomac, Md.	Maj. Gates	do	1						6									1						1	4	45	
23	Washington Arsenal	Greenleaf's Pt., Washington, D.C.	Bvt. Maj. Mason	do	1						3															6	2	46	
24	Fort Monroe	Old Point Comfort, Va.	Bvt. Brig. Gen. Armistead	1st, 3d, & 4th art.	4			2		2	5									25						1	5	165	
25	Fort Johnston	Near Smithfield, N. C.	Bvt. Maj. Saunders	1st artillery	1						1									3						2	2	54	
26	Fort Macon	Near Beaufort, N. C.	Bvt. Maj. Kirby	do	1						3									3						3	4	49	
27	Fort Moultrie	Charleston harbor, S. C.	Bvt. Brig. Gen. Eustis	do	1															8							5	44	
28	Castle Pinckney	do	do	do	1						3									3							3	52	
29	Augusta Arsenal	Augusta, Ga.	Col. Lindsay	2d artillery	1						1									2							5	43	
30	Oglethorpe Barracks	Savannah, Ga.	Bvt. Capt. Merchant	do	1						2									1						4	3	39	
31	Fort Marion	St. Augustine, Fla.	Capt. Drane	do	1						9									2							4	55	
						1	2	1	1	1	13										107						5	5	117
											100										207						143	2,159	

D.—Position and distribution of the troops of the western department, &c.—Continued.

No.	Posts.	Situation.	Commanding officers.	Regiments.	Number of companies.	PRESENT.											
						In arrest or confinement.										Commissioned officers.	Non-commissioned officers, musicians, artificers, and privates.
						Field officers.	Surgeons.	Captains.	First lieutenants.	Second lieutenants.	Brevet second lieutenants.	Non-commissioned officers.	Musicians.	Artificers.	Privates.		
1	Fort Snelling	Upper Mississippi	Major Bliss	1st infantry	3										5	8	159
2	Fort Crawford.....	Prairie du Chien, Michigan Territory.....	Colonel Taylor	do.....	5				1						15	11	267
3	Fort Armstrong.....	Rock Island, Illinois	Lieut. Colonel Davenport.....	do.....	2										14	7	85
4	Fort Leavenworth.....	Right bank of the Missouri, near the Little Platte.....	Colonel Dodge	Dragoons	4			1	1			2			13	14	284
5	Jefferson Barracks.....	Near St. Louis, Missouri.....	Bvt. Brig. General Atkinson.....	6th infantry	10							1			44	24	457
6	Fort Gibson	Arkansas Territory	Bvt. Brig. Gen Arbuckle	6th infantry	3										2	7	98
7	Fort Coffee	do.....	Captain Steuart.....	7th infantry	9							1	1		21	19	416
8	Fort Des Moines.....	Right bank of the Mississippi, Mississippi Territory	Lieut. Colonel Kearney	do.....	1							1				4	50
9	Fort Jesup	Near Natchitoches, La.....	Lieut. Colonel Kearney	Dragoons	3											9	170
10	Fort Towson	Near Natchitoches, La.....	Colonel Many	3d infantry	6										11	16	281
11	Fort Morgan	On the Kiamichi, Arkansas Territory	Lieut. Colonel Vose	do.....	4		1								11	12	177
12	Baton Rouge	Baton Rouge, Louisiana	Bvt. Lieut. Colonel Foster.....	4th infantry	4							1			16	7	118
13	New Orleans	New Orleans, Louisiana.....	Lieut. Colonel Twigg	do.....	2										12	5	98
14	Fort Wood	Chef Menteur, Louisiana.....	Bvt. Captain Lowd	2d artillery.....	1							2			8	3	50
15	Fort Pike	Petite Coquille, Louisiana.....	Bvt. Major Mountfort	do.....	1										1	3	51
16	Fort Jackson	Near New Orleans, Louisiana.....	(Garrison withdrawn)	do.....													
17	Fort Morgan	Mobile Point, Alabama.....	Captain Belton	do.....	1											4	44
18	Fort Pickens	On St. Rosa Island, Florida.....	Captain Gardiner	do.....	1										3	4	42
19	Fort Mitchell.....	Near Creek Agency, Alabama	Bvt. Major McIntosh	4th infantry.....	1										4	3	32
20	Fort King	Alachua, Florida	Bvt. Brig. General Olinch	1st, 2d, 3d artillery, and 4th infantry.	6										8	18	279
21	Fort Brooke.....	Tampa Bay, Florida	Bvt. Major Zantzing	2d and 3d artillery.	2										4	5	89
22	Key West	Key West, Florida	Bvt. Major Dade	4th infantry.....	1										1	2	49
23	Fort Cass, (temporary).....	Near Calhoun, Tennessee.....	Lieut. Howe	do.....	1										11	2	38
					71		1	1	2			8	1		204	187	1,337

D.—Position and distribution of the troops in the western department, &c.—Continued.

O 18—A—TOA

No.	Posts.	Situation.	Commanding officers.	Regiment.	Number of companies.	ABSENT.													PRESENT & ABSENT.		
						Detached service.					With leave or on furlough.								Total.	Aggregate.	
						Field officer.	Captains.	First lieutenants.	Second lieutenants.	Bvt. 2d lieutenants.	Non-commissioned officers, &c.	Field officers.	Surgeons.	Assistant surgeons.	Captains.	First lieutenants.	Second lieutenants.	Bvt. 2d lieutenants.			Non-commissioned officers, &c.	Non-commissioned officers, musicians, &c., sick and in confinement, &c.
1	Fort Snelling	Upper Mississipl.....	Major Bliss.....	1st infantry.....	3			3										2	161	173	
2	Fort Crawford	Prairie du Chien, Michigan Territory ...	Colonel Taylor.....	do.....	5		2	2	1	1	1							1	269	288	
3	Fort Armstrong	Rock Island, Illinois	Lieut. Colonel Davenport.....	do.....	2		1	1	1										69	90	
4	Fort Leavenworth	Right bank Missouri, near Little Platte..	Colonel Dodge.....	Dragoons.....	4		1	1			7								291	307	
5	Jefferson Barracks	Near St. Louis, Missouri.....	Bvt. Brig. Gen. Atkinson.....	6th infantry.....	10		4	2	5	1	2	2			4	1			467	510	
6	Fort Gibson.....	Arkansas Territory.....	Bvt. Brig. Gen. Arbuckle.....	Dragoons.....	3		1				1				1				99	108	
				7th infantry.....	9		3	3	3		15	1			3		2	5	4	436	475
7	Fort Coffee.....	do.....	Captain Stuart.....	do.....	1														50	56	
8	Fort Des Moines.....	Right bank of the Mississippi, M. T.....	Lieut. Colonel Kearney.....	Dragoons.....	3			3											171	183	
9	Fort Jesup.....	Near Natchitoches, Louisiana	Colonel Many.....	3d infantry.....	6	1	1	2	3										284	313	
10	Fort Towson	On the Klamichi, Arkansas Territory ...	Lieut. Colonel Vose.....	do.....	4		2	2			4								182	199	
11	Baton Rouge.....	Baton Rouge, Louisiana.....	Bvt. Lieut. Colonel Foster.....	4th infantry.....	4			2	4				1	2					119	135	
12	New Orleans	New Orleans, Louisiana	Lieut. Colonel Twiggs.....	do.....	2		2	2	1		5								103	113	
13	Fort Wood	Chef Menteur, Louisiana.....	Bvt. Captain Lownd.....	2d artillery.....	1		1												51	57	
14	Fort Pike.....	Petite Coquille, Louisiana.....	Bvt. Major Mountfort.....	do.....	1			2	1						1				54	61	
15	Fort Jackson	Near New Orleans, Louisiana.....	Garrison withdrawn.....	do.....																	
16	Fort Morgan.....	Mobile Point, Alabama.....	Captain Belton.....	2d artillery.....	1			1											44	49	
17	Fort Pickins.....	On St. Rosa Island, Florida.....	Captain Gardiner.....	do.....	1			2			4								47	53	
18	Fort Mitchell	Near Creek Agency, Alabama.....	Bvt. Major McIntosh.....	4th infantry.....	1								1	1					33	33	
19	Fort King.....	Alachua, Florida	Bvt. Brig. Gen. Clinch.....	1st, 2d, 3d artillery, and 4th infantry.	6		3	6	9	2	23				1			4	3	309	348
20	Fort Brooke.....	Tampa Bay, Florida.....	Bvt. Major Zantinger.....	2d and 3d artillery..	2			4	1	1	2							1	5	96	108
21	Key West.....	Key West, Florida.....	Bvt. Major Dade.....	4th infantry.....	1			1											1	51	56
22	Fort Cass, (temporary).....	Near Calhoun, Tennessee.....	Lieut. Howe.....	do.....	1		1				1							5	44	48	
					71	1	22	39	32	5	65	3	2	8	10	6	12	15	33	3,450	3,777

HEADQUARTERS OF THE ARMY, Washington, November 30, 1835.
ADJUTANT GENERAL'S OFFICE, Washington, November 30, 1835.

ALEX. MACOMB, Major General, Commanding in chief.
R. JONES, Adjutant General.

E.

ADJUTANT GENERAL'S OFFICE, *Washington, November 30, 1835.*

Statement showing the whole number of recruits enlisted in the army, from the 1st of January to the 30th of September, 1835.

GENERAL RECRUITING SERVICE, EASTERN DEPARTMENT—Lieut. Col. J. B. Crane, 2d artillery, superintendent:

At Boston, Massachusetts	8	At Philadelphia, Pennsylvania.....	133
New York, N. Y.....	126	Lancaster, Pennsylvania.....	48
Albany, New York.....	61	Harrisburg, Pennsylvania	12
Utica, New York.....	58	Carlisle, Pennsylvania.....	195
Syracuse, New York.....	46	Baltimore, Maryland	113
Rochester, New York.....	63	Fredericktown, Maryland.....	79
New Brunswick, New Jersey	1	Winchester, Virginia	13
			956

GENERAL RECRUITING SERVICE, WESTERN DEPARTMENT—Major A. R. Thompson, 2d infantry, superintendent:

At Pittsburg, Pennsylvania.....	35	At Cincinnati, Ohio.....	68
Wheeling, Virginia.....	24	Zanesville, Ohio.....	24
Newport, Kentucky.....	15	Nashville, Tennessee	10
Louisville, Kentucky	33		209

REGIMENTS.

In the dragoons.....			6
1st artillery	17	In the 3d artillery.....	25
2d artillery.....	17	4th artillery.....	79
			138
1st infantry	10	5th infantry.....	14
2d infantry.....	48	6th infantry.....	42
3d infantry.....	16	7th infantry	14
4th infantry.....	81		225
Detachment at West Point			11
Band at West Point			4
Detachment of orderlies at Washington			3
At ordnance depots.....			38

Total number enlisted from the 1st of January to the 30th of September, 1835..... 1,590

Amount of recruiting funds advanced to officers of the army from the 1st of January to the 30th of September, 1835..... \$17,940 00

Amount of those funds accounted for within the same period..... 14,371 70

Balance in the hands of recruiting officers on the 30th of September, 1835..... 3,568 30

Respectfully submitted.

R. JONES, *Adjutant General.*

Major General ALEXANDER MACOMB, *Commander-in-chief U. S. A.*

No. 2.

REPORT OF THE QUARTERMASTER GENERAL.

QUARTERMASTER GENERAL'S OFFICE, *Washington City, November 6, 1835.*

SIR: In obedience to your order of the 4th of September, I have the honor to submit a report of the operations of the department confided to my administration for the first, second, and third quarters of the present year, to which I have added that portion of the operations of the last year not embraced in my report of the 22d of November, 1834.

The balance remaining to be accounted for by the several officers of the department, at the date of that report, amounted to..... \$97,956 99

To which is to be added—

1st. Remittances, viz:	
In the 4th quarter of 1834.....	\$307,860 80
In the 1st quarter of 1835.....	178,956 74
In the 2d quarter of 1835.....	202,375 00
In the 3d quarter of 1835.....	169,475 00
	\$858,667 54

In small sums during the year from other departments, not on requisitions from this office, but accounted for through it..... 2,972 94

2d. Proceeds of the sales of public property, either unfit for service or no longer required for public use; and rents received for public lands and buildings not required for military purposes.....	\$7, 993 91	<u>\$869, 634 39</u>
Making the total to be accounted for.....		967, 591 38
Of which there has been accounted for—		
1st. By disbursements, viz:		
In the second and third quarters of 1834, not included in the last report, the accounts not having been received at its date...	\$7, 665 22	
In the 4th quarter of 1834.....	293, 276 81	
In the 1st quarter of 1835.....	143, 302 35	
In the 2d quarter of 1835.....	208, 615 40	
In the 3d quarter of 1835.....	144, 074 47	
		<u>796, 934 25</u>
2d. By deposits to the credit of the Treasurer of the United States, and warrants returned to the treasury.....	8, 530 97	
Total accounted for.....		<u>805, 465 22</u>
Leaving a balance in the hands of the officers of the department, to be accounted for, of...		<u>162, 126 16</u>

The report being made sixteen days earlier in the season this year than last year, the accounts of eight officers have not yet reached the office; when received, they will probably reduce the balance reported about thirty-six thousand dollars. The remainder is distributed among more than fifty officers at the various posts, and connected with the several public works directed by the department throughout the Union; all of which is applicable to the service for the present quarter, and I have no doubt will be promptly accounted for.

The accountability for the property under the administration of the department is as prompt as heretofore.

The balances remaining in the treasury on account of the Quartermaster's department proper, and for the transportation of troops and supplies, and for the travelling allowance to officers, will be sufficient for all demands against them for the remainder of the year.

The appropriation for the transportation of ordnance has been found entirely inadequate. I have been obliged to increase that item to thirty thousand dollars; and even that sum, I apprehend, will fall short of the demands of the service.

Of the works under the direction of the department, the barracks at New Orleans have been in rapid progress, and it is believed will be completed in the course of the ensuing winter without a further appropriation.

The hospital at Green Bay has been finished, and the barracks, it is believed, will be completed in the course of the winter.

The barracks and other buildings at Fort Gibson are not worth repairing. The sum which I asked at the first session of the last Congress would have put them in such repair as to have afforded comfortable accommodations for the troops for ten years. The sum granted was of no manner of use; and if the troops are to remain there new barracks must be erected. The position is, in a military point of view, by far the most important on the whole Indian frontier; and a permanent work, with accommodations for twelve companies, should be erected there as soon as practicable. I have estimated for fifty thousand dollars to commence the work and carry it on during the ensuing season; at least a hundred thousand dollars will be required to complete it.

The works at Savannah and Fort Severn have been in rapid progress during the season; and extensive repairs have, during the same period, been made at Baton Rouge. The expenditures on account of those works have been made from the appropriation for the Quartermaster's department. When my estimates for last year were in the course of preparation, it was intimated to me that if the appropriation for the department would bear the expenditures necessary to complete those works, and the barracks at Key West, that no specific estimates for them would be expected. I reported to you that the funds at the disposal of the department would be ample, and on my recommendation you authorized their application to those objects. The Third Auditor of the treasury has, however, suspended the accounts of the officers who have made the disbursements, as he says, for the want of appropriations. If the matter should be thought to require the intervention of Congress, I respectfully ask that application be made to that body in behalf of the officers whose accounts have been suspended.

A company of artillery has been stationed at Washington for the protection of the arsenal; if they are to remain, and a prudent regard to the public interests would forbid their removal, barracks will be required for their accommodation, for which I respectfully ask that an appropriation be made. The penitentiary is so situated as to command the approach by land to the arsenal; and in the event of the convicts succeeding in obtaining the mastery over their keepers, they might seize the arsenal, and by holding the penitentiary at the same time, prevent any succour from reaching it from the city. Either the convicts should be removed, or the arsenal should no longer be occupied as the place for the deposit of arms and munitions; the better course, perhaps, under existing circumstances, would be to convert the penitentiary into barracks, and erect a building for the convicts in a more suitable position.

A property adjoining Fort McHenry, near Baltimore, which is now rented by the public for the accommodation of the garrison, will be sold in February next, under a decree of the chancellor. Regarding Fort McHenry even as a secondary work, according to the classification made by the Board of Engineers, the United States should own the property referred to; I therefore respectfully ask that authority be obtained from Congress to make the purchase. No appropriation will be required, as the necessary sum may be spared from the Quartermaster's department.

Operations were commenced on the road authorized from Green Bay to Prairie du Chien, in Michigan, early in the season. The western section of the road, under the superintendence of Colonel Z. Taylor, had been finished on the 1st of August. At the date of the last reports, the troops were employed on the eastern section; but it is feared they will not be able to complete it during the present year.

The route of a road has been surveyed and marked from Saganaw to Mackinac, a distance of one

hundred and eighty-eight miles. Whether this communication be considered in relation to the transportation of the mail, the military defence of the frontier, or in its effect upon the sale of the public lands, it is one of the most important works upon which the government is engaged. I have estimated for fifteen thousand five hundred dollars to commence the operations, and to carry them on during the next year.

The road from Strong's, near the St. Francis river, to Batesville, in Arkansas, has been located and surveyed, and will be opened, it is believed, as far as the appropriation will admit, in the course of the winter; a further appropriation will be required.

That part of the road from Memphis to Little Rock, under the direction of this department, is in progress.

The road from Fort Smith to Jackson, in Lawrence county, in Arkansas, has been located and surveyed; and the officer in charge of it has a party at work on it. It will probably be finished this fall, as far as the appropriation will admit; a further appropriation will be necessary.

The road from Helena to the mouth of Cache river has been located and surveyed, and the officer in charge of it has a party engaged in opening it.

Orders have been given to commence operations on the route of a road directed by an act of the last Congress to be opened from the southern boundary of the State of Missouri, by Jackson, Little Rock, and Washington, to the town of Fulton, on the north bank of Red river.

On the road from St. Augustine to Tallahassee, in Florida, operations were commenced on the 20th of July, and at the last report the work was in rapid progress. An additional appropriation will be required.

On the road from Pensacola to Tallahassee operations were commenced on the 1st of July, and the work will probably be completed by means of the appropriation made at the last session of Congress, from the latter place to the Choctawatchee, where it connects with the steamboat line on Santa Rosa's sound.

The work on the road from the head of Pensacola bay, by Pittman's ferry to Webbville, in Florida, was commenced on the 7th of April last. A further appropriation of two thousand dollars will be required to complete it and to repair the road from Pensacola to the head of the bay.

There is a balance of about six hundred dollars of the appropriation for the military road in the State of Maine, which the authorities of the State desire to receive for the purpose of expending it in repairs upon the road. I submit the subject with a view of obtaining the sanction of Congress to the transfer should the Secretary of War approve of the measure.

The work for the improvement of the Escambia river was recommenced on the 25th of July, and at the last report from the officer superintending it the river had been cleared forty-one miles; the present appropriation will carry the improvements about twenty-one miles further; an appropriation of five thousand five hundred dollars will be required to continue the work next season.

The improvement of the Chipola river had not been commenced on the 26th of September, the date of the last report, in consequence of the water having, up to that time, been too high to admit of a satisfactory examination of the channel. As much as possible will be accomplished the present season, but an additional appropriation of four thousand dollars will be required to complete the work; the distance to be improved is about one hundred and twenty-five miles.

The officer charged with the improvement of the Ocklawaha had made arrangements at the last report to commence the work on that river, which will be carried on with the utmost vigor until completed; it is believed the present appropriation will be sufficient.

The course of observations commenced in November last at the Delaware breakwater have been continued during the present season; and though portions of the harbor are gradually filling with mud and sand, no doubt remains of the great importance of the work as a commercial harbor.

The labors were resumed on the eastern end of the breakwater in July, and the operations have been limited to raising that part of the work, so as to enable navigators to avoid running their vessels on it at high water. 11,404 tons of stone have been deposited. A large balance of the appropriation remains unexpended, the greater part of which will be applicable to the service of the next year. It is proposed that the examination of the work by a board of engineers, for the purpose of determining whether any change in the form of the harbor be expedient, be deferred until March or April, in order to afford us the advantage of observing the effect of the storms and currents upon the exterior of the work, as well as upon the shoals forming within, during the ensuing winter. I have presented an estimate for one hundred thousand dollars, which, with the balance that will remain after closing the business of the present year, will be as much as can be advantageously used next year.

It becomes my duty to those associated with me in this office to ask the attention of the Secretary of War to the entire inadequacy of their compensation. The principal clerk receives twelve hundred dollars a year; the second clerk nine hundred and fifty; the third eight hundred and forty; and two sergeants receive, in addition to their pay in the army, each four hundred and forty-five dollars and twenty-five cents. The great disbursing departments of the army are the quartermaster's, the paymaster's, the engineer, the subsistence, and the ordnance departments. The principal clerk in the Paymaster General's office receives seventeen hundred dollars, and two other clerks each eleven hundred dollars a year; the principal clerk in the office of the commissary general of subsistence receives sixteen hundred dollars, the second clerk twelve hundred dollars, and the third clerk a thousand dollars a year. There is nothing in the nature of the duties performed by the gentlemen of the two offices last named to justify the distinction made between them and the clerks in this office; the latter perform duties as important and laborious, and which require as much intelligence, time, and talent as the former; and on principles of strict justice they should have equal compensation. The business of this office is never allowed to fall back on the plea that the force attached to it is not sufficient to keep it up. If the gentlemen of the office be unable to dispose of it in the hours usually devoted to official labor in the public offices, they are required to work at other hours, and are often employed until late at night; and often at times when those who receive much greater compensation are at their homes, or attending to their private affairs. I respectfully ask that the Secretary of War do them the justice to place their case before Congress.

And I have the honor to be, with the most respectful consideration, his most obedient servant,

TH. S. JESUP, *Major General and Quartermaster General.*

HON. LEWIS CLASS, *Secretary of War, Washington City.*

No. 3.

REPORT OF THE COMMISSARY GENERAL OF SUBSISTENCE.

OFFICE OF THE COMMISSARY GENERAL OF SUBSISTENCE, *Washington, November 18, 1835.*

SIR: In obedience to your instructions of 4th September, ultimo, I have the honor to present a statement of the moneys remitted and charged to contractors, and to the disbursing officers of the commissariat, in the 1st, 2d, and 3d quarters of the year, together with the balances in the hands of the latter on the 31st of December, 1834, amounting to..... \$375, 354 08
 To which is to be added the balances due them on the settlement of their accounts..... 313 61

aggregating..... 375, 667 69
 The amount accounted for during the same period, is..... 323, 035 17

Leaving a balance of..... 52, 632 52

From which is to be deducted—

This sum charged to contractors as the difference in price of stores purchased to supply deficiencies arising from their failures..... \$1, 761 70

This sum expended on account of Quartermaster's department, not brought to the credit of the officers on account of subsistence..... 2, 000 00

This sum due by assistant commissaries at the period of their decease:

Lieutenant Walter S. Chandler..... \$43 10

Lieutenant D. P. Manning..... 71 72

Lieutenant Charles Pettigru..... 145 07

259 89

And this sum remitted late in 3d, for expenditures of the 4th quarter..... 3, 750 00

7, 771 59

leaving..... 44, 860 93
 actually in possession of the assistant and acting assistant commissaries, applicable to the expenditures of the 4th quarter of the year.

Of one hundred and sixteen officers disbursing the public money on account of subsistence, for the period embraced in this statement, the accounts of four only were not received at its completion. One has rendered his account since; and the remaining three are so remote that time has not been afforded for their reception; it is believed, however, from the nature of their receipts and expenditures, that had they reached the department the statement would not have been materially affected; no doubt they will shortly reach the office, and every cent will be strictly accounted for in the 4th quarter of the year.

The amount due by Lieutenant Chandler, \$43 10, was received by him from his predecessor but a short time previous to embarking at Fort Morgan for Mobile, and was intended to subsist his command in the boat, which, on its return from the latter to the former place, was unfortunately capsized, and all but one man perished; and although the body of Lieutenant Chandler was subsequently found, yet no funds were on his person; the presumption is, therefore, that the major part was expended during his absence in subsisting his command; it is due to the memory of the deceased to state that in all his previous transactions with the department his accounts were rendered with the greatest promptitude.

It is believed that sufficient pay is due Lieutenant Manning to cover the \$71 72 due by him.

Of the \$145 07 due by Lieutenant Pettigru, \$100 were remitted on the 8th of August last, and have not been acknowledged by him; the inference is, that it was not received; upon the treasurer's warrant for that sum reaching this office it will be cancelled, and the amount passed to his credit; the \$45 07 are suspended vouchers, forwarded him on the settlement of former accounts for explanation, these can also, upon their reception here, be now admitted to his credit.

It is nothing more than justice to Lieutenants Manning and Pettigru to remark, that from the prompt manner in which all their previous accounts were rendered it is believed that, had they survived, every cent in their possession would have been honorably and satisfactorily accounted for.

Very respectfully, your most obedient servant,

GEO. GIBSON, *Commissary General of Subsistence.*

HON. LEWIS CASS, *Secretary of War.*

Statement exhibiting the moneys remitted to contractors from the 1st of January to the 30th of September, 1835; the moneys paid to them by agents of the department; the sums charged to them on account of failures, and the amounts accounted for by them; the balances in the hands of the disbursing officers of the department on the 31st of December, 1834; the remittances made them in the first, second, and third quarters of 1835; the sums charged to them as transfers from one office to another; sales to officers at the frontier posts sale of surplus provisions, empty barrels, boxes, &c.; and the amounts accounted for by them during the same period, together with the balances in their possession at the expiration of the third quarter of the year.

Names.	Balances on hand December 31, 1834.	Remitted.	Charged on account of failures.	Paid to contractors by agents of the departments; transfers, sales to officers on the frontier posts, surplus stores, &c.	Total charged.	Accounted for.	Balances due to assistant commissaries September 30, 1835.	Balances due from assistant commissaries September 30, 1835.	Remarks.
James and Robert Aull . contractors.		\$3,079 78			\$3,079 78	\$3,079 78			
Samuel and Isaac Bell do		5,971 50	\$80 45		6,051 95	6,051 95			
Samuel T. Cross do		14,522 84			14,522 84	14,522 84			
H. and D. Cotheal do		10,865 24			10,865 24	10,865 24			
O. M. Gidings do		15,669 72			15,669 72	15,669 72			
James Hanson do		983 10			983 10	983 10			
Hill & McGunnele do			280 98	\$5,504 24	5,785 22	5,785 22			
Alpheus Hyatt do		6,273 92	232 78		6,506 70	6,506 70			
William and John James do		7,280 04			7,280 04	7,280 04			
Mills & Beach do		577 68			577 68	577 68			
Charles Moody do		1,336 23			1,336 23	1,336 23			
Oliver Newberry do		21 11			21 11	21 11			
Joseph C. Noyes do		473 38			473 38	473 38			
Peebles & Graham do		14,917 93	1,106 19		16,024 12	16,024 12			
Theodore E. Phelps do		3,875 49			3,875 49	3,875 49			
Joseph L. Sanford do		8,196 99			8,196 99	8,196 99			
William Stewart do		20,260 90			20,260 90	20,260 90			
Edwards Simms do		3,221 43	3 80		3,225 23	3,225 23			
Joseph G. Sise do		2,418 47			2,418 47	2,418 47			
Francis J. Smith do		400 11			400 11	400 11			
G. B. Wilson do		2,376 67	57 50		2,434 17	2,434 17			
A. Ames special cont'r for rec'ts.		72 40			72 40	72 40			
E. B. Armstrong do		45 99			45 99	45 99			
John C. Campbell do		42 19			42 19	42 19			
Hunter Crane do		572 94			572 94	572 94			
Henry Cassidy do		273 70			273 70	273 70			
Patrick Cassidy cont'r for rec'ts.		165 12			165 12	165 12			
T. B. Coleman do		235 88			235 88	235 88			
E. S. Comstock do		417 99			417 99	417 99			
Benjamin Dana do		588 43			588 43	588 43			
P. Foster do		226 99			226 99	226 99			
John K. Graham do		698 84			698 84	698 84			
Gray & Noble do		237 61			237 61	237 61			
Samuel Humes, jr. do		417 60			417 60	417 60			
R. R. Hurlburt do		113 74			113 74	113 74			
Samuel Johnston do		75 88			75 88	75 88			
John Kenney do		171 28			171 28	171 28			
John Price do		95 20			95 20	95 20			
J. L. Rice do		758 92			758 92	758 92			
Joseph Savage do		70 31			70 31	70 31			
John J. Salvage do		194 55			194 55	194 55			
J. L. Sanford do		527 92			527 92	527 92			
H. B. Sherman do		757 87			757 87	757 87			
Edward Shower do		2,399 44			2,399 44	2,399 44			
John F. Truax do		92 24			92 24	92 24			
M. D. Wheeler & Co. do		242 05			242 05	242 05			
Jacob Wiest do		388 40			388 40	388 40			
Lieut. E. B. Alexander A. C. S.	\$1,853 27			327 14	2,180 41	1,174 43	\$1,005 98		\$1,000 to Q. M. dep't not credited to him.
Lieut. John H. Allen do		250 00		672 33	922 33	414 45	507 88		Disbursing account 3d quarter not received.
Lieut. Samuel R. Allston do	753 53	2,600 00		157 62	3,511 35	2,175 26	1,336 09		Do.
Lieut. R. Anderson do	14 84	100 00		10 00	124 84	124 84			Closed.
Lieut. E. B. Babbitt do	1,469 45			2,246 55	3,716 00	2,524 35	1,191 65		Disbursing.
Lieut. J. W. Barry do	91 76	800 00		25 42	917 18	917 18			Closed.
Lieut. W. E. Bassinger do	155 49	600 00		123 37	878 86	750 38	128 48		Disbursing.
Lieut. John Beach do				1,889 47	1,889 47	516 23	1,373 24		Do.
Capt. F. S. Belton A. A. C. S.		500 00		140 13	640 13	664 07	\$24 94		Due him on settlem't.
Lieut. J. E. Blake A. C. S.				72 90	72 90	18 30	54 60		Disbursing.
Lieut. F. Britton do				8 25	8 25	8 25			Closed.
Capt. H. Brown do	1,051 71	16,000 00		100 00	17,151 71	17,069 16	82 55		Disbursing.
Lieut. J. H. K. Burgwin do	215 26			585 37	800 63	911 86	111 23		Do.
Lieut. J. R. D. Burnett do		400 00		139 13	539 13	527 28	11 85		Do.
Capt. J. R. Butler A. A. C. S.	449 93	850 00		10 43	1,310 36	1,293 71	16 65		Do.

Statement exhibiting the moneys remitted to contractors, &c.—Continued.

Names.	Balances on hand December 31, 1834.	Remitted.	Charged on account of failures.	Paid to contractors by agents of the departments; transfers, sales to officers on the frontier posts, surplus stores, &c.	Total charge.	Accounted for.	Balances due to assistant commissaries September 30, 1835.	Balances due from assistant commissaries September 30, 1835.	Remarks.
Lieut. L. F. Carter..... A. C. S.	\$4,381 91			\$2,550 77	\$6,932 68	\$2,874 14		\$4,058 54	Disbursing account 3d quarter not received.
Lieut. J. A. Chambers do....	253 95	\$300 00		59 10	613 05	613 05			Closed.
Lieut. John C. Casey..... do....		500 00			500 00			500 00	Disbursing, remitted late in 3d quarter.
Lieut. W. S. Chandler..... do....				43 10	43 10			43 10	Dead.
Lieut. C. O. Dollins..... do....		1,150 00		21 75	1,171 75	1,128 49		43 26	Disbursing.
Capt. P. F. G. Cooke..... A. A. C. S.		300 00			300 00	300 00			Closed.
Lieut. G. H. Crosman..... A. C. S.				2,619 97	2,619 97	2,195 89		424 08	Disbursing.
Major F. L. Dade..... A. A. C. S.	361 33	700 00		14 76	1,076 09	1,012 87		63 22	Do.
Lieut. F. L. Dancey..... A. C. S.	221 13	1,200 00		202 26	1,623 39	1,575 49		47 90	Do.
Lieut. J. P. Davis..... do....	292 18	250 00		357 89	900 07	539 47		360 60	Do.
Lieut. J. Dimick..... do....		650 00			640 00	650 00			Closed.
Lieut. S. H. Drum..... do....		10,000 00		5,809 57	15,809 57	12,688 86		3,120 71	Disbursing.
Lieut. James Duncan..... do....				287 69	287 69	287 69			Closed.
Lieut. A. B. Eaton..... do....	388 07			647 64	1,035 71	1,035 71			Do.
Lieut. N. J. Eaton..... do....	1,052 16			687 96	1,740 12	1,520 14		219 98	Disbursing.
Lieut. A. G. Edwards..... do....	82 94				82 94	82 94			Closed.
Lieut. W. H. Emory..... do....				25 00	25 00	25 00			Do.
Lieut. William Eustis..... do....	90 64			61 94	152 58	17 25		135 33	Disbursing.
Capt. H. W. Fitzhugh..... A. A. C. S.	58 38	2,500 00		5 02	2,553 40	1,494 42		1,068 98	Do.
Lieut. Lemuel Gates..... A. C. S.	654 85				654 85	654 85			Closed.
Lieut. J. R. B. Gardenier..... do....	1,941 13				1,941 13	1,941 13			Do.
Lieut. Campbell Graham..... do....				43 51	43 51	43 51			Do.
Lieut. John B. Grayson..... do....	290 52	400 00		278 64	969 16	769 86		199 30	Disbursing.
Lieut. G. S. Greene..... do....	112 84	550 00		4 24	667 08	667 57	\$0 49		Balance due him on settlement.
Capt. Tim. Green..... do....	478 04	5,200 00		139 40	5,817 44	4,804 78		1,012 66	Disbursing.
Capt. E. Harding..... A. A. C. S.		1,150 00			1,150 00	828 49		221 51	Do.
Lieut. W. L. Harris..... A. C. S.				1,131 00	1,131 00	1,131 00			Closed.
Capt. T. J. Harris..... A. A. C. S.				50 00	50 00	50 00			Do.
Lieut. T. M. Hill..... A. C. S.				14 12	14 12	14 12			Do.
Lieut. J. L. Hooper..... do....	1,004 04	2,300 00		3 90	3,307 94	1,218 55		2,089 39	Disbursing account 3d qr. not received.
Lieut. L. T. Jamison..... do....	601 29			423 57	1,024 86	786 05		238 81	Do. do.
Lieut. J. R. Irwin..... do....	113 79	1,250 00		62 17	1,425 96	1,424 71		1 25	Balance due U. States on settlement.
Lieut. Thomas Johns..... do....		100 00		144 55	244 55	244 55			Closed.
Capt. Wm. R. Jouett..... A. A. C. S.		600 00			600 00	600 00			Do.
Lieut. J. W. Kingsbury..... A. C. S.	356 89	33,800 00		3,169 22	42,326 11	26,875 08		15,451 03	Disbursing.
Lieut. Samuel Kinney..... do....	178 80			601 47	780 27	780 27			Closed.
Major E. Kirby..... P. M. A. A. C. S.				104 42	104 42	104 42			Do.
Lieut. E. M. Lacey..... A. C. S.	154 92			661 71	816 63	172 28		644 35	Disbursing accounts 3d qr. not received.
Lieut. J. A. d'Lagnel..... do....	275 02	550 00		89 48	914 50	914 50			Closed.
Lieut. A. M. Lea..... do....				50 14	50 14	50 14			Do.
Lieut. T. J. Lee..... do....	3 10	10,300 00			10,303 10	10,303 10			Do.
Lieut. R. W. Lee..... do....	100 00			238 38	338 38	265 83		72 55	Disbursing.
Col. Wm. Lindsay..... A. A. C. S.	71 13				71 13	71 13			Closed.
Lieut. J. L. Locke..... A. C. S.	339 79	1,000 00		87 05	1,426 84	1,231 19		195 65	Disbursing.
Lieut. E. R. Long..... do....		500 00		351 48	851 48	235 01		615 47	Do.
Lieut. J. P. Lupton..... do....				7 24	7 24	7 24			Closed.
Lieut. D. A. Manning..... do....	35 55			636 17	671 72	600 00		71 72	Dead.
Lieut. N. O. Macrae..... do....				2,458 45	2,458 45	1,758 59		699 86	Disbursing.
Lieut. John Mackay..... do....		750 00		21 82	771 82	771 82			Closed.
Lieut. J. McClure..... do....	1,720 04			1,278 61	2,998 65	293 69		2,704 96	Disbursing \$1,000, qr. not credited him.
Lieut. Samuel McKenzie..... do....	43 10				43 10	43 10			Closed.
Capt. C. S. Merchant..... A. A. C. S.		200 00		205 45	405 45	405 45			Do.
Lieut. M. E. Merrill..... A. C. S.	31 45	850 00		1,393 78	2,275 23	1,798 46		476 77	Disbursing.
Capt. A. Mordecai..... A. A. C. S.		500 00		343 72	843 72	722 00		121 72	Closed.
Lieut. Gouv. Morris..... A. C. S.	1,395 28	2,400 00		142 98	3,938 26	3,283 45		654 81	Disbursing.
Lieut. P. Morrison..... do....	2,050 94	17,497 49		100 60	19,649 03	19,475 16		173 87	Do.
Capt. J. Mountfort..... A. A. C. S.				178 33	178 33	185 27	6 94		Do.
Lieut. A. C. Myers..... A. C. S.		100 00		50 00	150 00	150 00			Closed.
Lieut. George Nauman..... do....	58 62	500 00		398 73	957 35	740 19		217 16	Disbursing.
Lieut. L. B. Northrop..... do....	6 54				6 54	6 54			Closed.
Lieut. Tim. Paige..... do....	500 10				500 10	500 10			Do.
Lieut. J. W. Penrose..... do....	235 93	500 00		449 09	1,185 02	1,262 23	77 21		Disbursing.
Lieut. H. E. Prentiss..... do....		300 00		10 13	310 13	310 13			Closed.

Statement exhibiting the moneys remitted to contractors, &c.—Continued.

Names.	Balances on hand December 31, 1834.	Remitted.	Charged on account of failures.	Paid to contractors by agents of the departments; transfers, sales to officers on the frontier posts, surplus stores, &c.	Total charged.	Accounted for.	Balances due to assistant commissaries September 30, 1835.	Balances due from assistant commissaries September 30, 1835.	Remarks.
Lieut. Charles Pettigru A. O. S.	\$212 38	\$1,100 00			\$ 1,312 38	\$1,167 31		\$145 07	Dead.
Lieut. R. H. Peyton do		300 00		\$603 94	903 94	847 49		56 45	Disbursing.
Lieut. J. A. Phillips do	95 55				95 55	95 55			Closed.
Capt. George Ramsay A. A. C. S.		450 00		418 04	968 04	888 04			Do.
Capt. J. W. Riply A. C. S.		100 00		82 64	182 64	98 38		84 26	Disbursing.
Lieut. R. H. Ross do				1 76	1 76	1 76			Closed.
Lieut. S. L. Russel do	314 11	900 00		462 66	1,676 77	1,181 04		495 73	Disbursing.
Lieut. J. R. B. Screven do		250 00			250 00	104 62		145 38	Do.
Lieut. Enoch Steene do	1,552 06			696 05	2,248 11	2,247 22		89	Balance due U. States on settlement.
Lieut. C. C. Sibly do	300 00				300 00	300 00			Closed.
Lieut. J. R. Smith do	247 66	550 00		644 70	1,442 36	1,434 83		7 53	Balance due U. States on settlement.
Lieut. John B. Scott do		2,000 00		6 57	2,006 57	1,437 47		569 10	Disbursing.
Lieut. Moses Scott do		1,000 00			1,000 00	1,000 00			Closed.
Lieut. T. B. W. Stockton do				600 00	600 00	600 00			Do.
Lieut. T. Swords do		300 00			300 00	300 00			Do.
Lieut. C. Smyth do				400 72	400 72	484 11	\$83 39		Balance due him on settlement.
Lieut. G. H. Talcott do		500 00		232 23	732 23	245 89		486 34	Disbursing.
Capt. J. P. Taylor commissary	10,493 12				10,493 12	4,156 16		6,336 96	Do.
Lieut. Francis Taylor A. C. S.	35 31	750 00		79 61	864 92	689 06		175 86	Do.
Lieut. James H. Taylor do	29 11			983 11	1,012 22	1,012 22			Closed.
Lieut. R. E. Temple do	104 42				104 42	104 42			Do.
Lieut. B. A. Terret do				1,773 06	1,173 06	1,567 11		205 95	Disbursing.
Major A. R. Thompson A. A. C. S.		300 00			300 00	300 00			Closed.
Capt. Charles Thomas do				492 73	492 73	492 73			Do.
Lieut. W. A. Thornton A. C. S.		1,300 00		398 16	1,698 16	1,518 53		179 60	Disbursing.
Lieut. D. D. Tompkins do	36 09	1,200 00		33 39	1,269 48	1,204 58		64 90	Do.
Lieut. D. H. Tufts do	1 75	800 00		2 24	808 99	807 00	3 01		Do.
Lieut. A. Ury do				1,171 57	1,171 57	1,171 57			Closed.
Capt. Jeff. Vail A. A. C. S.				123 34	123 34	129 74	6 40		Balance due him on settlement.
Capt. D. Van Ness do	154 18				154 18			154 18	Under stoppage.
Lieut. J. R. Vinton A. C. S.	23 45	700 00		47 70	771 15	750 80		20 35	Disbursing.
Lieut. R. D. A. Wade do	1 13	1,500 00		51 57	1,552 70	1,454 53		98 17	Do.
Lieut. Wm. Wall do	79 29	550 00		33 68	662 97	616 80		46 17	Do.
Major H. Whiting A. A. C. S.	376 50	5,500 00			5,876 50	5,091 45		785 05	Do.
Lieut. D. P. Whiting A. C. S.		800 00			800 00	800 00			Closed.
Lieut. John Williamson do	159 69	55 00		998 87	1,708 56	1,589 43		119 13	Disbursing.
Lieut. George Wilson do				1,012 58	1,012 58	228 05		784 53	Do.
Lieut. John H. Winder do		1,350 00			1,350 00	1,216 00		134 00	Do.
Total amount.	40,207 44	281,303 50	\$1,761 70	52,081 44	375,354 08	323,035 17	313 61	52,632 52	

RECAPITULATION.

Total amount charged	\$375,354 08
Balances due to assistant commissaries on the settlement of their accounts	313 61
	<hr/>
	375,667 69
Accounted for	323,035 17
	<hr/>
	52,632 52
Deduct this sum, charged to contractors as the difference in price of stores purchased to supply deficiencies arising from their failures	\$1,761 70
Deduct this sum, expended on account of Quartermaster's department, not brought to the credit of the officers on account of subsistence	2,000 00
Deduct this sum, due by Lieutenant W. S. Chandler at the period of his decease	43 10
Do do Lieutenant D. A. Manning do do	71 72
Do do Lieutenant Charles Pettigru do do	145 07
Do do remitted late in the 3d, for the expenditures of the 4th quarter of the year	3,750 00
	<hr/>
	7,771 59
Leaving in the hands of the agents of the department, September 30, 1835, applicable to the expenditures of the 4th quarter	44,860 93
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No. 4.

REPORT OF THE PAYMASTER GENERAL.

PAYMASTER GENERAL'S OFFICE, *Washington City, November 30, 1835.*

SIR: I have the honor herewith to submit a report of the transactions of the pay department for the year ending the 30th of September, 1835.

It will be seen that the balances in the hands of paymasters, and the sums received by them from the treasury during the fiscal year, amount to one million five hundred and ninety-six thousand five hundred and eighty-five dollars and twenty-two cents; all of which they have accounted for, except \$54,942 80. A part of this sum is charged to the late Paymaster Wright, being the balance reported against him by the Auditor. His administrators claim credits from the United States, on account of rejected vouchers and disallowances, to a greater amount. Whatever balance may be finally adjudged to be due will be paid without loss. The remainder to be accounted for was advanced for the payment of the troops on Red river; the paymaster received it in October last, and has not yet had time to disburse it and render his accounts; they will, no doubt, be received before the close of the year.

The troops have been paid to as late periods this year as they generally are when the annual report is made.

It is now fifteen years since the United States sustained any loss by the transactions of this department, in which time nineteen and a half millions of dollars have been disbursed in small sums; the accountability may, therefore, be considered as perfect as it can well be made, and I have nothing to ask for or recommend on that subject; but, in relation to frequent payments, it is my duty to repeat what I have before stated, that, with the number of paymasters now authorized, it is impossible for the department to have the troops paid as often as the law contemplates and the interest of the service requires.

When the army was last reduced, fourteen paymasters were retained and found necessary to pay it according to the requirements of the law. Since then their duties have been increasing, and are now at least one-third greater than they were in 1821, in consequence of the additional number of troops, the extension and increase of military posts, and the greater amount of funds to be disbursed. Under such circumstances, I again solicit you to recommend that provision be made by law for the appointment of three additional paymasters.

Respectfully, your obedient servant,

N. TOWSON, *Paymaster General.*

Hon. LEWIS CASS, *Secretary of War.*

A.—Statement of moneys drawn from the appropriations for the pay department and remitted to the disbursing officers on account of payments for the fourth quarter of 1834 and the first three quarters of 1835; the amount unexpended and forming part of their estimates for the fourth quarter of 1835; the balances to be accounted for; the periods to which the troops have been paid, and accounts rendered.

Paymasters.	Amount of funds remitted in the fourth quarter of 1834 and the first three quarters of 1835.					Amount unexpended and forming part of estimates for the fourth quarter of 1835.				Balances remaining to be accounted for.				Periods to which the troops have been paid and accounts rendered.	Remarks.
	Pay and subsistence.	Forage.	Clothing of servants.	Payments in lieu of clothing.	Amount.	Pay and subsistence.	Forage.	Clothing of servants.	Amount.	Pay and subsistence.	Forage.	Clothing of servants.	Amount.		
Thomas Wright	\$82,000 00	\$6,000 00	.....	\$2,000 00	\$70,000 00	.....	.....	.....	.....	\$12,234 92	.....	.....	\$12,234 92	.....	Died November 9, 1834.
B. F. Larned	51,740 00	1,160 00	\$500 00	1,500 00	54,000 00	.....	.....	.....	.....	.....	.....	.....	.....	September 1, 1835	\$7,364 08 due Paymaster Larned.
D. S. Townsend	77,840 00	2,400 00	710 00	3,750 00	84,800 00	\$4,159 93	\$7 52	\$583 41	\$4,750 86	.....	.....	.....	.....	.....	.....
Daniel Randall	123,050 00	3,900 00	1,150 00	3,900 00	133,000 00	.....	.....	.....	.....	.....	.....	.....	.....	November 1, 1835	\$163 98 due Paymaster Randall.
C. H. Smith	73,800 00	1,100 00	550 00	1,500 00	77,300 00	2,101 88	.....	.....	2,101 88	.....	.....	.....	.....	September 1, 1835	.....
A. A. Massias	8,700 00	600 00	.....	700 00	10,000 00	1,363 39	.....	.....	1,363 39	.....	.....	.....	.....	.....	.....
T. P. Andrews	185,350 00	3,150 00	1,600 00	4,900 00	195,000 00	.....	.....	.....	.....	.....	.....	.....	.....	November 1, 1835	.....
Edmund Kirby	103,550 00	2,200 00	250 00	3,600 00	109,600 00	8,103 27	62 73	316 35	8,481 35	.....	.....	.....	.....	.....	.....
L. G. DoRussey	86,900 00	1,200 00	600 00	3,200 00	91,900 00	.....	.....	.....	.....	42,107 88	\$400 00	\$200 00	42,707 88	March 1 and July 1, 1835.	.....
R. A. Forsyth	61,200 00	2,100 00	900 00	1,800 00	66,000 00	.....	.....	.....	.....	.....	.....	.....	.....	July 1, 1835	\$1,700 28 due Paymaster Forsyth.
A. D. Steuart	92,600 00	1,900 00	700 00	3,800 00	99,000 00	.....	.....	.....	.....	.....	.....	.....	.....	September 1, 1835	\$1,722 59 due Paymaster Steuart.
W. S. Harney	65,050 00	2,400 00	850 00	4,200 00	72,500 00	16,929 64	.....	.....	16,929 64	.....	.....	.....	.....	.....	.....
J. S. Lytle	68,500 00	1,400 00	500 00	2,300 00	72,700 00	239 63	.....	.....	239 63	.....	.....	.....	.....	July 1 and November 1, 1835	.....
Charles Mapes	114,700 00	2,400 00	600 00	2,300 00	120,000 00	11,254 00	.....	.....	11,254 00	.....	.....	.....	.....	September 1, 1835	.....
Peter Muhlenberg	46,350 00	550 00	300 00	800 00	48,000 00	3,119 73	.....	.....	3,119 73	.....	.....	.....	.....	.....	.....
T. J. Leslie	145,986 00	1,884 00	670 00	860 00	149,400 00	7,063 19	.....	.....	7,063 19	.....	.....	.....	.....	.....	.....
Unexpended balances of 3d quarter of 1834, forming part of estimates for 4th quarter of 1834	1,373,316 00	34,344 00	9,880 00	41,460 00	1,459,000 00	54,333 66	70 25	899 76	55,303 67	54,342 80	400 00	200 00	54,942 80	.....	.....
Balances remaining to be accounted for in 1834, now settled	83,533 68	639 88	409 59	.....	84,673 15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
MILITIA.	1,506,961 75	35,583 88	10,579 59	41,460 00	1,596,585 22	54,333 66	70 25	899 76	55,303 67	54,342 80	400 00	200 00	54,942 80	.....	.....
A. D. Steuart	2,000 00	.....	.....	.....	2,000 00	2,000 00	.....	.....	2,000 00	.....	.....	.....	.....	.....	.....
Total	1,508,961 75	35,583 88	10,579 59	41,460 00	1,596,585 22	56,333 66	70 25	899 76	57,303 67	54,342 80	400 00	200 00	54,942 80	.....	.....

No. 5.

REPORT OF THE COMMISSARY GENERAL OF PURCHASES.

COMMISSARY GENERAL'S OFFICE, Philadelphia, October 24, 1835.

SIR: In obedience to instructions contained in your letter of the 6th instant, I have prepared, and have now the honor of enclosing, my moneyed estimates for 1836, marked A and B, as follows, viz:

A. For clothing, camp equipage, &c., for one year ending 31st October, 1836.	\$202, 982 60
B. For the expenses of the Commissary General's office during the year 1836.	6, 250 00
Total.	209, 232 60

I likewise enclose four statements, numbered 1, 2, 3, and 4, prepared in obedience to your order, viz:
 No. 1. Of moneys drawn from the appropriation for the purchasing department during the first three quarters of the year 1835.

No. 2. Of moneys received and disbursed during the first three quarters of the year 1835 on account of the purchasing department.

No. 3. Comparative statement of the cost of clothing, &c., for the United States army during the years 1834, 1835, and 1836.

No. 4. Statement of the cost of clothing, &c., for the United States army during the year 1836.

I have deducted \$40,000 from the gross amount of the moneyed estimate A, for clothing, &c., that may remain on hand after the issues for this year have been completed, which is as much as can be deducted with safety.

The balance remaining in the treasury undrawn, \$14,438 64, will be required to enable me to settle all accounts to the end of the year 1835, and to enable me to make up clothing during the approaching winter, so as to be ready for an early spring issue. I have therefore to request this money may be reserved for the operations of this department, as the whole will be required.

These statements will, I hope, be entirely satisfactory. The duplicates will be forwarded by the mail of the 26th.

I have the honor to be, sir, with great respect, your most obedient servant,

C. IRVINE, *Commissary General of Purchases.*

Hon. LEWIS CASS, *Secretary of War.*

No. 1.

Statement of moneys drawn from the appropriation for the purchasing department during the first three quarters of the year 1835.

1835.			
Jan.	26	By Secretary of the Treasury's warrant, No. 145, balance of appropriation for 1834.	\$13, 442 40
Feb.	25	By Secretary of the Treasury's warrant, No. 307.	25, 000 00
April	13	.....do.....do.....do..... 721.	24, 950 75
May	13	.....do.....do.....do..... 954.	26, 405 17
June	11	.....do.....do.....do..... 1172.	26, 098 19
July	15	.....do.....do.....do..... 1374.	21, 209 63
Sept.	11	.....do.....do.....do..... 1894.	16, 285 47
			153, 391 61
By cash received on the 21st of March, 1835, of Major Staunton, quartermaster, New York, net amount of sales at auction of damaged clothing.			189 67
			153, 581 28

No. 2.

Statement of moneys received and disbursed during the first three quarters of the year 1835 on account of the purchasing department.

To amount of moneys drawn from the Treasury Department from the 25th of January, 1835, to the 11th September following, from the appropriation for "purchasing department".....	\$153, 391 61
To cash for net proceeds of sales of damaged clothing.....	189 67

As per statement No. 1.	\$153, 581 28
By amount expended during the first quarter of the year 1832, passed to the credit of the commissary general of purchases, per account settled by the Second Auditor, Treasury Department.	39, 155 94
By amount expended during the second quarter of the year 1835, passed to the credit of the commissary general of purchases, per account settled by the Second Auditor, Treasury Department.	71, 141 16
By amount expended during the third quarter of the year 1835, as per account in preparation for transmission to the Second Auditor, Treasury Department, for examination and settlement.	30, 443 37
	140, 740 47
Remaining unexpended on the 30th September, 1835.	12, 840 81

COMMISSARY GENERAL'S OFFICE, Philadelphia, October 24, 1835.

C. IRVINE, *Commissary General of Purchases.*

Hon. LEWIS CASS, *Secretary of War.*

No. 3.

Comparative statement of the cost of clothing, &c., for the United States army during the years 1834, 1835, and 1836.

Garments, &c.	Price in 1834.	Price in 1835.	Price in 1836.
Forage caps, artillery and infantry	\$0 75	\$0 80	\$0 80
Forage caps, dragoon	37½	80	80
Uniform caps, artillery and infantry, with metal equipments	2 72	2 25	2 05
Uniform caps, dragoon, with metal equipments	3 56	2 40	2 20
Epaulets for non-commissioned staff, pair	2 37½	2 37½	2 37½
Epaulets for corporals, pair	1 10	1 00	1 00
Epaulets for sergeants, pair	1 30	1 00	1 00
Shoulder straps, pair	60	50	50
Aiguillettes, each	1 40	1 25	1 25
Sashes, each	2 25	2 12½	2 12½
Pompons for non-commissioned staff	37½	37½	37½
Pompons for artillery	23	22	22
Pompons for infantry	20	20	20
Woollen overalls, sergeants'	3 07½	3 20½	3 33
Woollen overalls, privates'	2 75½	2 84½	2 97
Drilling overalls, privates'	61½	63	66
Drilling overalls, sergeants'	84½	76¾	79
Infantry sergeants' drilling jackets, with sleeves	1 01	89	91
Infantry privates' drilling jackets, with sleeves	75	73½	76
Artillery privates' drilling jackets, with sleeves	80	78¾	81
Artillery sergeants' drilling jackets, with sleeves	1 06	94½	96
Artillery sky-blue cloth jackets, with sleeves	3 12½	3 23½	3 41
Infantry sky-blue cloth jackets, with sleeves	3 07½	3 15½	3 29
Cotton shirts, privates'	51	43½	46
Cotton shirts, sergeants'	64½	62½	65
Flannel shirts	1 29	1 15½	1 16
Canton flannel drawers	60	52¾	53
Laced bootees, pairs	1 50	1 47	1 46
Stockings, pairs	35½	35½	35½
Blankets	3 00	3 00	3 00
Greatcoats	7 93¾	8 17¾	8 31
Leather stocks	15	14	13
Knapsacks	1 60	1 55	1 55
Haversacks	25¾	25¾	25¾
Infantry sergeants', corporals', and privates' coats	7 04	6 61	6 71
Infantry musicians' coats	7 80	8 13	8 23
Infantry principal musicians' coats	9 61	9 90	10 00
Infantry sergeant majors' and quartermaster sergeants' coats	8 68	8 37	8 48
Artillery sergeants', corporals', and privates' coats	7 20	6 92	7 02
Artillery musicians' coats	8 13	8 28	8 38
Artillery sergeant majors' and quartermaster sergeants' coats	9 51	9 08	9 97
Dragoon cloth jackets, privates'	4 99	4 79¾	4 93
Dragoon privates' woollen overalls	4 03	4 16½	4 29
Dragoon sergeants' woollen overalls	4 20	4 41	4 55
Dragoon privates' cotton overalls	1 11	1 01	1 04
Dragoon sergeants' cotton overalls	1 40	1 23	1 25
Dragoon sergeants' cloth jackets	4 99	4 87¾	5 01
Dragoon privates' cotton jackets	89	86½	89
Dragoon sergeants' cotton jackets	1 15½	1 02	1 04
Dragoon sergeant major's coat	8 44	7 27	7 37
Dragoon private's and corporal's coat	7 27½	6 62	6 72
Dragoon musician's coat	7 80	8 14¾	8 24
Dragoon principal musician's coat	8 01	8 79	8 89
Dragoon greatcoat	9 44	10 22½	10 52
Dragoon shoulder knots, brass	97	97	94
Dragoon sergeant's coat	7 31	6 62	6 72
Ordnance sergeant's coat	7 20	6 92¾	7 02
Ordnance private's coat	7 20	6 92¾	7 02
Ordnance sergeant's woollen overalls	3 07½	3 20½	3 33
Dragoon bands	60	54	54
Dragoon plumes, horsehair	70	60	60

COMMISSARY GENERAL'S OFFICE, Philadelphia, October 24, 1835.

C. IRVINE, Commissary General of Purchases.

Hon. LEWIS CASS, Secretary of War.

No. 4.

Statement of the cost of clothing, &c., for the United States army during the year 1836.

Forage cap, artillery and infantry.....	\$0 80
Forage cap, dragoon.....	80
Uniform cap, artillery and infantry, with metal equipments.....	2 05
Uniform cap, dragoon, with metal equipments.....	2 20
Epaulets for non-commissioned staff, pair.....	2 37½
Epaulets for corporals, pair.....	1 00
Epaulets for sergeants, pair.....	1 00
Shoulder straps, pair.....	50
Aiguillettes, each.....	1 25
Sashes.....	2 12½
Pompons for non-commissioned staff.....	37½
Pompons for artillery.....	22
Pompons for infantry.....	20
Woollen overalls, sergeants'.....	3 33
Woollen overalls, privates'.....	2 97
Drilling overalls, privates'.....	66
Drilling overalls, sergeants'.....	79
Infantry sergeants' drilling jackets, with sleeves.....	91
Infantry privates' drilling jackets, with sleeves.....	76
Artillery privates' drilling jackets, with sleeves.....	81
Artillery sergeants' drilling jackets, with sleeves.....	96
Artillery sky-blue cloth jackets, with sleeves.....	3 41
Infantry sky-blue cloth jackets, with sleeves.....	3 29
Cotton shirts, privates'.....	46
Cotton shirts, sergeants'.....	65
Flannel shirts.....	1 16
Canton flannel drawers.....	53
Laced bootees, pairs.....	1 46
Stockings.....	35½
Blankets.....	3 00
Greatcoats.....	8 31
Leather stocks.....	13
Knapsacks.....	1 55
Haversacks.....	25¾
Infantry sergeants', corporals', and privates' coats.....	6 71
Infantry musicians' coats.....	8 23
Infantry principal musicians' coats.....	10 00
Infantry sergeant majors' and quartermaster sergeants' coats.....	8 43
Artillery sergeants', corporals', and privates' coats.....	7 02
Artillery musicians' coats.....	8 33
Artillery sergeant majors' and quartermaster sergeants' coats.....	9 97
Dragoon cloth jackets, privates'.....	4 93
Dragoon privates' woollen overalls.....	4 29
Dragoon sergeants' woollen overalls.....	4 55
Dragoon privates' cotton overalls.....	1 04
Dragoon sergeants' cotton overalls.....	1 25
Dragoon sergeants' cloth jackets.....	5 01
Dragoon privates' cotton jackets.....	89
Dragoon sergeants' cotton jackets.....	1 04
Dragoon sergeant major's coat.....	7 37
Dragoon private's and corporal's coat.....	6 72
Dragoon musician's coat.....	8 24
Dragoon principal musician's coat.....	8 89
Dragoon greatcoat.....	10 52
Dragoon shoulder knots, brass.....	94
Dragoon sergeant's coat.....	6 72
Ordnance sergeant's coat.....	7 02
Ordnance private's coat.....	7 02
Ordnance sergeants' woollen overalls.....	3 33
Dragoon bands.....	54
Dragoon plumes, horsehair.....	60

COMMISSARY GENERAL'S OFFICE, *Philadelphia, October 24, 1835.*G. IRVINE, *Commissary General of Purchases.*Hon. LEWIS CASS, *Secretary of War.*

No. 6.

REPORT OF THE SURGEON GENERAL.

SURGEON GENERAL'S OFFICE, *November 21, 1835.*

SIR: In compliance with your instructions, I have to report that the amount advanced on account of the medical department of the army during the first three quarters of the present year was \$14,500; of which \$10,811 have been expended, and for which accounts have been rendered and settled. The amount

paid during the same period, by warrants on the treasury, for claims previously presented and admitted, was \$13,770.

The annual supplies for the several hospitals were transmitted in due season, and received in good order, and, with other property under the charge of the officers of the department, have been fully and satisfactorily accounted for by the returns of the surgeons, which also show the hospitals to be amply supplied in every respect; and although the allowances, as established by existing regulations, have been materially increased and improved, and are of the best quality the market affords, the expenses of the department on this account have, in consequence of the system of responsibility adopted, both in relation to supply and expenditure, been essentially less than heretofore. The average cost for supplies during the last two years has been \$2 56 per man, and the average from 1819 to 1832 was \$2 49 per man; while that of 1817 and 1818 was \$6 19, and that of 1810 and 1811 was \$4 50 per man; making a difference in favor of the present establishment of \$14,000 per annum over that of 1810, and of \$23,500 per annum over that of 1815.

In reply to a remark contained in a recent report of the board of visitors at West Point, it is deemed proper to state that from the returns and the reports of the medical officers, as well as from a recent inspection, the hospital at that place appears to be amply furnished, not only with all that this department is authorized to furnish, but with many additional articles which do not come strictly within its estimates. The appropriations for the army and for the Military Academy have always been entirely distinct; and if it is thought advisable, in compliance with the intimation of the board of visitors, to establish allowances for that institution, which has heretofore been furnished from the supplies of the army, beyond what is either authorized or required at the military posts, it is respectfully suggested that a special estimate be hereafter made for that purpose.

The whole number of deaths reported in hospitals during the first three quarters of the year was but 108, or a fraction over one and a half per cent. in the aggregate of the army. Of these 25 occurred at Jefferson Barracks, 19 at Fort Gibson, 6 at the dragoon encampment near Fort Gibson, 6 at Fort Jesup, 5 at Fort Armstrong, 5 at the Bay of St. Louis, and 42 at the other posts; of which 21 were from consumption, 16 from remittent and intermittent fever, 11 from intemperance, 7 from cholera, and 53 from other causes.

The law graduating the pay of the surgeons and assistant surgeons according to length of service, and requiring an examination by a medical board previous to appointment or promotion, is believed to have been of essential advantage to the army by securing to it the talent and the professional knowledge which are absolutely necessary to the performance of the important duties that devolve upon an officer of the medical department as soon as he enters the service. Of 121 applicants who had been recommended as qualified for appointment, and who were authorized to present themselves for examination, 50 have failed to attend, and of the remainder but 44, or somewhat over one-third of the whole number have been found qualified for the commission applied for. The army surgeon is liable at any moment to be called in to decide in the most critical cases remote from all professional advice and assistance, and should not only be well grounded in the elementary branches of his profession but be sufficiently versed in the details of practice to prepare him for all its responsible contingencies the moment he reports himself for duty. The medical board have therefore been instructed to make a full and accurate examination of every candidate in anatomy and physiology, surgical anatomy and surgery, theory and practice of medicine, materia medica and pharmacy, chemistry, obstetrics, and forensic medicine; to report the positive merit of each candidate in the respective branches and their relative merit on the whole examination; agreeably to which they are appointed and take rank in the department.

I have respectfully to call the attention of the department to the condition of the hospitals at the several military posts, many of which are entirely destitute of suitable accommodations for the sick. A large portion of the buildings appropriated to this purpose have been erected a long time and were built of perishable materials, and in a hasty manner, to meet the exigencies of the occasion; while at most of the works recently completed no provision is made for the sick, who are necessarily placed in damp casemates, or in temporary buildings entirely unfit to protect them from the inclemencies of the weather or to preserve the property under the charge of the medical officers.

Agreeably to instructions, the medical board recently made a special report on the condition of the hospitals at eighteen posts visited by them, and of this number but three were found to be well built and of good materials, and the internal arrangement of these is essentially defective. Hospitals of the first class are now required at four, of the second class at one, and of the third class at three of them. Those heretofore erected have afforded very imperfect accommodations in proportion to the expense incurred. It is therefore proposed that they be hereafter built on plans to be furnished by the department, adapted to the size of the command and so constructed as to admit of enlargement and to afford the necessary wards and offices at the least additional expense.

An estimate has been furnished of the amount believed to be required for this purpose for the ensuing year, and a special report will be made designating the several posts at which new hospitals now are or will shortly be required, and those where additions, alterations, or repairs only are necessary.

Very respectfully, your obedient servant,

JOS. LOVELL, *Surgeon General.*

Hon. LEWIS CASS, *Secretary of War.*

No. 7.

REPORT FROM THE ENGINEER DEPARTMENT.

ENGINEER DEPARTMENT, *November 15, 1835.*

SIR: In compliance with your instructions, I have the honor to submit the following report, relating to the operations of this department during the year ending on the 30th of September last. It is accompanied by three tabular statements, marked A, B, and C. The first two relate to its fiscal concerns, and the last exhibits the works projected by the board of engineers which have not been commenced, and an estimate of their cost.

FORTIFICATIONS.

In consequence of no appropriation having been made for this branch of service at the last session of Congress, the operations at the several works have been limited to the application of balances of former appropriations, and contracted to the degree necessary for placing in security and in a state of preservation those parts already commenced rather than in continuing the constructions then in progress. This obliged me to change the location of some of the officers, to dispense with the services of artisans, mechanics, and laborers, whose experience and skill it will be difficult if not impossible to replace, and to lay up and dispose of materials and machinery.

A recommencement of operations will be attended with embarrassment and delay, and imposes upon me the necessity of presenting large estimates, which a vigorous prosecution of the different works now calls for to place them in the situation they have lost.

I also beg leave to request that the propriety of a speedy action upon these estimate may be represented to Congress, that advantage may be taken of the coming winter to enter into timely preparations.

Fort Independence, Boston harbor.—The funds available for this work have been applied during the past season in procuring stone for the face of the scarp wall, and 36,431 superficial feet of the 55,000 required for the modified plan have been prepared.

Fort Warren, Boston harbor.—As soon as the preparatory measures for commencing the masonry of this fort, detailed in my report of last year, were completed, as large a force of masons as could be procured were employed on its construction.

It is anticipated that by the close of operations this year from 4,000 to 5,000 cubic yards of masonry will have been laid and about two-fifths of the entire excavations and embankments have been effected.

Fort Adams, Narraganset Roads, Rhode Island.—Nothing has been done at this work since last March. The balance of the funds available last fall were employed very efficiently in closing operations for the winter.

In consequence of no appropriation being made for a recommencement in the spring, it was found necessary to dispose of the horses and oxen, and make such other dispositions as practicable for the preservation of the works.

Fort Schulyer, Throg's Neck, East river, New York.—It was hoped, from the ample preparations made last year, and the funds available for their application, that the construction of this fort would have been prosecuted the present year with much vigor. But though materials and facilities of every description have been in waiting, it has been impossible to procure a sufficient force to carry on the works with the progress that was desired. No exertion has been spared to facilitate the operations, either by letting parts on contract or by hired labor; and unavailing efforts have been made to collect the necessary force in Boston, Newport, Connecticut, and the western part of New York. The foundations of the sea wall have been laid from its commencement at the southern redoubt to its extremity at the northern. The superstructure of about one-third of this extent has been built to its full height, and that of the remainder to about one-third; the most difficult parts of the foundation of other parts of the work have also been laid.

A large crane, a number of trucks, scows, &c., have been added to the facilities prepared last year, and a railroad at the quarry at Horseneck is now constructing.

It is hoped that much work may still be done the remainder of the season.

Fort Columbus and Castle William, Governor's island, New York.—The repairs of these works have been prosecuted with as much rapidity as the force at the command of the officer in charge would permit; should he be able to increase it sufficiently, the former fort will be entirely completed this fall, except the laying some of the gun traverses, which must be postponed until funds for that purpose can be obtained.

The measures deemed necessary for repairing the latter work have been attended with difficulty and delay. The exterior wall of the battery has been confined, by tension braces, to the interior, to prevent its inclination outwards from the weight of the arches of the casemates above. Arrangements have been made for laying the platforms of the second tier of guns, and the repairs of the roofs have been commenced. Nothing has yet been done to the south battery, except to remove the old walls furthest from the parade, that supported the platforms, and, with the materials thus procured, to build the foundations of the traverses. The wall next the parade has been left as an interior revetment of the rampart.

The constant employment afforded to mechanics and laborers of every description in the city of New York renders it very difficult to procure their services on the island, which has operated very unfavorably to these works the past season.

Fort Delaware, Delaware river.—The walls of the old fort have been razed, and the materials applied to strengthening the dikes around the island. The quarters of laborers, overseers, master workmen, and superintendent are completed; as also workshops, storehouses, lime sheds, and stables; the canals and necessary roads have been constructed, and the drainage of the whole island rendered perfect. The wharves have been repaired, several thousand bricks cleaned for future use, and the cranes necessary for the reception of stone completed. A supply of excellent building stone, a large quantity of piles, and square timber for the grillage and foundations of the new work have been received. The hydraulic machinery, with a steam-engine for propelling it, together with three pile engines, have been constructed; the position to be occupied by the new work has been examined by boring, and the nature of the soil ascertained.

All the arrangements were perfected at the close of last year for receiving materials in large quantities, and for commencing and rapidly progressing with the foundations of the fort in the spring; but it then became necessary to suspend the work, and confine operations to the receipt of such materials as had been contracted for, keeping the laborers employed when not otherwise engaged in tearing up the old foundations, and excavating one front of the new work.

Fort Calhoun, Hampton Roads, Virginia.—As contemplated in my last report, the balance of the stone required for the formation of the mole has been received, and deposited over the foundations of the walls of the fort, so that there is now acting along their whole extent a greater weight, by upwards of 20,000 tons, than is estimated will be brought upon them when the fort is completed and garrisoned.

Though an accession of weight continues to cause subsidence, it is in a continued decreasing ratio, and should there be no evidence of a contrary nature by next spring, it is proposed to resume the construction of the walls, for which purpose an estimate is submitted.

Fort Macon, Beaufort, North Carolina.—As announced in my last report, this fort has been completed, and is now garrisoned.

Fort Caswell, Oak island, North Carolina.—This work was reported to you last year to be in readiness to receive a garrison. Since that time the department has been informed that in the storms so frequent on that coast inroads have been made in the dikes by the sea, and a breach finally created, which even threatens more damage than has yet taken place. The walls of the fort have also had some motion since they were erected, causing injuries to the arches of the caponnières and crenated galleries, and give indication of insufficient stability to resist the weight tending to their overthrow. The funds originally available were not sufficient to construct the breast height walls, the parapets, furnaces, &c., which are necessary for its completion. An estimate to remedy these defects for the construction of the parts mentioned, and for the security of the site, is accordingly submitted for consideration.

Fortifications in Charleston harbor, South Carolina.—Operations in this harbor have consisted in applying the balance of the appropriation of 1834 to the prosecution of the plan for protecting the site of Fort Moultrie. This plan, so far as tested, has answered the desired end, and a large accumulation of sand has taken place on the shore before exposed to the abrading action of the sea.

For want of funds the operations were abruptly arrested last March, the works brought to as favorable a close as circumstances would permit, and the officer charged with their superintendance otherwise disposed of.

The estimate for next year contemplates the renewal of the construction of Fort Sumter, and the prosecution of the plan for protecting Sullivan's island.

Fort Pulaski, Cockspur island, Georgia.—On September 30, 1834, the piling and construction of the grillage for the foundation of this work was completed, and the masonry commenced. Since that time the available funds have been applied in laying 5,165 cubic yards of masonry; to the completion of all the counter arches, and cross walls of the rampart, to a height of seven feet above the grillage, and to the completion generally of the counter arches of communication, and the piers, scarp and rear walls, and counterforts of the north, northeast, and southeast fronts to a height of more than twelve feet above the grillage. The work is represented by the local engineer to be in a favorable condition for a vigorous commencement of operations so soon as further means are provided.

Fort Marion, St. Augustine, Florida.—Nothing has been done at this work the past year for want of funds.

Fort Pickens, Pensacola harbor, Florida.—This fort was completed in October last, and occupied by a garrison.

It has been since necessary to give increased dimensions to the scarp walls of the two faces of the northeast bastions, to insure their permanency against the immense pressure of the sand ramparts. It is satisfactory to state that all parts of the walls supporting these heavy embankments are now in excellent condition, as proved by the severe test to which they have been subjected from the unusual and heavy rains of the past summer.

For the causes alluded to in my last report, a further appropriation is still necessary for the final completion of this work, an estimate for which is accordingly submitted.

Fort on Foster's bank, Florida.—At the date of my last report the construction of the platform foundations of this work was in progress, and owing to the exposed position of the site, required great labor and activity to lay the masonry in a secure and proper manner. The funds arising from the appropriation of 1834 were at this time exhausted, but, seeing the great injury, if not complete destruction, that would result to the works should they be suspended at that stage of their progress, it was determined by Captain Chase, the local engineer, to continue them on his own credit, in anticipation of the appropriation of 1835. When he became aware of the non-appropriation for fortifications the works had been in progress nearly four months after the available means had been exhausted. The safety of the foundations had been secured, and the whole structure raised to five feet above high-water level. But, under previous appropriations, a large quantity of materials had been collected, and were then deposited on the narrow strip of land composing a part of Foster's island, which were necessarily much exposed to injury, and, indeed, to total loss, from the changes produced by storms on the recently formed island. It was therefore very desirable they should be used in the walls of the work as rapidly as possible, and Mr. Strong, the contractor, did not hesitate to proceed with the construction on his own responsibility, relying upon the appropriation of 1836 to remunerate him for his services. The work is now raised two feet above the tops of the lower tier of embrasures, and all the piers of casemates are raised ten feet above the parade. In consequence of these arrangements, by which great loss has been saved to the United States, a large amount of arrearages has accrued against the fort, which is embraced in the estimate for 1836. This estimate contemplates the completion of the work by the end of next June.

Fort Morgan, Mobile Point, Alabama.—Arrangements were made, in obedience to your instructions, to fit up thirteen casemates at this fort for officers' quarters, store and guard rooms; the first of these are nearly completed, and the balance of the funds, as far as they go, will be applied to the others.

Fort Livingston, Grand Terre, Louisiana.—Nothing has been done at this work, for the reasons mentioned in my last report.

The expenditures hitherto made have been principally for the construction of temporary buildings. A person is placed on the island for the purpose of taking care of the materials and houses; and one laborer, under his direction, is engaged in cutting the ditches that are considered beneficial to future operations.

Contingencies of fortifications.—The funds available under this head have been applied to repairs of Fort McHenry, to Fort Macon, to construction of experimental battery at the Washington arsenal, to fitting up magazines of forts on the Gulf of Mexico, constructing a fence at Fort Hamilton, to repairs of Fort Jackson, survey of Provincetown harbor, and contingencies of Engineer department.

The frequent calls made upon the department for repairs to fortifications, which are essential to their preservation, security, and efficiency, render it necessary that a larger sum than usual be placed at its disposal for this purpose. This will explain to you the cause why the item under this head in the estimate for 1836 is larger than customary.

I beg leave respectfully to represent at this place that most of the works now in progress will be completed in the course of a few years, and that a regard to economy and timely preparation obliges me to call your attention to the subject of continuing the system of contemplated defence along the coast; I therefore respectfully suggest that a commencement of the works for the defence of Portland, Me., Portsmouth, N. H., Provincetown harbor and New Bedford, Mass., the debouche of the Chesapeake and Delaware canal, Delaware river, Baltimore, Md., and that intended to complete the defences of Pensacola harbor and navy yard, be taken into consideration; an estimate for which is submitted.

The influence which these positions exert upon our internal defence and intercourse is well known to you, and need no comment from me, at this time, for the preference given them over others.

HARBORS AND RIVERS.

Chicago harbor, Illinois.—Notwithstanding the difficulties attendant upon procuring supplies of materials and workmen in a country whose whole energies are necessarily exerted for the accommodation of a numerous and rapidly-growing population, the works at this place have been successfully prosecuted, and to an extent commensurate with the available means. The piers forming the artificial harbor have been extended about five hundred feet, and enclose a channel of two hundred feet breadth, varying from three to seven feet deep, ready for the operations of a dredging machine, by which a free passage will be opened into the channel of the river. The north pier now extends into the lake 1,260 feet, and to twelve feet water; the south seven hundred feet, and to seven feet water. In their present incomplete state great protection has already been afforded to the increasing commerce of the place, and as many as five schooners have at one time discharged their cargoes under their shelter.

Since the opening of navigation to the 30th of September upwards of two hundred vessels have arrived at this port, showing that its speedy completion, which is anticipated during the next year, should the estimate now asked for be granted, will confer great advantages not only on Chicago and its immediate neighborhood, but on the whole country to the west and south, as far as the shores of the Mississippi.

Harbors on the south shore of Lake Erie.—The condition and progress of these works are set forth in detail in the reports of the general superintendents; and as their importance to the commerce of the whole western country is universally felt, they are herewith annexed, marked D and E, to which I beg leave to refer you.

Genesee river and Big Sodus bay, Lake Ontario, N. Y.—The extent to which the important improvements at these places have been prosecuted during the last fiscal year is stated by the immediate superintendent in his report to this office, which is appended and marked F, to which I beg leave to refer, as giving a concise view of their present condition.

It is now very apparent that, to secure the continuance of the advantages of these works, the temporary piers at the first position ought to be replaced by permanent constructions; to carry which project into effect an estimate is submitted.

Oswego, Lake Ontario, N. Y.—The operations for the improvement of this harbor have been confined to the collection and proper distribution of stone for the construction of the mole and pier, and in paving the mole with large blocks of limestone. About 4,084 cords of stone have been applied to the first-mentioned objects, and 1,115 tons of limestone to the second. A sufficient quantity of stone has been deposited in the mole to render it secure the coming winter.

Monument on Steel's ledge.—On the 14th ultimo this monument was completed, except putting in the copper bolts required for the upper courses of stone.

Piers at Kennebunk, Maine.—In making preparations for carrying into effect the wishes of Congress in reference to the erection of the eastern pier at this place, it was ascertained that the appropriation was not sufficient to complete it upon the plan proposed; and as the new work would be exposed, in its unfinished state, to the action of the sea during the autumnal and winter storms, the propriety of commencing its construction was doubted. Nothing has been, therefore, done this season but to procure materials and prepare the stone for the upper courses of the work. A large quantity of fine blocks of stone are now ready, and everything is prepared for commencing operations next spring, except contracting for the masonry, which the available funds did not justify.

Merrimack river, Mass.—The pier leading from Salisbury shore to Badger's rock has been completed, and extended nearly two hundred feet into the river, terminating upon a ledge of rock one foot under water at low tide. When completed it will afford shelter and protection from the ice to three ships at a time, affording them a harbor of fifteen feet of water at low tide. The effect experienced from this pier last winter, in its then situation, was very beneficial, and the influence it has exerted in widening and straightening the channel over the Hamp sands is very great.

Though it is impossible to state at this time what may be the consequence of the public works on the bar at the mouth of the river, it is satisfactory to know that vessels drawing seventeen feet water can now, without difficulty, pass it; and it may be supposed that in time a safe refuge for vessels, during the stormy seasons, will be prepared on that part of the coast.

Provincetown harbor, Mass.—The parts of the beach at this place that are planted with grass are represented as doing well, and as giving evidence that the object in view, viz: the protection of the harbor, will be attained. Upwards of two hundred acres have been planted this season, and the estimate for next year contemplates the setting out of a similar quantity.

Plymouth beach, Mass.—Nine hundred feet of stone will have been constructed on the west side of the breakwater at this place since my last report, and 1,500 feet of brush fence, for the purpose of arresting the drifting sand. Grass, for the same object, has been set out at various points along the beach, to the extent of 1,000 feet, which, together with the general state of the beach, is represented by the agent to be in good condition.

Hyannis breakwater, Mass.—The present length of this breakwater is one thousand and fifty feet, carried to its full height, and fifty feet partially finished, which will afford considerable protection to the coasting navigation. Many difficulties to its rapid progression this season are represented by the agent to have existed, and which he has used every exertion to overcome. The preparations he has made, and which have consumed a part of the labor of this year, will facilitate the operations of the next.

Hudson river, N. Y.—In my report of last year I stated the preparatory measures that had been taken to carry into effect the wishes of Congress in reference to the improvement of this river, and the apprehension of the department lest the plan designated by Congress should prove inadequate to accomplish the object in view. An examination of the river, between the points where the principal obstructions to its navigation are found to exist, by the officer charged with its improvement, led to conclusions so different as to the realization of all the benefits anticipated by the projector of the plan, that it was deemed advisable to adopt the recommendation of this officer, and refer the whole subject to the board of engineers. The plan reported by the board, which is herewith annexed, marked G, is confirmatory of the general principles of the original plan, yet differing in some degree in carrying those principles into execution. It contemplates, first, the removal of the existing deposits; and, second, the prevention of future accumulations.

The means recommended for the accomplishment of these objects are dredging, contracting the bed of the river by employing longitudinal piers, and protecting the channel shores from the action of the current.

It was believed that by the first process a channel would be obtained adequate to all the wants of the river navigation; that the erection of piers and protection of the channel shores would preserve the channel so formed free from future obstructions.

Early preparations were made for carrying this plan into effect; and as soon as a system of operations could be matured, called for by the importance and difficulty of such an undertaking, contracts were effected for carrying on the operation of dredging, for the delivery of stone, the formation of dams, and protection of the shores of the channel, as far as the available means would authorize.

Owing to many unfavorable circumstances, these contracts have not been completed, though this great work may now be considered in full operation; and from the change that has already occurred at the principal obstruction, the happiest result may be anticipated.

Many beneficial alterations in the proposed plan will no doubt suggest themselves in the process of execution; that of substituting imperishable for perishable materials in the dams, at a great saving of cost, has already taken place.

The estimate presented for next year contemplates the removal of the principal obstructions above and below Albany.

Harbor of Newcastle, Marcus Hook, Chester, and Port Penn, Delaware river.—Concurring fully in the views of the officer charged with the improvements and repairs of these harbors, I hereto append his report, marked H, to which I respectfully call your attention, as furnishing a concise history of the operations hitherto pursued, and a statement of their present condition.

You will perceive that there is no harbor for the protection of vessels navigating the Delaware, except at Chester; that nothing can be done with the partial appropriations hitherto made, and I therefore beg leave to present to you the estimate of the superintendent.

Ocracoke inlet, North Carolina.—The report of the officer charged with the improvement of this place, showing in detail the cause and nature of the obstructions to the navigation, as well as his views for their removal, is herewith submitted for your perusal, marked I.

Cape Fear river, North Carolina.—Some interruption to the operations on this river has necessarily occurred since my last report, resulting from the death of the officer charged with its improvement.

From an inspection made under the direction of this department you will perceive the present state and condition of the works, and the measures recommended for the accomplishment of the desired end. So much of the report as pertains to this object is annexed and marked K. Concurring in the suggestions therein presented, an estimate for carrying them into effect is accordingly submitted.

Savannah river, Georgia.—The progress of the improvements on this river has not answered the expectations of the project for the year, or the anticipations contained in my last report.

It was contemplated to complete the foundation of a permanent obstruction between Hutchinson and Argyle islands, and to remove, by dredging, the shoals at the wrecks, Garden bank, and Upper Mud flat. All the preliminary arrangements for the first-mentioned object were made, materials were collected, and operations commenced, when the local engineer was made aware that, by the second article of the treaty of Beaufort, concluded in 1787, between the States of Georgia and South Carolina, no obstruction whatever should be made by the citizens of either State in the channel it was contemplated to close. A suspension of operations was therefore required by the department; the subject was referred to the United States attorneys in those States, and a consequent application to the respective governors will be made at the suitable time.

Although every exertion was made to hasten the construction of the dredge-boat, machinery, &c., for the other operations, owing to a scarcity of workmen and a breakage of a part of the machinery when first put in operation, the sickly season commenced on the river before much could be perfected, and not more than 2,800 cubic yards of sand and mud have been removed from the wrecks.

It is hoped, however, that no cause will happen to retard the operations about to be recommenced, and that their progress will be commensurate with the efforts made for their completion.

Inland Pass, between St. John's and St. Mary's, Florida.—The officer to whom was assigned the superintendence of the improvement of this pass could not spare his attention from the works on the Savannah river to make an examination of the impediments to be removed till about the first of last June.

So soon as the project submitted by him could receive the sanction of the department, measures were entered into for the construction of a dredge-boat and the necessary mud flats for clearing out the channel; and it is anticipated that the operation will be commenced by the first of next January.

Ochlochney and Apalachicola rivers, Florida.—The improvements of these rivers were brought to a close upon the completion of the operations reported to you last year.

St. Mark's river and harbor, Florida.—The obstructions in the harbor, consisting of oyster beds and mud shoals, and extending over a space of about two miles, have been removed. A canal has been cut through the natural bridge at Rockhaven, about six hundred yards long, which opens the river and swamp for scow navigation fourteen miles above the natural bridge to a point about two miles south of the St. Augustine road. The funds appropriated for these works have been expended, and the operations brought to a close.

Mobile harbor, Alabama.—The difficulties attending this improvement were stated in my last annual report. The operations under the present contractor have been prosecuted with much vigor and great success, notwithstanding the prevalence of bad weather, and occasional damage sustained by the machinery from the contact of vessels. An addition of fifty feet has been added to the pass, making at this time a clear passage of 150 feet in width and ten feet in depth, and it is anticipated that its width will be extended to 200 feet by the first of January. The application of the appropriation of 1835 will afford an additional width of 250 feet, so that the whole pass will be 150 yards wide. This is deemed sufficient for the easy entrance and passage of any vessel, and its accomplishment will prove very beneficial to the commerce of that country.

Pasagoula river, Mississippi.—As anticipated in my last report, the then existing contract for the improvement of the mouth of this river was abrogated, and a new agreement made for carrying on the operations with greater vigor.

A cut has now been made fifty-five feet wide, affording five and a half feet water at low tide, which is deemed sufficient for any vessel navigating the river. But, from the nature of the sand flat through which

the excavation is made, it is feared that the advantages which have resulted from dredging will not be of long continuance.

The present contractor has made every exertion to facilitate the work, and has encountered many difficulties from the unfavorableness of the season.

No further appropriation will be asked for.

Ohio, Mississippi, and Red rivers.—For the condition of the improvements of these rivers, I beg leave to refer you to the reports of the officers charged with their superintendence; they are appended, and marked L and N, to which are annexed the reports of the officer of this department, who inspected the works on the first from the falls to its mouth, and of the second, from St. Louis to New Orleans, (marked M.)

Arkansas river, Arkansas Territory.—In consequence of the continued engagements of the superintendent, Captain Shreve, charged with carrying on this improvement, nothing has yet been done towards the application of last year's appropriation. Arrangements have been made, however, to work one of the steam snag-boats, belonging to the Mississippi river, for two months during the ensuing winter, on the Arkansas, which it is believed will much advance the interests of its navigation.

Cumberland river.—The obstructions to the navigation of this river at the point called Devil's chute, have been removed, with the exception of about forty yards square of rock in the middle, which a rise in the river arrested.

A wing dam has been constructed at Line island from the main across the island chute; another from the foot of the first island to the head of the second, crossing the keel-boat chute; and a third from the foot of the second island to a small island below, so that the water is confined to the left shore along the whole extent of the islands.

The steamboat President, sunk in the island chute at this place, has been raised, and a number of snags, logs, roots, &c., have been cleared out of the channel.

The wing dam at the head of Harpeth shoals has been added to and strengthened, and the one at the foot of the shoal completed, and appears to answer the purpose intended.

The repair of the dam at Davis's ripple was commenced, and necessarily suspended from sickness and death among the laborers. All the snags, logs, &c., from Nashville island to Line island, have been removed, and it is anticipated that the obstructions in and near the channel, down to the mouth of the river, will be removed this fall. The estimate presented this year is to complete the contemplated improvement of this river. The report of the officer of engineers who inspected these works is appended, marked O.

LIGHT-HOUSES AND BEACON-LIGHTS.

The condition of the light-houses on the south shore of Lake Erie will be seen from the report of the officer to whom their construction is committed, marked E. Those at Genesee and Big Sodus, from report marked F.

The foundation of the light-house at Oswego has been constructed, and stone prepared for the superstructure. The funds now available will be sufficient for the tower, but not for the lantern and lamps.

Upon commencing the preparatory measures for constructing the light at Goat island, it was ascertained that the funds provided by Congress were inadequate to its completion, and it was decided that, under the laws, the work could not be commenced. The report and estimate on this subject has been referred to the proper department, as well as those in relation to Black river, Cunningham creek, and Oswego, in order that, if deemed necessary, they may be laid before Congress.

ROADS.

Roads from Detroit to Fort Gratiot, and to the mouth of Grand river, in the Territory of Michigan.—The report stating the present condition of these roads has not yet been received.

The first has been completed, though, in consequence of the balance in the treasury (without the knowledge of the department) having been carried to the surplus fund, there are some arrearages due on the road, which will require its reappropriation.

Road from Detroit to Chicago.—The appropriation of last year was applied in securing as good a road as was practicable throughout its entire length. Contracts were therefore made for constructing the worst parts of the road first. In some instances it is merely to be grubbed and rendered even and smooth; in others, to be drained and turnpiked as heretofore; and those sections of the road which were tolerably good in their natural state have been omitted.

The whole length of road contracted to be constructed is twenty and a half miles, and is to be completed by the 20th of December next.

Bridges have been contracted for over Christian and Crooked creeks, which, when completed, will render that part of the road remaining to be finished at the date of my last report passable for vehicles of every description at all seasons of the year.

No part of the last appropriation could be spared for the erection of a bridge at Bertrand, over the river St. Joseph's, which will require an additional sum of \$4,000. An estimate for which is accordingly presented.

Saginaw road, Michigan Territory.—The section of road put under contract this year passes over the lowest land on the route from Detroit to Saginaw, and the available funds would only authorize ten miles of this road to be put under contract.

The road is to be opened one hundred feet wide, fifty feet of which is to be grubbed and cleared of timber, brush, &c., and where it passes over marshes and swamps is to be causewayed.

A bridge over Cass river is in a state of forwardness, and will be completed this year, as well as all the parts of the road now under construction.

Territorial road from Sheldon's to the mouth of St. Joseph's.—Contracts for opening and constructing those parts of this road which most required it were made in December last; parts of eighty-four and a half miles were put under contract, which, with one or two exceptions, are completed.

Bridges over the Kalamazoo, in two places, are constructed, as well as over some of the smaller streams on the route. The road is now generally good, and the funds last appropriated have been of great service to the public.

Territorial road from Niles to the mouth of the river St. Joseph's.—Eighteen and a half miles of this road were put under contract last November, which comprises nearly all the low land along the line.

They are now nearly finished, and will be entirely so before winter. Bridges are constructing over the small streams, but, to complete the road, a bridge is necessary across the St. Joseph's at Berrien, which will cost about the same sum as that at Bertrand.

Territorial road from Clinton to the rapids of Grand river.—Owing to the length of time occupied in locating this road, the sale of contracts for its construction did not take place till about the first of last May. Parts of twenty miles, together with two bridges over the river Raisin, one over Grand river, and seven smaller streams, were then put under contract, to be completed by the first of the present month, and it was anticipated by the superintendent would be finished by the time fixed.

The funds expended on this road will not be of much avail, unless an additional appropriation be made of \$8,000. A judicious application of this sum to those parts of the road most requiring it will make it quite passable.

Road from La Plaisance bay to the road leading from Detroit to Chicago.—The whole of this road is either completed or under contract; the contracts to be fulfilled and the road entirely finished by the 31st of December next.

Thirty-three miles, with all the bridges, culverts, side drains, &c., are now completed, and fifteen miles more, embracing the whole length, are in process of execution.

Such of the road as was made on the plan directed in 1833 is now and will continue in fine condition, and it is to be regretted that a more economical system had to be pursued, as the parts so constructed do not wear as well. This road has very essentially contributed to produce the unexampled sale of public lands within the district in which it lies, and is now one of the great thoroughfares for Michigan, Indiana, and Illinois.

Road from Port Lawrence to Adrian.—This work, originally a territorial road, has had expended on it \$9,913 08 of the \$10,000 appropriated towards its construction in 1834.

Twenty-one and a half miles have been constructed, principally through a swamp, and some labor bestowed on about four miles more; the balance of the funds will be applied on those parts most requiring it.

All the contracts heretofore made are fulfilled, which, however, does not complete the road.

Territorial road from Vistula (now Toledo) westwardly to the Indiana State line.—Of the \$10,000 appropriated by Congress for the construction of this road, \$9,446 30 have been expended.

Fifty-two miles were put under contract, to have such labor bestowed on them as was deemed sufficient to make the road passable. The contracts on forty-six and a half miles have been fulfilled, and five and a half are yet in progress, to pay for the completion of which the unexpended balance is deemed sufficient.

Road from Line creek to the Chattahoochee, Alabama.—Forty-five miles of this road were completed last December, and are reported to be in good condition; the remainder of the distance to the Chattahoochee, eighteen miles, have been opened by the citizens of that country.

Owing to a misapprehension of the agent, contracts were entered into for the whole amount of the appropriation, without taking into consideration his own compensation. This has produced an arrearage of \$1,544 50, which is included in the estimate for next year.

Road from the north boundary line of Florida to Apalachicola.—The survey of this road not having been finished, nothing has yet been done towards its construction.

Road from Memphis to the St. Francis river.—The operations on this road since the last annual report have been prosecuted as rapidly as circumstances would allow.

A space of 160 feet wide has been cleared throughout its entire extent, except two and a half miles; a breadth of thirty-four feet, along a given line, is cleared of all stumps, roots, &c., to receive the embankment.

Contracts are made for the whole quantity of embankment, amounting to 1,021,994 cubic yards, as well as for the construction of all the bridges, except those over sand slough, and some of the more unimportant ones on the east side of Blackfish lake. It is anticipated that the whole cost of the work, when completed, will come within the amount appropriated for its construction.

The delay which has occurred in the operations of this year has arisen from the contractors not having been prepared to take advantage of the first of the working season; from the frequent overflows to which that country is subject; from great sickness among the laborers; the entire abandonment of the work, and from the great demand for labor on the Mississippi river, and in that country generally.

Arrangements have been made this season for substituting oxen and scrapers for shovels and barrows; and it is believed that a sufficient number of hands can at all times be commanded as can then work to advantage.

It is hoped that by these arrangements one great cause of delay will be avoided, and the work will progress more rapidly.

Cumberland road in Indiana and Illinois.—No report has yet been received from the officer charged with this work.

Cumberland road in Ohio.—For the condition of that portion of this road yet in the hands of the general government, as well as for the progress made in its construction, I beg leave to refer to the report of the superintendent, herewith submitted, and marked P.

Cumberland road east of the Ohio.—The requirement of the act of Congress of March 3, 1835, forbidding the application of any of the funds appropriated at the last session towards the repair of this road until the whole should have been accepted by the several States in which it lies, has been carried into effect; and for the condition of the road, as well as the manner of the application of these funds, I beg leave to call your attention to the report of the superintendent, marked Q.

Northern boundary of the State of Ohio.—As soon as the officer to whom this duty was assigned had made the necessary arrangements for the prosecution of the improvement of the Hudson river, this service was resumed, and the observations for determining the line were completed during the summer. This officer has not yet had time to finish his calculations and make his final report on the subject; though a statement of the approximate results is expected by the first proximo, which will be laid before you.³²

Monument to the memory of General Brown.—It affords me gratification to State that this monument is complete and in its place.

Lithographic press of the War Department.—The funds annually appropriated for this establishment were only sufficient for the compensation of the pressmen. Nothing then was left for the purchase of

³² See Appendix, marked R, for a partial report on this subject.

materials, the repairs, &c., which were indispensable to its operation. It was found necessary, therefore, in May last, to suspend its operation, and apply the balance of the funds to the liquidation of the debts incurred since its first commencement.

Military Academy.—The condition of this institution and the manner in which it continues to sustain its high reputation is fully shown by the report of the board of visitors who attended the last annual examination of cadets.

The report is marked S, and is herewith appended.

Board of engineers.—The duties of the board have been the same as heretofore, and satisfactorily performed.

Bridge over the Wabash.—The information called for by the resolution of the Senate of the 16th of January, 1835, has not been furnished to the department, owing, it is supposed, to the constant and arduous duties of the officer who was directed to procure it. As soon as it is received it will be laid before you.

Office of the Chief Engineer.—Although one part of the appropriation annually referred to this department for application was omitted at the last session of Congress, the current business of the office has not been lessened. This has arisen from the necessity of devising ways out of small means to preserve the vast interest at stake, and to place in a train of execution other works committed to its charge. The embarrassment resulting from the small number of officers at the command of the department, the loss to the public service, and the little credit to which most of our public works entitle us, continues to be felt, and becomes more apparent as circumstances arise, calling for the active energy and skill of a body of professional engineers, combining experience with science, and whose characters and interests are identified with a faithful performance of the duties assigned them.

This embarrassment, or rather necessity, has been so often laid before you, the proofs of its existence so repeatedly given, and the unavoidable consequences as frequently demonstrated, that a repetition at this time is deemed not only uncalled for, but out of place; and I am only impelled to a reassertion of the fact by a sense of my own duty to the public, the honor of the corps under my superintendence, and justice to their unceasing but inadequate efforts.

Should it be deemed advisable by Congress to continue the system of defence and internal improvement heretofore considered called for by the interests of the country, it is hoped they will not leave their work unfinished by withholding the means of carrying their wishes into execution. I therefore respectfully recommend that such an increase be made to the present corps of engineers as was provided for in the bill of last session, and which it is believed would have received the sanction of both houses of Congress had time permitted.

I beg leave further to remark that, in consequence of the gradual increase of the business of the department for many years, the duties now required of the clerks are too onerous, either for the number provided or compensation allowed.

The prompt transaction of the necessary business of the office requires at least five clerks, whose duties are of the same magnitude and nature as those of the civil departments, and whose pay I earnestly recommend to be placed on the same footing.

All of which is respectfully submitted.

C. GRATIOT, *Brigadier General, Chief Engineer.*

Hon. LEWIS CASS, *Secretary of War.*

A.

Statement exhibiting the fiscal concerns of the Engineer department for the year ending the 30th of September, 1835; in which the funds that had accrued within that period, and the manner of accruing, are stated and accounted for by showing their application; and showing also the amounts expended upon the several works under construction.

Designation of the works.	Available for 1835, and whence derived.			Amount available accounted for.			Aggregate accounted for, corresponding with the aggregate available.	Amount expended on each work up to September 30, 1835.
	From appropriations for 1835.	From balances remaining in the treasury, and remaining in the hands of agents, Sept. 30, 1834.	Aggregate available.	Amount applied, corresponding with the amount of accounts rendered for settlement to Sept. 30, 1835.	Amount undrawn from the treasury October 1, 1835.	Balances in the hands of agents October 1, 1835.		
FORTIFICATIONS.								
Fort Adams.....		\$46,840 39	\$46,840 39	\$42,624 93	.....	\$4,215 46	\$46,840 39	\$862,369 35
Reservation of George's island, Boston harbor.....		220 60	220 60	220 60	.....	.....	220 60	65,283 10
Fort on George's island		103,452 14	103,452 14	82,883 15	.....	20,568 99	103,452 14	104,586 31
Preservation of Castle island, and repair of Fort Independence		35,017 91	35,017 91	23,415 55	.....	11,602 36	35,017 91	42,991 64
Repairs at Fort Lafayette, New York.....		2,408 55	2,408 55	254 64	.....	2,153 91	2,408 55	31,232 79
Repairs at Fort Columbus and Castle William.....		49,075 66	49,075 66	31,611 90	\$16,000 00	1,464 46	49,075 66	157,769 48
Fort Hamilton		1,792 62	1,792 62	29 00	.....	1,763 62	1,792 62	479,236 33
Fort at Throg's Neck.....		100,114 87	100,114 87	41,980 39	47,956 62	10,177 86	100,114 87	66,822 15
Fort Delaware.....		65,869 86	65,869 86	44,006 62	.....	21,863 24	65,869 86	107,136 76

A—Continued.

Designation of the works.	Available for 1835, and whence derived.			Amount available accounted for.			Aggregate accounted for, corresponding with the aggregate available.	Amount expended on each work up to September 30, 1835.
	From appropriations for 1835.	From balances remaining in the treasury, and remaining in the hands of agents, Sept. 30, 1834.	Aggregate available.	Amount applied, corresponding with the amount of accounts rendered for settlement to Sept. 30, 1835.	Amount undrawn from the treasury October 1, 1835.	Balances in the hands of agents October 1, 1835.		
FORTIFICATIONS—Continued.								
Fort Monroe.....		\$8,129 31	\$8,129 31	\$7,762 41		\$866 90	\$8,129 31	1,739,046 55
Fort Calhoun.....		88,536 29	88,536 29	72,351 67	\$8,571 81	7,612 81	88,536 29	1,388,791 40
Fort Macon, North Carolina.....		1,446 09	1,446 09	1,331 03	75 00	40 06	1,446 09	349,384 94
Fort on Oak island, North Carolina...		6,044 34	6,044 34	4,795 74		1,248 60	6,044 34	411,485 40
Fort on Cockspar island, Georgia.....		43,327 74	43,327 74	43,327 74			43,327 74	286,184 46
Fortifications in Charleston harbor.....		19,951 63	19,951 63	19,387 88		563 75	19,951 63	324,436 25
Fort at Mobile Point, Alabama.....		3,965 48	3,965 48	188 40		3,777 08	3,965 48	1,026,777 41
Fortifications at Pensacola, Florida...		1,458 40	1,458 40	1,458 40			1,458 40	629,283 74
Fort on Foster's bank, Florida.....		30,200 00	30,200 00	30,200 00			30,200 00	75,159 41
Fort Jackson, Louisiana.....		733 71	733 71			731 71	731 71	633,766 29
Fort at Grand Terre, Louisiana.....		59,467 65	59,467 65	2,748 46	50,000 00	6,719 19	59,467 65	18,280 81
Contingencies of fortifications.....		9,816 71	9,816 71	9,775 10	23 24	18 37	9,816 71	.....
Total.....		677,869 95	677,869 95	460,352 91	122,626 67	94,890 37	677,869 95	.....
INTERNAL IMPROVEMENTS.								
Cumberland road east of the Ohio river.	\$346,186 58	230,623 36	576,814 94	398,987 14	12,273 45	165,554 35	576,814 94	924,931 65
Cumberland road in Ohio.....	200,000 00	118,631 02	318,631 02	283,668 16		34,962 86	318,631 02	896,646 50
Cumberland road in Indiana.....	100,000 00	162,827 22	262,827 22	106,834 23	66,002 00	89,990 99	262,827 22	*479,007 01
Cumberland road in Illinois.....		150,543 36	150,543 36	55,170 71	67,231 97	28,140 68	150,543 36	250,627 35
Road from Detroit towards Chicago...	10,000 00	10,649 58	20,649 58	7,443 32	10,188 92	3,017 34	20,649 58	76,793 74
Road from Detroit to Fort Gratiot.....	3,000 00		3,000 00	2,738 12		261 88	3,000 00	48,567 25
Road from Detroit to Saginaw bay...	10,000 00	14,584 37	24,584 37	12,431 77	10,000 00	2,152 60	24,584 37	49,020 96
Road from Detroit to Grand river.....	25,000 00	14,022 82	39,022 82	14,050 53		24,972 29	39,022 82	28,707 71
Road from LaPlaisance bay to Chicago road.....	10,000 00	8,623 84	18,623 84	12,145 23	5,000 00	1,478 61	18,623 84	34,130 15
Road from Sheldon's, on the Chicago road, to St. Joseph's river.....		20,000 00	20,000 00	16,633 42		3,366 58	20,000 00	16,633 42
Road from Clinton, Chicago road, to the rapids of Grand river.....		8,000 00	8,000 00	2,220 50	4,000 00	1,779 50	8,000 00	9,220 50
Road between Port Lawrence and Adrian.....		10,003 44	10,003 34	9,916 52		86 92	10,003 44	9,913 08
Road between Niles and the mouth of the St. Joseph's river.....		10,000 00	10,000 00	5,000 00	5,000 00		10,000 00	5,000 00
Road from Vistula to the Indiana State line.....		10,003 44	10,003 44	9,449 73		553 71	10,003 44	9,446 29
Road from opposite Memphis, on the Mississippi, to the St. Francis river.	106,000 00	97,766 49	203,766 49	18,317 35	164,000 00	21,449 14	203,766 49	20,550 86
Road from Line creek, Alabama, to the river Chattahoochee, Georgia...		9,460 00	9,460 00	9,430 00		30 00	9,460 00	19,970 00
Road from the northern boundary of Florida to Apalachicola.....		12,000 00	12,000 00		9,000 00	3,000 00	12,000 00	.....
Improving the navigation of the Ohio, Missouri, and Mississippi rivers.....	50,000 00	44,638 40	94,638 40	71,024 75	1,000 00	2,613 65	94,638 40	631,286 35
Improving the navigation of the Ohio river above the falls.....	50,000 00		50,000 00	8,328 10		41,671 90	50,000 00	8,328 10
Improving the navigation of Red river.	50,000 00	51,665 22	101,665 22	91,582 29	9,751 00	331 93	101,665 22	134,917 07
Improving the navigation of Arkansas river.....	40,000 00		40,000 00		40,000 00		40,000 00	15,000 00
Removing obstructions in Savannah river.....	20,000 00	42,339 63	62,339 63	33,604 51	28,600 00	135 12	62,339 63	46,264 88
Improving the Cape Fear river below Wilmington.....	20,000 00	8,229 57	28,229 57	11,580 02	14,050 00	2,589 55	28,229 57	136,987 45
Improving Ocracoke inlet.....		14,288 65	14,288 65	13,069 32	800 00	419 33	14,288 65	111,480 67
Deepening the channel into Pascagoula river.....		10,571 60	10,571 60	3,656 81		6,914 79	10,571 60	18,685 21
Improving the harbor of Mobile.....	17,997 60	10,692 45	28,690 05	6,357 61		22,332 44	28,690 05	35,665 16
Removing obstructions in Apalachicola river.....		448 50	448 50	324 72		123 78	448 50	21,576 22
Improving the harbor and river of St. Mark's.....		3,559 90	3,559 90	3,493 03		66 87	3,559 90	34,963 13
Improving the inland channel between St. Mary's river, Georgia, and St. John's river, Florida.....	15,000 00	9,000 00	24,000 00	2,497 27	18,500 00	3,002 73	24,000 00	15,997 27
Improving the harbor of Chicago.....	32,800 00	23,520 35	59,320 35	36,995 80	3,700 00	18,624 55	59,320 35	68,276 45
Breakwater at the mouth of Merrimack river.....		10,560 28	10,560 28	4,272 99	5,760 00	527 29	10,560 28	54,079 4

* Since closing this statement vouchers have been received for the disbursements in the 3d quarter amounting to \$93,420 72.

A—Continued.

Designation of the works.	Available for 1835, and whence derived.			Amount available accounted for.			Aggregate accounted for, corresponding with the aggregate available.	Amount expended on each work up to Sept. 30, 1835.
	From appropriations for 1835.	From balances remaining in the treasury, and remaining in the hands of agents, Sept. 30, 1834.	Aggregate available.	Amount applied, corresponding with the amount of accounts rendered for settlement to Sept. 30, 1835.	Amount undrawn from the treasury Oct. 1, 1835.	Balances in the hands of agents Oct. 1, 1835.		
INTERNAL IMPROVEMENTS—Continued.								
Preservation of Plymouth beach.....	\$700 00	\$603 09	\$1,303 09	\$1,042 02	.....	\$261 07	\$1,303 09	\$49,105 83
Preservation of Provincetown harbor..	4,400 00	4,639 41	9,039 41	4,524 35	\$4,275 65	239 41	9,039 41	14,434 94
Preservation of Deer island, Boston harbor.....	.....	1,527 99	1,527 99	.....	.....	1,527 99	1,527 99	157,662 01
Breakwater at Hyannis harbor.....	9,000 00	6,994 58	15,994 58	8,604 66	6,500 00	889 92	15,994 58	49,777 90
Piers at the entrance of Kennebunk river.....	.....	9,150 67	9,150 67	3,136 06	3,300 00	2,714 61	9,150 67	12,160 39
Monument on Steele's ledge.....	.....	4,600 00	4,600 00	.....	465 00	4,134 00	4,600 00	.....
Pier and mole at Oswego harbor.....	.....	25,601 08	25,601 08	11,741 08	13,860 00	.....	25,601 08	116,160 87
Piers at Buffalo harbor.....	.....	22,030 94	22,030 94	12,735 39	6,172 19	3,123 36	22,030 94	130,295 45
Piers at Dankirk harbor.....	10,988 43	1,682 54	12,670 97	9,335 16	476 25	2,859 55	12,670 97	48,408 13
Pier at Black Rock harbor.....	.....	9,115 63	9,115 63	5,094 48	495 85	3,525 30	9,115 63	48,076 85
Improving the entrance of Genesee river.....	2,390 00	9,611 15	12,001 15	12,001 15	.....	.....	12,001 15	93,695 00
Removing obstructions at Big Sodus bay.....	11,790 00	3,730 65	15,520 65	8,418 83	1,000 00	6,101 82	15,520 65	97 318 18
Improving the harbor of Presque Isle..	5,000 00	14,577 20	19,577 20	18,313 27	1,263 93	.....	19,577 20	81,744 50
Improving the harbors of Newcastle, Marcus Hook, Chester, and Port Penn.....	6,000 00	5,196 90	11,196 90	8,112 15	.....	3,084 75	11,196 90	61,807 48
Removing obstructions at Ashtabula creek.....	7,591 00	7,175 27	14,766 27	4,844 12	9,369 92	552 23	14,766 27	38,227 60
Removing obstructions at Cunningham creek.....	.....	39 35	39 35	39 35	.....	.....	39 35	8,473 76
Improving the mouth of Conneaut creek.....	.....	25 64	25 64	24 85	.....	79	25 64	27,804 86
Removing obstructions at Huron river.....	.....	6,124 66	6,124 66	3,753 38	2,315 41	55 87	6,124 66	26,537 43
Removing obstructions at Grand river.....	.....	11,603 54	11,603 54	6,928 35	298 89	4,316 30	11,603 54	34,983 10
Improving Cleveland harbor.....	.....	12,417 90	12,417 90	9,287 71	681 22	2,448 37	12,417 90	44,420 37
Removing sand bar at the mouth of Black river.....	4,400 00	4,010 65	8,410 65	6,018 69	1,934 47	457 49	8,410 65	42,741 81
Piers at La Plaisance bay.....	.....	3,850 57	3,850 57	3,551 57	.....	299 00	3,850 57	19,271 76
Improving the navigation of Cumberland river.....	.....	31,098 46	31,098 46	18,174 36	11,000 00	1,924 10	31,098 46	47,075 00
Improving the navigation of Hudson river.....	.....	70,000 00	70,000 00	55,694 16	.....	14,905 84	70,000 00	55,094 16
Constructing a new entrance into the harbor at or near the mouth of the river Raisin, where it unites with Lake Erie.....	30,000 00	.....	30,000 00	12,777 09	15,300 00	1,922 91	30,000 00	12,777 09
Total.....	1,198,243 61	1,385,666 36	2,583,909 97	1,474,846 19	573,567 72	535,496 06	2,583,909 97	.....
LIGHT-HOUSES.								
Beacon-light at Grand river, Ohio.....	.....	1,482 03	1,482 03	994 29	.....	487 74	1,482 03	.....
Beacon-light at Huron river.....	.....	2,600 00	2,600 00	1,588 53	.....	1,031 47	2,600 00	.....
Beacon-light at Cunningham creek.....	.....	634 00	634 00	634 00	.....	.....	634 00	.....
Beacon-light at Conneaut creek.....	.....	1,351 24	1,351 24	1,351 24	.....	.....	1,351 24	.....
Beacon-light at Ashtabula creek.....	.....	2,000 00	2,000 00	35 30	.....	1,964 70	2,000 00	.....
Beacon-lights at Genesee river and Sodus bay.....	3,750 00	4,000 00	7,750 00	2,940 31	.....	4,809 69	7,750 00	.....
Light-house or beacon-light at Oswego.	6,485 00	3,666 00	10,151 00	5,711 16	1,540 00	2,899 84	10,151 00	.....
Removal of the light-house at Goat island.....	32,400 00	13,600 00	46,000 00	171 97	45,000 00	828 03	46,000 00	.....
Total.....	42,635 00	29,333 27	71,968 27	13,406 80	46,540 00	12,021 47	71,968 27	.....

A—Continued.

Designation of the works.	Available for 1835, and whence derived.			Amount available accounted for.			Aggregate accounted for, corresponding with the aggregate available.	Amount expended on each work up to Sept. 30, 1835.
	From appropriations for 1835.	From balances remaining in the treasury, and remaining in the hands of agents, Sept. 30, 1834.	Aggregate available.	Amount applied, corresponding with the amount of accounts rendered for settlement to Sept. 30, 1835.	Amount undrawn from the treasury Oct. 1, 1835.	Balances in the hands of agents Oct. 1, 1835.		
MILITARY ACADEMY.								
For defraying the expenses of the board of visitors	\$2,000 00							
For fuel, forage, stationery, printing, transportation, and postage.....	9,965 00							
For repairs, improvements, and expenses of buildings, grounds, roads, wharves, boats, carts, and fences...	6,528 00							
For pay of adjutants and quartermasters' clerks	900 00							
For philosophical apparatus and repairs of the same	585 00							
For models for the department of engineering	600 00	\$48,622 07	\$74,211 07	\$34,899 87	\$16,796 00	\$22,515 20	\$74,211 07	.....
For models for the drawing department, apparatus and contingencies for the department of chemistry, and repairs of instruments for the mathematical department	1,180 00							
For the departments of mineralogy, artillery, and sword exercises.....	1,400 00							
For increase and expenses of the library	873 00							
For miscellaneous items and incidental expenses	1,558 00							
Total.....	25,589 00	48,622 07	74,211 07	34,899 87	16,796 00	22,515 20	74,211 07	.....
MISCELLANEOUS.								
Ohio northern boundary line.....		5,807 23	5,807 23	5,807 23			5,807 23	.....
Lithographic press of the War Department	750 05	293 29	1,043 29	741 37		301 92	1,043 29	.....
Executive building occupied by the War Department		13 16	13 16			13 16	13 16	.....
Monument over the remains of Major General Brown		1,000 00	1,000 00	709 55		290 45	1,000 00	.....
Total.....		7,113 68	7,863 68	7,258 15		605 53	7,863 68	.....

B.

Statement showing the amount of money drawn from the treasury and remitted to the officers and agents disbursing under the Engineer department, from October 1, 1834, to September 30, 1835, inclusive, and the amount of accounts rendered by them respectively within the same period.

Names.	On what account.	Amount remitted.	Am't of accounts rendered.	Total remitted.	Total accounted for.	Remarks.
Colonel Joseph G. Totten.....corps of engineers.	Fort Adams.....	\$21,500 00	\$42,624 93	\$23,500 00	\$42,769 90	
	Removing light-house on Goat Island.....	1,000 00	171 97			
Lieutenant Colonel S. Thayer.....do.....	Fort on George's Island.....	41,900 00	43,830 58	41,900 00	56,628 79	
	Preservation of Castle island, and repair of Fort Independence.....		12,798 21			
Lieutenant R. E. De Russey.....do.....	Military Academy.....	39,384 95	34,899 87	39,384 95	34,899 87	
	Fort on Throg's Neck.....	48,400 00	41,920 39			
Major I. L. Smith.....do.....	Fort Columbus and Castle William, repairs at.....	34,000 00	31,611 20	82,400 00	73,875 23	
	Fort Hamilton.....		20 00			
	Fort Lafayette, repairs at.....		254 64	6,064 00	11,441 43	
Major George Blaney.....do.....	Fort on Oak Island.....		3,491 98			
	Cape Fear river, improvement of.....	6,064 00	7,949 45	72,359 45	45,804 73	
Captain William H. Chase.....do.....	Fort Jackson.....	733 71				
	Fort on Foster's Bank.....	30,100 00	30,200 00	3,860 46		
	Fort at Mobile Point.....	790 65	188 40			
	Fort at Grand Terre.....		2,748 46	2,500 00	6,974 00	
	Fortifications at Pensacola.....		1,458 40			
	Contingencies of fortifications.....	3,300 00	3,860 46	64,700 00	62,903 00	
	Mobile harbor.....	28,472 15	6,357 61			
	Pascagoula river, improvements at.....	8,962 94	991 40	250,500 00	245,096 74	\$9,580 20 paid over to Lieutenant Cross.
Captain R. Delafield.....do.....	Fort Delaware.....	25,000 00	30,252 05			
	Harbors of Newcastle, &c.....	4,500 00	4,538 89	210,305 80		\$617 81 paid over to the Moyamensing Bank.
	Cumberland road east of Ohio.....	230,000 00	210,305 80			
Captain A. Talcott.....do.....	Improvement of Hudson river.....	2,500 00	1,061 63	2,500 00	6,974 00	\$125 01 paid over to the Moyamensing Bank.
	Contingencies of fortifications.....		105 14			
	Ohio boundary line.....		5,807 23	64,700 00	62,903 00	\$20,043 96 paid over to the Merchants and Manufacturers' Bank.
Captain W. A. Ellason.....do.....	Fort Calhoun.....	64,700 00	62,903 00			
Captain O. A. Ogden.....do.....	Cumberland road in Indiana.....	238,880 00	106,834 23	334,111 97	162,004 94	Since closing this statement vouchers for \$93,420 72 have been received.
	Cumberland road in Illinois.....	95,231 97	55,170 71			
Lieutenant H. Brewerton.....do.....	Cumberland road in Ohio.....	144,739 24	153,555 66	144,739 24	153,555 66	\$12,214 60 paid over to the Clinton Bank.
Lieutenant George Dutton.....do.....	Fort Macon.....	1,200 00	1,331 03			
	Contingencies of fortifications.....	1,000 00	588 97	3,500 00	6,850 60	
	Improvement in Ocracoke inlet.....	1,300 00	4,930 60			
Lieutenant J. K. F. Mansfield.....do.....	Fort on Cocks spur island.....	40,000 00	43,327 74	70,900 00	79,429 52	
	Improvement in Savannah river.....	25,400 00	33,604 51			
	Inland navigation between St. Mary's and St. John's rivers.....	5,500 00	2,497 27	20,000 00	18,317 35	
Lieutenant A. H. Bowman.....do.....	Road from opposite Memphis to the St. Francis river.....	20,000 00	18,317 35			
Lieutenant T. S. Brown.....do.....	Fortifications Charleston harbor.....	15,300 00	17,815 30	20,000 00	18,317 35	
	Improvement of Cleveland harbor.....	8,229 81	5,851 34			
	Improvement of Ashtabula creek.....	3,000 00	2,948 33	8,045 00		
	Improvement of Grand river.....	7,000 00	3,838 37			
	Improvement of Presque Isle harbor.....	8,045 00	8,743 13			

VOI. V
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B.—Statement showing the amount of money drawn from the treasury and remitted to the officers and agents disbursing under the Engineer department, &c.—Continued.

Names.	On what account.	Amount remitted.	Am't of accounts rendered.	Total remitted.	Total accounted for.	Remarks.
Lieutenant T. S. Brown—Continued.....	Improvement of Buffalo harbor.....	\$11,646 09	\$9,211 40	\$70,209 33	\$58,460 77	\$795 78 paid over to Lieutenant R. E. Lee.
	Improvement of Black Rock harbor.....	6,000 00	3,422 43			
	Improvement of Dunkirk harbor.....	8,988 43	6,586 41			
	Beacon-light at Grand river.....		8 76			
	Beacon-light at Ashtabula creek.....	2,000 00	35 30			
Lieutenant William H. C. Bartlett.....	Monument over the remains of General Brown.....	1,000 00	204 22	1,000 00	436 31	
	Lithographic press, War Department.....		232 09			
Lieutenant Robert E. Lee.....	Fort Calhoun.....	12,000 00	9,448 67	15,318 24	11,832 24	
	Contingencies of fortifications.....	1,319 44	1,268 96			
	Monument to General Brown.....		505 33			
	Provincetown harbor.....	239 41				
	Improvement of Grand river.....	1,009 39		8,500 00	8,138 72	
	Lithographic press, War Department.....	750 00	509 28			
Lieutenant Alexander I. Swift.....	Improvement at Ocracoke inlet.....	8,500 00	8,138 72	8,500 00	8,138 72	
Major J. D. Graham.....topographical engineers.	Contingencies of fortifications.....		1,545 65			
Captain A. Canfield.....do.....	Cumberland road in Ohio.....	750 00	445 44	750 00	445 44	
Major H. Whiting.....United States army.	Road from Detroit to Fort Gratiot.....	3,000 00	2,482 80			
	Road from Detroit to Grand river.....	25,000 00	14,050 53	28,000 00	16,533 33	
	Contingencies of fortifications.....		252 34			
Major B. K. Pierce.....do.....	Road from Port Lawrence to Adrian, M. T.....	5,000 00	9,916 52	37,077 87	55,005 08	
Captain H. Smith.....do.....	Road from Vistula to Indiana line.....	5,000 00	9,449 73			
	Road from La Plaisance bay to Chicago road.....	5,000 00	12,145 23			
	Piers at La Plaisance bay.....		3,551 57			
	Improvement of Huron river.....	1,977 87	2,076 77	925 00	934 36	
	Beacon-light at Huron river.....	2,600 00	1,568 53			
	Improvement at Black river.....	2,800 00	3,519 64	42,243 49	36,187 49	
	Harbor at the mouth of River Raisin.....	14,700 00	12,777 09			
Captain H. A. Thompson.....do.....	Contingencies of fortifications.....	925 00	934 36	48,300 91	36,997 85	
Lieutenant E. S. Sibley.....do.....	Road from Detroit towards Chicago.....	7,668 18	5,438 50			
	Road from Detroit to Saginaw bay.....	5,575 31	5,525 19	16,633 42	16,633 42	
	Road from Sheldon's to St. Joseph's river.....	20,000 00	16,633 42			
	Road from Niles to St. Joseph's river.....	5,000 00	6,369 88	2,220 50	2,220 50	
	Road from Clinton to Grand river.....	4,000 00	2,220 50			
Lieutenant J. Allen.....do.....	Chicago harbor.....	48,300 91	36,997 85	48,300 91	36,997 85	
Lieutenant G. W. Long.....do.....	St. Mark's river and harbor.....		3,493 03			
	Apalachicola river and harbor.....		324 72	421 90	421 90	
	Contingencies of fortifications.....		421 90			
Lieutenant A. Drano.....do.....	Fort Monroe.....		7,218 68	7,218 68	7,218 68	
Lieutenant O. Dimmock.....do.....	Fort Monroe.....		543 73			
Captain T. Green.....do.....	Fort Monroe.....		543 73	1,572 58	1,572 58	
Lieutenant John L'Engle.....do.....	Fortifications in Charleston harbor.....		1,572 58			
Lieutenant O. Cross.....do.....	Pascagoula river improvement.....		2,665 41	11,741 08	11,741 08	
Lieutenant R. C. Smead.....do.....	Piers in Oswego harbor.....	10,940 00	11,741 08			
	Light at Oswego harbor.....	8,611 00	5,711 16	19,551 00	17,452 24	

B.—Statement showing the amount of money drawn from the treasury and remitted to the officers and agents disbursing under the Engineer department, &c.—Continued.

Names.	On what account.	Amount remitted.	Am't of accounts rendered.	Total remitted.	Total accounted for.	Remarks.	
John H. Winder.....	United States army.	Fort on Oak island.....	\$1,410 00	\$1,303 76	} \$6,350 00	\$4,044 33	Accounts for the 3d quarter of 1835 not received.
		Improvement of Cape Fear river.....	4,950 00	3,040 57			
General Joseph G. Swift		Sodus bay improvement.....	14,190 00	8,418 83	} 31,830 00	23,360 29	
		Genesee river improvement.....	9,890 00	12,001 15			
		Lights at Genesee river and Sodus bay.....	7,750 00	2,940 31	} 95,400 00	162,607 04	
H. M. Shreve.....		Ohio, Missouri, and Mississippi rivers	38,600 00	71,024 75			
		Red river improvement.....	56,800 00	91,583 29	} 3,000 00	4,272 99	
Thomas M. Clark.....		Merrimac river	3,000 00	4,272 99			
Joseph Bradford		Plymouth beach	1,200 00	1,042 02	} 1,200 00	1,042 02	
Asa S. Bowley.....		Provincetown harbor	4,524 35	4,524 35			
B. Palmer.....		Piers at Kennebunk harbor.....	4,000 00	3,136 06	} 4,000 00	3,136 06	
E. Crowell.....		Breakwater at Hyannis harbor.....	8,730 00	8,604 66			
Joseph D. Selden.....		Improvement at Buffalo harbor.....	1,000 00	3,833 88	} 17,000 00	21,857 34	
		Improvement at Black Rock harbor.....	2,000 00	2,028 10			
		Improvement at Dunkirk harbor.....	3,000 00	2,748 77	} 17,000 00	21,857 34	
		Improvement at Presque Isle harbor.....	9,000 00	10,263 21			
		Improvement at Black river.....	2,000 00	2,276 38	} 42 31	604 69	
		Improvement at Cunningham creek.....		42 31			
		Light at Cunningham creek.....		604 69	} 1,780 00	1,666 30	
M. Hubbard.....		Improvement at Ashtabula creek	1,780 00	1,666 30			
A. Dart.....		Improvement at Conneaut creek.....		24 85	} 1,000 00	1,376 09	
		Light at Conneaut creek.....	1,000 00	1,351 24			
		Improvement at Grand river.....	2,500 00	3,108 88	} 3,956 00	4,154 41	
H. Phelps.....		Light at Grand river.....	1,456 00	985 53			
A. W. Walworth.....		Improvement in Cleveland harbor		3,118 19	} 1,697 00	1,691 92	
Jabez Wright		Improvement in Huron river.....	1,697 00	1,591 92			
W. McKnight.....		Improvement in Cumberland river.....	13,500 00	18,174 36	} 13,500 00	18,174 36	
John Martin		Road from Line creek, Alabama, to Chattahoochee	9,460 00	9,430 00			
D. Lane.....		Monument on Steele's ledge.....	4,134 00		} 4,134 00		Accounts for the 3d quarter of 1835 not received.
Merchants' Bank, Boston.....		Fort on George's island.....	59,000 00	39,052 57			
		Preservation of Castle Island and repair of Fort Independence.....	17,594 00	10,617 34	} 76,594 00	49,669 91	
Albany City Bank.....		Improvement of Hudson river	67,500 00	54,032 53			
Moyamensing Bank, Philadelphia.....		Fort Delaware	35,000 00	13,754 57	} 41,533 00	17,327 83	
		Harbors of Newcastle, &c.,	6,533 00	3,573 26			
Merchants and Manufacturers' Bank, Pittsburg.....		Ohio river improvement above the falls	50,000 00	8,328 10	} 350,000 00	177,145 98	
		Cumberland road east of Ohio	300,000 00	168,817 88			
Merchants and Mechanics' Bank, Wheeling.....		Cumberland road east of Ohio	33,951 55	19,863 46	} 33,951 55	19,863 46	
Clinton Bank, Columbus, Ohio.....		Cumberland road in Ohio.....	151,853 00	129,409 30			
Merchant's Bank, Boston		Preservation of George's island.....	220 60	220 60	} 220 60	220 60	
		Preservation of Deer Island.....	1,130 00				
			2,366,788 95	1,982,570 59	2,366,788 95	1,982,570 59	

D.

MONROE, Michigan, September 30, 1835.

SIR: Accompanying I have the honor to enclose my annual statement of the operations on the river Raisin ship canal during the present year; and my estimate of the sum necessary, in addition to that already appropriated, to complete this important work.

On the 2d of May last the work was commenced by erecting barracks for the laborers, and commencing the constructing of the machinery necessary for excavation, and removing and keeping off the water. From that to the present the work has been advancing as the weather would allow; encountering occasional difficulties from ill health among the laborers and delay and trouble in procuring others. At length, however, I am happy to say that the work is in fine progress, that the plan has proved completely successful, and that little doubt exists that it may be completed for but little more than the sum estimated originally therefor. The cause of the excess is explained in my letter of the 13th of May last, and in the unexpected difficulty in procuring hands, and the consequent and necessary increase in the prices given for labor.

About the 1st of June such force of laborers as could be employed to advantage commenced their labors by the operation known among men familiar with labor on canals as "*mucking*," that is, removing the sods, turf, &c., over the whole surface of the intended canal, and placing it at the sides thereof; this was done in about half the length of the whole work, leaving the water about two feet deep in the portion thus excavated. The same mode of excavation was employed in cutting a small canal, about twelve feet wide, entirely through to the river Raisin, and just within the north line of the canal, for the purpose of facilitating the conveyance of materials, &c., from Monroe to the end of the canal nearest the lake, at which point it was determined to commence excavation. The driving of piles was then commenced at the lake on both sides of the intended cut, and ten feet from each one to the next.

There are now driven 350 in number along 1,750 feet of the work; on the tops of these piles strong tenons are cut and caps of square timber, twelve by ten inches, framed and placed. From these caps of timber land ties of timber, 20 feet long and placed twenty feet apart, extend at right angles under the embankment, being strongly keyed to the caps. On the back side of the caps and piles, pile planks nine feet in length are driven, (the piles being driven fourteen feet into the earth,) being previously well-jointed; the plank dam is then made water-tight, by the usual process of *puddling* with clay from four to six feet in depth. Cross dams are then made, and the water drawn from a section of the canal, and the *dry excavation* is made. Setting aside the *necessity* of adopting this mode on account of the porous and marshy nature of the soil, there is no doubt but economy is consulted by this mode of construction. 1st. From the perfect and lasting resistance thus established to the lateral pressure of the immense embankment; 2d. From the perfect protection thus afforded to the embankments from the *wash* produced by steamboats and other vessels navigating the canal; and 3d. From the additional channel width thus given, any vessel being able to float in actual contact with the surface of the bank. The caps are now framed and placed as above, on both sides of the work, 1,750 feet in length; the land-ties placed, and pile plank driven on each side for 1,500 feet of the distance; and the excavation entirely completed, one hundred feet wide at the surface by sixty-eight at the bottom, eleven and a half deep, in a distance of four hundred and sixty-two feet of the very worst portion of the work; and is commenced and now in progress in another section of about five hundred feet in length.

It is expected that one half of the length of the whole canal will be excavated this fall, and that enough of the last appropriation will be left on hand to commence the piers in the month of December, as no doubt exists that the latter work can be far better and cheaper done in the winter than when no ice is on the lake.

In the work are now engaged one superintendent, residing constantly on the spot, charged with the supervision of the whole labor, who is also a measurer and inspector of lumber, stone, &c., delivered on contracts; one master carpenter, charged with the supervision of all the mechanics, the direction of the framing, pile driving, &c.; about 200 to 250 laborers, to each thirty of which is an overseer appointed, who is held responsible for the industry and good conduct of his gang of laborers.

In the estimate, amounting to \$60,660, it will be observed that I have named the price for a good dredging machine. This machine is not only needed on this work, but on several others now in progress on the lake, and the good of the service will certainly be consulted in procuring one. The patent of Captain Randal, now in use in several of the eastern harbors, as well as Buffalo harbor on this lake, is of the description contemplated in the estimate.

I can only add, sir, that if the appropriation for the coming year should be made sufficiently early to enable us to make, and have fulfilled, our contracts for timber, stone and other materials during the winter, the work will be greatly expedited, and for one-third less of expense.

This memoir is respectfully submitted by, general, your obedient servant,

H. SMITH, *Captain U. S. Army, on engineer duty.*

Brigadier General GRATIOT, *U. S. Army, Chief Engineer.*

MONROE, Michigan, November 14, 1835.

GENERAL: I have the honor to report that I have this day returned from a visit to the public works at Huron and Black rivers, Ohio. Of the result of my examination of the latter work I have already had the honor to advise you.

The work at Huron requires the attention of the government as early in the spring as possible.

I found much of the wood work of the piers first sunk quite defective, and that the sand of the lake driven along the shore passes entirely through the piers, particularly the east pier, and is filling up the harbor, and unless the operation is arrested speedily the beach will make anew entirely across the harbor. The inhabitants of the place held a meeting while I was there, and handed me the accompanying paper, (marked No. 1,) stating to me at the same time that they believed the sand passed around the end of the piers. An examination of the facts convinced me that it was not so, but that the mischief has occurred as above described. I propose to sink brush in bundles along the outside, and in contact with both piers,

and cover them entirely with stone. I think this will remedy the evil, but should it not, planks well jointed may be spiked on to the outside of the piers from the bottom, above water-mark, and inside of the brush and stone. It will also be necessary to repair some portions of the old work, and to remove the sand already deposited. For the whole of which I herewith submit an estimate.

With perfect respect, sir, I have the honor to remain your obedient servant,

H. SMITH, *Captain on engineer duty.*

General GRATIOT, *U. S. Army, Chief Engineer.*

MOUTH OF BLACK RIVER, *Ohio, November 10, 1835.*

GENERAL: I have the honor to enclose the monthly report of the superintendent of the works at this place for October.

It is but justice to add that I am highly satisfied with the execution of the work here, and, considering the unusually bad season, with the progress made. The storms are now so constant, and the winter so near at hand, that but very little more work can be done. Of course, the funds appropriated will not all be expended this fall.

With perfect respect, sir, I have the honor to be your obedient servant,

H. SMITH, *Captain on engineer duty, agent.*

General GRATIOT, *United States Army, Chief Engineer.*

E.

ERIE, *Pennsylvania, October 1, 1835.*

SIR: I have the honor to make the following report of the operations at the works under my superintendence for the year ending September 30, 1835, viz:

Black Rock.—Two hundred and sixty-three feet of crib-work have been added to the pier projecting from the main shore, at the entrance into Black Rock basin, making the whole length of the work three hundred and fifty feet. Its object is to arrest the sand in its progressive motion along the beach, and prevent it from filling the basin, and obstructing the entrance into the Erie canal, where the latter leaves the basin to go towards Buffalo. This object has so far been fully obtained. During the last fall and winter the sand accumulated against the south side of the pier, making a dry beach for a width of one hundred and seventy feet, where, before, the water was from ten to eighteen feet deep. This beach continues to increase, but more slowly than at first.

It is proposed to add, this fall, one more crib, to serve as a pier head, which it is hoped will give length sufficient to provide against the accumulation of the sand for several years to come, or until, by the erection of other works, the causes which have produced this evil have ceased to operate.

Experience, however, alone can determine whether this work is sufficiently extended to insure the complete attainment of the object in view; and in order to provide, if necessary, for its further extension, or for the construction of another pier above it, having a similar object, it is recommended that the remainder of the estimate of Col. Totten for this purpose, amounting to \$8,000, be appropriated, so as to be available in case it is required.

The mole on Bird island has been rebuilt for a length of one hundred and sixty-five feet, leaving three hundred feet still to be executed, part of which will be done this fall and the remainder in the spring. The supply of stone was for some time cut off; and the weather, during the latter part of the season, has been remarkably unfavorable; but for these causes both the pier and the mole would by this time have been completed. The expenditures for the year have amounted to \$5,450 53.

In obedience to the general instructions of the department I have made a careful survey of the harbors of Black Rock and Buffalo, together with that portion of Lake Erie included between them, a chart of which will accompany this report. On this chart I have traced a project for the formation of a spacious harbor, by a further extension of the United States work from its present termination, at Bird island, to within one thousand feet of the new Buffalo light-house. A glance at the map will show that, by this plan, a harbor may readily be obtained, sufficiently large to accommodate and protect the whole commerce of the western lakes, and to serve as an appropriate termination to the Erie canal, when it shall have received its enlarged dimensions, and to the proposed ship canal around the Falls of Niagara. Observation proves that even in its present infant state the commerce of the city of Buffalo is too extensive for the narrow dimensions of Buffalo creek; and it is confidently believed that, before the work now proposed can be executed, it or some other one, on an equally enlarged scale, will be absolutely required by the vast interest connected with this chief point on the principal route from the ocean to the great west.

Accompanying this report is an estimate (marked A) of the expense of this project, to which the attention of the department is respectfully requested. It has been made with great care, and with the benefit of all the experience acquired during the erection of the works now existing.

Should this improvement be sanctioned by Congress, it is recommended that one-fourth part of the estimate be appropriated for the operations of next year.

Buffalo.—The operations for the year have been as follows:

1. Removing, with the diving bell, the ruins of the old cribs, which obstruct the channel, nearly the whole of which has been accomplished. The water is now so cold as to compel the postponement of the completion of this work until the next season.

2. Dredging out the curved point which projected into the creek at the inner end of the United States works.

The whole of the sand which could be reached by common road scrapers has been removed, and the floating dredging machines now move over every part, and have been kept constantly employed when the weather would admit. This operation will be continued until the close of the present season, and finally completed early next year.

3. Placing about one hundred and fifty feet of crib-work to support the tow-path, extending from the

inner end of the mole to the boundary of the United States land. These cribs will be sufficiently settled by spring to admit of placing upon them the superstructure of masonry.

4. Removing the timber work of the tow-path along the mole, and replacing it by a heavy wall laid with hydraulic mortar. Nearly the whole length of this wall has been raised out of water, and several hundred feet of tow-path flagging have been laid.

The operations have been much retarded by bad weather and an interruption in the supply of stone, but all the difficulties have been overcome, and the works can be finally completed next year with the amount now available.

The expenditures for the year have amounted to \$12,715 39. A map, exhibiting the condition of the improvements at this harbor, from a survey made in August last, will be forwarded to the department as soon as it can be prepared. At the time the soundings were taken there was nowhere less than ten feet of water in the channel leading into the creek.

As far as completed the works are of stone, and executed in a permanent and a workmanlike manner.

Dunkirk harbor.—The piers at this place have been extended three hundred and eighty-two feet, by sinking new cribs, building them to the surface of the water, and filling them with stone. This has added three hundred and twenty-two feet to the east end of the west pier, and sixty feet to the east pier or breakwater; of work previously raised to the surface of the water a length of five hundred and eighty feet has been wholly or partially completed. To finish what has been commenced more or less remains to be done for a length of four hundred and eighty-two feet, as also the repairs on the breakwater specially authorized by the act of the last session of Congress. Materials have been provided for these purposes, and the available funds are supposed to be sufficient.

Should the weather be favorable during the fall, it is hoped that before the end of the present year the whole may be accomplished.

The length of the west pier will then be 1,920 feet, and that of the breakwater or detached pier, in front of the bay, 1,340 feet.

The amount expended during the year is \$9,335 17, of which about one-third part has been devoted to rebuilding that portion of the breakwater which was washed away during the winter of 1833-'34.

A careful survey was made of this harbor during the month of September, a map of which will accompany this report.

An estimate (marked B) for carrying on the operations during the year 1836 accompanies this report.

It is proposed—1st. To construct on the east end of the west channel pier a beacon-light; the necessity for which becomes every day more apparent and more pressing. On the night of the 1st of October two vessels were totally lost in endeavoring to enter this harbor in a violent gale of wind, one striking against the west pier, and one against the breakwater. The amount asked for is the same as has heretofore been submitted. 2d. To extend the breakwater in front of the harbor 640 feet at its eastern end, which will make it conform to the original design. The estimate for this has also been heretofore presented. 3d. It is proposed to lengthen the breakwater at its west end 320 feet. The space between the breakwater and the west pier is now 760 feet, an opening which greatly exposes the anchorage and the wharves at the town of Dunkirk during severe gales from the northwest. The proposed new work will extend obliquely across the opening, without encroaching in the least upon the channel way, and will leave an entrance 460 feet wide. In gales of wind from the northeast, this pier will greatly facilitate the entrance of vessels into the harbor by the western channel, which is the one almost exclusively used. All these proposed additions are indicated on the accompanying map; from which also it may be seen that, in both the channels leading into the bay, the water, in ordinary times, is eleven feet deep.

Dunkirk harbor, in its natural state, was of small importance as a port of refuge; but by means of the works already erected, and of those proposed, it will become sufficiently valuable to the rapidly increasing commerce of Lake Erie, to say nothing of its own trade, to fully justify and repay all the expenditures necessary to display and secure in a permanent manner the good qualities which it possesses. It is still the only point between Erie and Buffalo where vessels and steamboats can obtain shelter.

Erie or Presque Isle harbor.—Since the last annual report the operations at this harbor have consisted—

1st. In completing the repairs at the breach which was formed at the junction of the south breakwater and the south channel pier. This was effected last fall, and the place where the breach existed is now occupied by the most substantial part of the whole work.

2d. In forming against the piers and breakwaters, throughout their entire extent on one side and at certain places on both sides, a bank or mound of stone, thrown into the water at random, rising next the pier to the surface, and sloping outwards, so as generally to have a base equal to the depth of water at each particular point. This bank of stone has given great increased stability to the whole of the works, and constitutes an important step in the transition from the present temporary improvements to those which shall be permanent and able, without requiring constant watchfulness and incessant repairs, to resist the powerful causes which are constantly operating to produce their decay and destruction.

In the ultimate future prosecution of this part of the work it will be necessary to add to the mound of stone now commenced, in order to form a base on which, in part, to rest the masonry rising above the water.

3d. In thoroughly repairing the whole of the timber work; and where, as is generally the case, the planking has rotted or been washed off of the top of the cribs, supplying its place by a pavement of large flagging stones, carefully wedged to secure them against the action of the waves.

The funds having been exhausted, the operations have been brought to a close for the present season.

The sum expended during the year is \$19,006 34.

The works are now in as good order as the nature of the materials will admit, and may, it is thought, with propriety, be left for two or three years in their present condition, while the whole expenditures at this harbor are in the mean time directed to other objects of scarcely less importance.

It is well known to the department that the works at Presque Isle have completely realized the objects for which they were designed.

The current created by the continual fluctuations in the level of the lake, communicating through a narrow opening with a spacious isolated bay, has, by being compelled by the artificial works devised for that purpose, had energy enough to deepen the water in the narrowest part of the outlet, where the width of the channel is four hundred feet, from three feet, which it was originally, to twenty feet, which it is now; and where the channel is six hundred feet wide, to increase the depth from two feet to fourteen. As might have been anticipated, however, this powerful action, which has been so beneficial at this point, has at

others proved the source of serious evils. The first effect produced by the pent up waters of the bay was to wash away, in succession, two sand-points to which the breakwater or dam on the north side of the channel was attached.

The length of the dam was then again increased until it attained a third point, which has not washed away, solely for the reason, however, that the water had by this time, besides excavating a deep channel at the site marked out for it, created a much more spacious and important outlet at a distant part of the bay. The narrow neck connecting the principal portion of Presque Isle with the main shore having been accidentally overflowed and cut through, when the lake was raised during a gale of wind much above its usual height, the whole mass of water immediately rushed in at the breach, until the level between the bay and the lake was re-established.

As the lake subsided, the waters of the bay flowed out through the same opening, and thus a channel was immediately formed through which, at first, steamboats and schooners were enabled to pass. This breach has continued to widen by the action of the current, the channel through it at the same time becoming more shoal, until at last, where trees stood thick at the period of the commencement of the work at the east end of the bay there is now an opening of nearly a mile in width, which is still every day increasing. The whole of Presque Isle seems to be threatened, and it is not extravagant to say that, in endeavoring to perfect the entrance into this fine harbor, the whole has been put in jeopardy, and the necessity entailed upon the government of persevering until all the consequences resulting from the original and well-devised plan have been met and guarded against.

I have made a careful survey of this breach, a map of which accompanies this report. I also submit an estimate (marked C, No. 1) of the expense of closing it up, by crib-work, leaving a channel of four hundred feet in width, extending from deep water in the bay to deep water in the lake, partly to guard against any future outbreak of the water, but chiefly to provide an additional and much needed inlet to this valuable port. The works projected for this object are traced upon the accompanying map, and are respectfully recommended to the attention of the department. This improvement is unquestionably one of the most important remaining to be effected on the south shore of Lake Erie, and of its entire practicability for the sum estimated there can be no doubt, provided it is immediately commenced and prosecuted with energy until completed. The narrow limits of an annual report will not permit me to enlarge upon all the advantages to be thereby secured, but it may be proper to allude to the following considerations, in addition to the cardinal one above suggested, of preserving the bay from destruction which should induce Congress to give its sanction to the work.

Presque Isle bay, with an area sufficiently great for any supposable purpose of commerce or of war, (from six to eight square miles,) has everywhere from three to four fathoms of water, with good anchorage. These qualities, on a coast proverbial for a deficiency of ports and destined soon to be the theatre of the greatest inland commerce on the globe, give it a high value, and render it worthy of all the attention necessary to secure to its advantages their full development. At present most of the vessels on the lake are unwilling to enter it, because the same wind which is fair in going in effectually prevents their departure through the one narrow outlet, and they may remain wind-bound for many days. An outlet at each end would entirely remove this difficulty; and if such outlets existed, from fifty to one hundred vessels, even in the present state of the commerce on the lake, would collect here during every severe gale. Now all the steamboats which touch at Erie in their daily trips are obliged to go from four to six miles out of their way; whereas, if the improvement recommended were effected, they could proceed directly through the bay, and the route along the lake shore would be materially shortened.

The saving caused in this manner alone will be found by calculation to amount to a very considerable sum.

This subject has been heretofore brought to the notice of the department, in the report of Colonel Totten, in the summer of 1833, and in recommending the adoption of immediate measures I but follow in the route which he indicated as probably the one most proper to be pursued.

In the estimate for the year 1836 I have assumed that about one half of this work may be advantageously executed during that season, and the remainder the season following.

In a previous part of this report it has been stated that the water in the eastern entrance is from fourteen to twenty feet deep. This entrance, and the channel leading from it into the deep water of the bay, have been surveyed during the present summer, and a map exhibiting the result will accompany this report. It will be seen from this map that, inside of the artificial works, at such a distance that their influence is unfelt, the old channel, leading into four fathoms water, has remained undisturbed, and has not, at a full ordinary level of the lake, a greater depth than nine feet. All the steamboats have, during the present season, with more or less regularity touched at the Erie wharves; but when the water, as is frequently the case, has been depressed a little below its usual level, some of them have experienced difficulty, and a few of the largest class of said vessels are not able to enter at all. Within the memory of all the older inhabitants, this lake has remained for whole seasons from two to three feet lower than it is at present. This event is, of course, liable at any time to recur, and thus Presque Isle bay may again be temporarily closed against that class of vessels which most need its protection.

It is easy to obviate this difficulty, and secure the same depth of water quite into the bay that there is between the channel piers, and accompanying this report I have submitted an estimate for this purpose, (marked C, No. 2.) In the estimate for 1836 I have embraced somewhat more than half of this amount, and the remainder, which is for dredging, may perhaps not be required.

Erie, as the outlet of the Pennsylvania system of canals, is destined soon to be the seat of an important commerce; and this consideration, with those of a more general nature, glanced at above, must be my justification for devoting so much space to this part of my report.

Conneaut creek.—The works at this place have been entirely completed according to the original plan, and no expenditures have been made here during the past year. The sand accumulating against the west pier begins, as usual, to pass around its outer extremity, and to form a bar across the channel. The wood work above water is decaying, and at one or two places the piers seem to be threatened with being undermined; but no immediate measures appear to be necessary to guard against these evils. The depth of water in the channel is now nine feet, and the harbor has proved of great value to the commerce of the lake. Within a month as many as twenty-six vessels at one time have taken shelter here during a gale of wind. Owing to the narrowness of the creek, it is impossible for steamboats to "wind" or turn in it, and the operation of backing out through so narrow an opening is a difficult and dangerous one, particularly when the lake is rough.

Accompanying this report is an estimate (marked D) of the cost of dredging out on one side of the

creek a sufficient space to permit the largest class of steamboats to turn, and it is respectfully recommended for that purpose be asked for at the next session of Congress.

Ashstabula creek.—The method devised in previous years for the removal of the rock which obstructs the entrance into this creek having promised favorably, it was this summer considered expedient to construct a machine especially for that purpose, which, however, from a variety of causes, could not be got into regular operation before the 2d of September. Since that period the weather has been very unfavorable; but enough has been done to increase the confidence previously felt as to its success, and it is hoped and expected that another season will not pass before it will be in the power of the superintendent to announce to the department that this troublesome and expensive undertaking has at length been accomplished. The dredging machine has been constantly in operation when the weather would admit, and has laid bare all the rock which it will be necessary to remove. The depth of water in the shallowest part of the channel is about seven feet.

Materials have, in part, been collected for the extension of the western pier.

The expenditures for the past year amount to \$4,844 12, leaving available a sum sufficient for the operations of the one to come; no estimate, therefore, is presented.

Preparations have been made for commencing the foundation of the beacon light-house, and, should the weather prove favorable, it will be sunk this fall; in which case the light-house will be completed early in the spring.

Cunningham's creek.—Nothing has been done at this place this year. The light-house is completed; but it still remains isolated from the rest of the work, and further expenditures are necessary to properly secure its base. The piers are greatly in need of repairs, which should be immediately applied, unless it is the intention of the government to abandon this improvement altogether. As a landing-place, it has proved valuable to the neighboring country; and I attach to this report a communication from the superintendent, (marked E.) presenting estimates for work considered absolutely necessary, which is respectfully submitted for the consideration of the department.

Grand river.—The west channel pier has been lengthened 300 feet to guard the channel from being obstructed by the sand which is constantly accumulating on that side at this and all the other harbors on the lake. This extension removes all danger from that cause for many years, and greatly facilitates the entrance into the harbor.

The balance remaining available will suffice to pay all arrears and bring this new work to completion this fall. The amount expended during the year is \$7,988 35.

The beacon has been lighted all summer. The balance of funds applicable to it is to be applied this month, if the weather permits, in securing its foundation.

It is proposed next year to take those steps for the permanent security of these works which cannot with safety be longer delayed.

The estimate for this object is herewith transmitted, (marked F.)

Cleaveland harbor.—The operations at this important point have consisted in depositing stones against the outsides of the piers for their permanent security; in placing an additional crib, and depositing stone for securing the base of the beacon-light; and in driving outside the west channel pier a line of contiguous piles to support the foot of the slope of the permanent stone mole intended to be formed. These operations will be continued as long as the weather will admit, and will consume the whole of the available funds. The amount expended during the year is \$9,287 71.

It is proposed next year to extend the west channel pier to the full length that will be necessary to guard against the encroachments of the sand, and to progress as rapidly as is consistent with economy in giving the whole of the works a permanent character. For this purpose an ample supply of good stone may be obtained from a distance of about ten miles by means of the Ohio canal.

The accompanying estimate for the year 1836 has been drawn up under my instructions, so as to conform to these views. The estimate is marked G.

General remarks.

The accompanying paper (marked H) is a tabular list of balances of appropriations relating to works under my superintendence, drawn up in obedience to the department circular of August 6.

In concluding this report I beg leave to suggest the propriety of constructing a steam dredging machine, on the most approved plan, to be employed in succession at all the harbors on the upper lakes where improvements are going on which require the use of such an engine. There is much dredging required, but not enough at any one point to justify the construction of so expensive an apparatus, which, however, if once put in operation, would produce a saving of upwards of two-thirds in the cost, and three-fourths in the time employed, at every point where its aid would be necessary. An estimate for the cost of such a machine is herewith submitted, (marked I.)

I have the honor to be, very respectfully, your obedient servant,

T. S. BROWN, *Lieutenant U. S. Engineers.*

Brig. General C. GRATIOT, *Chief Engineer.*

F.

SIR: I have the honor to submit this my annual report of the condition of the pier work and beacon-lights at Genesee river and Big Sodus bay for the year ending on 30th September, 1835.

Of Genesee river.—From the year 1829 to that of 1834, inclusive, the appropriations for the pier work at the mouth of this river have averaged \$15,167 per annum, which sums have been expended in constructing 5,240 feet in length of pier, of an average width of eighteen feet, and from ten to seventeen feet deep, forming a double line of docks that receive between them the Genesee river, which work has fulfilled the purpose for which it was constructed—namely, it has cleared out a crooked channel of from six to seven feet in depth of water that could not be entered in a dark night, so as to have formed at the present time a channel of thirteen feet depth of water that can be entered and passed through at any time of night. These piers have been formed of large hemlock timber, in cribs, connected together and

filled, and sunk with stone, and have subsided into the bottom of the lake to a depth of from two to seven feet. This sinking into the sandy bed of the lake has given all the stability to the work of which the material and structure were susceptible. The timber work that is above water is beginning to decay, and is in a proper condition to be substituted by stone masonry. The timber work under water will endure for ages.

The appropriation for the year 1835 was made with a view to finish the pier work; the amount, \$2,390, has been and is now applying to that object. But the work will continue to subside for another year, and will require an appropriation of \$3,000 to repair damage for the year 1836.

Of the Genesee river beacon-light.—Upon the west pier in the lake, at the distance of 2,700 feet from the shore, a beacon of stone has this year been erected twenty-five feet high, an octagon of twenty feet in diameter, upon a foundation of forty feet square, in fifteen feet depth of water, the beacon tapering to a diameter of ten feet at the top, agreeably to the plans heretofore submitted to the department. The masonry of this beacon is now open, and will remain so for the balance of this season, as the temporary light now in use will answer its present purpose for the remainder of the season for navigation, thus giving the masonry time to cement in its exposure. Possibly during the heavy weather of the coming winter the foundation, that is forty feet square, may settle one or two feet in the sandy bed of the lake. In case of such subsidence, and it be unequal, then the work will require to be adjusted in the next season. The balance of the beacon appropriation now on hand will meet the expense of the structure of the building.

Of Big Sodus bay.—From the year 1829 to that of 1834, inclusive, the appropriations for the pier work of this bay have averaged \$15,288 per annum. The work constructed thereby amounts to 5,900 feet of length of pier, sixteen feet wide, and from six to seventeen feet in depth. These docks enclose the entrance of the bay from Lake Ontario, excepting the channel, that is to be dredged out between the two branches or T's that extend into the lake. The piers are upon the same plan, and formed of similar materials to those at Genesee river, but they have subsided very little into the bed of the lake in consequence of the hard-pan at the bottom, and consequently exhibit a more uniform straight line than those at Genesee. The timber above water is also beginning to decay.

The appropriation for Sodus bay for the year 1835 was \$11,790, and became available in May—the object, to finish the piers and to plough and dredge out the hard-pan of the channel by machinery. The first has been nearly accomplished, and will be finished this season. The second is in operation as follows: Recommencing the work upon the piers and the construction of the beacon brought me into the month of June, when, agreeably to my report to the department, I proceeded to the foundery near West Point to determine how much steam and other machinery could be constructed at that place with the amount of funds applicable to that part of the necessary expenditure, and I found that there were not sufficient funds to procure steam and other machinery to commence the dredging even at so early a day as the ensuing spring of 1836. I therefore proceeded to visit and examine several new working machines in the harbors of Baltimore, in Maryland, and New London, in Connecticut. The dredging machinery that I found at work in Baltimore harbor was efficient, but more expensive than was contemplated. In New London harbor I found the machinery simple and efficient, and comparatively not expensive, and propelled by horse-power; also, that the part of New London harbor which had been dredged by these machines was as hard as the Sodus bay pan. I concluded therefore that it would be best to invite the proprietor of these machines, Mr. Holmes, to visit Lake Ontario, to compare the work that was necessary to be done at Sodus bay with the work that had been accomplished by Mr. Holmes at New London.

This request was complied with, and the result, thus far, has been that I have set Mr. Holmes at work in constructing the machines at Sodus bay, and he will commence the cutting and dredging of the hard-pan at Sodus early in the ensuing spring of 1836. The terms upon which this work is to be executed are as follows: For cutting out four hundred thousand cubic feet of pan not to exceed three cents per cubic foot, delivered to the United States agent in gondolas now constructing for that service. For such balance of cutting as may be found necessary, a less price per cubic foot, as may then be agreed upon when the work has come down to the loose bed below the pan. It is my opinion that an additional cutting of four hundred thousand feet below the pan will have accomplished the object thoroughly. Perhaps the motion of the water may so aid in moving the sub-strata as to diminish materially the expense of dredging.

The balance of the Sodus bay appropriation not drawn from the treasury is one thousand dollars; this sum added to the balance that will be in the hands of the agent on 31st December, 1835, will diminish by five thousand dollars the estimated sum for dredging the Sodus channel in the year 1836, which estimate is sent herewith, amounting to \$17,600, leaving a balance of \$12,600 requisite to be appropriated for clearing out obstructions at the entrance of Big Sodus bay in the year 1836.

Of the beacon-light at Sodus bay.—A structure of stone of the same form, dimensions, and foundations as the beacon at Genesee river has been commenced at the extremity of the west pier of Sodus in Lake Ontario, and is three-fourths finished. For the same purpose of cementing and settling, as of that at Genesee river, this beacon will also remain open until the spring, the temporary light continuing to answer its present purpose.

The balance of this beacon-light appropriation now on hand will cover the expenses of its completion.

Respectfully submitted,

J. G. SWIFT.

General GRANTOT, *Chief Engineer.*

Estimate of funds requisite to remove the obstructions from between the piers at Big Sodus bay for the year 1836.

For the employment of Mr. Holmes and his machinery in cutting out and delivering into United States gondolas 400,000 cubic feet of pan, at three cents.....	\$12,000 00
For two gondolas with folding sides, at \$650.....	1,350 00
For chains and anchors	450 00

For labor in gondolas and boats.....	\$1,080 00	
For superintendence and contingencies.....	2,720 00	
		17,600 00
Balance in the treasury	\$1,000 00	
Balance in the agent's hands on the 31st December, 1835	4,600 00	
		5,000 00
Wanting to be appropriated for the year 1836.....		12,600 00

J. G. SWIFT.

G.

NEWPORT, R. I., *December 27, 1834.*

Sir: The "special board of engineers," convened by your order of the 19th ultimo, to take into consideration the subject of improving the Hudson river and of devising a plan to overcome the obstructions to the navigation between Waterford and a point below Albany, to be designated by Captain Talcott, and directed by said order to review two projects which had been suggested—one by a canal, and the other by deepening the bed of the river—and to give its opinion as to their relative merit and practicability, accompanied by estimates of cost, present the following report:

Section 1. The information touching this subject furnished the board, exclusive of such as had been collected in personal examinations of the river during the autumn of the present year by Captain A. Talcott, a member of the board, is comprised in—

1st. A report of a joint committee of the legislature of New York, dated March 12, 1818, which includes a report of Mr. Thomas Moore, engineer, of February 25, 1818, and a report of Mr. Josiah Beckwith, of July 16, 1817.

2d. A letter of commissioners for improving the navigation of the Hudson river below Albany to the governor of the State, dated March 31, 1818.

3d. A report of the commissioners appointed to report a plan for improving the navigation of the Hudson river, communicated by the governor to the senate and assembly of the State on the 1st of March, 1820, with which report are connected a report and estimate of Mr. Henry Butler of February 21, 1820; a report of Mr. E. C. Genet on a ship canal, accompanied by schedules from A to H, inclusive, schedule E being an estimate of cost; and a map by Mr. Randal, on a large scale, and much in detail of the river from below New Baltimore to Troy.

4th. A report and estimate, without date, of Mr. Dewitt Clinton, United States civil engineer, to Lieutenant Colonel John J. Abert, topographical engineer, communicated by the Secretary of War to Congress on the 30th March, 1832, there being connected with this report a map on a large scale of the survey made by Mr. Clinton from below New Baltimore to Waterford.

Section 2. As to the number and nature of the obstructions, and as to tides, currents, &c., it appears from the above sources of information—

Section 3. That in 1819, "from the city of Troy to the city of Albany, at the low water mark of last summer, (1819,) taken at the ferry at Albany, and upon which the soundings have uniformly been gauged, there are not less than eight shoals over which the depth of water averages from 3 to 4.50 feet."

Section 4. That from the examination of 1831, (by Mr. Clinton,) to obtain a channel of nine feet deep at low water, and one hundred and fifty feet wide, excavation would be required at thirteen places between Troy and Albany, varying in depth from one to six feet; or, in other words, that in thirteen places the depth of water varied from three to eight feet.

Section 5. That in 1819, "south of Albany, as far as Castleton, the water in general is shallow, and over five extensive bars varies in its depth from 4.50 feet to 5.60 feet; and that between Castleton and New Baltimore there are more intervals of deep water and only four bars, over which the water varies from four to seven feet."

Section 6. That in 1831 it was found the river would require deepening in six places between Albany and Castleton from 1 to 2.50 feet to obtain nine feet water; and that in no place south of Castleton was there less depth than nine feet water in the deepest part of the channel.

Section 7. That it has been ascertained from recent examination that the shoals and bars are now composed of a mixture of sand, gravel, and pebbles, above Albany, and of sand below Albany; and it was stated by Mr. Clinton that in 1831 all the bars above Albany are gravel and other heavy soils, while all below Albany are sand and other lighter deposits.

Section 8. That the mean flow and full of the tides of the river, when not influenced by freshets, is said by Mr. Genet to be: At Troy, 1 foot; at Albany, 2 feet; at New Baltimore, 3.60 feet. And from the registers kept by Mr. Clinton in 1831 the mean was: At Troy, $13\frac{1}{8}$ inches; at Albany, $25\frac{1}{8}$ inches; at Castleton, $20\frac{1}{8}$ inches; at New Baltimore, 34 inches.

Section 9. That the only observations on the velocity of the currents were made during the low stage of water, they giving a variable velocity between Troy and Albany of from 0.60 feet to 2.00 per second, according to local circumstances; and between New Baltimore and Albany of from 0.75 to 1.70 feet per second.

Section 10. And that from New Baltimore to Albany the distance is about 15 miles, from Albany to Troy about $5\frac{1}{2}$ miles, and from Troy to Waterford 4 miles, making the whole distance within which improvements are called for about $24\frac{1}{2}$ miles.

Section 11. For more definite and satisfactory information than can be communicated verbally in relation to the relative positions of the respective shoals; their form and extent; the width and direction of the several parts of the river embarrassed by them; the position, form, and magnitude of islands, &c., the board refer to a map, on a scale of 440 yards to one inch, of the portion of the river lying between New Baltimore and Troy, herewith presented.

Section 12. The attempts at improving the navigation of the Hudson hitherto made have been of two kinds; and, as the board believe, of these two only, namely: 1st. The erection of a low dike or "jettee" above certain of the shoals designed to confine the channel in low water.

As to this application, we cannot ascertain that any lasting benefit has resulted therefrom; at any rate, as the resulting benefit, if any, is made a matter of question, it must be trifling, and we know that it is inadequate. 2d. Applying to the shoals the dredging machine, thereby mechanically removing the impediments. This application has certainly afforded temporary advantage; but a very general impression prevails that the improvement is transient, outlasting the period of low water chosen for the application, but scarcely surviving the first flood. The river has, however, in particular places, been greatly benefitted, as it were, incidentally, by works not having that exclusive object. The increased depth along the front of the new docks at Albany being a strong instance.

Section 13. The board approach the particular investigation of the subjects committed to them with great diffidence.

Considering their want of experience in operations of the nature of those now to be examined, and the newness to them of some of these subjects, even as matters of study; considering, on the one hand, the incalculable benefits to result from a successful solution of the difficulties, and on the other, besides the great immediate loss, the perhaps irremediable mischief that mistaken and erroneous views on their part may involve; though they shall apply their best faculties to an investigation which their duty does not permit them to avoid, they feel bound to ask as to their results, not confidence, but caution.

Section 14. We shall first confine ourselves to the subject of canals, as a mode of avoiding the river obstructions below Albany; afterwards examining the means of adapting the bed of the river, from Waterford downward, to the purposes of navigation.

CANALS.

Section 15. In March, 1820, Governor Clinton presented to the legislature of the State of New York the report of a board commissioners, consisting of himself, Simeon DeWit, J. V. N. Yates, M. Van Buren, E. C. Genet, George Tibbets, and Townsend McCoun; which report embraced the individual project of Mr. E. C. Genet, one of the commissioners, for a ship canal.

Section 16. The project of Mr. Genet contemplates a canal 18.70 feet deep below ordinary high water, 35 feet wide at the bottom, 109.8 feet wide at the top, and having a length of $12\frac{3}{4}$ miles. "The course of the canal would be from Greenbush, through the flats and a creek, to the front part of the village of Castleton; thence through meadows and islands to the Shodack creek, as far as Schermerhorn's store; from thence, in an oblique direction, it would reach, through an island and a creek, the outlet of Vvyde Hook." The report of Mr. Genet states that the upper mouth of the canal would be accessible from the Albany docks with 13.30 feet water at low water mark of summer; and the lower mouth with 13.70 feet at the lowest water; there being, however, on a shoal from two to three miles below the canal a depth, under the same circumstances, of 11.80 feet. The report further states that the average fall in the ground from Greenbush to the lower outlets does not exceed 1.50 feet; that the high water at Albany and at Shodack, twelve miles below, are on the same level; that the difference between high and low water marks at Troy is 1 foot, at Albany 2 feet, and at New Baltimore (one mile below the lower mouth) 3.60 feet; that numerous examinations, by borings to the depth of 21 feet, show the matter to be excavated to consist of "coarse sand and loam, except a distance of 1,800 yards, about 900 of which is blue and the remainder yellow clay;" that the form of the shores of the neighboring creeks, and the difference of levels in the neighboring river and in the wells in the vicinity, indicate a soil not liable to wash and tenacious of water; that the survey and levelling give the average height of surface along the line of the canal as 1.915 feet below common high tide, leaving 16.785 as the average depth of cutting; that it is proposed to raise an embankment two feet above the highest spring freshets along each bank of the canal; the western embankment having sufficient breadth to serve, being gravelled, as a towing path, and to erect a piece of masonry (furnished with a safety gate) of the same height at each end.

Section 17. Connected with the report is an estimate of the expense of the canal, drawn up by Mr. John Randal, jr., engineer, which places the sum total at \$727,715 08, or about \$57,000 per mile. It is necessary to observe here that this estimate relates only to the construction of the canal proper.

The canal has a depth within itself of more than 18 feet; but to obtain access thereto with this depth at the lower end, and to carry the same depth to the docks at Albany, in order to profit of the deep cut for purposes of ship navigation as high as that city, would probably require in the river extensive dredging, and perhaps structures of considerable extent, calculated to maintain the increased depth; operations somewhat uncertain as to durable results, and expensive in their nature; but to what degree called for, or to what degree expensive, we have not the data to determine.

Section 18. From the preceding statement, drawn from Mr. Genet's report, there appears to be no serious obstacle in the nature of the country, so far as can be foreseen, to the construction of the canal. In taking 22 cents per cubic yard, however, as the price of excavation the estimate has not contemplated any obstructions to the work from water; an obstruction not unlikely in such deep cutting; which, in common prudence, ought to be anticipated, and which, if occurring, would considerably enhance the cost of the canal.

Section 19. There will be, we think, in this, as in every other canal habitually navigated by large steamboats, a heavy item of expense, to be lessened probably by ingenious devices, but which no device can elude; we mean the protection of the banks against the wash of water set in motion by passing steamboats. As an approximate estimate of such a protection, and for the sake of comparison, we have supposed the slopes lined with planks from the bottom to the mean surface of the water, and thence for a further height of five feet, with a thin leaning wall. The cost of the lining for this canal we make amount to \$474,600; which sum, added to Mr. Randal's total of \$727,715 08, gives \$1,202,365 08.

Section 20. With this addition to the estimate, and such others as we have above supposed necessary or prudent, without, however, being able to give amounts, the projected ship canal might be completed, and the result would be a fine draught of water from Albany downward.

Section 21. It is not for the board to discuss the main question involved in the above project, namely, the advantages of an unobstructed navigation for the larger sea-going vessels from the ocean to the city of Albany. How far the city of Albany might have the disposition or the power to avail herself of such an advantage; how far the extensive regions which communicate with the Hudson would be bettered by a change in the commercial character of that city; or if any, what amount of national advantage would accrue, the board have not the means of estimating. They can only say that if such an improvement of the navigation should be deemed essential to these and other great interests, the improvement may be attained.

Section 22. The canal project above referred to is, however, worthy of consideration under another aspect. Giving up the condition of ship navigation, the same route will afford a free passage to river and coastwise craft from Albany downward, at a less depth of excavation, and without dredging, or any constructions exterior to the canal, and consequently at a greatly reduced cost.

Assuming the same state of things as regards surface of ground, nature of soil, &c., as is assumed in Mr. Genet's project, and also the same route, an average depth of cutting of 8.085 feet will give a draught of ten feet water. In answer to a question by Mr. Dewitt Clinton as to "the depth of water required by the interest and the amount of trade at extreme low water," Mr. James, of Albany, replied, "A depth of eight feet water is necessary at the lowest tides; depth of eight feet water will be a great relief from the present difficulties, but if it be increased to ten feet it would directly create a West India and whaling trade, and other foreign enterprise, which, of course, would add to the prosperity of the city, and increase the shipping and revenue of the United States government;" and Mr. McCoun replied, "Depth at low water should be from eight to ten feet." Using the assumptions before announced, it is found that the cost of a canal 109.80 feet wide at top, and ten feet deep, at the price of excavation allowed in Mr. Randal's estimate for excavating the deep canal, namely, twenty-two cents per cubic yard, both banks being lined with planks and stone, and all other allowances being the same, would be \$810,878.

Section 23. But both the project of Mr. Genet, and the modification thereof just indicated, suppose the state of high tide for the full depth in one of 18.80 feet, and in the other of ten feet; and it would certainly be less to the disadvantage of the deeper canal than of the shallower to be restricted to the time of high water for its maximum depth, because of the smaller number of vessels of great than of medium draught.

Section 24. If it be deemed important to have, without resort to locks, about ten feet draught along the canal at all times of tide, then it will be necessary to deepen the above excavation two feet at the upper, and about three feet at the lower end. An average additional cut of 2.50 feet in depth will bring the estimate, at the same prices, to \$935,340. The addition to the above estimate being \$124,462. The substitution for this additional excavation of an adequate number of locks of suitable size would, it is thought, besides retarding the circulating trade, involve a considerably greater expenditure.

Section 25. In order the better to institute comparisons as to expense, the surface breadth of 109.80 feet, adopted in Mr. Genet's project, has not as yet been departed from; that breadth being calculated for passage of two ships of six hundred tons, or two sloops loaded with boards. On presenting the question as to "the width of the channel necessary to be opened at the several bars to give the trade sufficient security," Mr. Clinton was answered by Mr. James, "a width of one hundred and fifty feet is necessary;" and by Mr. McCoun, "width of channel from one hundred to three hundred feet." Giving to these replies the value belonging to them, as the testimony of gentlemen deeply interested in the subject, and long familiar with the state of the river and its trade, it would seem that one hundred and fifty feet would be the minimum to allow as a breadth of channel to improvements at the bars in the river, but a much more restricted width might evidently be admissible at these few and distant points than should be assigned throughout an extended reach.

The extent to which steamboat power is already applied to the trade of the river, and to the conveyance of passengers, the great breadth of the vessels, the agitation they cause in the water, and the space they need to pass each other in safety, seem to demand for the width of the canal at least two hundred feet. Taking, then, two hundred feet for the surface breadth, twelve and a half feet for the average depth of the bottom below high water, in order that there may be at common low tide a depth of ten feet, giving slopes of two to one to the banks, and assuming the same average ground level as before, the cost of excavation will amount, at twenty-two cents per cubic yard, to..... \$994, 216 95

Doubling the cost of land, as estimated by Mr. Randal.....	22, 928 00
Taking Mr Randal's estimate for travelling towing-path, for sewers, filtering-dams, safety-gates, dredging, and steam engine.....	18, 529 00
Lining both sides of canal with planks up to low water level, and facing the banks with stone for a further height of five feet, say	350, 000 00
	<hr/>
	1, 385, 674 55
Add for contingencies, ten per cent.....	138, 567 45
	<hr/>
Total.....	1, 524, 242 00

Section 26. Believing it not improbable, from the great annual increase of the river trade, that it would soon find considerable embarrassment from the width of two hundred feet just assumed, although that width might meet its present exigencies, we have next taken the supposition of a width of three hundred feet, and find, by the same process of estimating, a cost of \$2,174,640.

Section 27. The board cannot be answerable for any inaccuracies in the preceding estimates. Besides being without experience in operations of the nature of these in question, it has not been in their power to make personally the necessary examination of the localities or to collect the multifarious data requisite for an exact statement of prices and a just valuation of workmanship and materials. The estimates deserve some confidence, however, as comparative estimates, and as such are considered useful in illustrating the subject before the board; and considering them in this light, it is proper to notice here that there is much less reason to apprehend considerable deficiencies in the estimates for the seven feet and the ten feet canals than in that for the sixteen feet canal, because, as before observed, no operation exterior to these shoaler canals will be called for, and because the bottoms being at less depth, the removal of the earth will be accomplished at a cheaper rate, whether embarrassed by percolating waters or not. It is proper to observe, further, that Mr. Genet's project having been located with reference to a navigation for the larger class of ships, it is not impossible that when seeking for the exact route of a communication of a different nature, as regards the form of the vessel and draught of water, a cheaper path may be selected.

Section 28. In order to bring the several preceding estimates into one view, they are here recapitulated:

1. Mr. Genet's project of a canal about 16 feet deep at low water, 109.8 feet wide at top, 12 $\frac{3}{4}$ miles long—Mr. Randal's estimate being increased by the supposed cost of lining the banks, cost of dredging, and other work exterior to the canal, not included..... \$1,202, 365 00
2. A canal about 7 feet deep at low water and 10 feet at high water, 109 feet wide at top, 12 $\frac{3}{4}$ miles long, banks lined, no work required exterior to the canal..... 810, 878 00

3. A canal about 10 feet deep at low water, 109 feet wide at top, $12\frac{3}{4}$ miles long, banks lined, no work required exterior to the canal.....	\$935, 340 00
4. A canal about 10 feet deep at low water, 200 feet wide at top, $12\frac{3}{4}$ miles long, banks lined, no work required exterior to the canal.....	1, 524, 242 00
5. A canal about 10 feet deep at low water, 300 feet wide at top, $12\frac{3}{4}$ miles long, banks lined, no work required exterior to the canal.....	2, 174, 640 00

Section 29. Mr. Genet presented, besides the project we have been considering, a scheme and estimate for a "sloop and steamboat canal" of $6\frac{2}{3}$ miles long, about 12 feet deep at low water, and 72.60 feet broad on the surface, having 13 basins 130 feet long, in which the surface width of the canal would be increased to 112.60 feet.

As this canal turned off from the river at Castleton, leaving below its lower mouth "five bars" to be removed by dredging, and other river work, thereby involving a mixed system of operations, it will not be herein considered.

Section 30. The board are of opinion that the preceding examination of canal projects has shown with some precision the relative expense at which communication of this nature, more or less capacious and accommodating, may be effected; and also that although the absolute expense is shown only approximately, this approximation is an interesting and important result.

Of the practicability of either of these projects they have no doubt; and were the subject before the board confined to the improvement of the Hudson downward from Albany, the problem would be limited to a comparison of the effect of means directed, in one case, to the making a new channel, and, in the other, to the improvement of the natural one. Should such a comparison show, for example, that the means demanded for an artificial channel of the required depth, and a certain width, would give to the river an equal depth, with a width much greater, the problem, so far as regards the kind of improvement, would be solved; and, on the other hand, should it appear that uncertainty as to both results and means would attend every step in the labors upon the river, it might be prudent still to consider the problem solved, yielding cheerfully to demands, though great, which cannot disappoint, rather than encounter an alternative surrounded by doubt and hazard. But the problem before the board is not thus simple.

The canals we have been considering reach no higher than Albany; and the form of the shores above that city has, as we believe, been considered as restricting improvements to the bed of the river. From the materials before the board, it is, at any rate, necessary to take the supposition that above Albany the river is, if possible, itself to be improved.

We are, therefore, for this portion of the navigation necessarily driven to a choice of means of improvement from amongst a class of expedients which have often disappointed sanguine expectations, it being our duty to find, if we can, one of these which shall hold out the promise of fulfilling all important conditions. And as we may anticipate, from the nature of the obstructions, that any expedient which shall be found applicable above will not be less so below Albany, it will be proper to take into the investigation the whole range of the embarrassed navigation.

The cost of so much of the river improvement as will be needed below Albany may then be compared with the cost of the several canals.

IMPROVEMENTS IN THE BED OF THE RIVER.

Section 31. The survey by Mr. Randal of this part of the Hudson was made in 1819.

In 1826 the new docks of Albany, which considerably contract the section of the river and change the outline of one of its shores, were erected. By the survey of Mr. Clinton, in 1831, it was proved that a very important change, giving quite sufficient depth, which has been maintained up to the present time, had been wrought in the channel along the face of these docks by the contracted current, the average depth having been considerably augmented beyond that shown on Mr. Randal's map.

That this effect has not been caused by the tides may be inferred from their small velocity at that place, viz., twelve inches per second on the surface, or a little more than six inches per second on the bottom—a velocity insufficient to disturb the mixture of sand, gravel, and pebbles, whereof the bottom is composed.

The cause must be sought, then, in floods. But here we are greatly in want of facts. Had we the exact slope of the river for a given length, and also the measure of its section in different states of the flood, we might calculate the velocity with some accuracy. But we must make the best use we can of such information as we possess. Mr. Randal states that in extreme low water the fall from Troy to Bath, (opposite Albany,) five and half miles, is two feet. Lieutenant Colonel Talcott has observed that, in a low condition of the river, the dock at Watervliet is at the same height above the water as the dock at Albany; while the waters of a moderate flood, which just reach the top of the Watervliet dock, are two feet below the top of the Albany dock: here is, therefore, a fall of 24 inches in five miles for this flood; or observing the same slope, a fall of 24.6 inches in the five and a half miles from Troy, which, added to that of 24 inches at low water, gives a descent of 50.4 inches in five and a half miles, equal to 9.164 inches per mile. According to the books, the velocity along the bottom at Albany, due to this fall, to the section of the river at this place, and to this state of flood, which rises at Albany about 8 feet above lowest water, giving a mean depth there of 16.14 feet, would be about 42 inches per second, an action that will bear off the coarsest gravel, according to the authorities. Taking now a flood, such as not unfrequently occurs, of 4 feet above the Albany dock, which would amount to a rise of the river above lowest water of 14 feet, and considering the slope the same, the bottom velocity at Albany would be 51 inches per second, requiring a mixture of pebbles to protect even the coarsest gravel. This estimate, probably near the truth, of the force of the current in freshets, fully accounts for the improvement of the channel since the construction of these docks. The present most contracted section of the river along the Albany docks, at lowest water, is about 800 feet in width, by an average depth of 8.14 feet, the greatest depth being $12\frac{1}{2}$ feet.

Section 32. Supposing the bottom to be everywhere of similar materials, it is an inference scarcely admitting a doubt, that could the channel, being kept nearly straight, be everywhere made of the same width, the slope of the river being also the same, there would be wrought out, by the wearing of the current in floods, a similar depth of channel throughout all the parts of the river thus contracted. But as the slope might vary in different parts of the river, though the bottom might be the same, then, wherever the slope were more gentle, the channel would need greater contraction, and where steeper less contraction to cause a like corroding action. And the slope remaining the same, the nature of the bottom might

vary, requiring greater or less contraction to produce a velocity answering to the resistance of the bottom. Again, both the slope and the nature of the bottom may, as regards different portions of the river, be variable, which is the most probable supposition. And finally, the degree of action upon the bottom, whatever may be its nature, or whatever the slope, may be made to depend on the height of waters kept within the restricted limits.

Section 33. Admitting that the principles just suggested are applicable to the improvement of the river, it is evident that the data they involve are matters to be obtained by observation; and we will add that it is of the first importance, if these principles are to be so applied, that the observations are to be made with great care and accuracy. As to surveys and soundings of the river, the maps of Mr. Randal and Mr. Clinton are perhaps sufficient; but several slopes of the river, at several different elevations of the growing flood, the measure of these elevations, the nature of the bottom to some distance below their surfaces at all the bars, are yet to be obtained, and are deemed indispensable to a correct and safe application of these principles.

Section 34. Certain expedients hitherto applied in this range of the Hudson, although similar in kind, have not, so far as we can ascertain, been so situated or so formed as in any degree to invalidate by their want of success the truth of the above principles. At or near certain shoal places dikes have been constructed, tending to keep the channel between narrow limits at a low state of the river; but being raised little, if at all, above the level of low water, they confine the river at a low state only; and as it is questionable whether the slightest benefit has resulted, there is a good reason to conclude that, in that reduced state of the waters, there is not sufficient velocity to act upon the bottom.

Section 35. The ideas we have adopted are, that if the river be confined between banks of such height, and at such a distance from each other that the velocity of the water therein, when the banks are full, shall have the intensity of action called for by the nature of the bottom, then the channel will be deepened; and if the proportion of height and breadth called for by the nature of the bottom be everywhere duly observed, then the depth will be uniform. It is the flood, then, on which we rely; but not on *all* the flood, for several reasons: 1st, because certain localities may require a lateral restriction, such that if all the flood were kept in, the corrosion of the bottom would be too great, endangering the structures and bearing into the lower portions of the river an unnecessary and perhaps hurtful amount of matter; 2d, because it is desirable that the ice which accompanies the crest of the flood should pass over the dikes without injury to them; and 3d, because by allowing the height of the flood, when the waters are most turbid, to pass freely over into the numerous lateral channels and basins, a great amount of deposit will be made therein, which would otherwise be transferred into the lower river.

Section 36. We do not mean, by any expression implying the confinement of the river within narrower than the natural limits, that we consider it actually necessary to construct these artificial bounds in all cases where the natural bed may be wide.

It may happen that the course of the channel of the river is such as to leave much dead water over a large proportion of the bed, although its own abrading action along its tract is considerable. Nor do we mean that, in more common cases, the dikes must be strictly continuous; numerous breaks may undoubtedly be left with impunity and even advantage.

Section 37. We now proceed by way of illustration to supply these ideas to the particular case of the Overslaugh bar.

The distance from Beacon island to Papscanee island is about 1,200 feet, and the average depth at low water about six feet.

If a dike be raised to the height of seven feet three inches above lowest water, upon the eastern shore of Beacon island, and be continued to Bogert's island, keeping everywhere at the same distance (of 1,200 feet) from Papscanee island, the passages behind Westerloo's, Bogert's, and Papscanee islands being closed, then on the occurrence of a flood equal in elevation to the top of the dike, the water passing the Overslaugh bar must have a mean velocity of thirty-six inches per second, and a mean depth of 14.2 feet, to discharge the waters which rush by the Albany docks.

The deepening process must begin when the waters shall have risen to within 1.40 feet of the top of the dike, because at that altitude the bottom velocity will be about eighteen inches per second; more than adequate to transport the sand composing the bar. As the flood shall continue to swell from this height to the top of the dike, the velocity along the bottom will rapidly increase (and also its corroding action) until it amounts to about thirty inches per second, corresponding with the mean velocity of thirty-six inches; this last bottom velocity of thirty inches being sufficient to transport the coarsest gravel. But when a practical application comes to be made of these ideas, the above proportions of heights and breadths, calculated on the somewhat vague information before us, may require considerable modification.

For example, the substance of the bar may be uniformly very fine sand to a considerable depth, or, after penetrating a little, it may be found to be quite coarse, or mixed with gravel or pebbles; either of these conditions would require a departure, one way or the other, from the above propositions.

Section 38. It is not impossible that after the structures at either of the sandy bars shall have accurately and fully accomplished their first object, namely, have opened a wide and deep channel, they may call for modification, to enable them to fulfil the further object, no less necessary, of keeping the channel free.

Certain of the obstructions appear to be made up of pebbles mixed with sand and gravel; portions of which materials may be transported, in the operation of breaking up these latter bars, as far as the sites of the bars of sand, and, as at these the velocity first resorted to was only sufficient to move sandy matter, they will be there deposited—building up, unless prevented by this modification, bars of gravel in the places of the original bars of sand.

Section 39. Modification may also be demanded by errors in the application.

So many circumstances come in play, variously aiding, neutralizing, or counteracting each other, that it is not in human calculation to appreciate them with exactness.

For instance, wherever the form of the river requires that the dike should lie in or near the bottom of a curve, it will be found, in most if not all cases, that the most rapid current will be on that side of the river, and that there will be, in fact, an accumulation of water along the dike, above the general transverse level; but in determining the amount of this accumulation, or to what degree the current will be accelerated thereby, there is, within certain limits, a probability of error; and if an error be committed, the dike may need a reduction of its altitude, to prevent its being undermined; or an augmentation, to afford the requisite velocity. The Albany dock well illustrates the principle of the greater velocity being on the concave side of the river; the average depth lies about the middle of the river, while all

the shoaler water is on the east side, and all the deeper on the dock side; the deepest being quite near the dock.

Section 40. We have, in considering the effect of floods, thus far spoken of them as the sole agent whereby the deepening of the channel was to be effected, and as our reliance to that end.

Strictly speaking, however, they constitute our sole reliance only as the agents whereby an improved channel is to be maintained in good condition. And as they need, to qualify them for this office, the same powers that would be needed were they relied on to excavate the channel also, we have hitherto considered them as fulfilling both offices. Having shown that the floods may, through the means of artificial works, be so directed and controlled in their action as to give everywhere the necessary depth of water, and, as a necessary consequence, maintain a sufficient depth during their continuance, we come now to consider a very important point, namely, whether it will be prudent to allow the floods to make these extensive excavations, throwing the matter they remove into the lower parts of the river; and if not, what will be the best mode and probable expense of making them by other means. As to another point, also important, viz: whether a low condition of the waters will be likely to affect injuriously the deepened channels, which may as well be noticed here, once for all, we have to observe that, considering the velocity of the water will be much too small to move a bottom which has been regulated by much greater velocity of a flood, and that the waters are but slightly turbid at that season, no change of consequence need be apprehended.

Section 41. Mr. Randal estimated the quantity to be removed, in order to obtain a channel 660 feet wide, and nine feet deep at the lowest water, from State street, in Troy, to Vyvde Hook, below Coryman's overslaugh, at 8,221,676 cubic yards; although this quantity is several times greater than that which it will actually be requisite to remove, as will be shown in the sequel, we will, notwithstanding, endeavor to trace its probable effect upon the river.

Section 42. A part of the heavier and grosser portions of matter would undoubtedly be dropped in certain hollows which are considerably below the common bed of the river; and a proportion of the finer particles would flow over with the water into the lateral channels, and be deposited in the stiller places; but, allowing that the whole quantity will be transported below the range of the artificial works, we find it stated by Mr. Genet, "that from New Baltimore to Hudson," a distance, we believe, of about twenty miles, "following the east channel, the depth of water averages seventeen feet, except at one place, one mile below New Baltimore, where at the lowest water the depth is only 11.80 feet." We also find by the last sheet of Mr. Randal's map that the average depth at lowest water, for one mile below New Baltimore, is about fifteen feet; or more accurately, that the average depth, between the lines of nine feet water, is 15.45 feet; which will leave a depth of 6.45 feet to be filled up of the bottom, without in the least incommoding the navigation. This depth into the average width gives more than 1,000,000 cubic yards to a mile; so that a length of eight miles would afford room for all the deposit, even were the average depth fifteen feet only, instead of seventeen feet; and the average width no greater than that of the small and narrow portion of the river taken near New Baltimore.

Section 43. It is not to be supposed, however, that this matter will all be deposited within this distance. The more probable operation will, in general terms, be this: on reaching a point where the velocity is diminished in a slight degree, the heaviest and largest of the materials only will find it insufficient for their further transport, and those only will be deposited; another diminution of velocity will leave behind the matter standing next in the descending scale, as to magnitude and weight; and so on, until at last the waters bear up fine particles alone.

Section 44. In a channel nearly direct, uniformly enlarging in section, and lessening in velocity, the operation would be nearly as just described. But in all rivers there are disturbing causes of this regularity; and amongst these are chiefly worthy of notice the branching off of the channel around islands, and sudden enlargement of the bed; both taking off, to be dropped in the more quiet places, much of the lighter matter mixed with the water. We may presume that the transported matter, instead of composing a stratum of several feet in thickness, just below the termination of the artificial works, will be spread, in a thin layer, over many miles in length.

Section 45. Mr. Genet mentions a shoal about one mile below New Baltimore of 11.80 feet water in the channel, which we find exhibited on Mr. Randal's map.

Mr. Clinton's survey, made twelve years after Mr. Randal's, shows a shoal in the same position, though considerably deepened and changed in form. We do not think it probable that this shoal, or any other in the channel, will be increased by the transported matters. Shoals are formed, not simply because the waters are turbid, but because they are both turbid and slow; and there is no reason to believe that the current along this part of the river will be diminished. Should it nevertheless occur that particles too heavy for the current, at the shoal, were conveyed thus far, it would be easy to contract the channel to the degree necessary to cause their removal.

Section 46. But it is of the first importance to mention here, that in calculating the quantity used above Mr. Randal took an extreme low water, a level 3.30 feet below the average low water recorded in his tables, and then supposed the excavation to be carried nine feet below this level; in other words, 12.30 feet below his registered average low water. This is taking an extravagantly low level, as will be seen by using it in Mr. Genet's canal. That canal, designed for ships, would, in this condition of the water, have but 11.80 feet draught at its lowest mouth, while it would have upwards of fifteen feet at the average low water. A more reasonable supposition, and one that, it is believed, would perfectly answer all the requirements of the trade, is to consider the river as requiring ten feet depth at common low water. This well accords with the several canal projects, and will agree, very nearly, with the proposal of Mr. Clinton, to give nine feet at very low tides. Now, taking this as the depth, and using Mr. Clinton's calculations of the quantity to be dredged, it is found that to obtain a channel of 660 feet wide, (the width given by Mr. Randal,) will call for the removal of about 2,000,000 cubic yards, or less than one-fourth of the before stated quantity of 8,221,674 cubic yards. This quantity would, on the supposition before made, (Section 42,) if deposited in a bed of 6.45 feet deep, extend less than two miles below New Baltimore; if spread along the bed for eight miles, would raise it but 1.60 feet; and if diffused uniformly over the bottom as far as Hudson, would cause an elevation thereof about six inches.

Section 47. If, now, the better to compare this operation with the canal projects, we take a breadth of 300 feet for the channel, again using Mr. Clinton's calculations, the quantity to be removed would be less than 1,000,000 cubic yards; calling it 1,000,000, it would barely fill the basin in front of New Baltimore 6.45 feet high; would raise the bed 10 inches for a length of 8 miles, or about three inches for a length of 20 miles.

Section 48 It would appear, from the above statement, that the quantity of 2,000,000 cubic yards might be left to the disposal of the floods, with the probability that no harm would result therefrom to the lower portion of the river; and, of course, the probability would be the greater with the lesser quantity of 1,000,000 cubic yards.

Section 49. But it may, after all, be the part of prudence, in a matter of such consequence, to guard against even improbable contingencies, to secure from possible danger a portion of the river which nature has left in a condition admirably adapted to the purposes of trade; and in order to this, to resort for the excavation of the channel, in part, if not wholly, to the dredging machine; leaving to floods, restrained by dikes, only the preservation of the requisite depths.

Section 50. With the observation that, in the progress of operations, it may be advisable to experiment upon the first mode of excavation, carefully watching effects, and in certain situations to apply both, we proceed to a more particular description of the works we would recommend for the improvement of the river navigation, reserving for the estimates a statement of the expense of dredging.

Section 51. As to the river from Waterford to the sloop lock, just above Troy, the board recommend the improvements suggested by Mr. De Witt Clinton—(See our estimate and his report.)

Section 52. Beginning at the foot of the sloop lock, we recommend, in order to prevent the water which falls over the dam from washing gravel into the channel, a low dike, to extend from the "slide" to the head of Hay island. The dike will be 2,230 feet long.

Section 53. A dike, 3,900 feet long, extending from the upper part of Port Schuyler docks to the head of Breaker's island, is proposed, in order to the removal of Washington and Van Buren bars.

Section 54. A dam from the west shore to Cuyler's island, 260 feet long, and another to Patroon's island, 120 feet long, together with the protection of the shores of these and Breaker's and Hillhouse's islands, on the channel side, will, it is thought, be sufficient to open the channel to Base island.

Section 55. The old dike, from the head of Base island to the east shore, to be raised; the face of this island protected, and a dike of 2,350 feet in length extended downward from the lower part of Patroon's island, with a view to the removal of the "Fish-house shoal," and to the turning the current upon the eastern shore; and, as auxiliary to the same effect, building a dam, 700 feet long, from the west shore, to Patroon's lower island, and securing the face of said island.

Section 56. Supposing the passage behind Waterloo's island already closed, a dam of 200 feet in length is proposed to connect this island with Small island, and a dike of 1,700 feet in length to run out in front of Small island, turning the mass of water eastward.

Section 57. The removal of the extensive shoal which includes the "Upper Overslaugh" and "Overslaugh bar" may be accomplished, it is thought, by the following works on the west side of the channel, viz: a dam 300 feet long behind Bogert's island; protecting works along the faces of Bogert's and Beacon islands; a dike of 3,600 feet in length from Bogert's to Beacon island; a dike above Bogert's island 1,400 feet long, and one below Beacon island 2,900 feet long, aided by the following works on the east side, namely: a dike 1,400 feet long running downward past the mouth of Papscanee creek; works of security along the face of Papscanee island, and cutting off 700 feet from the outer end of Van Wie's pier.

Section 58. "Austin's Rock" may possibly require removal.

Section 59. As Van Wie's Point will turn the current against Papscanee island, the shore of the latter, for some distance above and below the mouth of Cooper's kill, will require protection.

Section 60. That the channel may have a suitable direction below Papscanee island, a dike, 3,200 feet long, should be extended downward from near the lower end of the island, and to prevent any portion of the flood passing behind this island, Papscanee creek will require a dam of 130 feet in length.

Section 61. Together with a dam 450 feet in length from Smith's island to the main, a dike 850 feet long from this island to Cow island, and protecting works along the faces of these islands, it is proposed to run a dike from the west shore, above Vluaman's kill, in a direction proper to bend the current towards the Castleton docks. This dike will be 3,400 feet long, and will require that 700 feet be taken off Winnie's pier.

Section 62. It is proposed to throw a dike 1,600 feet long across the upper mouth of Schodack creek to protect the shore above it for some distance, and below it, along the face of Schodack island, to the entrance to "Hell Gate," and to unite Shad island with the west shore by a dam 250 feet in length.

Section 63. That the Hell Gate passage, to the village of Schodack, may be kept open, and at the same time to turn the current from that passage, a dike 2,200 feet long has been drawn from Schodack island in such a direction as to throw the mass of waters outside of the head of Mull's Plat island.

Section 64. A dam of 200 feet in length being thrown from Mull's Plat island to Lower Schodack island; a dike 1,300 feet long from Mull's Plat island to Mull's island; two short dikes, making, together, 600 feet in length, across openings in this last island; a dike 3,600 feet long from Mull's island to P. Ten Eyck's island, and a dike 700 feet long from the latter to Houghtaling's island; the protection of the faces of Mull's Platt island, Mull's island, and P. Ten Eyck's island with suitable works, will complete the structures deemed necessary.

Section 65. All the structures above enumerated have been drawn conspicuously on the map herewith, in order to show the application to the case before us of the means on which alone, as the board think, reliance can be placed for maintaining a good depth of water. It will be seen, on consulting the map, that with works of no great length, as regards the length of river, the great body of water may be confined to comparatively narrow limits, and be made to follow a given track; and it is evident that the depth of water coursing between these limits in times of floods, and consequently the abrading force of the current upon the bottom, can be regulated by the height given to the dams, the dikes, and the works protecting the shores.

Section 66. It was before stated (section 33) that accurate observation as to the height of floods, their slope, velocity, &c., and as to the nature of the bottom, is indispensable, not only to a correct determination of the proportion of flood which it will be proper to keep within the restricted limits, but also to the adjustment of the several breadths of the channel. Until such observations shall have been made, neither the exact forms, lengths, nor heights of these structures can be determined; nor, indeed, until the effect on the flood of removing masses of ice shall have been carefully noted, and much information collected on this last point, can the number and situation of these works be regarded as fully settled.

Section 67. It is necessary, however, to make suppositions of some sort, as to all these matters, in order to obtain our estimates.

The suppositions as to situation and extent of the works are shown on the map; and we have taken for their altitudes 9 feet above lowest water for those between Troy and Albany; 8 feet for those between

Albany and Van Wie's Point; and 7 feet for those below this point. All the dams and dikes being calculated at 12 feet in breadth at bottom.

Section 68. In our state of uncertainty as to the extent of which ice may endanger the structures, we have included in our estimate the number of "ice-breakers" recommended by Mr. Clinton, and have supposed them to be triangular pieces, having their upper surface so inclined that the ice must pass over them and be broken as it falls.

Section 69. We have also taken into our estimates, at his prices, the number of monuments and beacon-lights supposed by Mr. Clinton to be necessary in aid of the navigation of the river

Section 70. Cost of a section of dike or dam 30 feet long, 12 feet broad at bottom, 10 feet at top, and 13 feet high:

5 piles, at \$2 each.....	\$10 00
750 feet of square timber, at 10 cents.....	75 00
11 ties, at 90 cents.....	9 90
Tree-nails and bolts.....	7 80
300 feet of 3-inch planks, at \$36 per M.....	10 80
Spikes.....	4 00
Fascines under pier.....	22 50
100 yards of stone for filling, at 60 cents.....	60 00
55 yards gravel and sand for filling, at 20 cents.....	11 00
390 feet of face workmanship, at 8 cents.....	31 20
Contingencies, 10 per cent. on \$242 20.....	24 22
	<u>266 42</u>

1 yard will cost \$26 64; 1 running foot will cost \$8 88; 1 cubic foot will cost 62 cents.

For a pier 14 feet high, one running foot will cost \$9 62½.

For a pier 14 feet high, one running foot will cost \$8 13½.

Section 71. Cost of an ice-breaker, consisting of an equilateral triangular pier, 22 feet side, having a slope on top of 8 feet, its greatest height 12 above low water, and standing in an average depth of water of 10 feet:

1,552 feet of timber, at 10 cents.....	\$155 20
66 ties, at 70 cents.....	46 20
Iron bolts and tree-nails.....	66 00
Fascines, 44 feet, at 75 cents.....	33 00
1,376 feet of face workmanship, at 8 cents.....	110 00
80 yards of stone filling, at \$1.....	80 00
16 yards of gravel, at 20 cents.....	3 20
209 feet of 4-inch plank, at \$48 per M.....	10 04
Spikes.....	3 00
Contingencies, 10 per cent. on \$506 72.....	50 67
	<u>557 39</u>

Estimate (A) of the cost of all proposed works from Waterford to New Baltimore, including the dredging a channel 660 feet wide from Troy to New Baltimore.

Section 72. From Waterford to Troy:

To 2,230 running feet of pier, at \$8 88.....	\$21, 802 40
3 monuments and lights, at \$125.....	375 00
44,095 cubic yards of dredging between Waterford and the foot of Albany street, in Troy, at 13½ cents.....	5, 952 32
Contingencies, 10 per cent.....	2, 812 97
Total, Waterford to Troy.....	<u>30, 942 69</u>

Section 73. From Troy to lower part of Albany:

To 8,055 running feet of dikes and dams, at \$9 62½.....	77, 529 37½
Protecting islands, 13,200 running feet, at \$2.....	26, 400 00
3 monuments and lights, at \$125.....	375 00
4 ice-breakers, at \$557 39.....	2, 229 56
997,687 cubic yards dredging, at 13½ cents.....	134, 687 74
Contingencies, 10 per cent.....	24, 122 16½
Total, Troy to Albany.....	<u>265, 343 84</u>

Section 74. From lower part of Albany to New Baltimore:

To 13,150 running feet of piers and dams, at \$8 88.....	116, 594 40
To 16,850 running feet of piers and dams, at \$8 13½.....	137, 074 75
Protecting shores, 39,390 running feet, at \$2.....	78, 780 00
6 monuments and lights, at \$125.....	750 00
8 ice-breakers, at \$557 39.....	4, 459 12
Cutting off Van Wie's and Winnie's piers, 1,400 feet.....	2, 800 00
1,002,313 cubic yards of dredging, at 13½ cents.....	135, 312 25
Contingencies, 10 per cent.....	47, 577 05
Total, Albany to New Baltimore.....	<u>533, 347 57</u>

Section 75. Recapitulation.

Waterford to Troy.....	\$30, 942 69
Troy to Albany.....	265, 343 84
Albany to New Baltimore.....	523, 347 57
Grand total.....	<u>819, 634 10</u>

Estimate (B) of the cost of all proposed works from Waterford to New Baltimore, including the dredging a channel 300 feet wide from Troy to New Baltimore.

Section 76. From Waterford to Troy, same as estimate A..... \$30, 942 69

Section 77. From Troy to the lower part of Albany:

To dikes and dams, protecting shores, monuments and lights, and ice-breakers, same as estimate A.....	106, 553 93½
481,732 cubic yards of dredging, at 13½ cents.....	65, 033 82½
Contingencies, 10 per cent.....	17, 156 77
Total, Troy to Albany.....	<u>188, 724 53</u>

Section 78. Albany to New Baltimore:

To dikes and dams, protecting shores, monuments and lights, and ice-breakers, &c., same as estimate A.....	340, 458 27
518,268 cubic yards of dredging, at 13½ cents.....	69, 966 18
Contingencies, 10 per cent.....	41, 042 44
Total, Albany to New Baltimore.....	<u>451, 466 89</u>

Section 79. Recapitulation.

From Waterford to Troy.....	30, 942 69
From Troy to Albany.....	188, 724 53
From Albany to New Baltimore.....	451, 466 89
Grand total.....	<u>671, 134 11</u>

Estimate (C) of the cost of all proposed works from Waterford to New Baltimore, excluding all dredging below Troy.

Section 80. From Waterford to Troy, same as estimate A..... \$30, 942 69

Section 81. From Troy to lower part of Albany:

To dikes and dams, protecting shores, monuments and lights, and ice-breakers, &c., same as estimate A.....	106, 533 93½
Contingencies, 10 per cent.....	10, 653 39½
Total, Troy to Albany.....	<u>117, 187 33</u>

Section 82. Albany to New Baltimore:

To dikes and dams, protecting shores, monuments and lights, and ice-breakers, &c., same as estimate A.....	340, 458 27
Contingencies, 10 per cent.....	34, 045 82
Total, Albany to New Baltimore.....	<u>374, 504 09</u>

Section 83. Recapitulation.

From Waterford to Troy.....	30, 942 69
From Troy to Albany.....	117, 187 33
From Albany to New Baltimore.....	374, 504 09
Grand total.....	<u>522, 634 11</u>

Section 84. The cost of dredging a channel 660 feet wide from Troy to New Baltimore, at 13½ cents per cubic yard, and allowing 10 per cent. for contingencies, is, according to the above estimate, (A,) \$279,000; and the cost of dredging a channel 300 feet wide for the same distance, at the same price, and with the same rate of contingent allowance, is, according to the preceding estimate, (B,) \$148,500.

Section 85. As full nine feet water can now be carried up the river as high as Van Wie's Point, (according to Mr. Clinton's map,) it is thought advisable to present a separate estimate of the expense of improving the river above that point, exclusive of dredging below Troy.

Estimate (D) of the cost of all the proposed works from Waterford to Van Wie's Point, exclusive of dredging below Troy.

Section 86. From Waterford to Troy, same as estimate A..... \$30, 942 69

Section 87. From Troy to Albany, same as estimate C..... 117, 187 33

Section 88. From Albany to Van Wie's Point:

To 11, 630 running feet of dikes and dams, at \$8 88.....	\$103, 274 40
Protecting shores, 14,930 running feet, at \$2.....	29, 860 00
Six monuments and lights, at \$125.....	750 00
Four ice-breakers, at \$557 39.....	2, 229 56
Cutting off Van Wie's pier, 700 feet, at \$2.....	1, 400 00
Contingencies 10 per cent.....	13, 751 39

Total, from Albany to Van Wie's Point..... 151, 265 35

Section 89. Recapitulation.

From Waterford to Troy.....	30, 942 69
From Troy to Albany.....	117, 187 33
From Albany to Van Wie's Point.....	151, 265 35

Grand total..... 299, 395 37

Section 90. In order to bring all the preceding estimates for the improvement of the river into one view we here present

A GENERAL RECAPITULATION.

Estimate A, improvement of the river from Waterford to New Baltimore, including a dredged channel below Troy of 660 feet in width, \$819,634 10.

Estimate B, improvement of the river from Waterford to New Baltimore, including a dredged channel below Troy of 300 feet in width, \$671,134 11.

Estimate C, improvement of the river from Waterford to New Baltimore, not including any dredging below Troy, \$522,634 11.

Estimate D, improvement of the river from Waterford to Van Wie's Point, not including any dredging below Troy, \$299,395 37.

Section 91. With a view now to compare the expense of the canal projects, as before estimated, (Sec. 28,) with the probable expense of improving the bed of the river it will be unnecessary to take more than the cost of the river improvements below Albany, because the projected canals would reach no higher than that city.

It appears from estimate A that with a channel dredged to the width of 660 feet and 10 feet deep, the cost of the river improvement below Albany would be \$523,348; and this sum is found to be (Sec. 28) \$679,017 less than the estimate for a ship canal 109 feet wide; \$287,430 less than a canal 109 feet wide and 7 feet deep; \$411,992 less than a canal 109 feet wide and 10 feet deep; \$1,000,894 less than a canal 200 feet wide and 10 feet deep; and \$1,651,292 less than a canal 300 feet wide and 10 feet deep.

Section 92. Renewing the expression of doubt as to their ability fully to master the important subject committed to them, the board, in conclusion, recommend that the attempt to improve the navigation of the Hudson be confined to the bed of the river; and that the system of works should be of the kind suggested in the preceding remarks, being applied under the direction of a competent person, and being liable to such modification as careful observation during the process of operation shall show to be necessary or expedient.

All which is respectfully submitted.

JOS. G. TOTTEN, *Lieutenant Colonel of Engineers, Brevet Colonel.*

S. THAYER, *Brevet Lieutenant Colonel.*

A. TALCOTT, *Captain of Engineers.*

Brigadier General GRATIOT, *Col. Com. U. S. Engs., Washington.*

H.

Report on the improvements and repairs of the harbors of Chester, Marcus Hook, Newcastle, and Port Penn, on the Delaware river.

PHILADELPHIA, October, 1835.

These harbors were constructed by the States of Pennsylvania and Delaware previous to the year 1789, for the purpose of rendering the navigation of the Delaware "easy and safe," and as a protection to vessels against the floating ice in the winter season. They were ceded to the United States in 1789 and 1827. The preservation and repair of these harbors are required by the tenor of the acts of Pennsylvania and Delaware ceding them to the United States, and the necessity for places of security for vessels navigating the river and bay in the winter season.

An appropriation was made by Congress in 1829 for the repair of these harbors, about which time it was thought advisable to connect the detached piers, then forming the several harbors, by wharf-work connecting the outer piers with the main land, and thus forming a basin enclosed on three sides, two of which were perpendicular to the thread of the current, intending to remove the accumulation of mud from within these basins by a steam dredging machine.

In 1830 an appropriation was made for the purchase and putting in operation this dredging apparatus. In 1831 an additional appropriation was made for continuing this operation, as also in 1832 and 1833.

In the spring of 1833 the superintendence of these harbors was confided to the undersigned, at which period the steam dredging machine was in operation at Marcus Hook excavating the earth from within the enclosed harbor formed at that place. On September 30 of that year I showed in my annual report that 47,686 cubic yards of earth had been removed up to that date, and 15,369 yards during the year

ending that day, affording a "safe and secure" anchorage for about twenty vessels at Marcus Hook; and that some progress had been made in repairing one of the piers of this harbor, using stone for all that part above low water.

It was stated in the report for that year that to persevere upon the plan heretofore pursued (of enclosed basins and removing the deposit annually with dredging apparatus) is not deemed either advantageous towards effecting the desired object, or, when accomplished, answering a permanent good.

The estimates for the ensuing year were based upon a new system of operation, and the only one calculated, in my opinion, to attain the object in view; as also upon the plan, then in operation, of continuing the dredging apparatus within the enclosed harbors.

In January, 1834, a memoir was prepared and forwarded to the Engineer department, assigning the reasons for recommending an abandonment of the dredging system, and the construction of new piers in advance of the old ones, at each of the harbors, except Chester, as the only means of making a place of safety on the Delaware for vessels in the winter season, and stating that no harbor then existed to protect vessels against the ice, except at Chester, nor could not until new piers were constructed. The appropriation for the year 1834 was not made until July, and was the minimum sum stated in the estimate.

The Engineer department, being satisfied that the plan of dredging was useless, authorized its abandonment, and that the funds available should be applied towards the construction of such work as formed part of the system recommended by me. In furtherance of this plan, the work of the season was confined to opening the sluice-ways at Marcus Hook, between the piers, to prevent an eddy and further deposit within the harbor, and to the repairs of the southeastern pier, the lower side of which had given way below the water level. To effect this, a new pier was sunk immediately below and alongside of the defective one, the intermediate space filled with large masses of stone, and from the low-water mark building up the whole pier with blocks of stone bolted together with copper.

In the annual estimates for the succeeding year, 1835, (dated 30th September, 1834,) it is stated this estimate is for the construction of a new pier at Marcus Hook; any attempt to clear out the old harbors by dredging machines being worse than useless, as, from the formation of this (Marcus Hook) and the other harbors, the deposit from the river waters must very soon fill them again; and that my views in relation to these harbors were expressed fully in the memoir for the previous year, and had undergone no change, but rather strengthened by the observations of the year; and further, that no harbors can exist (except at Chester) to guard the commerce of the Delaware against ice, until new piers are constructed; and that I had caused the dredging machine that I found in operation on being assigned to this duty to be laid up, and its use abandoned; and further, that the limited means appropriated for the year had been applied to repairing the outer pier at Marcus Hook with stone masonry from low-water mark up, as a part of the system necessary in the formation of a harbor by the construction of new piers, and that two of these piers were necessary at Marcus Hook and Newcastle. Whether Port Penn was susceptible of a like construction remained to be ascertained after seeing the surveys ordered for that purpose.

The estimates for the year, as before observed, were based upon the construction of new piers, and gave as the maximum the sum necessary for perfecting the harbor of Marcus Hook on this system; the minimum being to construct one pier only, leaving the second for a succeeding year.

In August, 1834, a report was made to the Engineer department, called for by an order of the 21st of that month, which stated "that unless the appropriations are made with a view of reconstructing these harbors by building new piers, I cannot recommend the partial and limited appropriations, with which I can accomplish very little to the advantage of the public interest."

The appropriation for the year 1835 was made available in April, and proved to be less than half of the sum necessary to construct *one pier*.

Since the last annual statement the plan has been persevered in of applying these limited means to repairing the outer piers of these harbors with stone from the low-water mark up, and cutting away the impediments to a free passage of the tides through the harbor.

At Marcus Hook the southeastern pier has been repaired on this plan, and the two sluice-ways between the outer piers have been removed, the effect of which has been not only to prevent any further deposit, but has caused, by the action of the tides, the removal of much of the mud from within this harbor, lying above the level of the bottom of the openings made between the piers, serving as a preservation of the harbor more against future injury than any good that the commerce of the Delaware can derive from it in its present state.

The limited appropriation of the year could not be applied at Marcus Hook in effecting any useful object whatever. The only manner in which it could be applied was at Newcastle, in carrying into effect so much of the plan recommended, as it would accomplish in the removal of the obstructions to the free passage of the current through this harbor and between the piers, and repairing the northeastern pier with large stone from low water up.

In furtherance of this application of the available means, a sluice-way has been partially opened, the northeastern pier cut down to low-water mark, a foundation prepared thereon for laying the masses of stone for its reconstruction, and stone purchased for raising the work four feet high; after accomplishing which, the funds will be so nearly absorbed as to render any further progress impracticable.

In submitting estimates for continuing the improvements of these harbors, I have based them upon the plan recommended from the first moment of addressing you in relation to them; the propriety of pursuing which is strengthened and confirmed in my estimation by every year's observation, as the only means of gaining and securing a "safe and easy" navigation of the Delaware, as required by the acts of Delaware and Pennsylvania ceding these harbors. I have accompanied the annual estimates with a general plan of the harbor of Newcastle, exhibiting its condition, the works proposed for its improvement, with a detailed plan of the projected works, and another of the works now under construction.

In conclusion, I must again recall to your recollection that there is no harbor for the protection of vessels navigating the Delaware in the winter, except at Chester, and that I cannot make any of the harbors safe at such seasons with the small sums heretofore appropriated, and again observe that it is better not to appropriate these small sums at all, as with them the object in view cannot be attained.

All of which is respectfully submitted.

RICHARD DELAFIELD, *Captain of Engineers.*

Brigadier General CHARLES GRATIOT, *Chief Engineer.*

I.

PORTSMOUTH, *Ocracoke Inlet, September 30, 1835.*

SIR: The navigation of Ocracoke inlet, on the state of which, as connected with the operations for its improvement, I am about to report, is probably more remarkable than that of any inlet in the United States. Being the outlet for all the waters of North Carolina, excepting the Cape Fear and its tributaries, this inlet partakes of the character of the mouth of a river; and, connecting the vast waters of the Albemarle, Croatan, Roanoke, and Pamlico sounds, with the ocean, its character is also that of straits connecting two seas. The distance between the points of the inlet is less than two miles, and immediately on passing these points the land diverges at a very great angle. The ebb tide from within, pressing with force through this narrow pass, on debouching into the ocean, forms by its deposit what is called the bar; and in like manner the flood tide from the ocean, forcing its way through the inlet, forms by its deposit a large body of shoal within. From causes easily seen, the tides have excavated small channels through these shoals, all of which, however, have obstructions in them. To avoid confusion, it is necessary to understand that all the obstructions in these different channels have names. The obstruction at the head of Wallace's channel is called the Flounder slue.

Some years since, when the inlet was first examined with a view to the improvement of its navigation, the passage by the Flounder slue and Wallace's channel was selected as the one on which, for many reasons, it was best to operate; and this selection, all the officers who have since had charge of the works here have approved. It was recommended by the engineer that the Flounder slue, at that time the only obstruction to the passage by Wallace's channel should be excavated to a certain depth by dredging boats; and this recommendation being approved of by Congress, appropriations were made for carrying it into effect. When the operations were commenced but five and a half feet water could be carried through the slue. At the beginning of this year, as shown by drawing No. 2, a passage existed 120 feet wide and seven and a half feet deep, at low water, in the shoalest part. It had for a year previous become the principal channel for vessels from Pamlico bay and Neuse river. During the present year, as shown by drawing No. 3, the passage, with the same average width, has been increased in depth to eight and a half feet at low water on the shoalest part. Since the date of the last report, by one boat 31,683 cubic yards have been excavated and removed to a distance of 750 yards; of these 26,443 cubic yards have been excavated and removed since the 22d of April, the date on which the work commenced this year. By referring to the last year's report of the superintending engineer, it will be seen that at that time a new obstruction had been formed, threatening to render useless all that had been done on the Flounder slue. The mouth of Wallace's channel—that is, the point where this channel debouches into the deep water of the inlet—had become much shoaler. But little change has taken place in the depth of water at this mouth since the date of Lieutenant Dutton's report, as vessels drawing eight feet still pass out at high water. The question then presented to me on my arrival here was, whether, by any means commensurate with the end, this mouth might be permanently improved. To obtain data for the solution of this question a minute survey of the lower part of the channel was made.

Drawings Nos. 4 and 5 exhibit the results of this survey. From these it will be seen that to the east and north of Dry Shoal Point (the southern point of the inlet) lies a body of shoal called the Shark shoal, extending to the eastward as far as Amity shoal, and to the northward about 850 yards. The flood tide passing over this shoal between Amity shoal and Dry Shoal Point has a tendency to extend the shoal to the northward; but the main ebb tide of the inlet passing around the northwest point of Amity shoal counteracts this tendency. After passing over the Shark shoal, the flood tide, to supply the southern part of the inlet, inclining towards the south, excavates Beacon Island slue. At its mouth this slue is quite broad; but from the gradual diminution of the volume of water, caused by its flowing off laterally, this slue gradually contracts until at length, opposite Ayres's rock, it heads. The ebb tide in Wallace's channel, which is the current governing the formation of the lower part of this channel, after passing by Ayres's rock, runs close to the southern shore, excavating as far as the southern point of the inlet a deep channel, and leaving between it and Beacon Island slue and the roads a strip of shoal varying in width. After passing the southern point of the inlet, Wallace's channel spreads its waters in every direction upon the Shark shoal and ceases to exist.

The present mouth of the channel is nothing more than a slight deepening across the strip of shoal spoken of, caused by the water reflected from the southern shore during the prevalence of certain winds. Generally both the flood and ebb tides run across this mouth.

To turn the course of the ebb tide in Wallace's channel by means of a jettee over the strip of shoal separating this channel from Beacon Island slue and the roads is the course which I propose in order to form a good mouth. The positions which present themselves for the location of this jettee are three—at the present mouth, at a point designated on the drawing, and at Ayres's rock. At Ayres's rock the jettee should dam up the channel and turn the current into Beacon Island slue. Of the three positions, I prefer the second. A jettee there would, besides other great advantages, be less expensive and more permanent than one in the first position; and the objections to the last position are, that, from the deep water there, a jettee would be very expensive, and that while being constructed it would prevent the passage of vessels through Wallace's channel.

A jettee such as those constructed at Fort Macon, in a bottom exactly like the bottom here, and when the causes operating against their permanency were very similar to those we may expect at this place, would be sufficient, and perhaps preferable to any other. I have shown on the drawing the form and dimensions of the jettee sufficient, in my opinion, to form in a short time a mouth much better than the present one, and ere long, I think, the deep water to the south of the jettee would rent itself through this mouth when the depth would certainly be increased to 18 or 20 feet.

There is one fact in the history of this navigation which has so important a bearing on the question as to what would be the effect of the proposed jettee that I will mention it here.

About the year 1818 the mouth of Wallace's channel was in a worse condition than at present. At that time a shoal, dry at high water, was formed on the Shark shoal, a short distance to the eastward of the projected jettee. Immediately after the formation of this shoal, the ebb tide of the channel excavated a mouth with a depth of fifteen feet water, occupying, with respect to the shoal, the same relative position it is supposed the mouth of the channel will have with respect to the jettee proposed. The deep water near the shore took the direction it is supposed it will in this case; and, in every respect, the changes made were such as it is supposed will be caused by the proposed jettee.

This shoal lasted eight or ten years; and while it lasted the mouth of the channel was from twelve to fifteen feet deep. At length, not being protected, it was washed away; and from that period the mouth of the channel began to deteriorate. This shoal, with the mouth of the channel, will be found in Colonel Abert's map, made in 1821.

When the channel between the jettee and the southern shore shall have become shoaler, the jettee may *then*, at a little expense, be continued to the southern shore. As a consequence of this continuation, there is but little doubt (so rapidly in this navigation do shoals form when there are causes for their formation) that, within one year after the completion of the jettee, a dry shoal, which will be a continuation of the Dry Shoal Point, will be formed to the northern end of the jettee. It is to be expected that, in a few years, that part of the jettee above the sand will be destroyed by worms; but the part in the sand, which will be imperishable, will protect the shoal from being washed away by the ebb tide, and, by a little attention and expense, the shoal might be prevented from being washed away by any cause. The obstructions in the mouths of the channels at this inlet, as respects the causes of their formation, may be classed under three heads: 1st, where a channel debouches upon a shoal, the force of the current being lost by the sudden expansion, of course the depth can be no longer maintained; 2d, where the force of one tide being sufficient to keep open a good mouth, the direction of the other tide is directly across this mouth, so that, while one tide excavates, the other fills up; and, finally, when the obstructions are caused by the meeting of the two currents, forming an eddy across the mouth of one channel. It will be seen, by an inspection of the drawing, that none of these causes operate upon the position of the proposed mouth. It debouches into deep water; the two tides run in the direction of what will be the channel; there is no cross current; it is retired within the inlet, and, therefore, comparatively safe from the disturbing action of storms; and I must add that, judging from authentic accounts of the navigation for the last forty years, I do not see that any changes may be expected which will operate against the permanency of this mouth. Considering all these circumstances, I think there are just grounds for supposing that, from the course proposed, the continuation of the Dry Shoal Point will lie in such a position that the mouth of Wallace's channel would be permanent, and good for eighteen or twenty feet water.

Statistical accounts, showing the importance of a passage here to the interests of North Carolina, have been so often presented to the department that it would be superfluous in me to repeat them.

To return now to Flounder slue. At Shell Castle, the flowing waters, before spread over a large space, become concentrated; and, above this point, the flood tide becomes the current governing the form of the channel.

After passing obliquely across the mouth of the Flounder slue, this current, by expansion, gradually loses its force, and its deposit forms the body of shoal at the head of Wallace's channel. From the history of the Flounder slue, from a comparison of its state at the end of last year, as presented by the drawing of Lieutenant Dutton, and its state at the commencement of this year, and from examinations made during the year, I am inclined to the opinion that the flood, passing across the lower mouth, has a tendency to close it up. Owing, however, to the distance of this point from the jaws of the inlet, the deposit is made so slowly that a small annual expense, viz: sufficient to keep in operation a dredging boat six weeks in the year, would be sufficient to keep this slue open. I include this item in the estimate for next year, supposing it most prudent to suspend the operations for carrying the whole slue to the depth first contemplated till the effect of the jettee on the mouth of Wallace's channel be observed.

My time has been so exclusively taken up in examinations of the southern passage, that I have not been able to make any examinations of Teach's Hole or Blair's channel. A passage by either of these channels would be more convenient for the northern counties than the southern passage. My impression is that they might be improved; but, were either of them put in competition with the southern passage, I would give a decided preference to the latter.

Estimate of amount required, for the year 1836, for the purpose of improving the navigation at Ocracoke inlet North Carolina.

26,100 running feet of pine logs, at four cents per foot.....	\$1, 044 00
182 tons of brush, at \$4 50 per ton, say.....	820 00
4,900 days' labor, at sixty-five cents per day.....	3, 185 00
900 pounds spikes and nails, at 12½ cents per pound.....	112 50
For carpentry and lumber.....	100 00
Three overseers, for four months, at \$140 per month.....	560 00
Cost of employing dredging boat one and a half month.....	1, 600 00
For securing and taking care of the dredging boat for the remainder of the year, at \$40 per month.....	420 00
For clerk and office rent for five months, at \$35.....	175 00
	8, 016 50
Unforeseen and casualties, ten per cent. on estimated cost.....	801 50
	8, 818 00

Respectfully submitted to the chief engineer.

ALEX. J. SWIFT, *Second Lieutenant of Engineers.*

General C. GRATIOT, *Chief Engineer, Washington.*

K.

Extract from a report made by Lieutenant Jos. K. F. Mansfield and Lieutenant John H. Winder to the chief engineer, dated 15th October, 1835.

CAPE FEAR RIVER.

* * * We have inspected the operations and improvements of the Cape Fear river, and find it generally admitted that the navigation has been materially improved, as must inevitably be the case, to a still greater degree, if the jetties are kept up and the plan persevered in. On the west side of

the river the jetties above Town creek have been completed, and generally in good order. On the east side of the river the jettee at Reedy Point is complete and in order. The one next below was constructed, but, having been destroyed by the current, is not yet rebuilt. The three other jetties contemplated by the plan have not been commenced. A dike or obstruction made by the State of North Carolina, closing the passage between Campbell's island and the main at the west bank of the river, is breached to a considerable extent, creating thereby a broad and deep channel-way through it. And the dredge-boat and mud flats are in a condition that will require repair before fit for service. Having examined into the plan for the improvement of the river, and the end to be accomplished, and the nature of the bed and banks of the river, we respectfully recommend a continued prosecution of the original plan, in the following order and to the following extent: 1st. To close up the channel-way created by the breach in the dike between Campbell's island and the west bank of the river, and continue the operation of dredging, and the preservation of the jetties already constructed. 2d. To reconstruct the jettee next below Reedy Point, in about the same place, but change the position and direction of it, to avoid, if practicable, the rock below the bed of the river, which obstructs the driving of piles. 3d. Should it then be found necessary, to construct the remaining jetties as laid down on the plan. And that the public property of every description hereunto appertaining be advantageously and economically applied to its execution.

* * * * *
 All of which is respectfully submitted.

JOS. K. F. MANSFIELD, *Lieutenant Corps of Engineers.*
 JOHN H. WINDER, *Lieutenant 1st Reg't Arty, on Eng'r Duty.*

L.

Annual report of work done for the improvement of the navigation of the Ohio, Missouri, and Mississippi rivers, and for the removal of the great raft from the bed of Red river, during the year ending the 30th of September, 1835.

The summer of 1834 was so far advanced when the appropriation for continuing the improvement of the navigation of the Ohio, Missouri, and Mississippi rivers was made, that it was impracticable to make the necessary repairs on the steam snag-boats and get them out of the Ohio river, until a rise of the water in that river in the month of November. On the 3d of November the Archimedes began her operations at the mouth of the Ohio, and worked up the Mississippi. On the 19th of the same month the Heliopolis commenced work at the same place, and worked down the Mississippi. By reference to the monthly reports of the masters of those boats, on file at the department, it will be seen that 787 snags were removed from the bed of the Mississippi, and 2,488 trees were felled from its caving banks, between the 3d of November, 1834, and the 10th of March, 1835, at which time the Heliopolis was laid up at St. Louis, Missouri, for safe-keeping and repairs, the water being too high for her to remove snags.

The Archimedes closed her operations in the Mississippi on the 11th of January, 1835, and proceeded up the Red river to assist in the removal of the great raft from its bed, where she remained until the 25th of May last, when she was taken to Louisville, Kentucky, to which place it was necessary for her to go to receive repairs, which have been done. That boat has been at work in the Mississippi river, between the mouth of the Ohio and the Little Prairie, since the 21st of September, and has removed 103 snags up to the 30th of that month. The Heliopolis commenced operations at the mouth of the Missouri river on the 29th of August last, and worked down to the mouth of the Ohio. From that place she ran down one hundred miles to the Little Prairie, where she again commenced work, and has proceeded down to island No. 36. In the distance she has worked, (260 miles,) from the 29th of August to the 30th of September, she has removed 372 snags, and felled from the banks 101 trees that were on the edge of the banks and must have fallen into the river in a few days.

The whole number of snags removed from the Mississippi river in the year ending the 30th of September, 1835, has been 1,462, and 2,599 trees felled from the banks. Nearly all the snags that have been removed during the last year were from the annual accumulation occasioned by the falling in banks, changes of channels, and trees rising from the bottom that have been confined by various causes. The greatest portion of those snags were produced by the cavings of the banks, which must continue to be the case until the timber is cleared from them. Extensive experiments have been made on felling the timber from the caving banks.

The result has proved eminently serviceable to the improvement of the navigation and the preservation of the banks of the river.

I have been particular in examining the effect, and find that in nearly all the bends where the timber has been effectually cleared from the shores the banks have ceased to fall in. The earth crumbles from the top of the bank after the timber is off, and deposits itself underneath, by which the bank becomes graded to an angle of from thirty to forty-five degrees. A further proof of the effect of clearing the banks is seen from Natchez to the Gulf of Mexico, where the lands have been many years in cultivation, and they do not wash away or cave in. Many persons object to felling the timber on the banks of the river, on account of the stumps falling in and forming dangerous obstructions.

If this is the case, it has escaped my observation. I have instructed the captains of the snag-boats to examine into that particular subject, and they have informed me that no such thing does exist within their knowledge.

Under all these considerations, I beg leave to recommend that the felling of timber from the caving banks of the Mississippi be again resumed and carried to as great an extent as practicable.

The department may expect that all the accumulation of snags of the last year, and all others in the river that can be operated upon in the stage of water that may continue throughout the fall and winter, will be removed by the two snag-boats before they are laid up for high water. They are in good repair, both in their hull and machinery.

The Heliopolis, however, will not be able to work more than one year after the present without a new hull. She is now in her seventh year's service, and must be rebuilt after the eighth year, or run a great risk of losing the engine and machinery.

The improvement to the navigation of the Mississippi river is evidently very great, and but little now remains to be done, except the removal of the snags that are formed by the caving in banks. The sand,

&c., washing from logs that have been confined by it, float at the top, the root being heavier than the water remains at the bottom and holds the tree stationary, and forms a snag. The changing of the channel also uncovers snags, and forms dangerous obstructions. From those several causes, the number of snags annually deposited in the river will average about one thousand five hundred. There are about three hundred thrown out of the Missouri river by the ice, which has been frozen around them during the winter, and carries the snag off when the winter breaks up. Those are principally found between the mouths of the Missouri and Ohio rivers.

The losses by snags during the last year have been trifling. On inquiry at the principal insurance office at Louisville, I find that the number of flat-bottomed boats that applied for and have been insured for the last six years has decreased as ten is to one; and the premiums on the small number of flatboats are for the last year 75 per cent. lower than they were six years ago. The flatboat is the only craft that a correct estimate can be drawn from relative to the effect on insurance. The danger to the steamboats navigating the Ohio and Mississippi rivers, arising from obstructions in the channel, is not more than one-sixth of the whole risk, nor has a greater proportion of the losses for the last five years been occasioned by striking snags. At least five-sixths of the loss has been from boats running foul of each other, running on shore at night, or in fogs, by hurricanes, fire, breaking engines, bursting boilers, and striking logs afloat on the surface of the water drifting down with the current. Notwithstanding, the premiums now charged on merchandise shipped in good boats is not more than one-half of what it was nine years ago.

From the 1st of October to the 13th of November, 1834, the work on the dam at head of Cumberland island was proceeded with. The channel at that place has been good during the low water of last summer, and will not be shoal at any time hereafter, unless the dam should give way, which now appears to be permanent and secure. No apprehension is entertained of its failure; still it may be necessary to add some rock to it next summer. The other dams in the Ohio river have all answered the purpose for which they were constructed, except that at Three Mile island, near the mouth of Green river, which has never yet been completed, but will be finished in a few weeks hence.

On my return from the great raft in Red river, 10th of June last, it was necessary to repair the boats that had been engaged in its removal, and by which they had been materially wrecked.

The steam snag-boat Archimedes required many new planks on her bottom, her wheelhouses and upper works all new; a large portion of her decks also required shifting, and recalking on bottoms and decks; the Java and Souvenir required sheathing both on their bottoms and decks; new wheelhouses, with extensive repairs on their engines. The great demand for every description of mechanics required for building steamboats and engines made it difficult to get the repairs done, and consumed much more time than would have been necessary in former years. Those three boats have been repaired.

The snag-boat Archimedes has been at work since the 16th instant. The other two will proceed to work in the Ohio, below the falls, as soon as crews can be engaged for them. Labor is in such demand that men cannot be had to man those boats without some delay.

In relation to the improvement of the navigation of the Arkansas river, nothing can be done before April, 1836, towards building the iron boat authorized by Congress at their last session, owing to the scarcity of iron of the kind required to build such a boat.

My preparations are all made for the removal of the remainder of the great raft in Red river, except the rebuilding of one of the small steamboats, which will not be finished before the 20th of November.

The Souvenir and Java will proceed to the raft about the 15th of November, and the other boat, which is rebuilding, will be taken there as soon as she is ready to run. For a report of what has been done in removing the great raft in Red river, I beg leave to refer to my letter to the department dated the 1st July last.

I have the honor to be, sir, very respectfully, your obedient servant,

H. M. SHREVE, *Superintendent, &c.*

Brigadier General C. GRAY, *Chief Engineer, Washington.*

LOUISVILLE, *Kentucky, July 1, 1835.*

SIR: I closed my operations on the Ohio river on the thirteenth of November last. On the following day I proceeded to Red river with the United States steamboats Java, Souvenir, Pearl, three keel-boats, three machine boats, and three hundred men, officers, mechanics, &c. On the 1st of December I passed the rapids of Red river with much difficulty, after a detention of five days, having to unload all my stores, tools, &c., and haul the boats over the reefs of rocks that stretch across the river at that place. On the 10th of the same month I reached the mouth of the Coshada chute, about forty miles below Loggy bayou, where the foot of the raft was located on the 11th of April, 1833. From the mouth of this stream upwards, the Red river becomes narrow, its channel being contracted to a width of two hundred feet, where I found a large number of trees growing under the banks of the river, near to, and many of them in, the water, standing in an inclined position, projecting their tops near the middle of the river, and consequently presenting a formidable obstruction to the navigation of the river, and at the same time forming a very great impediment to timber that floats down the river, and was liable to produce a renewal of the raft. Finding this to be the inevitable consequence if the timber was left standing, I determined to clear the river from the mouth of that stream (Coshada chute) during the low water. Accordingly, I commenced operations at that place on the 10th of December, 1834, from which place I have cleared all the banks and islands of the timber that stood in or near the water at its low stage, as far up as the raft had been removed in 1833. That work, together with the removal of the snags and remnants of raft not removed in 1833, owing to the high state of the water that then prevailed, occupied the whole force up to the 20th of January, 1835. I then proceeded with the clearing of the river from the raft and standing timber as I progressed with the work. On the 14th March I had executed the work as far up as the first point marked on the rough sketch of the river for a cut-off, furnished with my report of work done in 1833. On examining the bend and neck of land at the narrowest point, I found the distance around the bend to be about eight miles, and the cut to require an excavation of 261 yards in length, 8 yards wide, and 3 yards deep, except through a low, flat bottom on the lower side of the neck of land, which was covered with a growth of timber 30 yards wide. Through that bottom the excavation was 100 feet wide, 9 feet deep, being 5 feet below the lower level of the water, and 8 feet 8 inches below the upper level, at the time the excavation was

made; the water then on the lower level about 4 feet below low-water mark. The excavation was finished by the steam snag-boat Archimedes and her crew, with the assistance of fifteen extra hands, on the 2d of April. Cubic yards excavated, 8,544. In that condition the water was let into the canal on the 13th of May. On the 16th three keel-boats passed up through the canal, and on the 26th the steamboats *Souvenir* and *Java* passed through without difficulty. The cut was then upwards of 200 feet wide and 30 feet deep, being the whole and entire channel of the river. Immediately above the cut, in the bend, I secured the drifting timber in such manner as to prevent it drifting down the stream. The whole raft in the bend was then removed from its original position, and stowed in the lower end of the bend, except a portion that was used to fill up the mouth of the Sand Beach bayou, which runs out of that bend about two and a half miles above the cut-off. Two and a half miles above Sand Beach bayou is the mouth of Anderson's bayou, which runs across from the Bayou Pierre four hundred yards, and falls into the bend with rapid current. At the time the work was executed nearly all the water flowing down the river passed through Anderson's bayou from Bayou Pierre, leaving the balance of the bend from the junction of Anderson's bayou and the Red river up to its junction with Bayou Pierre, without a current, a distance of seven miles, (three miles below the upper end of the canal, and four miles above the canal.) The effect produced by the opening of the canal was to create a rapid current, say four and a half miles an hour, from the Bayou Pierre down the old bed of the river, and a current of about two and a half miles per hour up the old bed of the river, from the mouth of Anderson's bayou to the canal; (the distance each way is nearly equal.) The length of the Red river has been shortened eight miles by the same operation. The bend has been filled with timber about four and a half miles, and is yet capable of taking in the raft for at least eight miles higher up than where it is now cleared. On the 19th March the steamer *Souvenir* passed through Anderson's bayou to Bayou Pierre, thence into the old river above the mouth of Bayou Pierre, and commenced operations on the first raft above Coate's bluff, being that entire section of the raft around which Lieutenant Sewall excavated a canal some years since. That boat, with a crew of officers, mechanics, and laborers, to the number of thirty, effectually removed the whole raft in fifteen days, at an expense of about five hundred and twenty dollars. On the 13th of April the work was all finished as high up as Soda bayou, fifteen miles above the canal. Through this bayou the boats pass that transport goods, produce, &c., to and from the country above the raft. It is only navigable for keel-boats at the highest stage of water. The distance from its junction with the river, through Soda lake and Black bayou into the river above the raft, is estimated at forty-eight miles. About two-thirds of the water of Red river flows down through those bayous and lakes, being forced out of the river at the head of the raft by the back water formed by the masses of timber crowded into the channel. The remaining portion of water passes down the old bed of the river through the raft, from its head twelve miles down to the Willow chute, a bayou through which at least one-half of the water that runs down it escapes from the old bed of the river, and does not return to it again until it passes the raft and falls in at the mouth of Loggy bayou. Seven miles lower down, Williams's and Benware's bayous run out of the river, and carry off all the water from the old bed of the river, leaving twelve miles, from Benware's bayou to the mouth of Soda bayou, without current.

There was not a sufficient circulation to maintain the color of the water in the river, which was as clear as lake water. In this distance of twelve miles, the raft was found to be much heavier than any part of that removed below. Since the timber had been drifted into this part of the river, and forced its waters through the passes on either side of the river, as above described, a deposit of mud had accumulated to such an extent as to cover a large portion of the timber, on which the willow and cottonwood had sprung up and taken root on the logs of which the raft was composed. Many trees were found growing in that manner as large as 18 inches in diameter.

To remove this description of raft required much more labor than any before met with. The greatest delay, however, was for want of current in the river to float the raft off after it had been loosened from its bed. To remedy that great evil, I was compelled to throw works across the mouths of Benware's and Williams's bayous and the Willow chute. Those passes were so far stopped as to create a current through the river below them sufficient to move the timber down after it was loosened from the raft. The current thus created will increase as the raft below is removed, and the action of the water removes the deposit of mud from the bed of the river. The raft was all removed within three miles of Benware's bayou, having employed the whole force from the 13th of April to the 25th of May to stop the bayous above alluded to, and to remove nine miles of the raft.

There yet remains to be removed 23 miles of the raft, from the point where the work was stopped on the 25th of May to its head, a large portion of which will not be more difficult to remove than what has been cleared away below Soda bayou. But the bayous that carry the water off from the river, on either side, must be stopped in such manner as to force the water back into the old bed of the river, and create a current to drift the timber off as it is loosened from the raft.

To estimate correctly the expense of removing the remainder of the raft is extremely difficult. The work to be done to complete the improvement is of such a nature that its cost cannot well be calculated. The bayous to be stopped may require great labor, or it may be done for a small amount of labor. Much will depend on the stage of water in the river. If it should be low water when the work is done, it may be effected for less than one-half the sum it will cost at a medium or high stage of water. The location of the work compels the executors of it to run all those hazards. Its great distance from any section of our country where labor can be procured makes it necessary to transport laborers from the Ohio river, and they cannot be prevailed on to go to that climate to labor earlier than October nor later than May. Consequently there is no advantage to be taken of the low later in the summer. The balance of the appropriations remaining on hand and in the treasury will go far towards the completion of the work. I would, however, recommend a further appropriation of \$20,000 as early in the next session of Congress as it can be obtained. If it should not be required, it will not be expended; but if it should be required, and not be available, the consequence will be delay and additional expense of probably half that sum. There can be no doubt now but the work can be completed in the course of the next winter and spring if the necessary funds are furnished in time to allow me to continue through the whole season, or so much of it as may be required to finish the improvement, which may be done in ninety days, or it may require six months, as circumstances may occur for or against its speedy execution.

If the last season had been a favorable one, there is no doubt but the whole work would have been completed by the 25th of May last, and for the same expenditure that has been made. But as it turned out, the water did not rise in the Red river until in May; consequently the progress of the work for the

removal of the raft was delayed, for want of sufficient water in the river, from the 1st of January (the time it usually rises) to the 10th of May.

I beg leave to recommend to the department the necessity of clearing the low bottoms in the river of all the timber that grows in them, as the action of the water on the banks, and particularly those of the latest formation, is now washing them, so that they are caving in throughout almost the whole extent of the raft region. If the timber is left standing, the navigation of the river will be constantly interrupted by its forming snags and raft in its bed. To fell the timber, and cut the tops and trunks of the trees short, will probably cost about \$100 per mile. The whole distance necessary to execute that work will not exceed one hundred miles.

Permit me also to recommend an improvement at the rapids of Red river, near Alexandria. The obstructions to its navigation at that place consist of two reefs of rock stretching across the river. The lower reef extends up and down the stream about two hundred feet; the other, about one and a half miles higher up the river, has an extent up and down the stream of about seven hundred feet. The improvement can be made by excavating the rock at each of those reefs to a sufficient width and depth to afford any given depth of water that may be required, as no injury can be produced to the navigation above by drawing off the water by the excavation required, because the river above the rapids has a depth of from six to ten feet at extreme low water for a distance of fifty miles; consequently the upper level will not be drawn off to any perceivable extent at that distance above the cut. The excavation can be effected at a low stage of water by the use of the common mattock and shovel. The rock is a soft sandstone, which may be dug up and removed without blasting, and with but little more labor than is required to remove a firm clay bank. I am not sufficiently acquainted with the particular extent and depth necessary to be excavated to estimate the probable expense of the improvement, but I know it to be one of great importance to that section of the State of Louisiana and the Territory of Arkansas that lies on Red river.

I have the honor to be, very respectfully, your obedient servant,

HENRY M. SHREVE, *Superintendent.*

General C. GRATIOT, *Chief Engineer, Washington.*

M.

MEMPHIS, *January 31, 1835.*

SIR: Since my last report in November, the operations for improving the navigation of the Mississippi have been prosecuted vigorously. The snag-boat Archimedes left the mouth of the Ohio November 3, 1834, and proceeded to St. Louis, removing such snags in her progress as were visible at that stage of water. On the 11th of the same month she commenced her descent, and continued to remove those obstacles which presented themselves in the navigation. Having reached the mouth of Red river January 11, 1835, the Archimedes ascended that river to join in the removal of the great raft. The Mississippi had risen considerably higher than it had been during the summer before the Archimedes commenced work, and had covered many of the most dangerous snags which had been exposed to view at lowest water, rendering it impossible to accomplish their removal.

This work is now the most important that remains to be effected, as it is such snags only as are a few feet below the surface of the water at a medium stage that are to be dreaded by boats. At high water there are few if any dangerous snags in the river. The only period of the year when they are visible is at extreme low water, which occurs usually in August, September, and October. The Archimedes removed, during the season, from the bed of the Mississippi, three hundred and seventeen snags, and cut from the banks eleven hundred and sixteen trees. The same boat, on her way up the Red river, removed one hundred and eighty-nine snags, and cut twelve trees.

She commenced operations at Tiger island, one of the most dangerous points on the river, and removed every obstacle at that place. After commencing on the raft, it was impossible to keep a journal of the logs and snags removed. The Heliopolis entered the Mississippi and commenced work November 19. This boat has undergone thorough repairs during the last summer, and is now in excellent order, and under the able management of her present captain is producing the most satisfactory results. I visited this boat on her way down the river to witness her performance. The department is already in possession of the most unquestionable proofs of the efficiency of this machine, drawn from its hitherto successful operations; but I cannot here omit an opportunity of rendering the merited tribute of praise to its excellence, and to the ingenuity of its inventor. No machine can surpass it in its adaptation to the work in the execution of which it is now engaged. The machine is simple in its construction and easy in its application, while in power it has been found adequate to overcome promptly every obstacle it has yet encountered. Through the agency of this machine the largest snags and logs are extracted with ease, many of which, without its intervention, could never have been removed. The value of such an auxiliary, in the annual improvement of the Mississippi, is commensurate with the importance of the work, and cannot be properly estimated, except by comparing its performance with the tardy and expensive mode of removing snags and logs before its invention. Those places from New Orleans to the mouth of the Ohio river which at low water are most dangerous from snags are, My Wife's island, (one hundred and thirty miles above Natchez;) islands 97 and 96; Stack Island reach; island 94, cut-off at mouth of Red river; islands 83, 78; point 35 miles above Chicot; Arkansas bend; White River bend; islands 65, 63, 62; bend between Helena and mouth of St. Francis; Cow Island chute; island 37; Plum Point; Canadian reach; Riddle's Point, and bend below mouth of the Ohio. Of the snags at those places, some have escaped being removed, from having been covered with water when the boats passed them; others were in such situation that they could not be approached, and some have been formed by the recent falling in of the banks. One summer such as the last has been will enable the boats to remove all the snags in the low-water channel. This most desirable work will receive the earliest attention of the superintendent, and, should the season be favorable, will be accomplished during the summer.

I have the honor to be, sir, very respectfully, your obedient servant,

A. H. BOWMAN, *Lieutenant of Engineers.*

General CHARLES GRATIOT, *Chief Engineer.*

MEMPHIS, July 31, 1835.

SIR: Since my inspection in January, the Heliopolis has been constantly engaged in removing snags and logs on the Mississippi, having since that time descended twice from the mouth of the Ohio to Natchez, and returning reached St. Louis March 10, where she was laid up for repairs. During the greater part of the winter and spring the water has been too high for the boats to operate advantageously, except in some chutes which were too shallow at lowest water to admit them. Notwithstanding these disadvantages the Heliopolis removed, during the season of her operations, six hundred and eighty-six snags, and cut from the falling in banks thirteen hundred and eighty-one trees. Adding to these numbers those removed by the Archimedes, we have one thousand and three snags, and two thousand four hundred and twenty-four trees, as the result of their united labors. The advantages resulting from the removal of so great a number of dangerous obstacles in one season is everywhere manifest, especially between the mouth of the Ohio and St. Louis. Where the banks were cleared in 1832 the river is entirely free from snags, except at such points as the banks have fallen in beyond the clearing; and as this has occurred in comparatively few instances, the good effects of the work then executed are still felt. In my last report I had the honor to state my belief that clearing the timber from the caving banks was the only effectual mode of preventing the accumulation of snags in the Mississippi. I am confirmed in this opinion by the observations made during my last inspection. I beg leave again respectfully to present this subject to the consideration of the department. Objections have been raised to the prosecution of this mode of improvement, which, upon examination, will be found to possess little weight. It is objected that the stumps of trees which have been cut become dangerous snags where the banks on which they stand have fallen in. The futility of such an objection will be readily admitted by all who are well acquainted with the nature of the falling in banks of the Mississippi; for to them it is well known that the deepest water is generally immediately alongside of the caving banks, and as the stumps are cut low, it is improbable that they should extend so near the surface of the water as to become sources of danger to boats; though instances, I believe, have occurred of injury from projecting logs, which had been cut off even with the surface, but by the subsequent wearing away of the earth became exposed.

Another objection has been founded upon the destruction of wood incident to this mode of improvement. The trees are generally cottonwood and sycamore, neither of which is esteemed of much value; and, from the inexhaustible quantities of fuel on the banks of the Mississippi better suited to the purpose of generating steam, it must be long ere much importance can be attached to timber of this description. Such are the reasons urged against clearing the caving banks. It is a well-established fact that snags do not move far from the point where they first fall in, the weight of earth attached to their roots serving as an anchor. They are sometime moved by the ice that adheres to them in winter, and by drift wood during the spring floods. It is also well established that trees which once float seldom form snags. Admitting this, it is sufficiently evident that if the banks are once cleared there can be no subsequent formation of snags. To secure a safe navigation at all seasons on this river, it will be necessary to adopt one of the two plans—either to keep, as at present, boats to remove snags as they are formed, or to clear the banks of all timber, thus preventing their formation. The comparative expense of the two plans has already been submitted to the department.

The most vigilant attention, if the first mode be adopted, can only remove dangers as they occur, while the same care bestowed upon the second plan, with less than one-fourth of the expense, would anticipate them, and, by removing such trees as were likely soon to fall into the river, prevent the formation of snags altogether.

The expediency of following the latter mode of improvement will ultimately appear in the failure of every other attempt at preventing the dangers incident to the navigation of the Mississippi. How far the labor already bestowed upon this river has contributed to the improvement of the navigation will be sufficiently evident from the reduced rates of insurance since the work was commenced. It is not possible at this time to procure a list of the boats lost annually since 1825; such a list would, however, give strength to the evidence of improvement to the navigation furnished by the decreased rates of insurance. The time devoted to the improvement of the Mississippi during the current year, by the two boats, amounts to one hundred and ninety-two days; the per diem expense of each boat being eighty-one dollars, the whole expenditure will amount to \$15,552; the total number of snags removed is one thousand and three, and two thousand four hundred and twenty-four trees cut. Admit the cost of cutting each tree to be one dollar, there will remain \$13,128 as the cost of removing the snags; this gives an average cost of upwards of thirteen dollars for each snag, an amount exceeding that assumed as the average in my last report. The Heliopolis has been thoroughly repaired, and will resume her work by the 5th of August, or as soon as the water is low enough, proceeding from the mouth of the Missouri downwards, and will continue to work on the Mississippi during the whole summer. The Archimedes is at Louisville repairing; she will be ready for service before the end of August, and will join the Heliopolis on the Mississippi without delay. This arrangement is very desirable, as there are many island chutes into which the Heliopolis cannot enter on account of her draught of water. There now remain few places on the Mississippi below St. Louis the navigation of which, at high water, is attended with much danger; snags are rarely seen except at points where the banks are falling in. Between the mouths of the Missouri and Ohio rivers, the navigation at lowest water is greatly impeded by bars. Obstructions of this nature in the Mississippi have not yet attracted much notice, nor is it probable that any permanent amendment in the navigation will ever be effected in this particular, owing to the changes that are taking place annually in the position of the bars. There is one, however, to which particular importance attaches itself, from its location. I allude to that forming in front of the city of St. Louis, which will seriously affect the prosperity of that flourishing town if it should increase to the extent apprehended.

I am not in possession of the facts necessary to form an opinion of its progress or probable limit. The importance of the commercial interest at stake demands a more critical examination than I had time or the means of making. The success which has attended the construction of dams on the Ohio river leaves no doubt of the practicability of removing this bar, by a dam running from the Illinois shore to Blood island, if it should become necessary to have recourse to artificial means for its removal.

The operations on the Red river raft have been completed to a point within twenty-three miles of the uppermost extremity; of this distance a portion only is raft, and this, from its more recent formation, is less difficult to remove than those parts which, by the deposit of earth and the accumulation of vegetable matter, have become imbedded and almost solid. In 1828, when I explored the raft, the greater part of this portion of it was loose and floating, unlike the older formation, or what is called "sunken raft," which

generally rests on the bottom. It was expected by the superintendent that the work would be completed by the first of May, at which time the engagement of his hands expired. In this, however, he was disappointed; and it being deemed unsafe to remain later on the score of health, it became necessary to defer its completion until another season.

I have the honor to be, sir, very respectfully, your obedient servant,

A. H. BOWMAN, *Lieut. of Engineers.*

General C. GRATIOT, *Chief Engineer.*

MEMPHIS, August 1, 1835.

SIR: The last report I had the honor to submit to the department of the progress of the works for the improvement of the Ohio river contained a detailed statement of their advancement, and exhibited their condition at that time; subsequently to which nothing has been done on the river except the completion of the Cumberland dam, in which the superintendent was then engaged. Since that period the only alteration in the channel at this work consists in the removal of some of the bars and the formation of others, giving evidence of a gradual movement of the sand and gravel by the current of water which the dam forces into the channel, and leaving little doubt of the final result. It is the intention of the superintendent to raise this dam still higher, by which the accomplishment of the desired object will be more speedily effected. The accumulation of sand and gravel above and below the dam, while it gives assurance of stability to that work, likewise affords satisfactory proof that the channel on the east side of Cumberland island is rapidly enlarging its dimensions. When we take into consideration the immense mass of sand and gravel that a year ago obstructed the eastern channel, sufficient in quantity to form a bar across the whole width three feet above low-water mark, and running a considerable distance up and down the stream; and when it is remembered that this mass, which moves slowly and with difficulty, has to be swept by the force of the current into the deep holes about the mouth of the Cumberland, a quarter of a mile below the bar, it is not surprising that, in its progress towards these holes, it should collect occasionally in lumps, causing uncertainty and difficulties in the navigation inseparable from the means used for the improvement of this part of the river; the ultimate success of this work is no longer doubtful.

It is probable that the current would already have opened this channel entirely, but that it only operates during that portion of the year when the water is below the level of the top of the dam, and is consequently forced into this channel. Little alteration is perceptible at the Sister islands since my last report. The channel on the east side of the island has so far filled up that at the present stage of the river (seven feet above extreme low water) scarcely any of the stream passes on that side. The sand-bars have extended themselves at the foot of the island, confining the volume of water to a narrower space; the extremity of the bar, which projected from the east shore opposite Bay creek, has been partially washed off; boats are not now compelled to approach so near the west shore as formerly. There is a small break in the principal dam at this place near its head, noticed in a former report, and also on a sketch forwarded to the department, which has been considerably enlarged since the last inspection, and will ultimately injure the work if not arrested in time. The Sister islands were once among the worst places on the river; at present they offer no obstruction to the navigation. This remark will apply in a great degree to Scuffletown and French Island bars. Three Mile Island dam is not yet finished, but will be commenced early in August. It is the intention of the superintendent to employ the forces designed for removing the raft on Red river upon the Ohio until the season for recommencing the former work. By this judicious arrangement these works serve as a rendezvous for collecting laborers during August, September, October, and a portion of November, which are the only months when the services of men could be profitably employed on the Ohio, leaving time, after the suspension of these works, to transport the forces as early as it is expedient to commence operations on Red river. Notwithstanding the space over which the works intrusted to the superintendence of Captain Shreve are spread, by his judicious and systematic division of the time, each appears to have received all the attention that it required.

I have the honor to be, very respectfully, your obedient servant,

A. H. BOWMAN, *Lieut. of Engineers.*

General CHARLES GRATIOT, *Chief Engineer.*

N.

PITTSBURG, October 25, 1835.

SIR: In obedience to your instructions of the 23d of April last, assigning to my superintendence the application of the sum of \$50,000, appropriated at the last session of Congress for the improvement of the Ohio river above the falls, I have the honor to report the progress and state of the operations under those instructions on the 30th of September ultimo.

On my arrival at Pittsburg, the head of the line, in May last, the Ohio river then presented a deep and turbid stream, with a depth of water over its shoalest points of eight feet, in which or nearly a similar state it subsequently continued until September, being maintained by the freshets of the intermediate months, and varied by occasional depressions of short duration; but at no time this season has it been impracticable for steamboats of a construction adapting them to shoal navigation.

On the receipt of my instructions, it did not appear that any regular or detailed survey of this part of the river, with a view to its improvement by the general government, had ever been made, or was accessible at the time; the only information in my possession relative to the obstructions in the river at the time of my arrival thereon was contained in the extracts taken from the notes of an examination made in 1819 by commissioners appointed by the several States interested, and to which I was favored with access through the politeness of the canal commissioners of Pennsylvania; these, although embracing much useful information in relation to the several obstructions, were not sufficiently minute to render

less necessary a resurvey of the whole upon a different plan before the work hereafter deemed necessary for the contemplated improvement could be correctly located or safely constructed.

The duties assigned me required, as a preliminary step, a minute and thorough examination of the obstructions at low water; this, for obvious reasons, could not be undertaken until the river had arrived at its minimum stage, which did not occur until late during the present season. In the interim the whole line was traversed, the principal commercial points visited, and investigations made, having for their object to determine the relative importance of the different portions of the line, and the selection of those points or sections having the greatest claims to precedence in the order of improvement; at the same time the obstructions in the river of a detached nature being numerous, and an examination into their extent, or the peculiar circumstances of each, not immediately required for the object in view, attention was forthwith directed to the construction of the machinery necessary to remove with the greatest facility all obstructions of that class.

The snag machinery invented and used with so much effect by Henry M. Shreve, esq., in the removal of obstructions to the navigation of the Mississippi and Red rivers, and which combines in its construction much simplicity of arrangement with great power of action, was, after a short inspection, unhesitatingly adopted for the removal of similar obstructions in the Ohio river above the falls; it was therefore determined to proceed without delay to the construction of four of these machines, for application on the river, and the procurement of the requisite boats, flats, implements, &c., during the high stage of the water, the expectation being confidently entertained that the means of constructing any description of machinery or craft could be readily obtained at any of the principal points on the line.

The Ohio river, from its commencement at Pittsburg, forming a continuation of the grand chain of internal communication stretching from the Atlantic westward, now rendered uninterrupted by the completion of the Pennsylvania line of canal and railroad, and the heavy amount of merchandise received and transhipped at the head of the river, estimated at half a million of tons annually, and progressively increasing, together with the general designation of the appropriation, induced attention to be first directed to the section lying between Pittsburg and Wheeling, which being of a shoaler character than that below it, was, from a due regard to the circumstances alluded to, selected for the commencement of the operations. It was then contemplated to hasten the construction of a portion of the machinery at the head of the river, with a view to its completion and application on the fall of the water, at which time it would become necessary to turn attention to the examination of the shoals, and the formation of plans for their improvement.

In preparing the machinery and boats during the high stage of water, it was found that the opinions entertained in regard to the facilities for its construction at the points where alone they could be looked for were entirely erroneous. The rapidly increasing trade on the western waters, and the many steamboats contracted for or building on this line, the number of which has been estimated at upwards of one hundred, rendered the accumulation of business on the hands of the builders too great to admit of their assuming new jobs at this time; and the construction by individual application was rendered nearly as uncertain by the consequent absorption of all suitable workmen in this branch of business.

A machine, with the necessary keel and flat boats, and a full equipment of the necessary implements for the removal of rocks and snags, was completed in September; at this time the river presenting a favorable stage for the object, the work of examining the shoals was immediately proceeded with.

Previous to this, in the month of August, whilst in expectation of a continued fall of the water, the most important obstruction in the upper section of the river was partially surveyed, with a view to the location of works for its improvement; the examination being arrested by a sudden and unexpected freshet in the river, the surveys were subsequently completed in September. The plan for the improvement of Brown's island, the point alluded to, is now before the department.

An examination of every obstruction to the navigation was completed in September.

The river has, throughout the present season, continued in a state unusually favorable to its trade and navigation, and, under these circumstances, has not presented the most satisfactory view of its low-water character. The examination, however, has served to determine very satisfactorily the nature, extent, and comparative promineny of the different shoals.

The Ohio river derives from the Alleghany its principal and most lasting supply; during the summer months its volume is maintained and very frequently increased by the occasional rains during that period, which enlarge materially the supplies drawn from the copious basin of this tributary; and it is only during a season of unusual drought that it arrives at its minimum stage; this, from a comparison of the best authorities, is assumed at fifteen inches. The least depth obtained during the examination this season was 2 in. 2 sec., although the water for the brief space of a few days only has been as low as two feet over some of the shoals between Pittsburg and Wheeling. The Ohio throughout its whole course has in general a very equable and gentle current. During high stages this is the most uniform, although its rate is then considerably increased; at low stages the river becomes resolved into a succession of ripples, with extensive slack-water basins between them, varying in depth from two to three and even five fathoms. The valley of the river is bounded on each side by richly timbered hills, of great uniformity in their average height, enclosing fertile bottoms, which alternate in very regular succession on either side of the river; ledges of rock occasionally appear along its banks; these are generally of stratified and easily wrought sandstone. There are few points on the river deserving the name of gorges; the nearest approach to an opening of that character is found at Brown's island, 65 miles below Pittsburg. The heights here approach within the distance of 600 yards, and ledges of rocks exhibit themselves on each side of the river. There are several other formidable passes on the river, which, however, in comparison with the shoals, are few in number; of the character alluded to are Captina and Buffington's islands, and the rapids called Letart's Falls; these are more dangerous for the passage of keel and flat boats than for that of steamers, which, under the management of careful pilots, are exposed to little risk when there is found sufficient depth of water at those points for floatage. The obstructions in the river generally arise from the want of sufficient depth of water over many of the shoals at low stages. There are points, however, where, owing to the existence of projecting rocks, the navigation is not safe for as much depth as is contained in the channel. The bars in the river may be classed, 1st, into those formed of hard and apparently of permanent gravel; 2d, shifting or loose gravel; and 3d, shifting sand-bars. The first abound in the upper section of the river. These are generally exposed to a strong current, and formed of rounded oblong pebbles and stones, varying from one to fifty pounds and upwards; they become by the continued action of the water cleared of all smaller particles, firmly

imbedded, and by their conformation resist the action of the current; the bottom assuming the consistency of, or similarity with, a pavement of smooth stones.

The bars of the second class are composed of fine gravel, movable by strong currents, and occur, as well as most of the sand-bars, at the lower junction of the chutes formed by the islands; these change their position when, upon the fall of the waters, the main channel of the river predominates in a new direction, and the fall and current increased by the subsidence of the lower basins. In the upper section of the river the sand-bars are always found under the lee of the islands, or at the meeting of the channels. In the lower section are extensive sand-bars, unaccompanied by islands; the most important of these are met with between Guyandot and Cincinnati. In addition to the shoals, large quantities of logs and snags are distributed in different parts of the river. On some of the shoals they lie imbedded in the gravel, forming, by the projection of their stumps, very dangerous obstructions to the low-water navigation. Large trees, with their roots, branches, and foliage in full verdure, undermined and thrown into the stream by the gradual abrasion of the alluvial banks at high water, are of frequent occurrence. Many logs are disgorged from the smaller tributaries and creeks which empty into the Ohio. These creeks, when swelled by rains into rapid torrents, discharge large quantities of pebbles and large angular stones into the bed of the river, in many cases forming extensive bars at their junction.

In descending the river from its head, a considerable improvement is experienced in the depth of the water after reaching the foot of Wheeling island. From this point the river, at stages admitting the passage of light draught steamers, is practicable for about six inches greater draught than the section above it. This circumstance is not due to the reception of any important tributary to its waters, but solely to the decrease in the rapidity of its descent. This difference in the depth is less perceptible at an extreme low stage. From a comparison of the best data obtainable, the descent from Pittsburg to Wheeling has been estimated, approximatively, at one foot to the mile; from Wheeling to Guyandot, eight inches; and thence to Louisville, four inches per mile. Below Guyandot the character of the river becomes materially changed. It here enlarges its bed, and flows onward with a diminished current. The level reaches are longer, and the descent at the ripples less. This enlargement of its bed, however, renders the depth over some of the shoals in this part of the river very slight at low water, forming several very shoal sand and gravel bars. From Cincinnati to Louisville the navigation becomes comparatively much improved. There are two or three bars on this section, and some dangerous snags below the mouth of Kentucky river, which require attention. It would be desirable to give a specific description and sketch of each shoal were it not that their great number and similarity would render such description a monotonous repetition of nearly the same circumstances. The chief results of my examination are therefore embodied in a tabular form, the most convenient for reference, and is herewith annexed.

An important feature in the Ohio river is observable in the fact that at all the islands are also located the worst shoals and rapids or falls. These islands are considered rather the effect than the cause of this fall, and formed, like the alluvial bottoms, by the gradual deposit from the river, which, at those points being spread out at low water, leaves some portions of the projecting parts of its bed uncovered. In respect to Captina and Buffington's islands, the low-water channel at each deflects from the main direction of the bed, and passes off laterally, through a narrow and circuitous route, around the island. The main or direct channel in both the cases alluded to is rendered dangerous by rocks, and too shoal at low water for navigation.

The rocks in the Ohio chute at Captina island appear, from recent examinations, to be of a detached character, and susceptible of removal. The direct channel at Buffington's island is bounded by a ledge of stratified sandstone rock, projecting into the river, which is supposed to continue entirely across the channel beneath the gravel bottom. It is, however, situated nearly at the foot of the rapids. Some loose rocks are scattered in this channel.

With regard to the islands, and particularly those at which the low-water channel deviates from the direct continuation of the main bed of the river, shifting bars are always found under the lee of the islands. This rule appears, from the result of my examination, to be of general application in regard to all similar points on the river. The water at high stages passes with the greatest volume and current through the most direct and spacious channel, which, then predominating, throws into the foot or junction of the smaller passage powerful eddies, depositing therein a bar, which again changes and deepens upon the fall of the waters. With regard to the rapids called Letart's Falls, the river here passes over a rocky bottom, with a descent and current far greater than is found at any other point above the falls. The bottom is free from dangerous projections, and the concentration of the water at this place by the more prominent parts of the rocky bed on each side renders the depth over these rapids much greater than upon most of the shoals in the river. The current, which is here five and three-quarters miles per hour at a moderate stage, can in general be stemmed by steamboats of sufficient power; but for keel-boats, and the lighter class of steamers, permanent warping fixtures are here necessary. The points most requiring immediate attention in the shoaler section of the river, lying between Pittsburg and the junction of the Muskingum at Marietta, are Logtown bar, Black's and Brown's islands, Beech Bottom bar, McMahon's creek, below Wheeling, which requires the removal of many dangerous rocks and logs, Captina island, Petticoat ripple, in the long reach, Carpenter's bar, and Marietta island. At this latter point, the junction of the Ohio channel, opposite to the town of Marietta, is crossed by a large bar of loose shifting sand, which makes from the foot of the island across to the mouth of the Muskingum. At the head of the island, three miles above, the Virginia channel is crossed by a shoal gravel bar.

By the execution of that part of the plan of improvement now in progress, viz: the removal or clearing the channel of all sunken logs, stumps, snags, and projecting rocks, the navigation at low stages, and particularly for light-draught steamers and keel-boats, will be rendered much safer, and even practicable for a deeper draught than it is under present circumstances considered prudent to employ. There are some sand and light gravel bars which are among the very shoalest on the river, but which, notwithstanding, are not ranked among the most serious obstructions from the comparative safety with which their passage may be attempted. A system of improvement, having for its object to secure a specific depth of water at all seasons sufficient to meet the demands of the trade upon those streams which are rendered impassable during the dry seasons from the diminution of the supplies derived from their tributaries, can be effected with certainty only by a series of dams and locks.

As this mode is not, however, contemplated with regard to the Ohio, the concentration of the river into one channel, and the appropriation of all the water passing to that object during low stages, will, it is believed, accomplish all the further improvement contemplated.

The dimensions of this channel should be accommodated to the passage of the various description of

craft which navigate the Ohio river. It is expected that in the upper section of the river the water will require to be confined to a channel fifty yards in width, to cause a sufficient depth for the passage of light-draught steamers. The improvements introduced into the construction of the latter, in reference to lightness of draught, with the present simplification of steam machinery, induces the belief that boats drawing twenty inches may be constructed with sufficient power and capacity for towing and the conveyance of passengers. If the paddles of these boats are applied at the stern, they will be enabled to stem the rapids on the river with much greater facility.

The construction of the works for the improvement of the shoals will require, as a preliminary step, a minute and accurate survey of each, the form, position, and extent of the works required being governed in a great measure by the irregular features of the bed. As the surveys and the works of improvement can only be carried on at low water, and within the limited time allowed by the state of the river for such operations, it is desirable to commence as many works, simultaneously at different points, as may be justifiable by the amount of the appropriation. To this end it is recommended to the department to attach competent surveyors to the work to survey all the points requiring improvement, under specific instructions from the superintending officer in reference to each. These surveys, as fast as executed, with the plan of improvement proposed for each, to be laid before the department for its action thereon.

The operations to the present time have consisted in the construction and preparation of machinery and boats; and in examinations and surveys, with a view to the location of works of improvement.

A machine, with the requisite boats and implements, has been put in operation on the upper section of the river in removing sunken logs and rocks; to which object it has proved to be fully competent. The obstructions of this class are drawn entirely from the bed, and afterwards demolished.

It was expected that the section from Pittsburg to Wheeling would have been cleared this season, but the operations have been recently suspended by a rise of the waters, which has also prevented the execution of the plan for the improvement at Brown's island.

The construction of three additional machines, to be in readiness in the ensuing spring, has been provided for.

It is anticipated that, in the event of a favorable season, all the dangerous obstructions of the detached class may be removed during the next year.

An estimate for the construction of all the works required for the improvement of the shoals cannot be safely hazarded until the execution of the surveys proposed for that object.

The present appropriation will suffice for the operations of the ensuing year. It is considered proper to state that the most favorable season for the application of the appropriation, will not afford four months for efficient operation; during the present season about two weeks only have been found during which the river was in a suitable state for that object.

The expenditures to September 30, 1835, were.....	\$8,468 31
The amount required during the fourth quarter.....	1,630 00

	10,098 31
Amount of appropriation.....	50,000 00

Leaving for application during the year 1836.....	39,901 69
The cost of additional machinery, boats, and tools, is estimated.....	\$7,250
And for their application during the year 1836.....	16,250
	<u>23,500 00</u>

Which leaves for the construction of dams, contingencies, &c.....	<u>16,401 69</u>
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The cost of constructing low dams in the upper section of the river is estimated at \$3 the running yard, and the excavation of rocks at \$3 25 per perch. The latter is, however, subject to more variation than the former from the contingencies of weather, rises, &c.

With regard to the annexed table the department will observe that the stage of the water, as there noted, is presumed to be very nearly accurate.

In this respect the river, from its length, is subject to great variations from the time required for the increased discharges from the head tributaries to produce their final effect upon the lower sections of the river.

Drawings of some of the principal points are herewith annexed.
Respectfully submitted.

G. DUTTON, *Lieut. Corps of Engineers.*

Brig. Gen. C. GRATIOT, *Chief Engineer, Washington, D. C.*

Table exhibiting the depth of water and nature of the bottom at the different shoals between Pittsburg and Louisville.

No.	Name.	Shoalest water over the bar.	Stage.	Nature of the obstructions, remarks, &c.
1	Brunot's Ripple			Gravel; strong current.
2	Foot of Brunot's island			Gravel; current gentle.
3	Horsetail Ripple			Gravel and stones; strong current.
4	Lowrey's Ripple			Opposite Lowrey's run a gravel bar.
5	Duff's Ripple			Gravel bar.
6	Merriman's Ripple			Gravel bar projecting from Neville's island.
7	White's Ripple	3' 9"	2' 11"	Ten miles below Pittsburg hard gravel; rapid.
8	Wollery's Trap	3 0	2 9	Gravel and stones.
9	Deadman's Ripple	4 0	2 9	Gravel bar; rapid chute.
10	Sewickly bar	4 0		Opposite Sewickly creek hard gravel.
11	Logtown bar	2 6		Gravel and pebbles; very shoal; strong current.
12	Crow's island	4 0		Hard gravel.
13	Waller's Ripple	4 6		Do.
14	Atkinson's bar	4 9		Do.
15	Beaver shoal	3 6		Gravel and stones; a dangerous shoal.
16	Raccoon bar	3 0		Gravel.
17	Montgomery's island	4 6		Do.
18	Philles island	4 6		Gravel and large rocks.
19	Georgetown island	4 6		Gravel and dangerous rocks.
20	Line island	4 0		Gravel.
21	Bab's island	5 0		Do.
22	Yellow Creek bar	4 2		Do.
23	Baker's island	4 2		Do.
24	Kneistley's Clusters	4 0		Gravel and rocks.
25	Black's island	2 6		Gravel.
26	Brown's island	2 9		Gravel and rocks; dangerous.
27	Will's creek	3 10		Gravel.
28	Well's bar	2 9		Do.
29	Mingo island	3 4		Gravel and dangerous logs.
30	Cross creeks	5 6		Gravel.
31	Cox's bar	3 0		Do.
32	Wellsburgh	6 0		Do.
33	Beech Bottom bar	2 6		Hard gravel.
34	Short creeks	3 9		Gravel.
35	Pike island	4 0		Do.
36	Two Sisters	2 9		Gravel and logs.
37	Burlington bar	2 9		Gravel, sand, and dangerous rocks.
38	Wheeling island	3 3		Gravel and rocks.
39	Bogg's island	3 0		Do. do.
40	McMahon's creek	4 0		Dangerous rocks and logs; rapid current.
41	Patterson's bar	5 0		Gravel.
42	Big Grave creek	4 4		Do.
43	Captina island	2 6		Gravel, sand, and logs.
44	Fish Creek island	3 1		Gravel and logs.
45	Gleen's bar	4 0		Hard gravel.
46	Sun Fish Creek bar	4 0		Do.
47	Opossum Creek bar	3 6		Do.
48	Procter's run	4 9		Do.
49	Muckle Downie's bar	4 6		Do.
50	Fishing Creek bar	3 0		Gravel, rocks, and logs.
51	Williamson's island	3 4		Gravel and logs.
52	Pursley's island	3 2		Gravel, rocks, and logs.
53	Wilson's island	3 3		Gravel.
54	Grandview island	2 6		Gravel and snags.
55	Chemise	3 6		Gravel.
56	Petticoat Ripple	2 3		Small gravel.
57	Grape and Bat island	4 6		Gravel.
58	Middle island	4 6		Gravel and rocks.
59	Three Brother island	3 6		Gravel and logs.
60	Bull Creek bar	3 4		Gravel and sand.
61	Carpenter's bar	2 4		Hard gravel and sand.
62	Marietta island	2 2		Gravel.
63	Muskingum island	3 6		Gravel and snags.
64	Vienna island	4 4		Do do.
65	Cole's island	3 2		Gravel, sand, and logs.
66	Blennerhasset's island	3 0		Many snags above the head; shifting sand-bar at the foot.
67	Little Hockhocking	3 9		Small rocks, gravel, and sand.
68	Newbery bar	2 6		Hard gravel; strong current.
69	Mustapha island	4 0		Hard gravel.
70	Bellville bar	4 3		Do.
71	Bellville island	3 8		Hard gravel and stones; sand at the foot.
72	Shade river	2 8		Hard gravel.
73	Swan's bar	3 1		Do.
74	Buffington's island	2 3		Gravel and dangerous snags; rapid.
75	Big Sandy creek	3 2		Hard gravel and stones.
76	Oldtown bar	4 5		Gravel, snags, and logs.
77	Goslin bar	5 0		Gravel.
78	Goose island	2 4		Gravel and snags.
79	Lefart's islands	2 6		Gravel; strong current.
80	Lefart's rapids	4 6		Rock; current — miles per hour.
81	Weaver's bar	3 6		Gravel and logs.
82	Wolf's bar	4 2		Hard gravel.

* These were not sounded in the examination at low water. Nos. 1 and 3 are among the shoalest class.

Table exhibiting the depth of water, &c.—Continued.

No.	Name.	Shoalest water over the bar.	Stage.	Nature of the obstructions, remarks, &c.	
83	Secrest's Ripple	4' 5"	} Descending, 2' 3" -----	Gravel and rocks; strong current.	
84	Sliding Hill bar	6 6		Logs and gravel.	
85	Leading creek	6 0		Gravel and stones.	
86	Eight Mile island	4 0		Hard gravel.	
87	Six Mile island	4 0		Do.	
88	Gallipolis island	4 1		Hard gravel; logs and trees below.	
89	Raccoon island	3 5		Shifting gravel bar; dangerous logs.	
90	Straight Ripple	4 2		Gravel and rocks.	
91	Little Guyandot	5 0		Small gravel and sand; logs.	
92	Green Bottom Ripple	4 0		Rocks and gravel; strong current.	
93	Dog bar	4 9		Gravel.	
94	Guyandot	2 11		Rocks and gravel; strong current.	
95	Burlington bar	2 10		Hard gravel; loose sand at the foot.	
96	Big Sandy river	4 2		Hard gravel and rocks.	
97	Greenupsburg	4 0		Gravel, sand, and stones.	
98	Little Sandy river	4 4		Gravel.	
99	Genet's bar	4 6		Gravel; snags.	
100	Little Scioto river	3 9		Gravel and stones; dangerous snags below.	
101	Conoconneque bar	3 11		Gravel.	
102	Quick's run	2 3		Do.	
103	Station bar	4 0		Do.	
104	Bush Creek island	2 6		Gravel, logs, and snags.	
105	Manchester islands	4 11		Sand at the foot.	
106	Charleston bar	4 4		Loose sand at the foot of the dry bar.	
107	Locust creek	4 3		Gravel.	
108	Virgin Locust bar	4 4		Sand.	
109	Mechanicsburg	3 0		Do.	
110	New Richmond	3 9		Gravel and sand.	
111	Shipyards bar	3 11		Sand and gravel.	
112	Five Mile creek	2 3		Do. do.	
113	Four Mile creek	3 0		Loose sand and gravel.	
114	Crawfish run	5 9		Gravel.	
115	Cincinnati	5 7		Do.	
116	Laugherty's island	5 9		Do.	
117	Rising Sun bar	5 6		Gravel, sand, and snags,	
118	Gunpowder bar	5 3		Hard gravel.	
119	Fredericksburg	4 6		Do.	
120	Vevay island	4 0		Gravel, logs, and snags.	
121	Craig's bar	4 6		Gravel.	
122	Locust creek	3 6		Gravel, sand, and stones.	
123	Hogland's bar	5 0		Do. do.	
124	Marque's bar	5 5		Sand and snags.	
125	Eighteen Mile island	3 3		Gravel and stones.	
126	Grass flats	4 0		Gravel; a grassy bar in the middle of the river.	
127	Twelve Mile island	5 0		Gravel.	
	Falls				

O.

MEMPHIS, August 31, 1835.

SIR: The Cumberland river, at the time of the inspection in October last, was at extreme low water, affording a most favorable opportunity of ascertaining the exact position, extent, &c., of the bars and reefs of rock which obstruct or impair the navigation; sketches of such as were deemed of most moment have since been forwarded to the department. At that time the superintendent was engaged in constructing the wing-dam connecting the head of Line island with the right hand shore of the river. This is the principal work, and measures five hundred and thirteen yards in length; one hundred and fifty yards of this dam will, when finished, be eighteen feet high; the balance will average six feet in height. The dam across what is called the keel-boat channel at Line island, when completed, will be four hundred and sixty-five yards in length; of this, three hundred and fifty are already raised three feet above low water mark. All operations were discontinued on the river, November 29th, on account of the cold weather and high water.

The works were recommenced in April with all the laborers that could be collected. This force was first employed in raising the dam at the head and foot of Harpeth island, and in prolonging that at the foot of the island to six hundred and fifty yards in length. A breach of about sixty yards was made in the dam at the head of Harpeth island by water during the spring flood, which was repaired, and the dam strengthened throughout its whole extent. The work at this island is now regarded as complete, and answers entirely the object of its construction. On the 6th of August the forces were removed to Davis's ripple. More time was consumed at Harpeth island than it would seem to have required; this was caused by the dispersion of the laborers, in consequence of the appearance of the cholera amongst them in June, when no inducement would tempt them to remain longer on the work. The operations, commenced on the 7th at Davis's ripple, were suspended before the end of the month in consequence of sickness among the officers and men, there being only twelve persons for duty at the time they were abandoned. A small force was employed early in August in quarrying stone for the dam at Line island. This force was increased towards the end of the month by the remnant of the laborers brought from Davis's ripple by the superintendent. The important work at this point will, probably, be completed this fall; after which, if the season is not too far advanced, the dam at Dover shoals will be commenced.

The necessity of having accurate surveys of each shoal is strongly felt. Without the information, which can only be acquired from actual surveys, there must unavoidably be great uncertainty in the

results intended to be produced by the wing-dams. The object for which they are constructed is to produce a uniform depth of water over the bars on which they are built; for this purpose it is not sufficient to raise dams at the different shoals to a uniform height above low-water mark. As this river receives few tributary streams which materially augment its volume, the quantity of water discharged through every section of it, in a given time, may be considered uniform, and consequently varies with the product of the breadth, depth, and velocity; assuming as the depth that which is desired to produce on the shoals, and having ascertained the velocity by experiment, the required breadth of the openings to be left between the wing-dams will thereby be known. To construct dams to produce this result with the least expenditure of labor and materials, it is essential to know the distances to different points of the adjacent shore, the depth of water, the direction, breadth of the shoals, and the depth of water on them. The want of this kind of information must cause uncertainty in estimates, and lead to unnecessary expenditures. It was my intention to time my present visit to the Cumberland so as to reach it at high water, for the purpose of determining the influence of the wing-dams at this stage of the stream, as well as to ascertain to what extent the navigation had been benefited from clearing the banks of projecting timber. The season was, however, too far advanced before I reached the Cumberland, which I found at only five feet above the point of the lowest water. It is at this stage of the river that the most decided advantages are to be expected from the wing-dams; when higher, their aid is not required; and when lower, they are incapable of adding sufficiently to the depth to render the stream navigable for any crafts but smaller-sized steam-boats and keel-boats.

Clearing the banks of projecting timber has proved of essential service to the navigation, by enabling boats to approach the points; thus shortening the distances, and in many instances, especially in the convex sides of the stream, giving greater depth of water, which, in such situations, is usually near the shore. I had the honor to inform the department in my last report that this part of the work was nearly completed. There still, however, remains something to be done before this branch of the improvement can be considered perfect. This was pointed out to the superintendent, who immediately caused the machine boat, with an adequate company, to proceed upon this duty, under the command of an individual perfectly acquainted with the river, with instructions to commence at Nashville island, and, in descending, to remove all snags, sunken logs, projecting trees or fallen timber, and all detached rocks, which might interfere with or interrupt the future navigation.

My last report contained a list of such places as were capable of being improved. I beg leave here to call the attention of the department to those works which, according to the plan of improvement suggested in the original project, come next in order. These are, a dam at Sycamore creek; one below the mouth of Harpeth river; one at Palmyra island and at Dover shoals; one at Shelly's island; and one at Ingraham's shoals. Further blasting of the point of rocks at the Devil's chute is necessary; and a similar work at Camp Rowdy will be attended with equally beneficial results. These works are indispensable to develop fully the advantages of the improvement effected at Flax patch, Harpeth shoals, Davis's ripple, Line island, and the Devil's chute, as there is now more water at these places than at those before mentioned. There remains at this time unexpended, of the former appropriation, about \$11,000. Five thousand dollars will be expended during the fourth quarter of 1835 on the works now progressing; there will then remain \$6,000 available for the ensuing year, and applicable to the projected work. This sum is wholly inadequate for their construction; a further estimate will be made by the superintendent for \$30,000, to be applied to that object. I have not the data necessary for estimating minutely the probable cost of the contemplated works; but from the extent of the improvements of which the Cumberland is capable, there will be ample room for applying the surplus advantageously, should the amount called for by the superintendent exceed that which shall be found necessary for completing the dams.

As these works form a prominent part of the system commenced for the improvement of the Cumberland, and as but little advantage can be derived from what is already done, unless the system be carried through, the necessity of the appropriation is obvious.

I have the honor to be, sir, very respectfully, your obedient servant,

A. H. BOWMAN, *Lieutenant of Engineers.*

General CHARLES GRATIOT, *Chief Engineer.*

P.

CUMBERLAND ROAD OFFICE, *Columbus, Ohio, October 12, 1835.*

Sir: I have the honor to present my annual report of the condition of that portion of the Cumberland road in Ohio, under the control of the United States, exhibiting the progress made in its construction since the 30th of September, 1834.

SECOND DIVISION.—Embraced between the town of Zanesville and the city of Columbus.

Masonry.—The several structures between the 22d and 53d miles, inclusive, have been thoroughly repaired and pointed, preparatory to this part of the road being delivered up to the State.

Carpentry.—The wooden superstructure of the bridge over the south fork of Licking creek, on the 25th mile, has been repaired and strengthened by additional braces to secure it against lateral motion. Some slight repairs were made to the bridge over the canal feeder, on the 32d mile, and others will be required to the flooring of those over Black Lick, Big Walnut, and Alum creeks, previous to their being turned over to the State.

Covering.—The third and last stratum of metal was placed upon eleven miles of the road, viz: Between the 22d and 32d miles, inclusive, during the winter and the early part of the spring of this year; and this portion of the road was received by the governor of the State in the month of May. From the 32d mile to this place, a distance of twenty-one miles, nearly the whole of the metallic covering has been prepared for the three strata. On the 30th of September seventeen miles of this portion were covered with six inches of prepared gravel and quarry limestone, leaving but four miles without any metallic cover. The whole of this division of the road would have been completed, so far as regards the first two strata of metal, early in the last month, had not the unusually wet weather experienced this year retarded this branch of our operations from the very commencement of the working season. Much greater difficulties have been encountered than was at first anticipated, in procuring a sufficient quantity of gravel for the covering, having nearly exhausted the whole district of country between the Licking canal feeder and this city of that material, in obtaining the required amount of stone for the completion of this

section. Such progress, however, has been made in the work as to warrant the belief that this division will be finished and placed under the control of the State in the course of the next month.

The quantity of metal prepared for the second division since my last annual report is 18,920.66 rods, or 62,438.17 perches of 25 cubic feet.

Graduation.—The side ditches and slopes of the road between the 22d and 32d miles, inclusive, were prepared previously to this portion being turned over to the State. The shoulders and drains of the remaining part of this division will require some repair upon its final completion.

THIRD DIVISION.—Embraced between the city of Columbus and the town of Springfield.

Masonry.—The abutments and pier of the bridge over the Scioto river are in a rapid state of forwardness, and it is expected will be finished the present month. The masonry between Columbus and Jefferson has undergone a thorough revision. All the culverts and one bridge have been entirely rebuilt, and such portions of the other structures as were found to be defective have been taken down and renewed.

Between Jefferson and Springfield the masonry is nearly completed, and should the weather prove favorable for the remainder of the working season, it is confidently anticipated that the whole of the masonry on this division of the road will be brought to a close.

Carpentry.—The wooden superstructure of the bridge over the Scioto river is nearly raised; it will be roofed and the flooring laid in all the month of November, so to admit the travel over it, if necessary, at that time.

This structure will be finished the present year if the weather is favorable for out-door operations. The bridges over Big and Little Darby creeks have been strengthened by upper lateral braces. That over the latter stream will require still further repairs the ensuing year, to counteract the tendency it has to twist, caused in a great measure by the weakness of the wooden arches connected with the truss frames. The bridge over Beaver creek, on the 37th mile, is raised, and will be completed in the next month. Part of the timber for that over Deer creek, on the 22d mile, has been collected at the site of the work, and piled for seasoning and preservation from the weather.

Covering.—The greater part of the material for the first and second strata of metal between this place and Jefferson, a distance of fourteen miles, has been prepared, and upwards of four miles have been covered with a depth of six inches of stones. Every exertion will be made to get as great an extent of this division of the road covered the present season as the state of the weather and our limited means will permit. The whole of the third stratum of metal has been prepared for the three miles immediately west of this city. The quantity of metal prepared for the third division is 7,859.09 rods, 25,935 perches of 25 cubic feet.

Graduation.—The graduation of twelve miles of the road between Jefferson and Springfield was finished on the 30th ultimo; six more will be completed the present month, and another mile in the month of November; making in all nineteen miles, and leaving ten still to finish. It is to be regretted that the want of funds will compel us to defer the completion of this part of the work for another year, as part of the district, yet untouched, involves very considerable excavation and embankment, the latter of which it is all important should be made this winter, in order that the necessary subsidence may take place previous to this portion of the road receiving the cover of metal proposed to be placed upon it the next season.

FOURTH DIVISION.—Embraced between the town of Springfield and the Indiana State line.

Masonry.—An arched culvert has been built over Mill run, in the town of Springfield. About forty rods of graduation have been completed to the east of this structure, being an extension of the graduation of South street, from the termination of the third division. Sixty rods to the west of the culvert will be finished and gravelled this month, which will include nearly the whole of the graduation to be done in the town.

Clearing and grubbing.—Six miles of clearing and grubbing were completed last year after the 30th of September, which, with the six miles previously reported as finished, make twelve miles of this section of the road opened, and leaving nearly forty-two miles still to clear and grub.

Congress, at its last session, having directed that a review of the line of the road between Springfield, Ohio, and Richmond, in Indiana, should be made, our operations on this division were necessarily suspended until the final result of this reconnoissance should be made known, in compliance with the instructions of the department to me on that subject, under date of the 16th of March last.

The project of operations for the year 1836 is as follows:

THIRD DIVISION—Masonry.—To repoint the masonry between this place and the twenty-fourth mile, previous to this portion of the road being delivered up to the State.

Carpentry.—To complete the wooden superstructure of the bridge over Deer creek, and make the necessary repairs to those across the Darbys.

Covering.—To complete the first and second strata of metal to Jefferson, and to prepare and put on the same depth of covering from thence to Springfield; subsequently to prepare and put on the third stratum of metal from Columbus to the twenty-third mile, inclusive, and deliver this part of the road up to the State.

Graduation.—To complete the graduation of that portion of the road unfinished between Jefferson and Springfield, and make the necessary repairs to those sections turned over to the State.

FOURTH DIVISION—Masonry.—To complete the masonry between Springfield and the twentieth mile, inclusive, west from thence.

Carpentry.—To complete the wooden superstructures of the bridge over Mad river, those over Donnel and Jackson creeks, across the Great Miami river, and the canal where it intersects the road.

Graduation.—To complete the graduation between Springfield and the twentieth mile, inclusive, west from thence.

Clearing and Grubbing.—To complete the clearing and grubbing through the State.

Causes which have operated against the advancement of the work.—Early in the spring, and during the greater part of the summer, grain of every description was held at so high a price as to deter most persons owning teams from bringing them on to the road, without the expectation of a considerable advance upon our usual rates of hauling. In fact, the value of this species of labor was so much enhanced as to induce us to curtail, as far as was consistent with the nature of our operations, this most expensive part of the work until after the season of harvest.

Another cause which has operated most materially against us, and which has tended to swell the costs of this particular labor, as well as that of every other, is the succession of wet weather, by which the roads during the greater part of the summer months were kept in as wretched a condition as they are

usually left upon their breaking up after the winter. This has added greatly to the expense of the masonry and covering, the materials for both having to be hauled considerable distances, particularly for the former work, the transportation of the stone for one structure being twenty-five miles. A heavy expenditure, consequent upon this most remarkable season, was the loss of labor in preparing the surface of the road again and again for the reception of the metallic cover; the frequent rains, with the increased amount of travel, having destroyed the graded surface before it could be covered with metal. This has been so great an evil on the division of the road west of this place as to compel us to prohibit the travel upon it until the metal is put on.

Sickness, too, has been more than usually prevalent along the line of the road, induced, no doubt, by the humidity of the atmosphere and the sudden changes of temperature.

From all these causes combined the progress of the road this season has not been as great as was anticipated, although the amount of work done, as is shown by the exposition of the state of our operations, exceeds very considerably that of any former year.

Resources of the country as regards materials.—That portion of the second division embraced between the thirty-second mile and this city. Sandstone for building is found at different distances from the line of the road, but generally of a very inferior quality. A few detached masses of limestone have been discovered, but not in sufficient quantities for any of the purposes of the road. Lime has therefore to be brought from the third division of this section. Sand in considerable varieties is found at the streams crossing the line of the road, some of which are pretty clean and sharp, but generally of too fine a grain for stone mortar. There being no quarry stone suitable for metal for the cover of the road, recourse has been had to the gravel banks lying north and south of the line of the road for a material for that purpose. This gravel is of various qualities, being a mixture of sandstone, slate, and limestone, the latter predominating the nearer we approach the city. The material thus procured was passed through iron screens, in order to free it from sand and clay, and subsequently broken to the prescribed weight of four ounces.

Lumber.—Elm, beech, hickory, and the different varieties of the oak, walnut, maple, ash, and locust are found in greater or less abundance throughout this section.

THIRD DIVISION.—Limestone, of an excellent quality and in large masses, for building, is found at the eastern extremity of this division, and from a quarry three miles west of this place we have drawn our principal supply of materials for the construction of the bridges and culverts to the twenty-eighth mile; from thence to Springfield the stone has been supplied from a quarry two miles west of that town. The Darbys, which it was supposed would furnish an abundant supply of good building materials, have failed almost entirely in this respect, the stone being inferior in quality and of bad shape for constructions. After a considerable expenditure of money, we were obliged to abandon those quarries, on account of the great cost in working them. For twenty-nine miles of this division no quarry stone is to be found. Lime of a very good quality is to be had in abundance and at a cheap rate. Building sand, of a suitable grain for stone mortar, and pretty free from loam, is procured from the Scioto river and its neighborhood, and in the vicinity of the Darbys and Springfield. Stone for the metallic covering between this city and Jefferson is obtained from the quarries and gravel banks, the latter of which furnish nearly a pure limestone. Between Jefferson and Springfield our chief dependence must be upon the gravel banks for a material for the cover of this section of the road. These banks have yet to be explored; the estimate for this particular part of the work is based upon some uncertainty, and may vary in amount. The same description of lumber is found on this division as on the second.

FOURTH DIVISION.—Limestone in abundance, it is supposed, will be found on this division, not only for building, but for the cover of the road. Lime can be had at a reasonable rate. Sand for mortar, it is presumed, can be obtained at the principal streams to be crossed.

In addition to the timber specified as growing on the second division is to be added white and yellow poplars, which are found west of Mad river.

Plan of administration.—The superintendent, aided by three assistants, one inspector, one superintendent of masonry, and five principal overseers, supervise the operations on the road. Two clerks are employed in the office.

Accompanying this report is an estimate in detail of the funds required for carrying into effect the project of operations for the year 1836. This estimate may seem large, but it is not greater than the steady advancement of the work requires, and it is therefore hoped that the sum asked to be appropriated by Congress for the road in this State the coming year may not be less than the amount named in the estimate.

The annual statement of the operations on the road up to the 30th of September, 1835, showing the cost of the several parts of the work, will be forwarded to the department as soon as the necessary data can be obtained from the disbursing agent at this place.

In conclusion, I would respectfully urge the necessity of an early appropriation as of vital importance to the progress as well as the interests of the road.

All which is very respectfully submitted.

H. BREWERTON, *Lieutenant of Engineers.*

Brigadier General C. GRATIOT, *Chief Engineer, Washington.*

Q.

Report on the progress made in the repair of the Cumberland road east of the Ohio during the year ending 30th September, 1835.

BROWNSVILLE, *Pennsylvania, September 30, 1835.*

At the date of the last annual report on the repairs of the Cumberland road east of the Ohio the operations were progressing rapidly under an appropriation of three hundred thousand dollars to finish the road from Cumberland to Wheeling, on such a reduced scale and modified plan as this limited sum, not half the estimated amount, would effect. Contracts had been made in August of 1834, under that appropriation, for finishing the grade of the new route near Cumberland; constructing the masonry and wooden superstructure of the bridges over Wilp's creek and Braddock's run; grading 48 miles of road in Washington county, Pennsylvania, and Ohio county, Virginia; and for putting on a stratum of metal the

whole length of the road. These contracts were principally carried into effect by the close of the year 1834, and finished, excepting the bridges, in the spring of this year, 1835, when the whole road from Cumberland to Wheeling was graded and covered, with Macadam metal, varying in thickness from three to nine inches.

In March, 1835, an appropriation was made of \$346,186, to complete the repairs on the plan originally contemplated, with a proviso that no part of this sum should be expended until the road was surrendered to, and accepted by, the State through which it passed.

On the 18th of April information was received that the road had been accepted by the States, and commissioners appointed to erect toll-gates and houses, and collect toll. Further progress was at once put a stop to in the construction of the bridges near Cumberland, the timber for which had all been procured and partly worked.

By the first of May contracts were concluded for putting on a stratum of metal in Pennsylvania and Maryland, and in August for putting on another stratum, being the last required to bring the whole road to a uniform thickness and strength of nine inches of good limestone metal.

The work in the State of Virginia passed from under my superintendence into the hands of the commissioners of that State, who have since carried into effect the arrangements and system I had adopted, and made contracts so soon as being appointed for putting on a stratum of metal through that part of the road. By the 30th of September the contracts for the first stratum of metal had been principally completed, and considerable progress made in the execution of the second and last stratum. The masonry of the bridges near Cumberland, on the original plan of stone arches, being remodified to suit the changes introduced by the changes of last year, to wooden superstructure, was put under contract, and two of them so far progressed with as the completion of the arches. The third or large bridge, over Will's creek, was put under contract late in the season; the centre pier only was required to be built this fall, time not being sufficient to prepare the stone and close the arches before the climate puts a stop to mortar masonry. The arch stones of this bridge are preparing, and the whole structure is to be finished by next July.

The Dunlap's creek bridge was also put under contract late in the season, on account of the difficulty of obtaining the right of way and ground for the wing walls in Bridgeport; local interests, coming in collision with the public good, arrested the progress of this work to so late a period that the foundation of the southern abutment only has been secured. This work will be finished next season, and promises to be a good specimen of the art of masonry, being composed of blocks of stone of not less than fifteen cubic feet, and so well-jointed throughout the whole mass as to admit of a cask of cement in laying twenty perches.

The masonry of the parapets of the old bridges and culverts in Washington county has been repaired in some cases by rebuilding the whole parapet with new materials, and in other cases relaying the old coping. In Fayette county the parapets have been partially repaired; they remain to be finished next season, as as the case also with those in Maryland. The quantity of work done during the year consists of quarrying, hauling, breaking to four ounces, and putting on the road, two hundred and twenty-eight thousand perches of metal; preparing forty thousand other perches of metal on the side roads ready to put on; delivering twenty-eight thousand seven hundred perches of stone on the side roads to be broken to four-ounce metal; constructing four thousand seven hundred and thirteen perches of masonry in bridges, culverts, and parapet walls; cutting and laying three thousand six hundred and fifty-four feet (running measure) of heavy coping; and relaying twelve hundred and seven feet of old coping.

There remains to be executed at the present time, to complete the work, the contracts for the last coat of metal, now in rapid progress, making up the side roads, and opening thoroughly the water ways that are now under contract to be finished by the 30th November, and the masonry of the bridges, as before stated.

All of which is respectfully submitted.

R. DELAFIELD, *Captain of Engineers.*

Brigadier General C. GRATIOT, *Chief of Engineers.*

Annual statement exhibiting the progress made in the repairs of the Cumberland road east of the Ohio, to the 30th September, 1834, as also the progress made during the year ending 30th September, 1835, and the application of the balance of the appropriation remaining on hand on the 30th September, 1835.

Amount in hands of the agent on the 30th of September, 1834.....	\$45 69
Amount in treasury undrawn on the 30th September, 1834.....	230, 000 00
Amount of tolls, stocks, &c., sold during the year ending 30th of September, 1835.....	584 08
Amount of appropriation for the year 1835.....	346, 186 58
Amount available for the fourth quarter of 1834, and the year 1835.....	576, 816 35
Amount in treasury undrawn on the 30th September, 1835.....	12, 235 03
Amount in hands of the agent on the 30th September, 1835.....	167, 557 90
Amount available for the fourth quarter of 1835, and final completion of the work.....	<u>179, 792 93</u>

State of the work on the 30th September, 1834.

Up to this period the following quantities of work have been executed:	
Perches of stone delivered on the road side.....	32, 127
Perches of stone broken to four ounces, and ready to put on.....	49, 615
Rods in length of road graded ready to receive the metal.....	19, 803
Rods in length of road covered with three inches of metal.....	1, 216
Rods in length of road covered with four and a half inches of metal.....	6, 149
Rods in length of road covered with six inches of metal.....	2, 688
Rods in length of road covered with nine inches of metal.....	2, 926
Rods in length of road covered with all the stone necessary.....	11, 463
Perches of stone at quarries.....	835

Perches of masonry laid in culverts, bridges, and walls.....	8, 692
Number of culverts constructed on the road	183
Number of places where the grade has been reduced.....	71
Number of yards of earth excavated	167, 051
Number of yards of rock excavated.....	26, 870

The total cost of the above work, and of the road to the 30th September, 1834, was \$380, 065 92.

Work executed during the year ending September 30, 1835.

Perches of stone prepared to four-ounce metal, and put on the road	228, 035
Perches of stone prepared to four-ounce metal, and ready to be put on.....	40, 076
Perches of stone quarried and delivered on side road for metal	28, 730
Perches of masonry laid in bridges, culverts, and side walls.....	4, 713
Coping, cut and laid on parapet walls, running feet.....	3, 654
• Old coping taken up and relaid, running feet	1, 207

The total cost of the above work and expenditures during the year ending September 30, 1835, was \$397, 023 42.

The total cost of the road up to September 30, 1835, from the commencement of the repairs, is \$770, 089 34.

Application of the sum available for the 4th quarter of 1835.

For the third and last stratum of metal on the first division, balance unpaid.....	\$13, 531 29
For the third and last stratum of metal on the second division, balance unpaid	12, 871 37
For the third and last stratum of metal on the third division, balance unpaid.....	11, 337 70
For the third and last stratum of metal on the fourth division, balance unpaid.....	1, 302 00
For the third and last stratum of metal on the fifth division, balance unpaid.....	9, 519 37
For the third and last stratum of metal on the sixth division, balance unpaid	15, 574 47
For the masonry of Will's creek and Braddock's run, bridges.....	20, 000 00
For the masonry of the parapets of old bridges, in Maryland.....	5, 000 00
For making up side roads and opening ditches and drains on first division	2, 700 00
For making up side roads and opening ditches and drains on second division	2, 500 00
For making up side roads and opening ditches and drains on third division	3, 700 00
For making up side roads and opening ditches and drains on fourth division	2, 482 00
For making up side roads and opening ditches and drains on fifth division	2, 370 72
For making up side roads and opening ditches and drains on sixth division.....	2, 664 04
For repairs of masonry of parapets of old bridges in Pennsylvania.....	5, 500 00
For putting up the cast-iron and the masonry of the bridges over Dunlap's creek.....	25, 000 00
Due for masonry constructed on the sixth division.....	1, 200 00
For office rent	125 00
For clerk hire and stationery	400 00
For forage and livery of horses used by engineers and assistants.....	450 00
For commutation for fuel and quarters for the officers of the army on this duty	1, 400 00
For salaries of superintendents	2, 300 00
For cast-iron mile posts	2, 000 00
For postage and transportation of engineers from other public works	150 00
For fencing along the precipices, depositing a supply of metal along the road, and unforeseen and contingent expenses in Pennsylvania and Maryland	19, 623 33
For putting on the last stratum of metal on five miles of the seventh division, and repairing the masonry of parapets, building culverts, in place of five large and deep hollow ways, making up side roads, and repair of the masonry in Wheeling, Virginia.....	16, 091 64

Amount available on the 30th September, 1835..... 179, 792 93

Amount in the hands of Merchants and Manufacturers' bank at Pittsburg..... \$151, 466 26

Amount in the hands of Merchants and Manufacturers' bank at Wheeling..... 16, 091 64

167, 557 90

R. DELAFIELD, *Captain of Engineers.*

Brigadier General C. GRATIOT, *Chief Engineer.*

BROWNSVILLE, November 6, 1835.

R.

PHILADELPHIA, November 23, 1835.

SIR: I have the honor to submit the following statement, showing the results of a portion of the observations made during the last season, for determining the latitude of certain points connected with the settlement of the northern boundary of Ohio, as required by the act of July 14, 1832.

The results are deduced from taking the mean of a number of observations on twenty fixed stars. The very near coincidence in the deductions made from each observation on the same star; as also their accordance with other results, obtained from a series of observations on other stars, which have also been calculated; induce me to believe that the latitudes of the several points are true to the nearest second.

1. The most southern extreme of Lake Michigan is in latitude 41° 37' 07" N.

The greatest difference, arising from a comparison of the observations, being 03.05"; and the greatest difference from the mean result, 01.17".

2. From observations upon a portion of the same stars, made on the Maumee river, near the east line, recognized as Fulton's, where that line crosses the Maumee, and referred to said line, the latitude is found to be 41° 37' 8" N., or about 101 feet north of the parallel tangent to the south bend of Lake Michigan.

This result is obtained from a mean of five determinations; the greatest difference found, on comparing the observations, being 01.67", and the greatest difference from the mean result 00.98".

3. The north cape of the Maumee bay is in latitude 41° 44' 7" N.

This result is obtained from a series of observations made on fourteen different stars, the greatest difference, as before, being 02.56", and the difference obtained, from a comparison with the mean result, being 01.50".

The observations from which the above latitude is deduced were made on Turtle island; the difference of latitude having been determined trigonometrically.

The latitude of the astronomical station on Turtle island, Maumee bay, is 41° 45' 12" N.

4. For the determination of the latitude of the most southerly point of the boundary heretofore established between the United States and Canada, in Lake Erie, two positions were chosen:

The first, 2½ miles east of Huron, Ohio, on the margin of the lake, and in the immediate neighborhood of its most southwardly bend. The result of the observations made at this station fixed the latitude of the most southerly bend of Lake Erie at 41° 22' 54" N.

The second position was taken at Point Pele, Canada, nearly due north of the first position. From a series of observations made at this station, it is found that the southern extreme of Point Pele is in north latitude 41° 53' 59"; and further, that it appears from the results of the survey and triangulation, connecting this station with Point Pele island, that Point Pele, when surveyed under the orders of the commissioners appointed to settle the position of the territorial line between the United States and Great Britain, under the treaty of Ghent, projected much further into the lake than it does at present; and that, as near as it can be ascertained from a comparison of the two surveys, this point in 1818 was in north latitude 41° 52' 24".

The latitudes of the two last mentioned points furnish the data from which the most southwardly point of the territorial boundary in Lake Erie must be determined, because "a line along the middle of Lake Erie" must make its greatest southing between these two points.

Before this latitude can be determined, however, the principle which governs in its location must be established. A middle point on the meridian, between the two shores, is found to be in latitude 41° 38' 26.5" north, from a portion of the data given above. A middle point on the same meridian in 1818 was in latitude 41° 37' 39" north, deduced from another portion of the same data; now a line dividing the lake into two equal parts and perpendicular to lines radiating from Point Pele is found to be in north latitude 41° 33' 15".

In 1818 it is found in latitude 41° 32' 44".

It will be observed that in both cases, under the first construction of the language used in the decision of the commissioners, relating to the territorial boundary, the due east line from the south bend of Lake Michigan will pass south of said territorial line; and that under the last construction, in both cases, the territorial line will be intersected by a line running due east from the south bend of Lake Michigan.

For the longitude of the several points above mentioned I have the honor to refer to my report furnished in January, 1834.*

I have the honor to be, very respectfully, your obedient servant,

A. TALCOTT, *Captain of Engineers.*

General C. GRATIOT, *Chief Engineer.*

*A table of the latitude and longitude of certain points required to be determined by the law of July, 1832, with a view to the adjustment of the northern boundary of the State of Ohio.

	Latitude north.	Longitude in degrees.	Longitude in time.
	° ' "	° ' "	h. m. sec.
Bay point or north cape of Maumee bay.....	41 44 02.4	83 18 55.5	5 33 15.7
Turtle island, Lake Erie.....	41 45 08.8	83 17 22.5	5 33 09.5
Gull island, Lake Erie.....	41 39 30.5	82 33 54	5 30 15.6
South of Lake Michigan.....	41 37 07.9	87 09 06	5 48 36.4
Station on Mississippi river.....	41 38 10.5	90 13 45	6 00 55.0
Most southern point of United States boundary in Lake Erie.	41 38 38	82 23 34	5 29 34.3
The intersection of a line drawn from the southern bend of Lake Michigan to the southern point of the United States boundary in Lake Erie—Maumee river.....	41 39 23.4	83 26 10.5	5 33 45.2
Do.....do.....with Lake Erie.....	41 39 13	83 11 35	5 32 46.3

S.

UNITED STATES MILITARY ACADEMY.

Report of the Board of Visitors invited by the Secretary of War to attend the general examination of the cadets of the United States Military Academy.

Sir: The undersigned having attended the general examination of the cadets of the United States Military Academy as a board of visitors, submit the following report as the result of their observations.

The board directed their inquiries to the course of instruction, both military and scientific, and to the internal police, discipline, and fiscal concerns of the institution. In making these inquiries every facility was afforded by the superintendent and members of the academic staff. In order that these inquiries

might be prosecuted with greater advantage, committees were appointed by the board, with instructions to inquire especially into the portion of the foregoing subjects, referred to them respectively, and to report the result of their observations.

The reports of those committees, which are herewith transmitted, will convey to you much information in detail, which could not conveniently be embodied in this report.

As this is professedly a military institution, the attention of the board was first directed to the course of military instruction. Although this branch embraces a wide field, it is intended to speak of it as limited to engineering, artillery, and infantry tactics.

Engineering is divided into two branches—civil and military; and, in connexion with the latter, is taught the science of war, so far as it relates to the attack and defence of military positions, and the providing of defensive means for an army operating in the field.

In the course of civil engineering is taught the properties, preparations, and use of materials of construction; elementary parts of buildings, and the art of construction generally, including decorative architecture; the manner of laying out and constructing roads, the construction of the various kinds of bridges, the general principles which regulate the removal of obstructions that impede the navigation of rivers; the survey, location, and construction of canals and railroads; and the formation of artificial and the improvement of natural harbors. This branch is taught to the first or graduating class, by lectures, and a series of drawings and notes, prepared by the professor from the best authorities, and lithographed at the press belonging to the institution, under the title of "Outlines of the Course of Civil Engineering." Drawings, illustrative of the prominent parts of the subject, are executed by the cadets; and these exhibit great neatness of execution, as well as much precision and detail.

Next in order is the course of military engineering.

This comprises field and permanent fortification. In the first are taught, to the same class, the principles which regulate the construction of field entrenchments; the different kinds of lines; batteries for the various kinds of ordnance; the armament of entrenchments, with reference to the attack and defence; enclosed and detached works; defence of posts, and the construction of military bridges; permanent fortification, including a complete description of the bastion front; the attack and defence of the same; a critical examination of the principal systems of fortifications; the construction and armament of a fortress; the hydraulic works used in the defence of military positions; mining; the principles of defilement and their application to works constructed for inland and maritime defence. Military engineering is taught from a text-book, and from notes prepared with judgment and skill by the professor; the whole being amply illustrated by drawings, executed by the students under the immediate supervision of instructors.

To the professional ability of the professor to whom this department is confided, the very able and satisfactory manner in which his pupils acquitted themselves in the various parts of their course at the black board, in presence of the visitors, afforded the most pleasing and ample testimony.

No changes either in the course of study or organization are at present contemplated, nor are any deemed necessary. The board, however, would recommend the continuance of small appropriations of money by Congress for the purpose of providing the department with such works and models as the professor may from time to time require.

Instruction is given to the cadets of the first class in artillery tactics during the encampment, which usually commences in June and terminates on the first of September following. During this time they are required to recite upon a system of field artillery, at the same time that they are taught a course of pyrotechny, mortar exercise, and target practice, with guns of various calibre, as well as mortars and howitzers. Cadets of the other classes are also taught the drill of field artillery during the suspension of the other academic studies.

It is thought by the officer at the head of this department that the time allowed for recitation is insufficient, and that much which ought to be studied thoroughly is necessarily passed over rapidly.

In our country there is no establishment provided by law especially for instruction in artillery. All the education our officers receive in this branch of study is, with the exception of the mere drill of an artillery garrison, obtained at this place. This deficiency would seem to suggest the importance of placing this department of the academy upon a more enlarged and permanent basis.

It is the opinion of the board that it would be greatly to the advantage of this course of instruction if a permanent assistant were attached to it, instead of the mode now in use of detailing cadets from the graduating class.

In connexion with this subject the board would remark that the moving of ordnance on the field by the bodily exertions of the cadets alone is a requisition upon them of great severity, and is at the same time obnoxious to the objection that it keeps the cadets entirely unskilled in the only mode of using the field piece employed in actual service. The board would, therefore, suggest the propriety of procuring a number of horses sufficient for artillery exercise, and also for instruction in cavalry tactics.

The same horses would be used for both purposes and the number required would not exceed forty.

Cavalry tactics have never been taught at this academy. Cavalry as an arm of national defence is confessedly of great importance. It is submitted whether instructions in that branch might not be advantageously added to the course of instruction at this institution.

The ordnance stores furnished for the year are good in quality and sufficient in quantity. Some field pieces and guns of different calibre are wanted to render this department complete, which are particularly detailed in the report of the committee on this subject.

On drill and in firing in the field the cadets exhibited a thorough knowledge of the manoeuvres and evolutions in this important arm of service, and in their drawings and mathematical demonstrations at the black board they evinced high proficiency in the theory and practice of gunnery. Their target firing and accuracy of throwing shells are very commendable, and afford unequivocal evidence of great zeal and ability on the part of the instructor, for which he is entitled to much credit.

The corps of cadets, organized as a battalion of infantry, exhibits on the field a perfect knowledge of infantry tactics, and performs all the evolutions of the line and of the battalion with facility and accuracy. Their appearance in dress, in the condition of their arms and accoutrements, as well as in soldier-like bearing, is highly gratifying and deserves much commendation, whilst it reflects much credit on the experienced officer who commands them.

With regard to the course of study in the other branches which are taught, agreeably to the regulations of the institution, the board was well satisfied with the abilities and zeal of the professors and their assistants.

Besides the branches already mentioned, the cadets of the first or graduating class were examined on moral and political science, and on mineralogy and geology, on all of which they exhibited attainments that could only be the result of much attention on their part, aided by skill and perseverance on the part of the professors and their assistants.

In moral and political science the first class was subjected to a satisfactory examination. The familiarity they evinced with the several systems of ethics propounded by distinguished masters at different periods showed that their minds had been effectually directed to the distinguishing characteristics of those systems, and their relative merits closely compared by them and familiarly understood. The examination on the subject of government and constitutional law was highly gratifying, with room, it is true, for slight shades of difference in opinion on the latter topic; the discussions and replies of the class were such as showed a just comprehension of the nature and objects of civil government in general, of the peculiar and unique and happy system under which they live; qualifying them at once for a participation in the pursuits of civil and political life, and teaching them duly to appreciate the blessings of those institutions which, as soldiers, they may be called upon to defend.

The second class was examined on natural and experimental philosophy, on chemistry, and drawing. On these branches the proficiency of the cadets was quite creditable to themselves and to their instructors. The knowledge which the pupils seem to have acquired in the important branch of chemistry, not only of its general principles, but of their application in detail, was gratifying. The specimens of drawing by the cadets exhibited to the board showed a practical acquaintance with this branch, which demonstrated that they are fitted at once to apply their acquirements to purposes of practical utility.

The third class was examined in mathematics, in the French language, and drawing.

The fourth class in mathematics and the French language.

It has often been remarked that in no school is the mathematics more thoroughly taught than at this institution. The correctness of this remark was quite manifest during the present examination whenever mathematics or any other branch dependent on that science was under consideration.

The examinations on the French language were very satisfactory. To those acquainted with the language there appeared by the course of instruction to be imparted to the student a thorough knowledge of the principles of the language.

Some of the members of the board had an opportunity of witnessing the proficiency of the cadets under the instructions of the sword master. It was thought to be quite creditable. Whilst the instructions of the sword master secure to the officer and soldier the best means of personal defence, the exercise connected with them is well fitted to improve the health and to impart to the muscular system tone and vigor.

As connected with the course of study, the board has thought proper to remark that a good library and a chemical and philosophical apparatus are essential aids in imparting scientific instruction. It is believed an important benefit would be conferred on the institution by adding to the library some of the periodical works which contain the earliest, and at the same time the most learned, dissertations upon the improvements of the day.

The situation of the professorship of chemistry it is thought might be placed on a better footing. At present it is subsidiary in every respect. It is recommended that it be placed on an equality with the independent professorships, and that there be two assistants, one of whom should be the professor of mineralogy. The whole course of study as conducted, it is believed, is well fitted to create a fund of information which cannot fail to be of inestimable value to our country in a civil as well as a military point of view.

The attention of the board was directed to the course of religious instruction. This course is necessarily of vital importance. During the present visitation the chaplain, to whom this department is entrusted, has been under arrest. There was, therefore, no opportunity of witnessing the manner in which the duties belonging to this department are performed. The importance of the duties to be performed by the chaplain has induced the board of visitors to recommend that the Secretary of War institute an inquiry into the causes which have led to a suspension of the performance of those duties.

With regard to the internal police, it is entitled to high approbation. The condition of the hospital is fully suited to the object of securing to the cadets all the comforts and all medical aid that they can require in ordinary cases of indisposition. Clean, well ventilated, and properly attended by nurses, nothing need be added on these heads; recent circumstances, however, have suggested the propriety of enlarging the number of surgical instruments.

The south barrack, which is the oldest building of the kind at this post, is badly constructed. The rooms are too small, and they are injudiciously disposed. It is recommended that they be rebuilt.

Both barracks present an air of cleanliness and order that reflects credit on all concerned.

The steward's hall, where the cadets mess in common, was visited. It was found that the cadets are supplied with good and wholesome food.

A building for a chapel has been commenced, and it is thought will be completed this year.

The storehouse is an old and very insecure building, and altogether unfit for the use to which it is applied; a new one is recommended for the safe keeping of the stores deposited there.

The fiscal concerns of the institution were brought to the notice of the board. The disbursements are found to be made in accordance with the appropriations made; and a system of order and economy prevails. A building for military and other exercises, so requisite for the successful prosecution of military knowledge during the inclement season of the year, and to the health of the cadets, has been commenced under the appropriation for that purpose.

An improvement is recommended in the apartments appropriated to the use of the chemical laboratory, library, and philosophical apparatus. They are too small, and exposed to danger in making chemical experiments.

The teacher of drawing is entirely destitute of the convenience necessary to the practice, study, and, of course, improvement in his profession. The building of an apartment for that purpose is recommended, the estimated expense whereof will not exceed eight hundred dollars.

In the accounts of the treasurer and quartermaster the expenditure appears to be rigidly confined within the appropriation. The whole fiscal arrangement meets the entire approbation of the board. The attention that is paid to economy in all the details of the institution is very satisfactory. There remains in the treasury an unexpended balance of the appropriation of last year of eight thousand dollars.

Upon the whole, the board is of opinion that the institution is well conducted; that the objects to be attained by its continuance are of very great importance to the community. Knowledge is obtained by

means of this institution which is indispensable to the successful conduct of military affairs. Not only is the knowledge imparted to those educated here valuable in time of war, but, should a state of war be looked upon as remote, the knowledge acquired is scarcely less valuable in time of peace, when applied to the prosecution of the various improvements which are so rapidly developing and enlarging the resources of our country. But the hope that peace shall be perpetual should not be indulged to our detriment. The means most essential to the resistance of aggression should always be within our reach. The humiliating disasters, the waste of life and treasure, that marked the commencement of the late war, for want of a knowledge of what should be deemed the elementary principles in the science of war, are still fresh in the recollection of many. This institution it is believed is well fitted to obviate the recurrence of such calamities from the same cause. At an expense less than is requisite to keep in commission a frigate of the largest class, knowledge of the science of war, in principle and in practical detail, is imparted to a sufficient number of citizens of our own country to enable us in any emergency to conduct our military operations on a footing of equality with the most skilful enemy. When it is considered that success in war is slightly dependent on either the numbers or courage of the parties, but is most generally the result of the scientific and skilful combinations of causes, the effect of which is foreseen and calculated almost with the precision of a mathematical problem, it would be a source of most painful reflection that a country justly proud of its freedom and liberal institutions should, for want of appreciating the knowledge necessary to the defence of that freedom and those institutions, permit itself to be placed at the mercy of the enemies of all liberty and liberal institutions. It cannot be denied that those governments most hostile to liberty at the present day are most ready to appreciate and to appropriate all the aids that can be derived from science and applied to the art of war. How important that those countries blessed with freedom should keep themselves on a footing of equality, not in the largeness of their armies, but in the knowledge necessary to the formation of armies, and to direct them, when formed, with efficiency. The knowledge imparted at this institution to the children of our own citizens, selected from every part of the country, is so indispensable to our security, that to dissolve it without providing a substitute possessed of advantages equal or preferable would seem like retrograding from civilization towards barbarism, and well calculated to endanger our national independence.

P. V. DANIEL, *President of the Board of Visitors.*

E. S. DAVIS, *South Carolina.*

PETER MARTIN, *Alabama.*

JOHN HUNTER, *Westchester, New York.*

JOHN BRAGG, *North Carolina.*

JONATHAN COGSWELL, *Connecticut.*

JOHN A. GRAHAM, *New York.*

WM. J. LEIPER, *Pennsylvania.*

WILLIAM C. FRAZER, *Pennsylvania.*

THOMAS J. PEW, *Kentucky.*

WM. C. LYMAN, *Georgia.*

EDWARD H. CARMICHAEL, *Virginia.*

CHARLES G. FERRIS, *New York.*

CALVIN BLYTHE, *Pennsylvania.*

WM. T. ROGERS, *Pennsylvania.*

H. ATKINSON, *Brigadier General U. S. Army.*

Hon. LEWIS CASS, *Secretary of War.*

REPORTS OF COMMITTEES.

Military instruction.

UNITED STATES MILITARY ACADEMY, *West Point, New York, June, 1835.*

SIR: The committee whose attention has been directed by the board to the department of military instruction in the academy have the honor to submit the result of their inquiries.

The great and leading objects of the institution being essentially military, it became a question of some interest to the committee to ascertain the subjects to be embraced within the range of their investigation. Were these to be determined by considerations of their obvious importance in the formation of a military character, the committee are of opinion that their report should present a review of every branch taught at the academy, for nothing has come to their observation that could, without disadvantage, be omitted. The appointment of other committees, however, renders it obvious that such was not the intention of the board, and they have accordingly limited their examinations to the departments of engineering, artillery, and infantry tactics.

The course of engineering is divided into two branches—civil and military; and in connexion with the latter is taught the science of war, so far as it relates to the attack and defence of military positions and the providing of defensive means for an army operating in the field.

In the course of *civil engineering* are taught the properties, preparation, and use of materials of construction; elementary parts of buildings and the art of construction generally, including decorative architecture; the manner of laying out and constructing roads; the construction of the various kinds of bridges; the general principles which regulate the removal of obstructions that impede the navigation of rivers; the survey, location and construction of canals and railroads, and the formation of artificial and the improvement of natural harbors. This branch is taught to the first or graduating class by lectures and a series of drawings and notes, prepared by the professor from the best authorities, and lithographed at the press belonging to the institution, under the title of "*Outlines of the Course of Civil Engineering.*" Drawings illustrative of the prominent parts of the subject are executed by the cadets, and these exhibit great neatness of execution as well as much precision and detail.

Next in order comes the course of *military engineering*. This comprises *field and permanent fortifications*. In the first are taught, to the same class, the principles which regulate the construction of field entrenchments; the different kinds of lines; batteries for the various kinds of ordnance; the armament of entrenchments, with reference to the attack and defence; enclosed and detached works; defence of posts and the construction of military bridges. *Permanent fortification* includes a complete description of the bastion front, constructed according to the principles of Vauban and Cormontaigne; the attack

and defence of the same; a critical examination of the principal systems of fortification; the construction and armament of a fortress; the hydraulic works used in the defence of military positions; mining; the principles of defilement and their application to works constructed for inland and maritime defence. Military engineering is taught from a text book, translated from the French of Gay de Vernon, by M. O'Connor, and from notes, prepared with judgment and skill by the professor; the whole being amply illustrated by drawings, executed by the students under the immediate supervision of instructors.

This department is confided to the care of Professor D. H. Mahan, to whose professional ability the very able and satisfactory manner in which his pupils acquitted themselves in the various parts of their course at the blackboard, in presence of all the visitors as well as the committee, afforded the most pleasing and ample testimony. No changes, either in the course of study or organization, are at present contemplated, nor are any deemed necessary by the committee. They would, however, suggest to the board the propriety of recommending the continuance of small appropriations of money by Congress for the purpose of providing the department with such works and models as the professor may, from time to time, require. Models, illustrative of the subjects of architecture and engineering, facilitates greatly the labors of both instructor and pupil and are indispensable to thorough instruction.

The committee next went into an examination of the department of artillery, and find that instruction is given in artillery tactics to the cadets of the first class during the encampment, which usually commences in the month of June and terminates on the first of September following. During this time they are required to recite upon a system of field artillery, abridged from Lallemand, at the same time that they are taught a course of pyrotechny, mortar exercise, and target practice with guns of various calibres, as well as mortars and howitzers. Cadets of the other classes are also taught the drill of field artillery during this suspension of the other academic studies.

At the commencement of the academic term in the fall, about two months are devoted to the study of the theory and practice of artillery, and the fabrication of cannon, &c., and from one month to six weeks in the spring to a review of the same subjects, preparatory to the June examination.

It is thought by the officer at the head of this department that the time allowed for recitations, considering the difficulties and importance of the course, is insufficient, and that much which ought to be studied more thoroughly is necessarily passed over rapidly.

Artillery in Europe is considered a most important arm of service, and much time and expense are devoted to its improvement. In our country there is no establishment provided by law especially for instruction in artillery, and all the education our officers receive in this branch of study is, with the exception of the mere drill of an artillery garrison, obtained at this place. This deficiency would seem to suggest the importance of placing this department of the academy upon a more enlarged and permanent basis.

It is also thought by the same officer, and approved by the opinion of your committee, that it would be greatly to the advantage of this course of instruction if a permanent assistant were attached to it. If practicable this should be done with as little delay as possible. It has been customary to detach several cadets from the graduating class, who are detained here during the encampment to aid in hearing recitations and in giving practical instruction, but in the opinion of your committee this is obviously objectionable. These assistants are still cadets in feelings, and those whom they instruct regard them as equals and companions. Nor is it probable they feel the responsibility that should influence an instructor, owing to their connexion with the department being so brief. One other circumstance which induces the committee to urge this point is the fact that, in addition to his appropriate duties, the officer at the head of the department is also charged with the command of the United States troops on this station.

The supplies of ordnance stores furnished for the year are good in quality and sufficient as to quantity, and within the last year the department has been amply supplied with mortars and guns of heavy calibre, whilst a requisition for field pieces has not been complied with, owing, it is thought, to the circumstance of the ordnance department not having at its disposal guns of the proper calibre and model. The field battery now in use is composed of pieces of various models, and their carriages are heavy and difficult to manœuvre by manual force. A field battery of light six or four-pounders, mounted on light carriages, would facilitate the evolutions and manœuvres and relieve the cadets from a heavy labor to which they have been heretofore subjected.

The twelve-pounders on hand are defective and have been condemned, but possessing no others they have been continued in use by using small charges. A battery of four twelve-pounders and two twenty-four-pounder howitzers would render the department complete in this respect. All projectiles supplied for practice should be of the best quality, without which there can be no satisfactory results in target firing, and, in consequence, no confidence on the part of the cadets in this branch of their course of study.

On drills and in firing in the field the cadets exhibited a thorough knowledge of the manœuvres and evolutions in this important arm of service, and in their drawings and mathematical demonstrations at the blackboard they evinced high proficiency in the theory and practice of gunnery. Their target firing and accuracy of throwing shells are very commendable, and afford unequivocal evidence of great zeal and ability on the part of the instructor, for which he is entitled to much credit.

The committee proceeded to an examination of the course of studies of the cadets as a corps of infantry. The organization is a battalion of four companies, having an appropriate number of officers and non-commissioned officers agreeably to the regulations, and the whole is commanded by Major Fowle, of the third infantry, an officer of experience and high moral worth.

This corps exhibits on the field a perfect knowledge of infantry tactics and performs all the evolutions of the line and of the battalion with facility and accuracy. Their appearance in dress, in condition of their arms and accoutrements, as well as in soldier-like bearing, is most highly gratifying and deserves much commendation.

The instruction imparted to the corps is given in the field and the recitation room in infantry tactics. In witnessing their recitation in the hall of examination, the committee were of opinion that they fully understood the course, though in some instances deficient in explanation on subjects with which they exhibited an acquaintance in the field.

The committee would remark, in conclusion, that they are satisfied, indeed gratified, with the result of their inquiries into all the subjects referred to them for investigation.

H. ATKINSON, *Brigadier General U. S. Army,*
Chairman of the Committee.

PETER V. DANIEL, Esq., *President of the Board of Visitors.*

Course of studies.

The frequent detail of the course of study in this institution renders it unnecessary that your committee should enter fully into the description of it. But at the same time not to let pass unnoticed the proper encomium upon the able manner in which the professors acquit themselves to their own honor and the profit of the pupils. The most attentive examination into the various means of education have induced them to lay a particular stress upon the assistance offered by a good library and chemical and philosophical apparatus. The former is but illy kept up by the present appropriation. It is true that all the standard works are here, but those on literature are not to be found; and as the earliest and at the same time the most learned dissertations upon the improvements of the day are found in periodical works we suggest them to be added.

The professor on chemistry, which is more an Executive than a lawful appointment, stands in a situation truly unpleasant: instead of being an independent professorship, it is in every respect subsidiary. And in this department we propose the equalization of this professor with the others of this institution, and two assistants, one of whom should be the professor of mineralogy, with privileges in rank and pay.

When we look over the splendor and perfection of the philosophical apparatus, we cannot but be struck with the inappropriateness of the room. The crowded state of the instruments, and the injury that they would sustain by moving them for the purposes of instruction, must induce this committee to ask of the proper authorities a room better suited to this important collection, and prevent the deterioration they necessarily undergo. Improvements in the science of natural philosophy—nearly every branch of which is illustrated by instruments—require also aid by an annual appropriation larger than that now allowed.

In this hasty survey of that which to them seemed their proper department, they did not offer any general reflections upon the institution as fitted to the purposes for which it was originally designed; nor would they do so now but for the allusion held up that this purpose has been perverted. Such is not the fact. If the sons of the wealthy enjoy these advantages, it is found to result from that influence that wealth exercises on every condition of things; and if to the influential, it must spring from that same influence which those who bestow desire from those upon whom these gifts are bestowed. Another reason why this institution should be equally divided in its benefits to two classes of rich and poor is, that the earlier education of the former fit them better to make returns to the country in fuller and more perfect information. This, we are aware, is not an unexceptionable rule, the first reward here being often bestowed upon some one who has labored under the misfortune of being poor. Another, and by no means the least important, reason for the appropriations, and the continued existence of this school, is the state of our physical condition as a country. Extensive in its geographical boundaries, unlimited in its wealth, and associated in feelings of political fraternity, we ought to be brought into constant intercourse. What, we would ask, is more certain in producing this effect than the aid of various departments of engineering? From our examination of this class, we see railroads, the application of steam, and all mechanical principles developed, and not one cadet who could not apply them to this all important end.

In conclusion, then, your committee beg the continuance of this institution; and all the necessary means of keeping it alive may be found included in your report to the Secretary of War.

Respectfully reported.

JNO. A. GRAHAM, *Chairman.*

Internal police.

WEST POINT.

The committee on internal police beg leave to report: That they have had under consideration the various subjects within the purview of their duties, and while they have much to approve and admire, they have, nevertheless, in their investigations, discovered defects which they will now bring to the view of the board.

As the health of the cadets is of primary importance, your committee directed their attention first to an examination of the hospital.

The condition of the hospital, in its internal arrangements, is fully suited to the object of securing to the cadets all the comforts and all the medical aid that they can require in ordinary cases of indisposition. Clean, well-ventilated, and properly attended by nurses, nothing need be added on these heads. Recent circumstances, however, of a painful character, have suggested the propriety of enlarging the number of surgical instruments, as casualties appear to be the most common outlet of life here.

The want of an appropriate instrument at a proper moment sometimes proves fatal, when its application would, perhaps, give relief.

The attention of your committee was next drawn to the barracks. The south barrack is the oldest building of the kind at this post. The rooms are badly constructed, both as regards their dimensions and their location. They are too small for the purposes for which they are appropriated, and very injudiciously disposed. The north barrack contains large and well-ventilated rooms, in every way calculated to insure the comfort of the incumbents.

Both barracks present an air of cleanliness and order that reflects credit on all concerned.

Your committee next visited the steward's hall, where the cadets mess in common. Here we found that the cadets are supplied with good and wholesome food. The price of board in this hall, exclusive of bedding, washing, or any other accommodation other than dieting, is ten dollars per month.

A new building, 50 feet in front, 70 feet deep, and 24 feet high, has been commenced, and is intended for a chapel. The erection of such a building is much wanted, and will be completed, it is thought, this year. The storehouse here is an old and very insecure building, only nine and a half feet long and eleven feet deep, and is altogether unfit for the use to which it is applied.

In conclusion, your committee would beg leave to recommend to the board that the especial attention of the Secretary of War be called—

First. To the necessity of an additional supply of surgical instruments.

Secondly. To the necessity of rebuilding the south barrack.

Thirdly. To the necessity of erecting a storehouse for the safe keeping of the stores deposited here.

All which is respectfully submitted by your committee.

E. S. DAVIS, *Chairman.*

PETER V. DANIEL, Esq., *President of the Board of Visitors.*

Fiscal concerns.

The committee on fiscal concerns report that, in pursuance of the duty assigned to them, they have cursorily inspected the accounts of this institution between the 1st of January, 1834, and the 31st of December, 1835, inclusive, and believe them to be correct; that the disbursements are in accordance with the appropriations made; and that a system of order and economy prevails throughout. The ordinary appropriations for the Military Academy are embraced under the general appropriation of pay and subsistence for the army, which does not discriminate between the pay and subsistence of it and that of the cadets. By the regulations of this institution the paymaster here stationed is treasurer of the cadets, and the sum appropriated as above mentioned is by him disbursed. The amount of this fund annually expended, by an average of the last ten years, may be fairly estimated at \$93,566 52. Another appropriation is made specially for the Military Academy, and directs the objects to which it shall be applied. These are fuel, forage, stationery, printing, transportation, postage, and for repairs of buildings, improvements, &c. Likewise for the pay of the adjutant's and quartermaster's clerks, increase and expense of the library, for philosophical apparatus and models for the department of engineering, for models for the department of drawing, repairs of mathematical instruments, for apparatus and contingencies for the department of chemistry, miscellaneous items and incidental expenses of the academy, and for defraying the expense of the board of visitors at West Point. The annual sum thus appropriated is about \$25,000.

There have been occasional extraordinary appropriations, viz: one of \$20,000 for the erection of a building for military and other exercises. This necessary edifice has not yet been erected, from the circumstance that the sum appropriated for the purpose was insufficient. It has, however, been commenced and about \$1,000 expended, under the belief that Congress will not refuse to complete a work so requisite for the successful prosecution of military knowledge during the inclement season of the year and to the health of the cadets. There has likewise been an appropriation of \$10,000 for a chapel, which is now in a state of progress, and about \$1,840 expended up to the 1st of April. The sum originally appropriated, owing to the rise in the price of materials and labor, it is feared will not complete the building; but the necessity of moral and religious instruction is so evident as to occasion no apprehension that the necessary means to finish it will be withheld.

The committee are compelled to recommend that an improvement should be made in the apartment appropriated to the use of chemistry, the library, and natural philosophy; they being too small for an advantageous display of philosophical apparatus, or of chemical experiments. Besides, the valuable library and costly philosophical apparatus is continually endangered by fire, unavoidably contingent on chemical experiments. The committee regret that the teacher of drawings is so entirely destitute of the convenience necessary to the practice, study, and, of course, improvement, in his profession. The only place in which he can prosecute his labors is either the field or the garret. Other professors have facilities during vacations, or other relaxations from their academic duties, to prosecute those studies which lead to eminence in their professions. The committee are of opinion that it would be vain to expect stability in a department so inseparably connected with the objects of this institution, (a complete military education,) or that distinguished masters would continue here as professors if reasonable accommodation is not afforded them. They therefore recommend the building of an apartment for the use of the teacher of drawing, the expense whereof it is estimated will not exceed \$800. Your committee have examined the accounts of the treasurer and of the quartermaster; they are arranged in a tabular form, under appropriate heads, for each of which there is a voucher, and without which the accounts would not be passed. The expenditures rigidly adhere to the appropriation, and the whole fiscal arrangement meets our entire approbation.

Your committee have directed their attention to the inquiry if due attention is here paid to economy in all the details of the institution, and the result is very satisfactory.

The regulations refuse to the cadet the possession or use of money, or the expenditure of it, but with the consent of the superintendent. The pay and subsistence of the cadet is \$16 per month, and two rations, equal to \$12; making the total \$28 per month. Each cadet provides a check-book, which is arranged in tabular form, and exhibits in one view his expenditures and his means. When the cadet desires to obtain an article he applies to the superintendent, whose approval is indicated by writing in the opposite column. The article is then furnished and charged to the cadet by an entry in another column. The entries in this check-book are constantly exhibited to the superintendent, and are vouchers upon which the treasurer pays to the persons who furnish the cadets.

This mode of keeping the account is perfectly simple, easily understood, and well imagined to prevent imposition. Besides, the moral effect is excellent, as the cadet is constantly admonished of the extent of his income and the necessity of a prudent exercise of his slender means. It gives to him the habit of order in his affairs; a qualification essential not only to his professional success, but to his reputation and happiness as a private man; and your committee cannot refrain from here expressing their entire approbation of the system. It is the best evidence your committee can afford you of economy on the part of those charged with the administration of the institution that there is an unexpended balance in the treasury of the last year's appropriation of about \$8,000; \$5,000 of which is intended for the supply of fuel, in part, for the ensuing year, for which heretofore no appropriation has been made in season for the necessities of the institution, leaving a balance of \$3,000.

From the statement made it will be perceived that the annual amount expended is estimated to average \$118,166 52, that is to say, for the pay of professors and pay and subsistence of cadets, \$93,566 52; and for academic purposes \$25,000. The latter item embraces the sum necessary for the increase of the library, philosophical apparatus, mathematical instruments, &c.

By reference to the regulations it will be perceived that each cadet, upon entering the institution, is required to furnish certain articles of clothing and furniture necessary to his comfort.

The cost of the above-mentioned requisites is about \$75. It is with regret your committee inform you that many cadets do not bring with them when they come to the institution money for this use. The consequence is the cadet is compelled to contract debts in anticipation of pay, which occasions him much embarrassment, and is unfriendly to that high feeling of independence which is the characteristic of a freeman and a soldier.

Your committee recommend that the War Department be requested to impress the parent or guardian of each cadet, when notified of their appointment, of the necessity of furnishing the means required by the above alluded to regulation.

Your committee are satisfied that no beneficial reduction of expenses can at this time be effected in this institution. Indeed, when the great moral and political benefits emanating from it are considered, they are only surprised that so much advantage can be gained at such a cost. By this institution the remote ends of our country are, if not indissolubly bound, more firmly welded together. The youth of the north, the south, the east, and the west, are here brought together and united in friendship's holy bands.

The parents partake of their sons' feelings, and love those they have never seen, because their sons loved them. The youth here taught enter the world with the highest aspirations, and, being fitted for any useful purpose, will attain the highest distinctions, and their hearts will recur frequently to the lovely scenes of their youth, and with gratitude to the country whose liberality educated them.

Your committee cannot but express their conviction that the beneficial results of this institution are inestimable, and that true economy demands its support.

JOHN HUNTER, *Chairman of the Fiscal Committee.*

No. 8.

REPORT FROM THE TOPOGRAPHICAL BUREAU.

TOPOGRAPHICAL BUREAU, *Washington, November 2, 1835.*

SIR: In obedience to your instructions of the 4th of September last, I have the honor to submit to you a statement (marked A) exhibiting the amount drawn from the Treasury Department, and remitted to the disbursing officers under this bureau, from the 1st of October, 1834, to the 31st of September, 1835, inclusive, and the amount of accounts rendered.

The topographical and civil engineers have been employed upon, and the funds appropriated for surveys for the year 1835 have been applied to the following objects:

1. An examination of the route for a railroad from Memphis, in Tennessee, to the Atlantic ocean.
2. A report and estimate of the cost of the construction of the Portage summit of the Ohio canal; that is, the canal from Pittsburg to Lake Erie.
3. Survey, with a view to the improvement of the Cumberland river, from Nashville, Tennessee, to the head of navigation in Kentucky.
4. The report of the geological investigations made of the public lands and of the Territory of Arkansas.

5. A survey of the harbor of St. Joseph's, in the Territory of Michigan.

6. A survey of the harbor at the mouth of Trail creek.

These surveys and reports, from 1 to 6, inclusive, have been completed since the last annual report, and were reported to Congress during its last session.

7. A survey of the Delaware river from Newcastle to Port Penn, and a survey of Pea Patch island.

These surveys embrace an exposition of all the facts necessary in the digesting of a system of the defences of that pass in the river, as well as all those necessary to its navigation. The duty is completed, and the maps delivered to the bureau.

8. A survey of the Brandywine shoal. The object of this survey is to determine the best position on the shoal for the construction of a light-house. It is a highly important point in the navigation of the Delaware bay, but its exposed situation, and the composition of the shoal, make it one also of extreme difficulty in the establishing of a foundation which will endure and sustain the superstructure for the light.

The appropriation for this object was made in June, 1834, and in the following words:

"For rebuilding the light-house on Brandywine shoals, in the bay of Delaware, thirty thousand dollars: *Provided, however,* That before the commencement of the work, a resurvey, plan, and estimate shall be made, and that then it shall be in the discretion of the proper department to enter upon the rebuilding of the said light-house, or to report such survey, plan, and estimate to Congress as shall be considered best for the public interests."

The survey was commenced as soon as the necessary arrangements could be made, and it was ascertained in a short time that the appropriation was entirely inadequate to the object, which, as a measure preliminary to the building of the light-house, required that an artificial foundation should be established upon a sandy shoal in the mouth of a wide bay, and exposed to the violence of the waves of the Atlantic.

Under these circumstances, the alternative presented by the law was adopted, and the survey, plan, and estimate were presented to Congress during its last session.

As it was not acted upon, additional investigations have been since made, and their result is the foundation of an item in the estimate from this office for the "rebuilding of the light-house on the Brandywine shoal."

The report, estimate, and plan, in all their details, are daily expected from the engineer who had this survey in charge, which, as soon as received, will be laid before you.

The amount appropriated in the act of June 30, 1834, was \$30,000, of which \$1,150 have been drawn out of the treasury for the necessary preliminary surveys. The total amount of the estimate of the engineer is \$123,985 93, leaving for the object a deficiency of \$95,535 93, which amount constitutes an item in the estimates of this bureau.

9. In the drawings and reports of various parts of canal routes across the States of Maine, New Hampshire, and Vermont, in order to complete a series of surveys for the same objects, which had been partially attended to some years since. All the field-work of these surveys is completed; the drawings and reports only have to be made; these, it is expected, will be delivered to the bureau during the ensuing winter.

The delay which this work has experienced has been an unavoidable result, from the small number of the corps, which forced the bureau to extend the attention of the officer superintending this to other duty.

10. The drawings and reports of the military defences of parts of the coasts of North and South Carolina. The system of army details, which removes our assistants before the completion of the particular

duty upon which they have been engaged, together with a diversion of the attention of the superintending officer to other surveys, have occasioned the delays which these works have experienced. There is, however, every reason to believe that they will be completed during the ensuing winter.

11. A survey of a canal route from Cape Fear river, through the Waccamaw lake to the Waccamaw river, North Carolina. The returns of this are daily expected.

12. An examination of the construction of the canal around the Muscle Shoals of the Tennessee river.

13. An examination of the route for a railroad from Portland, in the State of Maine, to Quebec, in Canada.

14. The survey of a route for a railroad from the Connecticut river to intersect the Concord railroad in New Hampshire.

15. The survey of a route for a railroad from Boston, in Massachusetts, to Whitehall, in New York.

16. A survey of the harbor of East Thomaston, in Maine.

No. 16 is completed, and the results are expected at the bureau early during the ensuing winter. Numbers 13, 14, and 15, are not in as great a state of forwardness. The extensive views embraced by these three, and the lateness of the season when the attention of the officer who has them in charge was called to Nos. 14 and 15, render it highly probable that no definite report will be made by him until during the course of the next year.

17. A survey of the Christiana river from Wilmington to the Delaware, with a view to improve the entrance of the Christiana. This is completed.

18. A survey of Provincetown harbor and its vicinity. The survey of this position, so important in the military defences of the coast east of Cape Cod, and as a point of shelter for our commerce from a pursuing enemy, or from storms, is now completed. All the field-work is done, and the drawings and reports will also be during the present year.

19. The survey of a route for a ship canal around the falls of Niagara, effecting a junction with the two lakes, Erie and Ontario. The field-work of this duty is completed; the drawings and reports are in progress, and will be delivered to the bureau during the ensuing winter.

20. A survey of the channel between the North and South Hero islands, on Lake Champlain. This duty is also so far completed that the drawings and reports will be delivered to the bureau during the present year.

21. A survey of a route for a road from the Alabama line, by Marianna, to the town of Appalachicola, in Florida. This duty was completed; but before entering upon the opening of the road, as required by the law, it was thought advisable to examine a different route, which would apparently much shorten the distance. This examination is now making.

22. A resurvey of the route of the national road between Springfield, Ohio, and Richmond, Indiana; also from Springfield, by the way of Dayton and Eaton, to Richmond. This duty has been completed, and the drawings and report delivered to the bureau. These last have, also, in conformity with the law, been submitted to the President, who has affixed his approbation to the location of the direct route.

23. A survey of the Maumee river from its mouth to Maumee city, completed, and the drawings received.

24. A survey of the route for a railroad from Detroit to Pontiac.

25. Also the route of a railroad from Detroit to the St. Joseph's river.

These surveys have been completed, and the returns duly made.

26. A survey of the route of a road from Chicago to Fort Howard, on Green Bay.

27. A survey of the mouth of Galleen river.

28. A survey of the mouth of Black river.

29. A survey of the mouth of Milwaukee river.

These four (Nos. 26, 27, 28, and 29,) are now in progress, and it is expected will be completed this fall and the ensuing winter.

30. A survey of a railroad from Memphis, Tennessee, to such point on the lines of the States of Virginia and Tennessee as may be best adapted, in the opinion of the engineer, to facilitate the continuation of the road to the Chesapeake. The survey is now in progress.

31. A survey of a route for a road from the Maumee river, through the northern counties of Indiana, to or near the rapids of the Illinois river, and thence to the Mississippi river, at some point between Rock island and Quincy. The field-work of this survey is completed, and the drawings and reports are expected to be delivered to the bureau during the course of the present year.

32. The survey of the following routes for roads in Indiana: Lawrenceburg and Indianapolis railroad; Madison and Lafayette railroad; Evansville and Terre Haute railroad; Columbus and Jeffersonville railroad; New Albany and Vincennes turnpike road; New Albany and Crawfordsville turnpike road.

33. In superintending the construction of the aqueduct over the Potomac at Georgetown. This may truly be considered one of the most interesting and one of the most difficult of civil constructions ever attempted in our country. The object of the work is to conduct the Chesapeake and Ohio canal over the river Potomac, at the upper end of Georgetown, and thereby furnish to its trade a termination in the fine harbor of deep water at Alexandria.

The length of the aqueduct is 1,700 feet, (including the causeways,) sustained by two abutments and six piers, at a height of 29 feet above the common high tides of the river. These abutments and piers are all to rest upon the natural rock foundation, which is found throughout the length of the aqueduct, at a depth nearly uniform of 30 feet below common high water, making the total height of each pier 59 feet.

The successful establishment of a foundation at such a depth, in water and mud, is among the most difficult problems in the practice of the engineer, and the experience of the world has furnished so few instances of similar attempts, that he is comparatively without those guides which are in other instances so easily obtained.

But the persevering efforts of science and mechanical skill supplied the deficiency of information from precedents, and, overcoming all obstacles, triumphed in the successful establishment and completion of one pier during the course of the last season, and in a successful issue to the greatest difficulties in the establishment of a second, and of one of the abutments.

This work is the result of the enterprise of an incorporated company, but as the United States furnished a proportion of the funds for its aid, the company considered it advisable, and applied, to have its expenditure placed under the direction of an officer of the corps of topographical engineers, that any desired investigation, in reference to the faithful and judicious application of the means allowed by the

United States, could be made independently of their control, and that they might also, in so difficult and rather unprecedented an undertaking, avail themselves of the presumed science of officers.

It affords me much satisfaction to add, that a frequent inspection, as well of the work as of the expenditures, has resulted in a conviction of the great skill and judgment of the engineer, and of the faithful application of the funds. The books exhibit the most minute detail of expenditure for every object, and his mechanical arrangements have been justly admired by all who have visited the work. The engineer is prepared, whenever it shall be called for, to present the most satisfactory statements, descriptions, reports, and drawings, in reference to the whole.

34. In the survey of a railroad from Pensacola, in Florida, to Columbus, in Georgia. Although Pensacola is one of the finest harbors on the Gulf of Mexico, and, in fact, of the United States, and although it is also at present an established navy yard and navy depot, yet, as the land in the vicinity is extremely poor, and there is no river leading from its harbor to the interior, its commercial advantages are but partially felt, and the population necessary to its defence exposed to hazardous and difficult, or tedious and dilatory methods of access. The remedy for these evils is in improving all means of communicating with the richer soil and denser population of the interior, and the road now being surveyed will eminently accomplish these object. It will open to the products of the interior a cheap and rapid means of access to an uncommonly fine harbor, and will enable that harbor to command for its defence the strength of the interior in the shortest possible time. It possesses, therefore, a highly national aspect, deserving of the patronage which has been extended towards it by the general government, in permitting its officers to superintend the work.

35. In a continuation of the mineralogical and geological investigations of the public lands, the Territories, and the Indian country. The highly interesting results from the geological investigations of the last year, under the same officer who has now those of this year in charge, are the best earnest of the manner in which these will be performed.

His instructions were, that, "it being desirable to have some knowledge of the mineral structure of the Coteau de Prairie, an elevated ridge which separates the Missouri from the St. Peter's, a tributary of the Mississippi, you are directed to proceed to that vicinity, and to make such investigations as the season and the nature of your opportunities will admit. It is desirable, also, that you should take Green Bay in your way, with a view to the examination of the mineral structure in the vicinity of the Wisconsin river."

Early history had mentioned the "Coteau de Prairie" as a locality rich in its deposit of copper in its various forms. Records which are presumed to be deserving of confidence state that many tons of this mineral had been taken at an early period of our history to France, and there smelted to advantage. There is no doubt that it exists in that region, but in what quantities, and at what particular places, have yet to be ascertained.

From the known intelligence, great zeal, and untiring perseverance of Mr. Featherstonhaugh, no doubt is entertained that all that can be will be done in accomplishing the discovery; but he has to contend with the difficulties of an unknown and wilderness country, and in a climate affected early in the season with the inclement weather of winter. Should his report, therefore, not be as much in detail as is desirable, (of which there is some reason to fear,) there is no doubt that every accessible general indication will be ascertained, sufficient to form the most encouraging basis, and the best justification for future and more detailed investigations.

The great interest which is felt by the country in reference to this particular duty, exhibited by an unparalleled demand for the report of the proceedings of last year, is no equivocal proof of the value which is placed upon it, and the advantages which are anticipated to result from it. Such investigations are beyond the resources of individuals; and the States limit those which they authorize to the extent of their territories. If the United States does not therefore complete the chain of knowledge by a continuation of its efforts in reference to the public lands and the Territories, an extensive region, rich with the most valuable ores, will continue to remain unknown. Under these impressions, I have hazarded a small item in the estimate from this office, to enable it the more satisfactorily to complete a duty which has been so fortunately begun.

It may probably be observed that in the foregoing statement of surveys there are many enumerated which were not ordered by a resolution of either house of Congress or by any law.

The rules which have been prescribed for this office in these matters are as follows:

1st. That surveys ordered by law, and for which there are generally specific appropriations, should be attended to.

2d. Surveys ordered by resolutions of Congress. The expenses of these are paid out of the annual appropriation for surveys, including the pay of the civil engineers, which is taken out of the same appropriation.

3d. Surveys of a national or highly interesting commercial character applied for by States or incorporated companies. In these cases, such officers as can be spared (with their instruments) are allowed to be assigned. All other expenses, including those for additional engineers or additional instruments, are supplied by the parties interested in the survey, the United States being subjected to no charge on these accounts; or, in other words, confining the aid from the United States to the mere loan of such engineers and of such instruments as can be conveniently spared.

In the execution of the foregoing duties, the whole force of this bureau, in military as well as civil engineers, has been employed. Its military engineers consist of the corps of topographical engineers and such lieutenants of the army as are detailed for its duties; its civil engineers of those authorized to be employed under the authority of the law of April 30, 1824.

The first embraces, of the corps of topographical engineers.....	10 officers
Of lieutenants now detailed for this duty from the army.....	26 "
The second, being citizens without military rank, employed under the act of April 30, 1824..	13 "

Making the whole force of engineers employed under this bureau equal to..... 49

The evils of these military details arise from—

1st. The shortness of the time in which an officer, being placed on the duty, has to acquire that practical knowledge in the use of instruments, and the habit of applying his scientific knowledge to results in practice, without which he can be of no value.

2d. The apathy which oppresses a temporary detail, from the consciousness that if he labors, it is to acquire that which, as soon as it is obtained, he will, in all probability, be removed from the only sphere of action in which it can be applied.

3d. When the temporary detail is endeavoring partially to acquire a knowledge of the duties of the corps to which he is attached, he must, from the very nature of things, lose by its disuse much of the knowledge of his proper arm of service, and when he returns to it be consequently a less valuable officer than when he left.

4th. The corps is, under this system, continually exposed, in the execution of its duties, to those consequences which must flow from the services of unqualified and consequently incompetent assistants, and is forced from this cause to increase its demands upon the army, that it may compensate partially by numbers for deficiencies in experience. These demands, if complied with, but increase the general evil before alluded to; they cannot be complied with but partially, as the line has duties for which these subordinates were intended, and which it would not do to neglect. We are placed thereby in a continual series of unpleasant bickerings with the line. The corps endeavors to retain its experienced assistants as long as possible, because they are essential to the well-doing of its duties. The line regrets these details, however temporary; it seeks to reduce them to short periodical tours, and is continually endeavoring to get back the older assistants. It is a system, therefore, in which the permanent interests of the line and of the corps are diametrically opposed, and which, as might well be supposed, by the occasional success of either, has left one or the other exposed to the reproach of negligence or favoritism.

There is no one more strongly impressed than myself with the efforts which the line now makes in order to aid us in our duties, and that it cannot do more without a sacrifice of its own; but, at the same time, I must acknowledge that after many years of experience I am satisfied that the duties of the topographical engineers can only be carried to that extent of perfection and intelligence which the country has a right to expect by a system which shall permanently attach its assistants to the corps.

The effect of these details from the army for the duties of this corps may be expressed in a few words. If temporary or periodical, it is a sacrifice of the duties of the corps; if permanent, while they yet retain their rank and its privileges in the line, it is, to the extent of the number detailed, a sacrifice of the interests and duties of the line.

The civil engineers employed under the act of April 30, 1824, are officers without military commissions or military rank. The law recognizes no distinction of grade or of title between them, although the custom of service has divided them into the two classes of civil engineers and assistant civil engineers. The rules and articles of war and the army regulations cannot be extended over them. There is, therefore, an absence of legal authority in relation to their control, and also of defined right in relation to their privileges, from which it will be seen that no subordination or authority can well be established in such a service. No serious evils have yet resulted from it, owing, however, more to the correct moral bearing of the gentlemen who hold these appointments than to any well-defined power over them. Among the greatest inconveniences of this arrangement is the difficulty of associating the two kinds of engineers on the same duty. The military engineer is unwilling to be placed under the civil, and probably cannot be by law, or in a way that would involve any legal responsibility. The civil engineer is equally unwilling to be viewed as subject only to be commanded, without the hope of ever enjoying the right of commanding in turn. It is a moral prostration of his branch of service to another, without the prospect of ever being relieved from it, and adapted to engender painful and unpleasant feelings, as well as being in itself unjust.

Another evil is, that this mixed arrangement of military and civil appointments is destructive of a proper *esprit du corps*, and of that united emulation which exerts the whole mass of mind to elevate the duties of that branch to which it belongs.

With a service so constituted, and beset with inconveniences so detrimental to its duties, this bureau has been struggling for years, sparing no efforts, however, to do the best which could be done with the means placed at its disposal.

The means have already been represented generally. I shall now speak of them numerically and economically, with a view of submitting a plan which will, if adopted, remedy all the evils, and without additional cost.

The military engineers consist, 1st, of the corps of topographical engineers, ten in number. Of these, one receives the pay of a lieutenant colonel, five have the pay of majors, and four the pay of captains. The annual compensation of the whole is \$14,496.

2d. Of the temporary details from the army. These vary from 25 to 30. There are now 26 on this service. The annual compensation of these is \$23,344.

The civil engineers consist of those employed under the act of the 30th of April, 1824. Taking the average of the last three years, their number is 13, and their annual compensation is \$16,700.

The entire annual cost of the whole number of officers on topographical duty is therefore \$43,540.

In the above statement it will be perceived that the officers detailed from the army are included in the sum of the total cost. All these details receive their pay out of the general appropriation for the army, and it does not therefore appear in any estimate for the corps of topographical engineers or for surveys; yet, as this number is always employed on topographical duty, their pay is justly chargeable to that branch of service, and is therefore included in the sum of its annual cost.

The compensation for the civil engineers is taken from the customary annual appropriation for surveys.

From the foregoing it will therefore be perceived that the present force and rank of officers for topographical duty consists, in its present mixed and complicated organization, of one lieutenant colonel commanding, five majors, four captains, twenty-six lieutenants of artillery and infantry, and thirteen civil engineers.

Now, the remedy proposed is to incorporate the whole or a part in one regular corps, with the usual grades of military rank, and to subject the whole to the rules and articles of war.

The subject has been treated with much ability by the chairman of the Military Committee in a report to Congress during the last session. Allow me, respectfully, to refer you to that report for some views which are not incorporated in this.

But taking the opinion of the distinguished chairman of that committee as the best basis for an improved organization, it results in the recommendation of a corps to consist of one colonel, one lieutenant colonel, four majors, ten captains, ten first lieutenants, and ten second lieutenants; in all, thirty-six engineers, of which the total annual cost will be \$40,454. Our present imperfect organization gives forty-nine engineers, of which the total annual cost is \$43,540, making an annual difference in favor of the organization of \$3,086.

The plan submitted presents two questions which require explanation: one referring to the numbers, the other to the cost.

The lesser numbers of the proposed plan are considered capable of doing more duty than the greater numbers of the existing plan, because, 1st, of their better organization; 2d, and of always controlling the experience acquired, which, accumulating to the same individuals, gives that facility and aptness of execution and readiness in the application of theoretical knowledge which will enable the lesser numbers in the one case to do more and better work than the greater numbers in the other. It is, in fact, but an application of the simple axiom, that he who is acquainted with the theory and practice of any profession can do more of it and better than any number of those who have not this knowledge.

3d. The number is also based upon the consideration that these are now, and would for many years be, fully adequate to the wants of the general government for topographical duties.

In reference to the cost two considerations have been made: one to be found in the report of the Military Committee of the last session, which reduced the army, proportionally, to the number transferred from it to the corps. This, of course, would result in a positive reduction of the army estimates, or a transfer of a portion to the estimates of the corps, and would make a positive saving of the amount previously stated; but the army would probably suffer inconvenience from the reduction. It is divided into so many small posts, and extended over so vast a space of country, that it could not feel less the inconveniences of the reduction than it does those of the details. These are already oppressive to its duties. Although the reduction of the army estimate would be thereby a proportional reduction of army expenditure, the reduction would be at the expense of the organization of the army and of its duties, and might, therefore, although a saving, not be considered a true economy.

The other, to leave the army as it is, and organize the corps as it should be. Under this consideration the total amount of present appropriations absorbed by the proposed organization would be, for the corps of topographical and civil engineers, \$31,200; but as the total cost of the proposed corps is stated to be \$40,454, it would leave an annual deficiency over our present appropriations of \$8,254.

Under either view the authority to employ civil engineers under the act of the 30th of April, 1824, is to be repealed; of course the amount of their annual compensation ceases with the passing of the law for the new organization.

But as a plan which leaves the army in its present form is, under all circumstances, the better, that for the organization of the corps, which will be presently submitted to you, will be made in accordance to it.

The plan submitted last year, while it authorized a complete organization, embraced a feature of periodical promotions until the organization should be complete. Such a course is not unfrequent in the extension of scientific corps when the materials for supplying places have to be formed; but when, as in our circumstances, we have abundant officers properly educated, experienced in its duties, and who, in fact, are now performing them, such a course cannot be advisable but on the supposition that a full organization is not now wanted. As we already are obliged to employ more than the organization contemplated, this supposition cannot be well sustained; and believing, as I do, that the whole number are wanted, I have considered it the better course at once to submit a correct plan to your consideration.

It has been previously observed that the present corps consists of one lieutenant colonel commanding, five majors, four captains, to which are attached twenty-six lieutenants of artillery and infantry, and thirteen civil engineers.

The plan proposed adds a colonel to the corps, takes away one major, and from the lieutenants and the civil engineers takes six captains, ten first, and ten second lieutenants.

I have hitherto confined myself to an exposition of the kind of organization which now exists for topographical duties—its defects and inconveniences. Although many of the advantages of the modifications proposed are to be inferred from these, yet it may be well to state a few of the important public services which this corps has to perform, but to which, from its present defective organization, its attention has been applied but imperfectly.

Heretofore its duties have been principally directed to surveys for the defences of the posts and harbors on the Atlantic, including the water approaches to the positions to be fortified.

These surveys generally embrace some extent of coast as well as of inlets, and, from the facts which have to be collected, constitute also very valuable, but rather limited, charts for navigation; but the land approaches to these positions remain yet to be surveyed.

Surveys of our harbors and of our rivers on the coast, with views to their improvement, and also to obtain more accurate charts of them than now exist. Although much has been done under this head, yet the greater part of our coast, and particularly from the Delaware south, has yet to be attended to. These surveys form valuable details to be introduced in the great survey of the coast now being made, and which, with a proper understanding with the principal of that survey, may be introduced into his charts with great facility.

Surveys of the harbors and shores of our western lakes. It is only some of the principal harbors of these lakes to which the attention of the corps has yet been directed—those affecting the present lake navigation and requiring immediate improvement. The connecting links between these harbors, the inlets of a secondary class, and the rivers which empty into them, have hitherto received but little attention. Our imperfect organization and limited numbers were embarrassments to the activity and extent of our operations which could not be overcome.

Surveys for common roads, railroads, and canals. Although these may be considered as purely of a civil character, yet a finer school of practice than they furnish for the topographical engineer cannot well be imagined. He obtains on these duties expertness in the use of instruments; the habit of investigating the resources of a country, commercially, morally, and physically; its supplies in provisions, timber, metals, and means of construction; its population, and the best means by which it can be commanded in cases of emergency; its military aspect, hilly, level, or mountainous, and the various roads which intersect the path of his survey. While he is, therefore, apparently engaged on an object ostensibly of mere profit to its undertakers, he is perfecting himself in the practice of his profession, acquiring exact and persevering habits of investigation, improving his *coup d'œil*, and gathering the most valuable information in relation to the capabilities of self-defence of the locality of the survey, and its ability to aid in the defence of other parts of the country.

Surveys of the inland frontiers of our Atlantic and western States. Singular as may be the acknowledgment, yet it is nevertheless the fact that this highly important service has hitherto received but little attention. It embraces not merely a geographical knowledge of the frontiers named, but accurate topographical surveys of the vicinities of all our western posts; of the best routes for roads of communica-

tion between the posts and with the interior for supplies and assistance. We have hitherto been able to direct but very feeble efforts to these important objects. The fault is not that of this bureau, but of the inadequate means placed at its disposal. Although there is an annual appropriation of twenty-five and sometimes thirty thousand dollars for surveys, yet as considerably more than half of this is required for the salaries of the civil engineers, it leaves but a small portion for the expenses of surveys. This small portion is generally absorbed in the execution of those surveys directed to be made by resolutions of Congress, and of some parts of our sea-coast; the latter being a continuation of the surveys directed some years since in reference to a regularly digested system of sea-coast defence. We are therefore left without the means of bestowing our efforts on the western frontier; and the position of appearing to neglect so important a duty in which this bureau has been placed is shown by the foregoing remarks to have been beyond its power to obviate.

Should the organization proposed be adopted, it will leave the whole appropriation for surveys free from the deductions for the salaries now paid out of it, and the bureau may then place a brigade of officers on the western frontier, to commence the execution of those important duties. Should it not be adopted, it will be seen that the bureau will be as unable as heretofore to attend to them, unless a separate appropriation is granted, and which is asked, in order to meet the contingencies of the case, in the estimate now submitted.

The survey of the coast. It would be superfluous to speak of the necessity of this survey, of its immense importance to our commerce and navy, and its extensive influence over any system of defence for the Atlantic frontier.

Of the methods by which alone such a duty ever has been executed by any nation, or ever can be correctly, the books are full; and from the same sources we may also draw the best conclusions of the time, and means, and qualifications which such a labor requires. Applications have been made to this bureau for aid in officers, but it has been able to furnish but one. It was a cause of serious regret, but yet beyond the power of this bureau to remedy, and only in the hands of Congress by legislative action.

We have but one school in our country which may be considered as thoroughly mathematical in its course—the military school at West Point; and it is to this school only which we can look for individuals sufficiently qualified to enter upon the duties of this survey and justly aspire to a knowledge of its highest practical operations. I do not mean by this to say that there may not be citizens who, of their own taste and own force of mind, are not equally qualified; but these are only rare exceptions to a rule, the correctness of which will stand the proof of a comparison of the course of mathematical instruction and habits of study pursued at West Point with those of any other school or college in our country.

Now, then, if the desire is that this great work should not cease with the life of the present highly informed gentleman who superintends it, and that, in course of time, we should have numbers capable of conducting it, and of executing any of its parts, we must give them the opportunity of acquiring the necessary practical knowledge by placing them upon it. This can be done only by allowing to the corps within whose proper province such duties naturally fall the necessary numbers. We can then place upon this duty a brigade of officers, from whose efforts may be justly anticipated the results of adequate education, facilities in practice, and of order and subordination of conduct.

The superintendence of constructions purely civil. There is no corps in our country to which the duties of a corps of *ponts et chausee* so properly belong as to the topographical engineers. It is so intimated in the report of the Military Committee of the last year; and it seems to me an unequivocal dictate of common sense to say that the corps which is employed in making the survey, digesting the plan, and forming the estimate of a work is, from the very nature of the case, more fully imbued than any other can be with the considerations and unity of view which its construction involves, and therefore better qualified to superintend it. The subject does not seem to admit of much reasoning, but stands, like an axiom, upon the clear truth in its annunciation.

Having now exposed generally to your consideration the defects of the present organization of this bureau, its evils to the service, the remedy, and the general duties which the corps will be called upon to execute, I have, in conclusion, appended to this report the form of a short bill which appears to me best adapted to effect the desired organization.

Respectfully submitted.

JOHN J. ABERT, *Lieutenant Colonel Topographical Engineers.*

HON. LEWIS CASS, *Secretary of War.*

A.

Statement showing the amount of money drawn from the treasury and remitted to the officers and agents disbursing under the Topographical bureau, from the 1st of October, 1834, to the 30th of September, 1835, inclusive, and the amount of accounts rendered by each within the same period.

To whom remitted.	On what account.	Amount remitted.	Amount disbursed.
Lieut. Col. J. Kearney, top. eng'rs..	Surveys for roads and canals, under the act of April 30, 1824.....	\$1, 600 00	\$2, 918 05
Lieut. Col. S. H. Long, top. eng'rs..	.....do.....do.....do.....	600 00	.....
Major J. D. Graham, top. eng'rs.....	.....do.....do.....do.....	3, 000 00	3, 316 05
Capt. W. G. Williams, top. eng'rs.....	.....do.....do.....do.....	500 00	871 48
Capt. A. Canfield, top. eng'rs.....	.....do.....do.....do.....	700 00	633 00
Lieut. J. M. Berrien, U. S. army.....	.....do.....do.....do.....	1, 850 00	238 93
Lieut. A. J. Center, U. S. army.....	.....do.....do.....do.....	1, 400 00	1, 491 40
Lieut. W. M. Mather, U. S. army.....	.....do.....do.....do.....	200 00	.....
G. W. Featherstonhaugh, geologist.....	.....do.....do.....do.....	2, 800 00	1, 800 00
W. B. Guion, civil engineer.....	.....do.....do.....do.....	1, 700 00	1, 539 94
G. W. Hughes, civil engineer.....	.....do.....do.....do.....	2, 050 00	1, 905 13
H. Stansbury, ass't civil engineer.....	.....do.....do.....do.....	3, 900 00	3, 807 48
J. P. Bailey, ass't civil engineer.....	.....do.....do.....do.....	1, 500 00	2, 455 67
Major H. Bache, top. engineers....	Rebuilding the light-house on Brandywine shoal, in the bay of Delaware, under the act of June 30, 1834.....	1, 550 00	1, 117 66
Major W. G. McNeill, top. eng'rs...	Surveying a route for a road from the Alabama State line, through the town of Mariana, to Apalachicola, in Florida, under the act of June 30, 1834.....	3, 000 00	2, 844 72
Major W. G. McNeill, top. eng'rs...	Surveying east pass into Apalachicola bay, under the act of June 30, 1834.....	500 00	658 48
		26, 850 00	25, 597 99

A BILL for the better organization of the corps of topographical engineers.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the corps of topographical engineers shall be reorganized and increased by regular promotions in the same, so that the said corps shall consist of one colonel, one lieutenant colonel, four majors, ten captains, ten first lieutenants, and ten second lieutenants.

SECTION 2. *And be it further enacted,* That vacancies created by said organization over and above those which can be filled by the present corps shall be taken from the army, and from such as it may be deemed advisable of the civil engineers employed under the act of April 30, 1824, and that the pay and emoluments to the officers of said corps shall be the same as are allowed to officers of similar rank in the regiment of dragoons.

SECTION 3. *And be it further enacted,* That the authority to employ civil engineers in the act of April 30, 1824, and the authority by law for the employment of the present corps of topographical engineers be, and the same are hereby, repealed after the passage of this act, and that all letters and packages on public business to and from the chief of the corps now authorized be free from postage.

SECTION 4. *And be it further enacted,* That the officers of said corps shall be subject to the rules and articles of war, and to such regulations in relation to their duties as the President may think proper to adopt.

No. 9.

REPORT FROM THE ORDNANCE DEPARTMENT.

ORDNANCE OFFICE, Washington, November 20, 1835.

SIR: In obedience to your order of the 4th of September last, I have the honor to transmit a report of the general result of the proceedings and operations of this department between the 1st of October, 1834, and the 30th September, 1835.

The papers marked A and B present a general view of these concerns during the last-mentioned period, as well in regard to the amounts of expenditures under the several heads of appropriations as in reference to their objects, and to the various ordnance stations where they have been made.

The first of these (A) shows the whole amount of funds remitted from the treasury to disbursing officers and contractors in this department during the year 1834, to have been..... \$1, 039, 248 78
That the portion of that sum which was expended and accounted for during the same period amounted to..... 951, 239 89

And that at the close of that year there remained unexpended, and in the hands of disbursing officers, the sum of..... 88, 008 89

A balance which it may be proper to remark was liquidated by the responsible disbursing officers in the first quarter of 1835.

Statement B exhibits the total amount of funds remaining in the hands of disbursing officers at the close of the year 1834, and which have been remitted to them and to contractors during the first, second, and third quarters of the year 1835. This amount will be seen to have been.....	\$739, 919 68
And the portion of this sum expended, and for which accounts have been rendered during the same period, will be seen in the same statement to have amounted to.....	650, 216 31

The unexpended balance exhibited in the same statement as being in the hands of disbursing officers at the close of the third quarter of 1835 having been.....	\$89, 703 37
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Statement C presents a view of the general result of the operations at the several arsenals and armories of the United States in the manufacture, repair, and purchase of the principal articles of ordnance, ordnance stores, and building materials. It exhibits the result of these operations to the extent to which they have been completed, during the year between October 1, 1834, and September 30, 1835, indicating, among other articles of ordnance and ordnance stores which have been fabricated or procured, the following, viz: of artillery, 98 32-pounder iron cannon; 3 12-pounder and 4 6-pounder iron cannon; 34 32-pounder casemate carriages, complete; 158 32-pounder casemate chasses; 3 24-pounder casemate, and 177 24-pounder barbette carriages, complete; 77 24-pounder casemate chasses; 33 field artillery carriages; 4 6-pounder caissons, and one travelling forge.

Of small arms manufactured and procured, viz: 22,506 muskets, complete, made at the national armories, and at the private factories, 7,540 muskets, complete; 1,060 rifles, (Hall's,) 2,000 artillery swords, and 1,840 cavalry sabres.

Of accoutrements for small arms: 750 sets for infantry, 500 sets of rifle accoutrements, 250 sets for cavalry, 2,400 sword belts, and 1,214 sabre belts.

Statement D shows the extent of the operations during the year between October 1, 1834, and September 30, 1835, which have occurred in procuring ordnance and ordnance stores under the act of 1808, for arming and equipping the militia of the States and Territories. This statement presents also a view of the expenditures under the act, which have resulted during the same period, in procuring the stores, amounting, for all objects, to \$148,518 49. It exhibits, among other articles of ordnance stores procured, 26 field carriages, with their equipments, complete; 7,540 muskets, 1,060 rifles, (Hall's,) 2,000 artillery swords, 840 cavalry sabres, 2,374 sword and sabre belts, and 330 percussion cannon locks.

Statement E exhibits the amount of ordnance and ordnance stores which have been apportioned for the year 1834 to the several States and Territories under the act of 1808 for arming and equipping the militia, this apportionment being founded on the recent returns of the strength of the militia as made by the adjutant generals of the militia of the several States to the adjutant general of the army.

Statement F shows the several articles of ordnance and ordnance stores which have been distributed to the militia of the States and Territories during the year between October 1, 1834, and September 30, 1835.

Statement G presents a view of the munitions of war issued by this department during the year, between October 1, 1834, and September 30, 1835, to the army. In this it will appear that 89 32-pounder, 162 24-pounder, 6 12-pounder, 18 6-pounder iron cannon; 34 32-pounder casemate carriages, 36 24-pounder barbette carriages, 6 12-pounder and 19 6-pounder field carriages; 105 muskets; 750 dragoon sabres; 110 (Hall's) carbines; 67 rifles, and 196 sets of infantry accoutrements, are among the principal articles issued.

Statement H exhibits the operations of the lead mines for the year ending September 30, 1835, and statement I the amount of lead made at these mines in each year from the year 1821 to September 30, 1835.

	Pounds.
By these statements it will appear that the lead made during the said year amounts to....	3, 754, 290
Total amount of lead made from 1821 to September 30, 1835.....	75, 571, 609
Total amount of rent lead accruing for the above period.....	5, 909, 216
Amount of rent lead due to the United States yet to be collected.....	493, 313

The returns of lead made during the last year exceed the returns of this year by 4,217,289 pounds. This has not been caused by a decrease in the manufacture of lead, but by the refusal of numbers of the smelters to make the required returns to the superintendent and pay in their rent lead. The grounds of their refusal are: first, that the act of March 3, 1807, contains no authority for collecting rent lead on a *license for smelting* lead ore; and, secondly, that any law authorizing the leasing of public land within the limits of a State is unconstitutional.

To test the validity of these objections suits have been ordered against some of the most prominent and influential of the delinquents, under a belief that the final adjudication of their cases would restore order, without resorting to further measures, or incurring additional expense.

There are, however, other views of this subject which it now becomes proper to state, viz:

The decision of a suit by the proper tribunal might settle the *constitutional* question in favor of a State, but the principles of that decision might not be applicable to the condition of a Territory. Should a decision be made which would bind the one and exonerate the other, the operation would be partial and unequal. In the sales of the public lands which have taken place in the mineral region it appears that conflicting interests have arisen which, probably, can only be adjusted by an entire sale of the mineral and timbered lands.

Such a course is therefore respectfully recommended as being best adapted to remove existing difficulties and promote the general prosperity of that section of the Union.

As regards the building operations progressing at the several arsenals, I have the honor to state that they have proceeded to the extent of the last annual appropriation for those objects, and have been conducted in the most efficient manner by the several superintending officers.

I beg leave to call your attention to the very inadequate compensation of the clerks of the Ordnance office, and to request that, for the performance of duties confessedly as arduous and important as those of any other bureau of the War Department, measures may be taken to put them upon a footing of equality, in respect to salary, with the clerks in the offices of the commissary general of subsistence and of the paymaster general.

I have the honor to be, sir, respectfully, your obedient servant,

GEO. BOMFORD, *Colonel of Ordnance.*

Hon. LEWIS CASS, *Secretary of War.*

A.—Statement of the money expended through the ordnance department in the year 1834.

Officer's name and station.	Amount of sums remitted, including the balances in the hands of agents on January 1, 1834.														
	Appropriations.														
	National armories.	Current expenses of ordnance service.	Arsenals.	Armament of new fortifications.	Arming and equipping the militia.	For thirty-six double racks.	For additional machinery.	Erecting two dwelling-houses.	For building a pay office.	For the new arsenal.	Slating roofs and rebuilding water-wheel.	Erecting forging shop.	Slating roofs of four workshops.	Enlargement of the canal.	Repairing the walls of four workshops.
Charles Howard, armory, Springfield, Massachusetts.....	\$186,773 93				\$4,138 64	\$3,063 00	\$9,323 10	\$2,730 65	\$2,000 00	\$7,600 00	\$3,500 00	\$8,044 41			
Daniel Bedinger, armory, Harper's Ferry, Virginia	182,062 17												\$186 58	\$14,998 27	\$650 05
Capt. J. W. Ripley and Lieut. Robt. Anderson, arsenal, Augusta, Mo.	\$1,563 44	\$10,829 03													
Major H. K. Craig, arsenal, Watertown, Massachusetts...	2,616 55	1,628 00			15,396 63										
Captain Benjamin Huger, arsenal, Fort Monroe, Virginia.....	3,624 09	6,596 84	\$40,531 58												
Captain Charles Ward, arsenal, Vergennes, Vermont.....	160 02	1,150 00													
Lieutenant Colonel George Talcott, arsenal, Watervliet, New York.	17,936 83	14,650 00	300 00	7,900 00											
Captain H. S. Mallory, arsenal, Rome, New York.....	1,723 95														
Major R. L. Baker, arsenal, Pittsburg, Pennsylvania	7,424 18	5,788 22		4,106 42											
Lieut. Colonel W. J. Worth, arsenal, Frankford, Pennsylvania....	5,294 53	17,650 00	880 00	1,273 21											
Lieutenant Wm. Maynadier, arsenal, Pikeville, Maryland	1,392 20														
Capt. Richard Bache & Marcus C. Buck, arsenal, Washington city.	11,152 12	5,400 00	417 12	5,164 34											
Marcus C. Buck & Moses McArthur, arsenal near Richmond, Va....	1,124 60														
Capt. N. Baden & Lieut. Herring & Lagnelle, arsenal, Augusta, Ga.	1,050 00														
Captain Edward Harding, arsenal, Mount Vernon, Alabama.....	300 00	19,792 31													
Captain John Hills, arsenal, Apalachicola, Florida		39,453 30													
Lieut. F. L. Jones & Lieut. W. S. Newton, arsenal, Baton Rouge, La.	1,690 00	825 49		30 90											
Captain J. Symington, arsenal, St. Louis, Missouri.....	6,244 81	37,748 87		1,500 00											
Captain J. Howard, arsenal, Detroit, Michigan.....	308 32	27,337 36													
Major J. L. Smith and Capt. S. Perkins, depot, New York.....	1,623 28	7,724 60		1,325 76											
Lieut. James Allen and William L. Poole, depot, Charleston, S. C.	639 85														
Major T. C. Legate, lead mines, Galena, Illinois.....	5,501 72														
Sundry persons, for cannon and small arms				76,259 29	132,200 47										
Settlements on audited accounts	867 64	14 47	17 47												
Total.....	370,603 74	71,434 96	196,591 49	88,387 99	173,126 37	3,063 00	9,323 10	2,730 65	2,000 00	7,800 00	3,500 00	8,044 41	186 58	14,998 27	650 05

A.—Statement of the money expended through the ordnance department in the year 1834—Continued.

Officer's name and station.	Amount of sums remitted, including the balances in the hands of agents on January 1, 1834.											Total amount.	Amount expended and accounted for.	Balances remaining unexpended in the hands of disburs'g officers, Dec. 31, 1834.
	Appropriations.													
	Construction of new wheels and machinery.	Repair and extension of the public dam.	Erecting storehouses.	Completion of machinery.	Erecting dwelling-houses.	For the purchase of cannon.	More perfect defence of the frontier.	Purchase of (arms) accoutrements for South Carolina.	Purchase of (arms) accoutrements for mounted rangers.	Purchase of three acres of land on the Alabama river.	Arsenal at St. Louis.			
Charles Howard, armory, Springfield, Massachusetts												\$219,329 32	\$206,251 09	\$13,077 33
Daniel Bedinger, armory, Harper's Ferry, Virginia.....	\$2,105 10	\$3,625 45	\$4,000 00	\$24,200 00	\$4,020 33							244,792 36	225,736 08	19,056 28
Capt. J. W. Ripley and Lieut. Robt. Anderson, arsenal, Augusta, Mo.												12,382 47	10,960 53	1,421 94
Major H. K. Craig, arsenal, Watertown, Massachusetts.....						\$5,000 00	\$2,141 50	\$2,598 00				29,380 68	17,820 74	11,559 94
Captain Benjamin Huger, arsenal, Fort Monroe, Virginia												20,752 51	18,247 18	2,505 33
Captain Charles Ward, arsenal, Vergennes, Vermont.....												1,310 02	1,310 02	
Lieutenant Colonel George Talcott, arsenal, Watervliet, New York.....												40,786 83	39,180 01	1,606 82
Captain H. S. Mallory, arsenal, Rome, New York.....												1,723 95	1,709 37	14 58
Major R. L. Baker, arsenal, Pittsburg, Pennsylvania.....							3,980 50					21,398 32	17,270 26	4,128 06
Lieut. Colonel W. J. Worth, arsenal, Frankford, Pennsylvania.....												25,097 74	24,238 35	859 39
Lieutenant Wm. Maynardier, arsenal, Pikesville, Maryland.....												1,392 20	1,254 13	138 07
Capt. Richard Bache & Marcus C. Buck, arsenal, Washington city.....												22,133 58	20,075 80	1,057 78
Marcus C. Buck & Moses McArthur, arsenal near Richmond, Va.												1,124 60	1,115 93	8 67
Capt. N. Baden & Lieut's Herring & Lagnelle, arsenal, Augusta, Ga.												1,050 00	443 83	606 17
Captain Edward Harding, arsenal, Mount Vernon, Alabama.....									\$1,800 50			21,892 81	15,748 22	6,144 59
Captain John Hills, arsenal, Apalachicola, Florida.....												39,453 30	37,885 22	1,568 08
Lieut. F. L. Jones & Lieut. W. S. Newton, arsenal, Baton Rouge, La.												2,546 39	2,034 39	512 00
Captain J. Symington, arsenal, St. Louis, Missouri.....											\$8,500 00	53,993 68	33,888 95	20,104 73
Captain J. Howard, arsenal, Detroit, Michigan.....												27,705 68	27,705 68	
Major J. L. Smith and Capt. S. Perkins, depot, New York.....												10,673 64	7,856 26	2,817 38
Lieut. James Allen and William L. Poole, depot, Charleston, S. C.												639 85	600 12	39 73
Major T. C. Legate, lead mines, Galena, Illinois.....						\$4,266 67	20,561 12					5,501 72	4,719 70	782 02
Sundry persons, for cannon and small arms.....												233,287 55	233,287 55	
Settlements on audited accounts.....												899 58	899 58	
Total.....	2,105 10	3,625 45	4,000 00	24,200 00	4,020 33	4,266 67	25,561 12	6,131 00	2,598 00	8,500 00	8,500 00	1,039,248 78	951,239 69	88,008 69

ORDNANCE OFFICE, Washington, November 20, 1835.

GEO. BOMFORD, Colonel of Ordnance.

B.

Statement of the money expended through the Ordnance department during the first, second, and third quarters of 1835.

Stations.	Amount transmitted in the 1st, 2d, and 3d quarters of 1835, and balances remaining in officers' hands at the close of the year 1834.	Amount of accounts rendered in the 1st, 2d, and 3d quarters of the year 1835.	Balances remaining in officers' hands October 1, 1835.
Armory, Springfield, Massachusetts.....	\$141, 083 52	\$120, 665 40	\$20, 418 12
Armory, Harper's Ferry, Virginia.....	161, 918 18	144, 185 24	17, 732 94
Arsenal, Augusta, Maine.....	4, 826 94	4, 224 75	602 19
Arsenal, Watertown, Massachusetts.....	45, 773 84	43, 284 47	2, 489 37
Arsenal, Fort Monroe, Virginia.....	25, 928 51	20, 115 61	5, 812 90
Arsenal, Vergennes, Vermont.....	205 28	199 45	5 83
Arsenal, Watervliet, New York.....	50, 210 61	46, 219 73	3, 990 88
Arsenal, Rome, New York.....	1, 214 58	1, 214 58	.....
Arsenal, Pittsburg, Pennsylvania.....	22, 073 81	16, 738 87	5, 334 94
Arsenal, Frankford, Pennsylvania.....	26, 096 63	21, 691 60	4, 405 03
Arsenal, Pikesville, Maryland.....	1, 828 60	1, 777 69	50 91
Arsenal, Washington city.....	22, 274 90	17, 120 12	5, 154 78
Arsenal near Richmond, Virginia.....	110 62	110 62	.....
Arsenal, Augusta, Georgia.....	1, 098 17	1, 074 91	23 26
Arsenal, Mount Vernon, Alabama.....	16, 944 59	14, 081 03	2, 863 56
Arsenal, Apalachicola, Florida.....	26, 968 08	20, 920 24	6, 047 84
Arsenal, Baton Rouge, Louisiana.....	11, 007 70	6, 398 00	4, 609 70
Arsenal, St. Louis, Missouri.....	28, 342 60	25, 687 90	2, 654 70
Arsenal, Detroit, Michigan Territory.....	18, 591 99	17, 852 78	739 21
Depot, New York.....	8, 464 14	1, 812 10	6, 652 04
Depot, Charleston, South Carolina.....	596 53	481 36	115 17
United States lead mines, Galena, Illinois.....	4, 247 02	4, 247 02	.....
Sundry persons for cannon, gun-carriages, and small arms.....	117, 599 10	117, 599 10	.....
Settlements on audited accounts.....	2, 513 74	2, 513 74	.....
Total.....	739, 919 68	650, 216 31	89, 703 37

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 20, 1835.*

NOTE.—The officer in charge of the Apalachicola arsenal died the 6th October last, and no cash accounts have been received from that post for the third quarter of 1835.

G. B.

C.

Statement of work done and articles fabricated, procured, and repaired at the national and private armories and ordnance stations from the 1st October, 1834, to the 30th September, 1835, inclusive.

MADE AND PROCURED.			
<i>Class No. 1.</i>		Sets of iron for 24-pounder chasses.....	84
32-pounder iron cannon.....		24-pounder carriages, iron, barbette.....	1
12-pounder iron cannon.....		Travelling forge.....	1
6-pounder iron cannon.....		Elevating machines.....	15
		Traverse boards.....	59
<i>Class No. 2.</i>		<i>Class No. 3.</i>	
12-pounder field carriages—block trail..	2	Sponges and rammers, assorted.....	663
12-pounder field carriages—gribeanval..	1	Rammers and staves, assorted.....	255
6-pounder field carriages—gribeanval..	28	Sponges and staves, assorted.....	175
6-pounder field carriages—block trail..	2	Ladles and worms, assorted.....	71
6-pounder caissons.....	4	Ladles and staves, assorted.....	75
32-pounder casemate carriages.....	13	Worms and staves, assorted.....	78
32-pounder casemate chasses.....	85	Lead aprons.....	54
24-pounder casemate chasses.....	93	Tarpaulings.....	23
24-pounder casemate carriages.....	3	Tompions, assorted.....	216
24-pounder barbette carriages.....	82	Priming horns.....	90
24-pounder barbette chasses.....	80	Priming wires.....	174
32-pounder upper carriages, iron.....	21	Sponges.....	550
Sets of irons for 32-pounder chasses....	107	Sponge covers.....	192
24-pounder carriages, iron.....	94	Sponge buckets.....	312
		Tar buckets.....	8
		Water buckets.....	31

C.—Statement of work done and articles fabricated, procured, and repaired—Continued.

Linstocks	19	24-pounder flannel cartridges	556
Portfire stocks	16	12-pounder flannel cartridges	184
Portfire cases	155	6-pounder flannel cartridges	1,392
Portfire clippers	98	24-pounder howitzer cartridges	455
Prolongs	18	Cartridge bags, flannel, assorted	21,009
Tube pouches	60	Musket ball and buckshot cartridges	59,856
Tube boxes	49	Pistol ball cartridges	47,701
Gunners' gimlets	12	Carbine ball cartridges	74,414
Gunners' haversacks	10	Rifle ball cartridges	6,450
Artillery harness sets for four horses	19	Musket blank cartridges	27,070
Artillery saddles	3	Pistol blank cartridges	10,650
Traversing handspikes	478	Carbine blank cartridges	10,650
Truck handspikes	445	Musket bullets, pounds	4,840
Trail handspikes	66	Pistol bullets, pounds	825
Implement straps, sets	142	Rifle bullets, pounds	1,849
Bridge barrels	770	Buckshot, pounds	200
Cannon locks, percussion	338	Rockets	1,245
Cannon scrapers	13	Rocket sticks	421
Thumbstalls	906	Percussion caps	68,205
Thermometers	3	Portfires	4,224
Verifying instruments, sets	4	Priming tubes, full	18,542
Spirit level	1	Priming tubes, empty	17,534
Graduated scales	3	Fuses, full	17
<i>Class No. 4.</i>		Quickmatch, pounds	14
32-pounder round shot	1,077	Slowmatch, pounds	797
12-pounder round shot	12	Wheel cases, number	390
6-pounder round shot	16	Brimstone, pounds	381
12-pounder strapped shot	221	Sulphur, pounds	106
6-pounder strapped shot	142	Nitre, refined, pounds	300
24-pounder shells, strapped	339	Cannon wads, number	7,353
12-pounder shells, strapped	437	Cannon cartridge paper, pounds	507
<i>Class No. 5.</i>		Musket cartridge paper, pounds	56
12-pounder strapped shot, fixed	279	Wrapping cartridge paper, pounds	92
6-pounder strapped shot, fixed	246	<i>Class No. 9.</i>	
6-pounder canister shot, fixed	72	Axletrees, assorted	189
32-pounder grape-shot, fixed	233	Wheels, wagon	4
<i>Class No. 6.</i>		Belt plates	1,575
Muskets, armory, complete	22,506	Bridles	13
Muskets, contract, complete	7,540	Saddles	14
Hall's rifles, complete	1,060	Collars	40
Artillery swords	2,000	Wagon harness, sets	5
Sabres, dragoon	1,840	Canisters	100
Screw-drivers	10,112	Barbette pintle cases	309
Wipers	11,711	Barbette pintle crosses	66
Ball-screws	1,532	Barbette pintle plates	236
Spring vices	1,435	Barbette naves	57
<i>Class No. 7.</i>		Barbette traverse wheels	134
Infantry accoutrements, sets, complete	750	Barbette truck wheels	134
Hall's rifle accoutrements, sets, complete	500	Barbette screw boxes	66
Dragoon accoutrements, sets, complete	250	Sockets, handspike	238
Cartridge-boxes, infantry	941	Bolts and rings	252
Cartridge-boxes, dragoon	137	Braces	130
Cartridge-box belts, buff	2,052	Rub plates	468
Cartridge-box belts, black	31	Washer plates	610
Bayonet scabbards	2,578	Washers	794
Bayonet belts, buff	1,910	Inch bolts	1,772
Bayonet belts, black	31	Axle caps	1,008
Sabre belts, buff	1,214	Bolts and rivets	501
Artillery sword belts, buff	2,400	Tongue brace bolts	202
Pouches and belts, rifle	301	Tongue caps	417
Waist belts, rifle	301	Rail plates	460
Rifle flasks	250	Rail plate nails	7,208
Holsters, pair	65	Tongue plates	58
Sealskin housings	390	Transom plates	126
Brushes and picks	1,350	Nuts, assorted	2,736
Flint caps	16,598	Canister blocks	50
Gun slings, russet	1,514	Cartridge-box blocks	1,195
Carbine buckets and straps	750	<i>Class No. 10.</i>	
Carbine slings	750	Gins	4
<i>Class No. 8.</i>		Gin falls	6
32-pounder flannel cartridges	45	Gin blocks, sets	10
		Sheaves for gin blocks, brass	20
		Wagon, common	1
		Wagon, truck	1

C.—Statement of work done and articles fabricated, procured, and repaired—Continued.

Carts, common.....	6	Hinges, assorted, pair.....	1, 035
Cart, sling.....	1	Knobs and handles, number.....	95
Chains for sling carts.....	2	Latches, number.....	73
Wheelbarrows.....	8	Locks, door, number.....	244
Bells, large.....	2	Locks, pad, number.....	14
Bells, house.....	6	Stoves and pipes, number.....	16
Pumps.....	2	Grates, number.....	4
Scales and weights, sets.....	4	Kettles, iron, number.....	10
Patent balances.....	3	Pots, iron, number.....	3
Mathematical instruments, sets.....	3	Nave boxes, brass, number.....	592
Fire buckets.....	50	Nave boxes, iron, number.....	11
Eprouvette bed, iron.....	1	Chalk, pounds.....	231
Fire-engine.....	1	Emery, pounds.....	1, 067
Arm-chests.....	358	Glue, pounds.....	1, 344
Horses.....	5	Bristles, pounds.....	50
Oxen.....	2	Sandpaper, quires.....	454
Mortars and pestles.....	3	Ox horns, number.....	70

PART 2.—CLOTHS, THREAD, ETC.

Flannel, yards.....	4, 034
Duck, linen, yards.....	293
Ticking, yards.....	229
Coarse linen, yards.....	216
Coarse cotton, yards.....	160
Webbing, white, yards.....	410
Oakum, pounds.....	14
Junk, pounds.....	17, 326
Rope, white, pounds.....	3, 307
Rope, tarred, pounds.....	54
Ropeyarn, pounds.....	1, 153
Tow, pounds.....	154
Thread, pounds.....	373
Twine, pounds.....	396
Fringe for sponges, pounds.....	218
Sash cord, pieces.....	141
Woollen yarn.....	601

FORAGE.

Corn, bushels.....	1, 891
Oats, bushels.....	2, 979
Hay, pounds.....	266, 908
Straw, pounds.....	32, 685
Bran, bushels.....	196
Meal, bushels.....	113

IRONMONGERY.

Iron, bar, pounds.....	880, 191
Iron, assorted, pounds.....	120, 307
Iron, cast, pounds.....	86, 232
Iron, scrap, pounds.....	58, 607
Steel, pounds.....	75, 272
Steel, scrap, pounds.....	11, 945
Tin, block, pounds.....	1, 421
Tin plate, sheets of.....	1, 158
Lead, pounds.....	56, 711
Wire, brass, pounds.....	292
Wire, iron, pounds.....	964
Nails, cut, pounds.....	63, 182
Nails, wrought, pounds.....	290
Brads, number.....	161, 522
Spikes, pounds.....	710
Nails, copper, number.....	1, 281
Sprigs, iron, number.....	79, 000
Tacks, iron, number.....	47, 644
Tacks, brass and copper, number.....	25, 627
Screws, gross.....	348
Springs, window, number.....	228
Brass cocks, number.....	6
Copper, pig, pounds.....	580
Copper, sheet, pounds.....	4, 672
Copper, scrap, pounds.....	1, 726
Brass, pounds.....	336
Brass and copper castings, pounds.....	2, 397
Copper spouting, feet.....	480
Pewter, bar, pounds.....	29

LABORATORY STORES.

Acid, muriatic, pounds.....	1
Acid, nitric, pounds.....	30
Acid, sulphuric, pounds.....	126
Alcohol, gallons.....	109
Whiskey, gallons.....	22
Alum, pounds.....	2
Antimony, pounds.....	103
Arsenic, pounds.....	22
Beeswax, pounds.....	73
Borax, pounds.....	244
Candles, pounds.....	148
Chloride of lime, pounds.....	30
Chloride of potash, pounds.....	3
Copperas, pounds.....	10
Flour, pounds.....	324
Gum arabic, pounds.....	2
Gum camphor, pounds.....	13
Gum copal, pounds.....	10
Gum shellac, pounds.....	14
Rosin, pounds.....	90
Sal ammoniac, pounds.....	4
Soap, pounds.....	352
Spelter, pounds.....	105
Tallow, pounds.....	1, 290
Tobacco, pounds.....	10
Vitriol, oil of, pounds.....	620
Vitriol, blue, pounds.....	26
Woollen rags, pounds.....	1, 703
Zinc, pounds.....	18, 660

LUMBER, GUN-CARRIAGE TIMBER, BUILDING MATERIALS, ETC.

Casemate chasses timber, sets.....	52
Barbette carriage timber, sets.....	20
Cypress timber, cubic feet.....	261
Oak timber, cubic feet.....	50
Oak, squared, board measure, feet.....	48, 978
Oak logs, number.....	99
Locust timber, board measure, feet.....	8, 573
Hickory timber, board measure, feet.....	2, 000
Pine timber, board measure, feet.....	326, 062
Pine timber, cubic feet.....	22, 240
Plank, assorted, feet.....	241, 907
Boards, assorted, feet.....	419, 781
Scantling, assorted, feet.....	144, 267
Joist, assorted, feet.....	104, 875
Shingles, number.....	171, 450
Laths, number.....	49, 600
Fence posts, number.....	1, 555
Fence rails, number.....	1, 440
Hoop poles, number.....	1, 550
Mahogany, board measure, feet.....	75
Musket stocks, number.....	42, 533
Rifle stocks, number.....	1, 510
Naves, number.....	20
Spokes, number.....	110
Bricks, number.....	1, 416, 225
Bricks, fire, number.....	3, 290

C.—Statement of work done and articles fabricated, procured, and repaired—Continued.

Building stone, perches	625	Axes, number	29
Building stone, cut and hewn, feet.....	3, 655	Augers, number	128
Slate, squares of	87	Awls, number	90
Lime, bushels	6, 394	Bellows, pair	18
Cement, bushels	663	Braces, number	19
Plaster of Paris, pounds	4, 685	Bits, number	192
Sand, bushels	8, 779	Bench screws, number	2
Hair, bushels	180	Buff wheels, number	4
LEATHER AND SKINS.			
Leather, assorted, pounds	15, 961	Bending machines, number	3
Leather, buff, pounds	228	Buttresses, number	4
Leather, buff, old, pounds	10, 038	Brushes, assorted, number	428
Leather, buck, skins	2	Camel's hair pencils, number	90
Leather, deer, skins	15	Chisels, assorted, number	231
Leather, calf, skins	96	Copper pans, number	13
Leather, sheep, skins	19	Creasers, number	4
Leather, seal, skins	749	Chargers, number	52
Leather, morocco, skins	57	Calipers, pair	10
Raw hides, skins	61	Cold chisels, number	99
Old leather, bushels	540	Stockers' chisels, number	17
PAINTS, OIL, GLASS, ETC.			
Paints, mixed, pounds	6, 752	Turners' chisels, number	15
Lead, white, pounds	9, 685	Countersinks, number	50
Lead, black, pounds	112	Cutting machines, number	2
Lead, red, pounds	65	Crucibles, number	253
Ochre, yellow, pounds	979	Drills, number	100
Ochre, red, pounds	14	Drill stocks, number	7
Chrome yellow, pounds	85	Drifts, number	56
Chrome green, pounds	39	Diamond, glazier's, number	1
Dragon's blood, pounds	6	Dies and stocks, number	33
Spanish brown, pounds	32	Dies and taps, number	123
Ivory black, pounds	2	Dredging boxes, number	2
Prussian blue, pounds	10	Dripping pans, number	62
Venetian red, pounds	11	Drilling machines, number	20
Verdigris, pounds	26	Fullers, number	20
Vermilion, pounds	2	Fringe looms, number	2
Umber, pounds	9	Files, assorted, number	19, 352
Lampblack, pounds	184	Formers, cartridge, number	160
Sugar of lead, pounds	25	Formers, rocket, number	19
Gold leaf, books of	9	Funnels, number	85
Putty, pounds	560	Gauges, number	177
Whiting, pounds	3, 504	Gimlets, number	110
Oils, assorted, gallons	3, 443	Gauges, number	18
Varnish, gallons	40	Grindstones, number	25
Lacquer, gallons	14	Gun-barrel turning machines, number ..	2
Pit coal tar, gallons	139	Hammers, assorted, number	109
Spirits turpentine, gallons	246	Hardies, number	2
Litharge, pounds	211	Hatchets, number	6
Glass, feet	8, 620	Heading tools, number	18
Glass, lights of	2, 152	Laboratory knives, number	41
STATIONERY.			
Blank books, number	135	Lathes, turning, number	2
Blank accounts, quires	51	Ladders, number	4
Post and letter paper, quires	1, 346	Lanterns, number	14
Cap paper, quires	641	Mallets, number	32
Drawing paper, sheets of	143	Mandrels, number	10
Envelope paper, quires	140	Mill, hand, corn, number	1
Quills, number	19, 612	Mill, paint, number	1
Pencils, number	271	Nippers, pair	19
Pens, steel, number	75	Oil stones, number	33
Sealingwax, pounds	6	Pliers, pair	15
Wafers, pounds	4	Pincers, pair	5
Sand, black, pounds	51	Picks, number	8
Ink, black, gallons	10	Powder measures, sets	17
Ink, red, gallons	1	Punches, number	116
Tape, pieces of	115	Polishing wheels, number	9
Braid, pieces of	24	Ploughs, number	1
TOOLS.			
Adzes, number	11	Planes, assorted, number	92
Anvils, number	34	Plane irons, number	98
		Rasps, number	17
		Reamers, number	94
		Rules, carpenters', number	32
		Saws, assorted, number	107
		Sieves, number	4
		Screw-drivers, number	24
		Slabs and mullers, number	4
		Sledges, number	3
		Squares, number	68
		Swedges, number	37
		Stamps, number	72
		Scissors, pair	40

C.—Statement of work done and articles fabricated, procured, and repaired—Continued.

Spokeshaves, number	14	Powder, barrels	6
Shot gauges, number	12	Old files re-cut	2, 189
Star moulds, number	25	Screw-drivers	276
Shovels, number	50	Wipers	375
Spades, number	20	Ball-screws	52
Scythes and sneads, number	10	Spring vices	15
Scoops, number	42	Brushes and picks	42
Tongs, pair	22	Carts	6
Vices, number	22	Wagons	5
Wrenches, number	25	Wheelbarrows	5
		Saddle	1
		Sponges and rammers	10
		Cannon cartridge bags, flannel	27
		Cannon wads	167
		Elevating screws	2
		Cartridge-box belts	54
		Rifle flasks, copper	73
		Hall's rifle flasks, copper	29
		Hall's screw-drivers	26
		Hall's wipers	9
		Hall's ball-screws	11
		Hall's spring vices	22
		Hall's bullet moulds	316
		Hall's accoutrements, sets	41
		Hall's locks	32
		Hall's bayonets	48
		Slowmatch, pounds	116
		Budge barrels	20
		Musket barrels	134
		Musket locks	133
		Musket bayonets	1, 119
		Musket guards	59
		Musket triggers	89
		Musket trigger plates	78
		Musket side plates	56
		Musket heel plates	63
		Musket lock plates	56
		Musket upper bands	72
		Musket middle bands	120
		Musket lower bands	71
		Musket band springs	228
		Musket stocks	31
		Grape-shot, stands of	722

GEO. BOMFORD, Colonel of Ordnance.

ORDNANCE OFFICE, Washington, November 20, 1835.

D.

Statement of the arms, accoutrements, &c., procured, and of the expenditures made, under the act for arming and equipping the militia, from October 1, 1834, to September 30, 1835, the same being embraced in statement C.

Muskets, complete	7, 540
Rifles, (Hall's,) complete	1, 060
Artillery swords	2, 000
Cavalry sabres	840
Infantry cartridge-boxes	415
Bayonet belts	2, 354
Sword belts	2, 400
Sabre belts	374
Rifle pouches and belts	301
Cavalry cartridge-boxes	25
Holsters, pairs	65
Six-pounder field carriages, with implements, &c., complete	26
Percussion cannon locks	330

Expenditures.

Amount paid for arms, &c., procured	\$142, 149 90
Amount paid for inspection, packing boxes, storage, and distribution of the arms, &c., to the States and Territories	6, 368 59
	<hr/>
	148, 518 49

GEO. BOMFORD, Colonel of Ordnance.

ORDNANCE DEPARTMENT, Washington, November 20, 1835.

E.

Apportionment of arms to the militia for the year 1834, under the act of 1808, for arming and equipping the whole body of militia.

States and Territories.	Date of return	Number of militia.	No. of arms apportioned in muskets.
Maine.....	1834	40,849	467
New Hampshire.....	1834	28,712	327
Massachusetts.....	1835	44,973	514
Vermont.....	1824	25,581	289
Rhode Island.....	1832	1,377	15
Connecticut.....	1834	24,786	283
New York.....	1835	181,945	2,081
New Jersey.....	1829	39,171	447
Pennsylvania.....	1834	202,281	2,313
Delaware.....	1827	9,229	105
Maryland.....	1834	46,889	536
Virginia.....	1834	102,597	1,173
North Carolina.....	1835	65,593	764
South Carolina.....	1833	51,112	584
Georgia.....	1834	48,461	554
Alabama.....	1829	14,892	170
Louisiana.....	1830	14,808	169
Mississippi.....	1830	13,724	155
Tennessee.....	1830	60,982	697
Kentucky.....	1834	67,190	768
Ohio.....	1835	132,713	1,519
Indiana.....	1833	53,913	617
Illinois.....	1831	27,386	313
Missouri.....	1833	2,815	32
Michigan Territory.....	1831	5,476	62
Arkansas Territory.....	1825	2,028	23
Florida Territory.....	1831	827	9
District of Columbia.....	1832	1,249	14
Total.....		1,311,569	15,000

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 20, 1835.*

F.

Statement of the ordnance and ordnance stores distributed to the militia, under the act of April, 1808, from October 1, 1834, to September 30, 1835.

- 37 six-pounder iron cannon and carriages, with implements, &c., complete.
 - 4 twelve-pounder iron cannon and carriages, with implements, &c., complete.
 - 3 six-pounder caissons, complete.
 - 2 twelve-pounder caissons, complete.
 - 2 four-pounder brass cannon.
 - 330 percussion cannon locks.
 - 6,870 muskets and appendages.
 - 500 rifles (Hall's) and appendages.
 - 1,317 rifles (common) and appendages.
 - 752 pistols.
 - 376 cavalry sabres.
 - 2,186 sets of infantry accoutrements.
 - 301 sets of rifle accoutrements.
 - 376 sets of cavalry accoutrements.
- The whole being equal in value to 12,310 muskets.

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 20, 1835.*

NOTE.—Since the 30th September last (in October, 1835,) orders have been given for ordnance and ordnance stores to be issued to the several States, under the act of 1808, upon settlements made with them up to December 31, 1834, equal in value to 33,397 muskets. These issues have not been embraced in the above statement in consequence of their not being made within the fiscal year.

GEO. BOMFORD.

G.

Statement of the artillery, small arms, accoutrements, and other ordnance stores issued to the troops and the engineer department from October 1, 1834, to September 30, 1835.

CLASS 1.		Rifle flints.....	1,600
32-pounder iron cannon.....	89	Pistol cartridge-boxes.....	338
24-pounder iron cannon.....	162	Holsters, pair.....	273
12-pounder iron cannon.....	6	Sabre belts, (white webbing).....	188
6-pounder iron cannon.....	18	Artillery sword belts.....	4
CLASS 2.		CLASS 8.	
32-pounder casemate chasses, with imple- ments and equipments complete.....	21	Cannon powder, pounds.....	24,925
32-pounder cast-iron carriages.....	21	Musket powder, pounds.....	2,930
24-pounder casemate carriages, with imple- ments and equipments complete....	10	Rifle powder, pounds.....	125
24-pounder chasses, with implements and equipments complete.....	24	Refined nitre, pounds.....	500
24-pounder iron carriages.....	74	Crude sulphur, pounds.....	200
24-pounder chasses, irons, sets.....	74	Rolled sulphur, pounds.....	100
24-pounder barbette carriages, with imple- ments and equipments complete....	36	Cartridges, (cannon).....	434
12-pounder carriages, with implements and equipments complete.....	6	Cartridge bags.....	6,512
6-pounder carriages, with implements and equipments complete.....	19	Musket ball cartridges.....	74,500
CLASS 3.		Musket ball and buckshot cartridges....	20,000
Sponges and rammers.....	12	Musket blank cartridges.....	48,000
Sponges.....	44	Rifle ball cartridges.....	12,200
Powder-horns.....	30	Pistol ball cartridges.....	44,375
Priming wires.....	6	Pistol blank cartridges.....	10,650
Thumbstalls.....	24	Carbine ball cartridges.....	72,775
Portfire stocks.....	4	Carbine blank cartridges.....	10,650
Tompions.....	4	Pounds cartridge paper.....	249
Dark lantern.....	1	Priming tubes, filled.....	6,200
Artillery harness sets for two wheel horses.....	8	Fuses.....	125
Artillery harness sets for two leading horses.....	8	Carbine percussion caps.....	75,975
CLASS 4.		Portfires.....	1,731
32-pounder cannon balls.....	5,152	Pounds slowmatch.....	613
24-pounder cannon balls.....	1,050	Pound quickmatch.....	1
6-pounder cannon balls.....	70	CLASS 9.	
10-inch shells.....	25	Belt plates.....	32
CLASS 5.		Hooks and slides for dragoon sabres....	90
32-pounder grape-shot, stands.....	93	MISCELLANEOUS.	
24-pounder grape-shot, stands.....	336	Musket arm-chests.....	6
24-pounder grape-shot.....	100	Truck wagon for cannon.....	1
6-pounder grape-shot, fixed.....	100	Chain for truck wagon.....	1
6-pounder strapped shot, fixed.....	400	Gins.....	2
6-pounder cannon shot.....	50	Blocks and falls for gins.....	1
CLASS 6.		Twine, pounds.....	3
Wads, (cannon).....	948	Flannel yarn, yards.....	614
Muskets, complete.....	105	Broad white webbing, yards.....	90
Rifles, half stocked.....	67	Narrow white webbing, yards.....	300
Hall's carbines.....	110	Cartridge thread, pounds.....	10
Pistols.....	20	Woollen yarn, pounds.....	2
Dragoon sabres.....	750	Copper tacks.....	1,300
Artillery swords.....	4	Borax, pounds.....	1
CLASS 7.		Rosin, pounds.....	62
Cartridge-boxes.....	26	Antimony, pounds.....	50
Cartridge-box belts.....	22	Refined whiskey, gallons.....	10
Bayonet belts.....	27	Timber, pieces.....	10
Bayonet scabbards.....	66	Paint, pounds.....	4
Brushes and picks.....	83	Pit coal tar, gallons.....	70
Gun slings.....	814	Pumice-stone, pounds.....	3
Sets of infantry accoutrements.....	196	Rotten-stone, pounds.....	5
Ball-screws.....	2	Linseed oil, gallons.....	36
Spring vice.....	1	Spirits turpentine, gallons.....	12
Wipers.....	69	Lampblack, pounds.....	14
Screw-drivers.....	67	White lead, pounds.....	337
Musket flints.....	17,200	Litharge, gallons.....	4½
		Black paint, pounds.....	30
		Chrome green, pounds.....	3
		Spanish whiting, pounds.....	6
		Umber, pounds.....	4
		Handsaws.....	2
		Files.....	18
		Paint brushes.....	42
		Scissors, pair.....	24
		Powder measures.....	10
		Funnel.....	1
		Cooper adze.....	1
		Earthen bowls.....	12
		Musket and rifle chargers.....	24
		Laboratory knives.....	12

GEO. BOMFORD, *Colonel of Ordnance.*

H.

Statement, in abstract, of the operations of the United States lead mines in the vicinity of Fever river, from the 30th of September, 1834, to the 30th of September, 1835.

Pounds of lead made during the year.....	3, 754, 290
Pounds of lead which have accrued as rent during the present year.....	209, 585
Pounds of lead remaining due September 30, 1834.....	328, 802
Total of rent lead due.....	538, 387
Pounds of rent lead received in the year ending September 30, 1835.....	45, 074
Pounds of rent lead remaining due September 30, 1835.....	493, 313

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 20, 1835.*

I.

Statement of the number of pounds of lead made annually at the United States lead mines, from the year 1821, when their superintendence was transferred from the Treasury to the War Department, to the 30th of September, 1835.

Periods.	Fever river.	Missouri.	Total.
Lead made from the year 1821 to September 30, 1823	335, 130	.....	335, 130
Lead made in the year ending September 30, 1824	175, 220	.....	175, 220
Do.....do.....do.....1825	664, 530	386, 590	1, 051, 120
Do.....do.....do.....1826	958, 842	1, 374, 962	2, 333, 804
Do.....do.....do.....1827	5, 182, 180	910, 380	6, 092, 560
Do.....do.....do.....1828	11, 105, 810	1, 205, 920	12, 311, 730
Do.....do.....do.....1829	13, 343, 150	1, 198, 160	14, 541, 310
Do.....do.....do.....1830	8, 323, 998	8, 060	8, 332, 058
Do.....do.....do.....1831	6, 381, 900	67, 180	6, 449, 080
Do.....do.....do.....1832	4, 281, 876	.....	4, 281, 876
Do.....do.....do.....1833	7, 941, 792	.....	7, 941, 792
Do.....do.....do.....1834	7, 971, 579	.....	7, 971, 579
Do.....do.....do.....1835	3, 754, 290	.....	3, 754, 290
Total.....	70, 420, 357	5, 151, 252	75, 571, 609

NOTE.—The amount of rent lead accruing for the above period is 5,909,216 pounds.

GEO. BOMFORD, *Colonel of Ordnance.*

ORDNANCE OFFICE, *Washington, November 20, 1835.*

24TH CONGRESS.]

No. 614.

[1ST SESSION.]

ON A CLAIM OF AN OFFICER OF THE ARMY FOR ADDITIONAL PAY AND RATIONS FOR EXTRA LABOR AND RESPONSIBILITY IN CHARGE OF THE CONSTRUCTION OF THE DELAWARE BREAKWATER.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 21, 1835.

Mr. ELISHA WHITTLESEY, from the Committee of Claims, to whom was referred the petition of George Bender, reported:

That this committee, concurring in the report of the committee presented on the 22d of May, 1834, make the same a part of this report, and herewith present a bill.

MAY 22, 1834.

The Committee of Claims, to whom was referred the petition of George Bender, late a major in the army of the United States, report:

The services are so fully set forth in a communication made by General Jesup to the committee, in answer to inquiries made of him touching the claim of said Bender, submitted to the committee, and analogous cases are so clearly referred to, that the committee think it is unnecessary to go into a minute examination of the facts set forth in the petition, and in a communication addressed to the committee by Major Bender. They concur with General Jesup in the belief that he is entitled to the pay of a major of engineers superintending a work, and for that purpose they herewith report a bill.

QUARTERMASTER GENERAL'S OFFICE, *Washington City, May 17, 1834.*

SIR: I have received your letter of the 14th instant, covering an account of Major Bender, late of the army, for extra compensation when employed on duty connected with the Delaware breakwater; and, in reply, I have the honor to state that the major was ordered to Philadelphia on the 4th of April, 1829, and directed to make the disbursements for that work. He relieved an agent who would, for the disbursements alone, have received two thousand dollars per annum. It was not contemplated at that time to impose any other duties upon him, as the proper disbursement of the large appropriations made by Congress for the work, and the purchase of the large quantities of supplies required, were considered as sufficient employment for any one officer under ordinary circumstances; but it soon became necessary, in consequence of difficulties between the contractors and the engineer, and other agents, to enlarge the sphere of his duties. In May, 1829, the chief superintendence of the operations at the quarries was assigned to him, and he originated and carried into effect the system for ascertaining the quantity of material delivered, and was charged with the whole administrative accountability and direction of the public property, and was required to visit the work frequently, and inspect it minutely.

In October, 1831, he was appointed inspector of the work, and so continued until relieved in December, 1832. In April, 1832, he was required, in addition to his other duties, to take upon himself those of the quartermaster at Philadelphia, which he continued to perform until he was relieved in December, 1832.

During the last year Lieutenant Waite, who, in addition to the superintendence of the quarries, and the accountability for public property at the breakwater, disbursed the appropriation, was allowed one per cent. on his disbursements, not to exceed two dollars per day; and Lieutenants Dimmock and Dusenbury, who successively acted as assistant engineers, were allowed double rations and a per diem of one dollar and twenty-five cents.

When the direction of the breakwater was confided to this department, I found an engineer employed at three thousand five hundred dollars per annum; an assistant, denominated "superintendent of stone work," at two thousand dollars per annum; and a disbursing officer at two thousand per annum. The disbursing agent and assistant engineer were dispensed with, and on the 1st of January, 1830, the salary of the engineer was reduced to three thousand dollars. Many of the duties properly appertaining to the engineer, with the whole accountability of money and property, have successively devolved on the military officers; and it has been for the increased duties and responsibilities that extra allowances have been made in the cases mentioned. I consider Major Bender entitled to the per diem which he claims, upon every principle of justice and equity, in consequence of his increased duties and responsibilities; for it has been as well settled by every department of the government as practice can settle a question, that extra compensation is due for extra services; the principle was admitted and acted on as far back as 1806, during the administration of Mr. Jefferson, and has been admitted and acted on under every subsequent administration. Major Bender was by law entitled to the *pay* and *emoluments* of a major; the measure of his compensation is, therefore, the *whole* pay and emoluments of major, not a *part*; his situation was analogous to that of a major of engineers superintending a work, who would receive both the per diem and additional rations which he claims. There would seem to be no good reason to deprive him of that which others similarly situated have been allowed, except that he failed to claim them until the appropriations for the years in which he acted had been entirely expended.

It is but justice to Major Bender to say that, in my opinion, the excellent system which he adopted, and the judicious arrangements which he made, saved more than fifty thousand dollars to the treasury while he was connected with the work.

I return the papers in the case; and am, sir, respectfully, your obedient servant,

TH. S. JESUP, *Quartermaster General.*

HON. E. WHITLESEY, *Chairman of the Committee of Claims.*

24TH CONGRESS.]

No. 615.

[1st Session.]

APPLICATION FROM CITIZENS OF CLAY COUNTY, MISSOURI, FOR THE ERECTION OF MILITARY POSTS AND OPENING MILITARY ROADS, ETC., AROUND THE FRONTIER OF THAT STATE.

COMMUNICATED TO THE SENATE DECEMBER 24, 1835.

To the Senate and House of Representatives of the United States in Congress assembled:

The memorial of the citizens of Clay county, Missouri, respectfully represents: That your memorialists, for themselves, and in behalf of their fellow-citizens of the adjoining counties, would respectfully introduce to your consideration a subject, to them and the frontier settlers generally, of the highest and most

vital importance. Situated, as we are, upon the extreme western boundary of the United States, and of Missouri, we must necessarily be exposed to depredations from the numerous tribes of Indians, whose proximity renders them a source of increasing solicitude and apprehension to the people of the Missouri frontier. If the favorite policy of the general government, of colonizing upon our frontier, and in our immediate vicinity, the emigrating Indian tribes, endangers the peace and harmony of any section of the Union, we must, from our local situation, feel the full force of such a danger. As a measure of general utility to the whole country, we have nothing to urge against it. But while we are willing, in the genuine spirit of attachment to our common country, to acquiesce in a measure the evils of which we must exclusively bear, we think we have the right to expect the government of the country to afford us that protection which its own policy has rendered more necessary for our security. We have seen the prosecution of this esteemed policy of the government, for several years past, continually increasing the number of Indian tribes upon our frontier, while at the same moment we have seen the profits of the chase as constantly diminishing, and the elk and buffalo still retreating further back from the haunts of their numerous and increasing pursuers. The further continuance of the policy will still further augment the number of Indians already upon our borders, while the means of their support, so congenial to the wild and untamed spirit of the North American savage, will continue diminishing until it has entirely vanished. The period when this will occur cannot, in the nature of things, be remote. It is constantly and with accumulating rapidity approaching; and what will then be the situation of the aborigines can easily be anticipated—they will be compelled to seek some means of support other than the chase. That a race of men, whose inveterate habits have withstood the contagious touch of civilization for centuries without any material and radical change in their modes of life, can be suddenly converted into peaceful tillers of the soil, we consider utterly impracticable and visionary in the extreme. When this policy of the country shall have been accomplished, and the chase of the deer and buffalo shall have ceased, then will the restless and jarring spirit of the Indians manifest itself in bloody wars against each other and midnight invasion of our peaceful homes and firesides. This must be the inevitable result of the measures of the government, unless the protection of our border be greatly increased and improved.

Under these circumstances, deeply impressed with the correctness of our views, and conscious that we are asking nothing of the government but that protection which its own policy has rendered necessary for our security and peace, we would respectfully, but earnestly, ask your honorable body to adopt such a measure as will insure to our widely-extended and much-exposed frontier peace and security. For the purpose of accomplishing the desired object, we would call your attention to a plan of fortification which has been, as we understand, suggested by an intelligent individual possessing great experience, acquired from a long and intimate intercourse with the aborigines of the country, and well acquainted with the local situation of our frontier settlements. The plan is this: "Let a line of military posts be established along or near the boundary between the settlements and the Indians, beginning on the Upper Mississippi and extending to Red river; that well-constructed and permanent forts be built sufficiently large to garrison one company of infantry and two of dragoons at or near the following points: Des Moines rapids, on the Mississippi; Raccoon fork of the Des Moines, at the point where a due west line from the northwest corner of the State of Missouri would intersect the Missouri river; at Fort Leavenworth; at Harmony Mission, on the Neosho, below the Osage agency; at Fort Gibson, between the Arkansas and Red river, and on Red river. All the building materials can be had at each of these points. The distance between them is from one hundred to one hundred and fifty miles, and none of the posts need be more than twenty or thirty miles from the settlements, and not more than one hundred miles from steamboat navigation. The dragoons, instead of performing long journeys to the Rocky mountains, of no earthly service to the government, should be employed in patrolling the road from post to post, in companies, or smaller detachments. They should be empowered to take up every strolling white man or Indian going out from or coming into the settlements, and convey them to the nearest post for punishment. Fort Leavenworth would be the proper place for headquarters. Roads should be opened leading from post to post; bridges made; ferries established; mail-routes so arranged as to convey information, with regularity, to headquarters from all the posts on each end of the route." In addition to this, we would suggest the propriety of transferring the troops stationed at Jefferson barracks to the posts established at the above points. We cannot perceive the utility, if this plan should be adopted, of continuing the troops at Jefferson barracks. They are situated in the interior of the State, and when troops are required to assist in repelling invasion from Indian tribes, it requires much time and trouble to ascend the Missouri river. On the contrary, if Fort Leavenworth should be established as the headquarters, the troops could be sent to all points where, in all probability, they will be required, with much less delay and expense. Should they be needed at any point on the Mississippi, they could descend the Missouri to St. Louis in two days in steamboats. We would also state for your consideration a few important facts in reference to our local situation. By an examination of the map of the country, it will be manifest that we are exposed to attacks from the Indians on the whole western and northern line of the State. The settlements upon the Missouri river, for a distance of more than two hundred miles, are in the form of a narrow oblong, and are confined exclusively to the narrow strip of timbered country extending on each side of the river from twenty to forty miles. This strip of country is broad enough for a line of counties four deep, including those on both sides of the Missouri. The counties which lie immediately upon the river, in the general, contain from two to eight thousand inhabitants, while those which lie back of the above do not contain more than one-sixth that number; and these are scattered over a great extent of territory, which, for want of timber, never can be densely populated. Back of the settlements, on each side of the Missouri, there are extensive prairies, which contain so little timber that they will not be inhabited thickly, in all probability, for the next half century. This being our situation, it will be seen at once that we have a thin long frontier settlement subject to invasion for a distance of more than three hundred and fifty miles, and containing a population altogether inadequate to protect themselves against the incursions of the numerous bands of Indians within from two to ten days' ride of every point of our exposed frontier.

In connexion with this subject, we would also solicit your candid examination of a matter of much importance, not only to your memorialists, but to the government and the Indians themselves. They are impressed with the opinion that the office of superintendent of Indian affairs, now established at St. Louis, should be removed to some point on the western frontier of Missouri, and either established at the town of Liberty, Clay county, Missouri, or at Fort Leavenworth. In favor of this suggestion there are many facts, some of which we would respectfully bring to the notice of your honorable body, and others will, no doubt, readily suggest themselves to the experienced wisdom of Congress. The first prominent advantage of the proposed location which presents itself most forcibly to the minds of your memorialists

is its greater proximity to the various Indian tribes included within the limits of the northwestern superintendency. By examining the geography of the country, and ascertaining the local situation of the Indians, this fact will appear evident. We believe it may be asserted as a fact beyond dispute, that such a location would not only be much nearer the Indian settlements in the general, but be nearer each and every one of them within the limits before mentioned. The advantages of this greater proximity to the Indians, and the agents and sub-agents, must be palpable and obvious. That the Indians would prefer the change of location themselves we think there can be no doubt, as it would greatly lessen the time and trouble incurred in their frequent visits to the superintendency on business or otherwise. We think it equally obvious that the intercourse between the superintendent and Indians, and Indian agents and sub-agents, would be greatly increased and facilitated. The superintendent being the representative of the feelings of the government towards the Indians, and exercising, as he does, a superintending control over the agents and sub-agents, must necessarily have it in his power to exert a pervading influence upon the various tribes within the extensive limits of his superintendency. This power the proposed location would give him the means to exert with greater effect in disposing the Indians to peace among their own hands and towards the frontier settlements of the whites. From the vicinity of his situation he would obtain fuller and earlier information of any manifestation of warlike intentions, and be enabled to take such prompt and decided steps as would check the evil in the bud; while, on the contrary, had the information to be first transmitted to St. Louis, and a delay of some weeks incurred, it might be too late to arrest progress of ruin and desolation. But the salutary influence which he could exercise over the Indians is only one of the many advantages which would result from a change of location. One of the greatest sources of danger to the frontier settlements arises from the mutual incursions of whites and Indians upon the territory of each. These mutual aggressions could be greatly diminished, if not entirely prevented, were the superintendents in the immediate vicinity of their commission. These advantages, which would tend so much to preserve peace and harmony on our frontier, are of great importance to your memorialists, as they are also to the country generally.

The next class of benefits to which we would ask your attention seems more immediately to concern the government itself. It is confidently believed by your memorialists that much useless expense now incurred by the government in the Indian department in this quarter might be avoided. The estimated amount (as appears from the Blue Book) for furnishing the Indians with provisions while visiting the superintendent, agents, and sub-agents, for the year 1835, is eleven thousand eight hundred dollars. Should the proposed change occur, the Indians in going to and returning from the superintendency would not have to travel so great a distance, or to incur so much trouble and expense, passing, as they would, through an unsettled country, where they could procure provisions by the chase. The government is bound by treaty stipulations to furnish rations for most of the emigrating Indian tribes; and, from our adjoining situation and abundant capacity, we must necessarily furnish the produce required to fill the various contracts of the government in this quarter. Our citizens living upon the spot where the provisions must be purchased by the contractor, and being fully acquainted with the localities as well as the inhabitants of the country, could fill these contracts much cheaper than persons living at a distance. The contracts would be let out here upon the spot, and companies of our citizens would put in bids, who could furnish from their own farms much of the produce required; consequently they could and would underbid individuals whose residences and whose business would be in another section of the State.

The government is further bound by treaty with several Indian tribes to furnish annually a certain amount in agricultural implements, which can, as experience has proven, be furnished here much cheaper than in St. Louis. The reason of this is obvious. The contracts are generally small, and are to be filled at such a distance from St. Louis that any one not considered by persons generally as meriting attention cannot procure one; consequently there is little, if any, competition amongst bidders, and the contractor obtains the most enormous prices. For the truth of this remark we might appeal to every Indian agent and sub-agent on the Upper Missouri.

With these facts, and many others before us which might be advanced, we believe it would subserve the mutual interest of all parties to change the present location of the northwestern superintendency. We hope you will bestow upon those matters the attention they may merit, and adopt such measures as will give us permanent and lasting protection to our lives and property.

Resolved, That the foregoing memorial contains the unanimous sentiments of this meeting.

Resolved, That our senators and representatives in Congress be, and they are hereby, requested to use their utmost efforts to effect the passage of a law in accordance with the foregoing memorial.

Resolved, That the secretary send a copy of the proceedings of this meeting to each of our senators and representatives in Congress.

Resolved, That our sister counties be requested to hold similar meetings.

Resolved, That the different newspapers in the State be requested to publish these proceedings.

JOHN THORNTON, *Chairman.*

EDWARD M. SAMUEL, *Secretary.*

24TH CONGRESS.]

No. 616.

[1ST SESSION.]

EXPLANATORY ESTIMATES FOR THE ORDNANCE DEPARTMENT FOR 1836, AND THE NUMBER, LOCATION, AND CONDITION OF HOSPITALS FOR THE USE OF THE ARMY.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES DECEMBER 29, 1835.

Estimate for the service of the Ordnance department for the year 1836.

A.—For the national armories		\$330, 000
B.—For the armament of fortifications, viz:		
Providing in part the cannon, howitzers, mortars, cannon balls, shells, gun-carriages, mortar-beds, &c., for the fortifications completed, and for those now erecting		200, 000
C.—For the current expenses of the ordnance service, viz:		
Repairing small arms of the several arsenals and depots	\$15, 675	
Constructing and repairing field artillery carriages	11, 450	
Ordinary repairs, to keep the public buildings in order at the several arsenals and depots	13, 320	
Repairing and preserving military stores at the arsenals and fortifications	8, 750	
Miscellaneous expenses at arsenals, including stationery, printing, fuel, forage for public horses, and other incidental expenses	10, 000	
Providing ordinary military supplies for the army	9, 150	
Expenses of the lead mines, viz:		
Compensation to the persons employed in collecting rents, receiving and distributing lead	\$4, 650	
Stationery, printing, fuel, forage for public horses, &c.	1, 475	
For building two warehouses and an office on the west bank of the Mississippi river	1, 200	
		7, 325
		75, 670
D.—For the purchase of gunpowder:		
For the purchase of 5,000 barrels of gunpowder, or materials for the same		100, 000
ARSENALS.		
E.—Mount Vernon, Alabama:		
For erecting a permanent brick wall to enclose all the buildings, measuring 5,280 feet in length, ten feet high, two feet thick, including the excavation, 350 cubic yards of earth, and coping the same with copper or stone	28, 812	
For constructing culverts of brick, for carrying off the water in front of the arsenal, 300 feet long, 4½ feet high, walls one foot thick, to be arched and paved with brick at bottom	994	
Removing the earth in arsenal yard, graduating and gravelling the same, containing 10,000 cubic yards, paving gutters, gravelling roads and walks, curbstone included	3, 350	
Erecting a guard-house of brick at the main gate, 25 feet deep and 12 feet wide, one story high	793	
For constructing a brick cistern, 15 feet diameter, to be grouted with hydraulic cement, and sewers leading to it, in the centre of the arsenal yard	1, 025	
		34, 974
F.—Fort Monroe, Virginia:		
For making a yard around the timber shed near the wharf, for storing lumber and other materials	400	
For erecting four houses to accommodate two families each, for dwellings for hired mechanics	7, 640	
		8, 040
G.—Pittsburg, Pennsylvania:		
For covering the roofs of the following buildings with zinc, viz:		
Timber shed, barracks, armory, blacksmith shop, carriage-makers' shop, turners' shop, harness shop, machine shop, and engine house; office building and kitchen to officers' quarters, containing 51,136 square feet; preparing the roofs and putting on the zinc	7, 334	
For making repairs and alterations to officers' quarters, and for finishing iron fence between the arsenal and quarters	1, 596	
For paving gutters with stone in the road around the public land at this arsenal, 2,068 yards, at one dollar per yard	2, 068	
For the purchase of the water right, and for the expenses of conducting water to this arsenal	3, 000	
		13, 998

H.—Frankford, Pennsylvania:		
For constructing two cisterns, and laying iron pipes to them, from the buildings.....	\$1, 500	.....
For constructing a large sewer to drain the arsenal yards.....	2, 000	.....
For repairing the western storehouse at this arsenal.....	6, 000	.....
For repairs and preservation of buildings and enclosures at this post.....	500	.....
		\$10, 000
I.—Detroit, Michigan Territory:		
For completing the following buildings at this post, viz:		
Officers' quarters, soldiers' barracks, carpenters' shop, smith shop, armorers, turners, and saddlers' shop, gun-carriage shed and paint shop; office, guard-room, and surrounding wall to the buildings..	18, 235	.....
For graduating arsenal square, making drains, &c.....	1, 765	.....
		20, 000
K.—Watertown, Massachusetts:		
For painting the public buildings at this arsenal.....		1, 000
L.—Washington city:		
For building an addition to the carriage-makers' shop of 40 feet.....	1, 700	.....
For building a new gun shed 202 feet long.....	2, 500	.....
For constructing 1,381 feet of sea wall on the eastern front of the arsenal grounds, of stone, and laying the same.....	1, 242	.....
For filling up the marsh on the eastern front, for the location of gun sheds, 3,333 cubic yards of earth, at 50 cents per cubic yard....	1, 666	.....
For flagging for the shot piles, 156 square yards, at \$1 35 per yard..	210	.....
For building a new casting-house for cupola furnace.....	600	.....
For the purchase of a site, and cost of construction, of a new magazine and keeper's house.....	7, 500	.....
		15, 418
M.—Harbor of New York:		
For completing the construction of a small depot for munitions of war, at Governor's island, New York, viz:		
For finishing the necessary buildings, enclosures, wharf, the graduation of the grounds, and for the construction of permanent skidding for the preservation of heavy cannon, including an additional building for quarters for ordnance men, and storeroom for flannel, paper, &c.....		5, 841
N.—Augusta, Maine, (Kennebec arsenal:)		
For enclosing in part the arsenal grounds with a permanent stone wall, to be seven feet high, and 1½ foot thick above, and three feet deep, and two feet thick below the surface of the ground....	10, 000	.....
For flagging the basement story of the arsenal, repointing the north end and upper story, and repainting the same.....	1, 200	.....
For a piazza six feet in width, on the west side of the quarters, and for other necessary alterations and repairs to the building.....	362	.....
For rebuilding a portion of the river wall, and extending the same..	1, 250	.....
For prosecuting the improvements now in progress, cutting down and removing the high ridge running through the centre of the lot, filling ravines, building culverts, drains, &c., and for the gradual improvement of the post.....	2, 500	.....
		15, 312
O.—Augusta, Georgia:		
For the construction of a small magazine at this post, of brick, 12 feet long, 10 feet wide, with slated roof.....	750	.....
For the construction of a brick cistern, 13 feet wide and 13 feet deep, to be in hydraulic cement.....	530	.....
		1, 280
P.—Watervliet, New York:		
Towards constructing a permanent stone wall around the arsenal land (45 acres) recently purchased at this post.....	18, 820	.....
For constructing 17,750 cubic feet of foundation wall, and 942 lineal feet of iron fence in front of the arsenal along River street....	7, 456	.....
For filling 4,000 cubic yards of earth in ravine along River street, at 20 cents per yard, \$800; and for paving 1,242 feet of side walk along River street, \$670.....	1, 470	.....
For erecting a saw-mill at the new shops.....	534	.....
For constructing a brick cistern in area of the timber sheds.....	900	.....
For completing the grinding machine, and for constructing one vertical drill-press.....	570	.....
For flooring north and south gun-carriage sheds, repairing and partial additions to officers' quarters and guard-room, repairing public wharf, fences, culverts, &c.....	2, 395	.....
		32, 145
Q.—St. Louis, Missouri:		
For constructing walls of masonry between the storehouses and workshops at this post.....	3, 077	.....
For enclosing the barracks yard with a low wall of masonry, and paling above, and for the erection of a melting furnace, guard-room, tool-house, and fire-engine room.....	2, 952	.....

For the erection of two timber sheds of masonry, 151 feet by 30 feet each.....	\$5, 622		
For the erection of two gun-carriage sheds, 105 feet by 30 feet each.....	3, 608		
For the construction of walls of masonry between the workshops and gun-carriage, and timber sheds.....	1, 379		
For graduating the grounds at this arsenal.....	800		
For constructing six water cisterns of masonry, with leading pipes from the general workshops, and from the gun and timber sheds.....	2, 061		
		\$19, 499	
R.—Apalachicola, Florida: Towards completing the arsenal and other buildings in Florida, under the act approved April 5, 1832.....			35, 000
S.—Baton Rouge, Louisiana: For constructing a powder magazine at this post, to contain from 2,500 to 3,000 barrels.....	15, 000		
For erecting quarters for enlisted and hired workmen at this arsenal.....	3, 000		
		18, 000	
T.—Pikesville, Maryland: For procuring 1,000 feet of stone coping for the walls of the magazine at this post, and laying the same; relaying brick pavements; for a fence to enclose the stable yard, and for new flooring for workshops.....			995
			\$231, 502
U.—For supplying the arsenals with certain indispensable ordnance stores, viz: 10, 000 pistols, at \$8.....	80, 000		
2, 500 cavalry sabres, at \$10.....	25, 000		
2, 500 Hall's carbines, at \$21.....	52, 500		
2, 500 sets of cavalry accoutrements, at \$4 79.....	11, 975		
1, 000 sets of Hall's rifle accoutrements, at \$4 05.....	4, 050		
5, 000 sets of infantry accoutrements, at \$3 01.....	15, 050		
			188, 575
V.—Cannon balls: For the purchase of 20,000 32-pounder, and 1,300 42-pounder cannon balls.....			29, 488
			1, 155, 235

RECAPITULATION.

For the national armories.....	\$330, 000
For the armament of the fortifications.....	200, 000
For the current expenses of the ordnance service.....	75, 670
For the purchase of gunpowder.....	100, 000
For the arsenals.....	231, 502
For supplying the arsenals with certain ordnance stores.....	188, 575
For the purchase of cannon balls.....	29, 488
	<u>1, 155, 235</u>

ORDNANCE OFFICE, *Washington, November 12, 1835.*GEO. BOMFORD, *Colonel of Ordnance.*

NOTES.

A.—The sum of \$330,000, herein estimated, is the same in amount as was appropriated for those establishments for the year 1835.

B.—For the armament of fortifications the sum of \$200,000 has been embraced in this estimate, being in addition to the amount of \$100,000 which has been annually appropriated for this branch of service for several years past. The additional amount inserted, if appropriated, is designed exclusively for procuring the gun-carriages necessary to arm the fortifications completed as well as for those now completing.

C.—The sum of 75,670 has been inserted for the current expenses of the ordnance service, being about \$7,600 more than was appropriated for this branch for the year 1835. This amount of \$75,670 being required in consequence of the expenditures under this head being greater during the present year than was foreseen when the estimate of 1835 was prepared.

D.—There is at present but a small quantity of gunpowder on hand, and much of it is of very inferior quality—none of any importance having been purchased since 1819. All this powder that could be rendered serviceable has been remanufactured during the present year, and it is estimated that the present state of the country warrants a supply of at least 5,000 barrels for the fortifications.

E.—The present enclosure around the public buildings is a temporary *wooden* fence, which evidently presents no barrier to the frequent and prevalent fires in the adjacent woods; from this circumstance the buildings and other public property at this post are greatly endangered. The other sums inserted are deemed necessary towards the completion of the works according to the original design. The inspector

of armories and arsenals has recently inspected this arsenal and carefully examined the works. He recommends that the amount embraced in this estimate be asked for, as the objects to be effected are deemed indispensable. He states the necessity of bringing together at once a sufficient number of workmen from distant parts of the country; it being economical to employ a large rather than a small number, on account of subsistence and other charges, and that a large appropriation will accomplish more work in proportion to the sum expended than a small one.

F.—The necessity for erecting quarters for the mechanics arises from the circumstances that those now occupied by them are old decayed frame buildings, and not worth repair; and it being impossible to procure lodgings in the vicinity of the arsenal renders it proper that quarters should be erected near the workshops in which the workmen are employed. The inspector of armories and arsenals approves the above estimate.

G.—The buildings at this post were built about twenty years since, and the roofs covered with shingles—they are old and decayed; it is proposed to cover the buildings with zinc. There is at present no entrance into the quarters on the proper front, and the yard being now enclosed with a permanent fence, it is proposed to give each a centre door and portico; this will be the means of removing a great inconvenience in the present plan, and cause the buildings to be properly ventilated. The iron fence between the arsenal and quarters was commenced in 1835; an amount has been embraced in this estimate for its completion. The gutters are required in the roads all around the public land, which, during the rainy season, have washed so badly by the heavy rains as to endanger the stone walls. The great quantity of water that empties from the high grounds unto the river, through the road on the northeast side of the public lands, renders such an improvement, as is here estimated for, very important. The great importance to the place of a more ample supply of water renders the purchase of the water right very desirable; and it is believed that the amount required, although less than the sum demanded by the proprietors, may suffice to procure the privilege so long sought after of taking water from soft springs, the only source from which a supply of water can be obtained from land higher than that upon which the public buildings stand. Recommended by the inspector of armories and arsenals.

H.—The construction of two cisterns at this post to contain water is deemed necessary for security against accidents by fire. The ground on which the buildings are placed is so nearly level as to be, with great difficulty and very slowly drained—an inconvenience felt especially during the winter. It is not doubted that, by an effectual system of draining, the healthfulness of the place will be improved, and the durability of the public buildings increased. To effect these objects the sum of \$2,000 has been inserted for the construction of a large sewer.

The western storehouse or arsenal, erected many years since at this post, requires a thorough repair; in its present condition it is considered unsafe for storing heavy stores. The sum of \$6,000 has, therefore, been embraced for repairing the building and putting it in complete order. Recommended by the inspector of armories and arsenals.

I.—The officer in charge of this post estimates the sum of \$20,000 as necessary to be expended in the year 1836, in order to fulfil the intentions of the 5th section of the act No. 152, approved June 20, 1832. The inspector of armories and arsenals approved the above estimate as far as it goes, but thinks it scarcely sufficient for the objects contemplated.

L.—An addition to the carriage-makers' shop at this arsenal is required for the convenience of putting together barbette and casemate carriages constructing for the fortifications.

The officer in charge of the post recommends the building of a gun shed, in consequence of the present shed being full of carriages.

The building of the sea wall is considered indispensable, for the proper enlargement of the space within the arsenal limits, that all the necessary buildings may be erected, and, by the filling up of the marsh, that the health of the place may be improved. The inspector of armories and arsenals has recently inspected this post and recommends the above.

The magazine is situated on the margin of the Chesapeake and Ohio canal, about four miles from Georgetown, and so near that the embankment of the canal partly rests on the outer wall of the magazine. The walls, consequently, and the foundations of the building, are constantly kept wet by the water penetrating through the embankment; in consequence of which, the powder in the magazine suffers very materially. Besides, the situation is unhealthy; all persons who have been stationed there having been constantly sick during the summer months.

The sum of \$7,500 has been inserted for the purpose of procuring a more suitable site, and erecting in part a magazine sufficiently capacious to contain from 3,000 to 3,500 barrels of powder.

M.—The city of New York has advantages of communication with the coast of the United States which are not possessed by any other seaport—transportation for munitions of war to almost every part of the coast being attainable at all times of the year. But, the United States having no suitable storehouse there, much inconvenience has been experienced during that season of the year when the communication with the city of New York and the Watervliet arsenal is closed by ice; and, when stores are wanted for transportation, they cannot, therefore, descend the North river. It is for these reasons a small depot at Governor's island is required.

N.—A suitable enclosure for the public grounds is very necessary at this post; it is proposed to erect permanent stone walls around all the buildings for their security. The flagging of the basement story of the arsenal is necessary, in order that the stores may be deposited there for preservation. The erection of a piazza to the quarters is required to protect the buildings in the inclement season of the year. The rebuilding and extension of the river wall is necessary for securing the banks of the river road, and for the enlargement of the limits of this post, that the necessary buildings may be erected thereon when required. The item embraced in this estimate for the prosecuting the improvements of this post is considered sufficiently explanatory. The inspector of armories and arsenals has recently inspected this arsenal, and recommends that the amount of \$15,312 be estimated, as the objects to be effected are deemed of great utility.

O.—The items under this head are considered sufficiently explanatory.

P.—It is deemed necessary to enclose the grounds by suitable walls, with a view to the ultimate fulfilment of the object of the act No. 59. This amount, (\$7,456,) added to that for continuing the walls around the public grounds, will completely enclose the public buildings situated on the east side of the Erie canal, and, in a great degree, on the west, and is deemed indispensably necessary for the protection of the public property and buildings—surrounded by a large and growing population, and exposed (however great the vigilance exercised) to the designs of any incendiary or pilferer. During the past season

the buildings were fired and narrowly escaped destruction. The filling of the ravine is considered indispensable, as connected with the walls, and for convenient access to the shops. The municipal authorities of the town of Watervliet have caused the streets on both sides of the arsenal to be paved, and it is desirable that the pavement on the United States property should be made to correspond with that of the town; to effect which, the sum of \$670 has been inserted in this estimate.

The erection of a saw-mill is much wanted. There is abundant and convenient water for working the mill, and the cost of the erection will be saved by one year's operations at the post.

The four timber sheds are situated west of the canal, and are about a quarter of a mile from a supply of water. The erection of a cistern to contain water near them is deemed indispensable to guard against accidents by fire.

A grinding machine at this post was commenced in 1835; the sum of \$570 has been embraced in this estimate for its completion, as well as for constructing a vertical drill-press. The sum of \$2,395 has been inserted for repairs and additions to the buildings, and for the gradual improvement of the post.

Q.—The erection of the connecting walls between the buildings already constructed is deemed necessary for their security. The barracks occupy a position immediately in the centre of the area; they are open on every side; it is proposed to enclose them with a wall of masonry below and a paling fence above.

The erection of timber and gun sheds is deemed indispensable for the preservation of gun-carriages and timber; the lumber for their construction has already been purchased.

The amount embraced for the construction of the walls between the workshops and sheds is required, in order that the plan originally contemplated for this arsenal may be carried into effect.

A supply of water is essentially necessary—first, as a measure of security against fire, the distance of the river precluding a supply from thence in an event of this kind, and the wells sunk yielding so small a quantity that no reliance can be placed on that source. The inspector of armories and arsenals recommends the above.

R.—The officer who was in charge of this post has estimated the sum of \$73,998 for completing the public works at Chattahoochee during the year 1836, in order that the intention of the act approved the 5th of April, 1832, be carried into effect as early as practicable.

The inspector of armories and arsenals recently inspected this post, and found the materials provided for the construction of the buildings to be of an excellent quality, and the execution of the work to be good and creditable to the officers who have superintended it. He states that a large sum can always be expended with more economy than a small one, in any one year, in consequence of the high wages paid to master-workmen and others, and recommends that \$50,000 be estimated for the expenditures of 1836—a sum much larger, it is perceived, than that contained in the estimate, to wit, \$35,000.

S.—The position of the present magazine is deemed an unsafe one, inasmuch as the infantry barracks have been built within twenty feet of its door. In the event of fire breaking out in the barracks, the whole of the valuable buildings and other property at this post would be endangered. Great quantities of powder have been ruined by the defective construction of this magazine, which is now old and decayed; but the principal objection is that its dimensions, if it were unobjectionable in other respects, are wholly insufficient for the supply of powder in that section of the country.

The position of Baton Rouge, always guarded by a large military force, and being on the Mississippi river, and within easy communication with New Orleans, makes it the most eligible position for a large magazine that can be found between St. Louis and the mouth of the Mississippi.

The present ordnance barracks are wholly unfit for soldiers' quarters, being very old, small, and decayed. The erection of new barracks is considered indispensably necessary for the health and comfort of the men stationed at this post.

T.—The wall around the magazine at this post was originally covered with shingles, which have decayed; it is proposed to cover it with stone coping, which alone can preserve it.

The other items are considered sufficiently explanatory, and are deemed indispensably necessary for the preservation and good condition of the post. The amount of \$995, embraced in this estimate, has been approved and recommended by the inspector of armories and arsenals.

U.—The stores embraced in the first five items are required, since the arsenals have been completely exhausted of this description of stores in consequence of the recent issues to the several States, under the act of 1808, in order to close their accounts up to December, 1834. The 5,000 sets of infantry accoutrements are required, there being but a small supply on hand east of the Alleghany mountains.

V—These being necessary in order to make 100 rounds for the guns to be mounted on carriages now made, and which are expected to be made under the appropriations now estimated for.

In the present prospect of the country, the fortresses would, it is considered, be unsafe without this provision of round shot.

HOSPITALS AT VARIOUS POSTS.—EXPLANATION.

SURGEON GENERAL'S OFFICE, December 28, 1835.

SIR: In compliance with your instructions, I have to state that, from the special reports received from the several posts agreeably to an order of the 21st October last, it appears—

First. That no hospitals have been erected at the following posts, and that the sick have been placed in barrack rooms, casemates, or temporary buildings, none of which have the necessary accommodations, and most of which are entirely unsuited for the purpose, viz:

- | | |
|---|-----------------------------------|
| 1. Hancock Barracks, Maine. | 7. Fort Johnston, North Carolina. |
| 2. Fort Independence, Massachusetts. | 8. Fort Macon, North Carolina. |
| 3. Fort Trumbull, Connecticut. | 9. Fort Oglethorpe, Georgia. |
| 4. Fort Columbus, New York. | 10. Fort Morgan, Alabama. |
| 5. Fort Hamilton, New York. | 11. Fort Pickens, Florida. |
| 6. Fort Washington, District of Columbia. | 12. Fort Jackson, Louisiana. |

Second. That the buildings at the following posts are badly arranged, old, and entirely decayed, viz:

- | | |
|--------------------------------------|----------------------------|
| 1. Fort Preble, Maine. | 4. Fort Jesup, Louisiana. |
| 2. Fort Constitution, New Hampshire. | 5. Fort Gratiot, Michigan. |
| 3. Fort Wolcott, Rhode Island. | |

Third. That those at the following posts, except, perhaps, Fort McHenry, are sufficient for the present, with suitable alterations and repairs, viz:

- | | |
|------------------------------------|-----------------------------|
| 1. Fort McHenry, Maryland. | 4. Fort Mitchell, Georgia. |
| 2. Fort Severn, Maryland. | 5. Fort Wood, Louisiana. |
| 3. Castle Pinkney, South Carolina. | 6. Fort Crawford, Michigan. |

Fourth. That those at the following posts afford sufficient accommodations for the sick, and are in good order, a few of them requiring trifling repairs:

- | | |
|-----------------------------------|-----------------------------------|
| 1. Fort Sullivan, Maine. | 7. New Orleans, Louisiana. |
| 2. Fort Wood, New York. | 8. Fort Pike, Louisiana. |
| 3. Fort Monroe, Virginia. | 9. Baton Rouge, Louisiana. |
| 4. Fort Moultrie, South Carolina. | 10. Jefferson barracks, Missouri. |
| 5. Fort Marion, Florida. | 11. Fort Dearborn, Illinois. |
| 6. Fort King, Florida. | 12. Fort Mackinac, Michigan. |

Reports remain to be received from a few of the extreme posts, viz:

- | | |
|-----------------------------|-----------------------------------|
| Fort Brooke, Florida. | Fort Armstrong, Illinois. |
| Fort Towson, Arkansas. | Fort Winnebago, Michigan. |
| Fort Gibson, Arkansas. | Fort Snelling, Upper Mississippi. |
| Fort Coffee, Arkansas. | Fort Howard, Michigan. |
| Fort Leavenworth, Missouri. | Fort Brady, Michigan. |

New hospitals will be required at several of these.

The reports received contain a description of "the number and dimensions of the rooms occupied; the uses to which they are applied; the number of patients they can conveniently accommodate; and the full number they can contain in cases of emergency;" and will, if required, afford more particular information in respect to each post; and from these it is believed that new hospitals are now required at all the posts enumerated in the first and second lists above given.

Very respectfully, your obedient servant,

JOS. LOVELL, *Surgeon General.*

HON. LEWIS CASS, *Secretary of War.*

24TH CONGRESS.]

No. 617.

[1ST SESSION.]

PROPOSAL OF THE SECRETARY OF WAR FOR AN APPROPRIATION FOR PAYING THE FLORIDA MILITIA CALLED OUT TO SUPPRESS INDIAN HOSTILITIES IN THAT STATE.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JANUARY 5, 1836.

WAR DEPARTMENT, *January 4, 1836.*

SIR: Information has reached this department that hostilities have been commenced by the Seminole Indians in Florida. General Clinch has the command of the troops in that Territory, and has, subject to his orders, fourteen companies of the army, amounting to about seven hundred men. He has also been authorized to call upon the acting governor for such militia force as he may find necessary. Under this authority a considerable number have been ordered out and are now in the field. The means of making anything like a detailed estimate of the expenses are not within the reach of the department; but it is necessary that funds should be provided to meet the claims which will no doubt be presented without delay, and one of which has already been made. I have therefore the honor to propose that an appropriation may be made of the sum of eighty thousand dollars for the expenses attending the repression of the hostilities commenced by the Seminole Indians in Florida.

Very respectfully, your most obedient servant,

LEWIS CASS.

HON. C. C. CAMBRELENG, *Chairman Committee Ways and Means, Ho. Reps.*

24TH CONGRESS.]

No. 618.

[1ST SESSION.]

QUANTITY AND CONDITION OF THE ORDNANCE AND ORDNANCE STORES AND ARMS BELONGING TO THE UNITED STATES AT THE ARMORIES, ARSENALS, DEPOTS, AND FORTS; AND EXPENDITURES AT THE SEVERAL ARMORIES AND ARSENALS, AND FOR THE MANUFACTURE OF HALL'S RIFLES, FROM 1816 TO 1834.

COMMUNICATED TO THE HOUSE OF REPRESENTATIVES JANUARY 5, 1836.

WAR DEPARTMENT, *January 2, 1836.*

SIR: In compliance with the resolution of the House of Representatives of February 23, 1835, calling upon this department for certain information in regard to the condition of the ordnance and ordnance stores belonging to the United States, and the expenditures accruing therefrom, I have the honor to transmit two reports; the first from the colonel of ordnance, the second from the Second Auditor.

The latter shows the amount and objects of expenditure from 1816, when the office was established, to the close of 1834.

For the information required by the resolution for the period prior to 1816, I beg leave to refer to the document that accompanied the President's message of January 3, 1823,* in the second session of the 17th Congress, which may be found in the ninth volume of the State Papers, and which I request may be considered a part of this report.

Very respectfully, your most obedient servant,

LEWIS CASS.

Hon. JAMES K. POLK, *Speaker of the House of Representatives.*

ORDNANCE OFFICE, *Washington, December 24, 1835.*

SIR: I have the honor to transmit herewith the several statements, (marked from A to D, inclusive,) made in obedience to the resolution of the House of Representatives of the 23d February, 1835. They contain all the information called for as fully as can be obtained from the records of this office.

Statement A exhibits that part of the information called for by the following quotation from the resolution: "A statement showing the state and condition of the ordnance and ordnance stores under the control of the Ordnance department, the number and kinds of arms and accoutrements, and heavy ordnance on hand, specifying the number and kinds fit for service."

Statement B exhibits "the average cost of each kind of ordnance and small arms and accoutrements in each year."

Statement C exhibits the number of officers and workmen "employed at the respective armories and arsenals in each year;" and "the number of workmen, in each year, devoted to the manufacture of Hall's patent rifles."

Statement D exhibits "the number and kinds of arms produced;" and "the number of Hall's rifles annually produced, and the place where manufactured."

A copy of the resolution above-mentioned, copied in full on the succeeding page, is also transmitted. Those parts of it which are complied with by this office being designated by red lines, [printed in *italic*.]

I have the honor to be, sir, your most obedient servant,

G. BOMFORD, *Colonel of Ordnance.*

Hon. LEWIS CASS, *Secretary of War.*

TWENTY-THIRD CONGRESS, SECOND SESSION.

CONGRESS OF THE UNITED STATES.

IN THE HOUSE OF REPRESENTATIVES, *February 23, 1835.*

On motion of Mr. Mann, of New York,

Resolved, That the Secretary of War be requested to report to the next Congress, at the commencement of their first session, a statement showing the state and condition of the ordnance and ordnance stores under the control of the Ordnance department, the number and kind of arms and accoutrements, and heavy ordnance on hand, specifying the number and kinds fit for service; the amount of money expended in each year at the respective armories and arsenals, and the general objects of such expenditure, since their establishment; the average cost of each kind of ordnance and small arms and accoutrements in each year, showing the aggregate expense of buildings, implements, and machinery, devoted to the manufacture of arms at each armory; the number of officers and workmen employed at the respective armories and arsenals in each year, and the number and kinds of arms produced, the aggregate cost of the whole, and the average cost of each description manufactured; and showing, separately, the expenditure, for each year, of buildings, machinery, implements, workmen, and their number, in each year, devoted to the manufacture of Hall's patent rifles; the number annually produced, and the place where manufactured; the average cost of each, including buildings, machinery, and all charges; and the number now belonging to the United States.

Attest:

W. S. FRANKLIN, *Clerk.*

SPECIAL INDEX.

A statement showing the state and condition of the ordnance and ordnance stores under the control of the Ordnance department; the number and kind of arms and accoutrements, and heavy ordnance on hand, specifying the number and kinds fit for service.—(See "Statement A.")

The average cost of each kind of ordnance and small arms, and accoutrements in each year.—(See "Statement B.")

The number of officers and workmen employed at the respective armories and arsenals in each year.—(See "Statement C.")

The number and kinds of arms produced.—(See "Statement D.")

The average cost of each description manufactured.—(See "Statement B.")

Number of workmen devoted to the manufacture of Hall's patent rifles.—(See "Statement C.")

Number of Hall's patent rifles annually produced, and place where manufactured.—(See "Statement D.")

The other information called for by the resolution is furnished by the Second Auditor.

* For this document see volume 2 State Papers on Military Affairs, No. 236, page 472.

A.

Statement of the ordnance and ordnance stores in the land service, made up from the returns of the fourth quarter of 1834.

Arsenals, armories, and depots.	CLASS 1.—ORDNANCE.																			
	Brass cannon.																			
	24-pounder, American.	24-pounder, trophy.	18 pounder, American.	12-pounder, American.	12-pounder, French.	9-pounder, American.	9-pounder, English.	8-pounder, French.	8-pounder, Spanish.	8-pounder, American.	6-pounder, American.	6-pounder, English.	6-pounder, French.	4-pounder, American.	4-pounder, foreign.	3-pounder, American.	3-pounder, English.	3-pounder, foreign.	2-pounder, American.	1-pounder, American.
ARSENALS.																				
Allegheny, serviceable																				
Allegheny, unserviceable												6			2		3			
Augusta, serviceable											5					1				
Augusta, unserviceable																				
Baton Rouge, serviceable					3	2		1			3		3	5						
Baton Rouge, unserviceable																				
Bellona, serviceable																				
Bellona, unserviceable																				
Champlain, serviceable				1							1									
Champlain, unserviceable																				
Fort Monroe, serviceable																				
Fort Monroe, unserviceable																				1
Frankford, serviceable		2											5			1			1	
Frankford, unserviceable																				
Kennebec, serviceable																				
Kennebec, unserviceable																				
Mount Vernon, serviceable																				
Mount Vernon, unserviceable																				
Pikesville, serviceable																				
Pikesville, unserviceable																				
Rome, serviceable																				
Rome, unserviceable																				
St. Louis, serviceable																				
St. Louis, unserviceable																				
Washington, serviceable	7		1	5	3			1	2		2	2	2		1		6	3		
Washington, unserviceable											2									
Watertown, serviceable				8				2			2			2		1				
Watertown, unserviceable																				
Watervliet, serviceable																				
Watervliet, unserviceable		1		11							2	2	18		4					
ARMORIES.																				
Springfield, sup't, serviceable																				
Springfield, M. S. K., serviceable											1									
Springfield, unserviceable																				
Harper's Ferry, sup't, serviceable																				
Harper's Ferry, M. S. K., serviceable																				
Harper's Ferry, unserviceable																				
DEPOTS.																				
Charleston, serviceable																				
Charleston, unserviceable																	1			
Detroit, serviceable																				
Detroit, unserviceable																				
Galena, serviceable																				
Galena, unserviceable																				
Middletown, serviceable																				
Middletown, unserviceable																				
New York, serviceable	2																			
New York, unserviceable																				
West Point, serviceable					1						3		6		2		4			
West Point, unserviceable											3									
Total serviceable	9	2	1	14	7	2	2	2	2		17	2	16	7	3	3	7	3	1	1
Total unserviceable		1		11							4	8	18		6	1	2			

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 1.—ORDNANCE.																		
	Brass howitzers.										Brass mortars.								
	8-inch, Americann.	8-inch, English.	8-inch, French.	6-inch, Americann.	6-inch, French.	5 8-10-inch, Americann.	5 8-10-inch, trophy.	5½-inch, Americann.	3-inch, Americann.	2½-inch, Americann.	24-pounder, Americann.	24-pounder, English.	12-pounder, Americann.	13-inch, Americann.	10-inch, Americann.	10-inch, English.	10-inch, French.	9½-inch, Spanish.	8-inch, Americann.
ARSENALS.																			
Allegheny, serviceable							4			1									
Allegheny, unserviceable																			1
Augusta, serviceable																			
Augusta, unserviceable				5				3		10									
Baton Rouge, serviceable	2																		
Baton Rouge, unserviceable																			
Bellona, serviceable																			
Bellona, unserviceable																			
Champlain, serviceable											4								
Champlain, unserviceable																			
Fort Monroe, serviceable	2																		
Fort Monroe, unserviceable																			
Frankford, serviceable															4				
Frankford, unserviceable	2								3		11								
Kennebec, serviceable																			
Kennebec, unserviceable																			
Mount Vernon, serviceable																			
Mount Vernon, unserviceable																			
Pikesville, serviceable																			
Pikesville, unserviceable																			
Rome, serviceable	1																		
Rome, unserviceable																			
St. Louis, serviceable																			
St. Louis, unserviceable																			
Washington, serviceable		1			1							1							
Washington, unserviceable																			
Watertown, serviceable								5						5		5			
Watertown, unserviceable													1						
Watervliet, serviceable																1	1		
Watervliet, unserviceable		5	3					5										2	
ARMORIES.																			
Springfield, sup't, serviceable							1												
Springfield, M. S. K., serviceable																			
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable																			
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable	1					2									1				
Charleston, unserviceable																			
Detroit, serviceable																			
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable																			
New York, unserviceable																			
West Point, serviceable		1															1		
West Point, unserviceable																			
Total serviceable	6	2		5	1	2		8		10	4	1		10		6			1
Total unserviceable	2	5	3				5	5	3	1	11		1		1	1	2		

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 1.—ORDNANCE.																	
	Brass mortars.		Brass cohorns.			Brass, stone mortars.		Iron cannon.										
	8-inch, English.	5½-inch, English.	5 8-10-inch, English.	4½-inch, English.	Calibre not reported.	Old.	16-inch.	10-inch.	Brass swivels.	42-pounder.	32-pounder, new.	32-pounder, old.	24-pounder, new.	24-pounder, old.	24-pounder, navy.	24-pounder, trophy.	18-pounder, light.	18-pounder, heavy.
ARSENALS.																		
Allegheny, serviceable										78		20					52	
Allegheny, unserviceable.....																		
Augusta, serviceable					5													
Augusta, unserviceable.....																		
Baton Rouge, serviceable.....																	5	
Baton Rouge, unserviceable																		
Bellona, serviceable.....										98				33	64			16
Bellona, unserviceable																		
Champlain, serviceable.....						5								2			8	
Champlain, unserviceable.....																		
Fort Monroe, serviceable.....																		
Fort Monroe, unserviceable.....										241	1	113	3					1
Frankford, serviceable.....			9	11						16	15		51					
Frankford, unserviceable.....																	1	
Kennebec, serviceable																		
Kennebec, unserviceable.....																		
Mount Vernon, serviceable.....																		
Mount Vernon, unserviceable.....																		
Pikeville, serviceable.....																	16	10
Pikeville, unserviceable																		
Rome, serviceable.....													1				10	1
Rome, unserviceable																		
St. Louis, serviceable					5												2	
St. Louis, unserviceable.....																		
Washington, serviceable.....							1	1		1	305		39	263			35	4
Washington, unserviceable.....																		
Watertown, serviceable.....				1													2	6
Watertown, unserviceable.....																		
Watervliet, serviceable.....													26			3		
Watervliet, unserviceable	2	2																
ARMORIES.																		
Springfield, sup't, serviceable.....																		
Springfield, M. S. K., serviceable																		
Springfield, unserviceable																		
Harper's Ferry, sup't, serviceable.....																		
Harper's Ferry, M. S. K., serviceable.....																		
Harper's Ferry, unserviceable.....																		
DEPOTS.																		
Charleston, serviceable.....										12		16	52				7	
Charleston, unserviceable																		
Detroit, serviceable													1				1	1
Detroit, unserviceable.....														2				
Galena, serviceable																		
Galena, unserviceable.....																		
Middletown, serviceable.....																		
Middletown, unserviceable																		
New York, serviceable.....										26	165	74	269	66			13	25
New York, unserviceable.....																		
West Point, serviceable.....													2				1	
West Point, unserviceable.....																		
Total serviceable.....			9	12	10	5	1	1		27	915	90	461	496	64	4	151	64
Total unserviceable.....	2	2												3			1	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Armories, arsenals, and depots.	CLASS 1.—ORDNANCE.							CLASS 2.—ARTILLERY CARRIAGES.										
	Iron howitzers.				Iron mortars.			Field carriages.										
	24-pounder, heavy.	24-pounder, light.	24-pounder, medium.	12-pounder.	10-pounder, sea-coast.	10-pounder, siege.	8-pounder, siege.	Iron swivels.	18-pounder.	12-pounder.	9-pounder.	6-pounder, steel-trail complete.	6-pounder, with cheeks.	3-pounder.	24-pounder howitzer.	12-pounder howitzer.	6-pounder howitzer.	8-inch howitzer.
ARSENALS.																		
Allegheny, serviceable.....	12	31						3	7			25		9				
Allegheny, unserviceable.....																		
Augusta, serviceable.....	2											2						
Augusta, unserviceable.....																		
Baton Rouge, serviceable.....		1						5	4			2					4	
Baton Rouge, unserviceable.....																		
Bellona, serviceable.....																		
Bellona, unserviceable.....																		
Champlain, serviceable.....	4								3						4			
Champlain, unserviceable.....						2												
Fort Monroe, serviceable.....	1	3	91		2				2					1				
Fort Monroe, unserviceable.....													2					
Frankford, serviceable.....		1											5					
Frankford, unserviceable.....													2					
Kennebec, serviceable.....																		
Kennebec, unserviceable.....																		
Mount Vernon, serviceable.....	2								2			13		2				
Mount Vernon, unserviceable.....																		
Pikesville, serviceable.....						5												
Pikesville, unserviceable.....													2					
Rome, serviceable.....					1													
Rome, unserviceable.....					1													
St. Louis, serviceable.....	5							6	4			4						
St. Louis, unserviceable.....									2			2		1				
Washington, serviceable.....	155			1	6	24						3	87	1				
Washington, unserviceable.....						1			2				6					
Watertown, serviceable.....		1			1	1			16				1					
Watertown, unserviceable.....																		
Watervliet, serviceable.....		2		1		2			5		1	46		2	1			
Watervliet, unserviceable.....									2			4						
ARMORIES.																		
Springfield, sup't, serviceable.....																		
Springfield, M. S. K., serviceable.....													1					
Springfield, unserviceable.....																		
Harper's Ferry, sup't, serviceable.....																		
Harper's Ferry, M. S. K., serviceable.....																		
Harper's Ferry, unserviceable.....																		
DEPOTS.																		
Charleston, serviceable.....		3								2	3	10		4				
Charleston, unserviceable.....																		
Detroit, serviceable.....		5										6						
Detroit, unserviceable.....																		
Galena, serviceable.....																		
Galena, unserviceable.....																		
Middletown, serviceable.....																		
Middletown, unserviceable.....																		
New York, serviceable.....					1	4												2
New York, unserviceable.....								1	2			4						
West Point, serviceable.....	1	2			4	3			2			8	1	2				
West Point, unserviceable.....																		
Total serviceable.....	182	49	91	2	15	41	6	8	47	3	4	273	1	25	1	4	2	
Total unserviceable.....					1	1		1	8			18	1	1				

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Armories, arsenals, and depots.	CLASS 2.—ARTILLERY CARRIAGES.																	
	Caissons.				Travelling forges.	Siege carriages.						Garrison carriages.				Carriages.		
	24-pounder howitzer.	12-pounder howitzer.	6-pounder howitzer.	Stockrail, or French patterns.		24-pounder.	18-pounder.	6-pounder.	8-inch howitzer.	Ammunition wagons.	Tumbrels.	32-pounder.	24-pounder.	18-pounder.	18-pounder, truck.	12-pounder, filler.	6 pounder, truck.	24-pounder, sea-coast.	8-inch howitzer.
ARSENALS.																		
Allegheny, serviceable.....			1															
Allegheny, unserviceable.....																		
Augusta, serviceable.....																		
Augusta, unserviceable.....																		
Baton Rouge, serviceable.....																		
Baton Rouge, unserviceable.....																		
Bellona, serviceable.....																		
Bellona, unserviceable.....																		
Champlain, serviceable.....		3	6		1	3	5		1									
Champlain, unserviceable.....																		
Fort Monroe, serviceable.....	1	1	1		1		1											
Fort Monroe, unserviceable.....																		
Frankford, serviceable.....																		
Frankford, unserviceable.....																		
Kennebec, serviceable.....																		
Kennebec, unserviceable.....																		
Mount Vernon, serviceable.....					1													
Mount Vernon, unserviceable.....	1		1															
Pikesville, serviceable.....																		
Pikesville, unserviceable.....																		
Rome, serviceable.....																		
Rome, unserviceable.....																		
St. Louis, serviceable.....									1									
St. Louis, unserviceable.....			5											2				
Washington, serviceable.....		2	3			1			11									
Washington, unserviceable.....																		
Watertown, serviceable.....		5	10				2											
Watertown, unserviceable.....																		
Watervliet, serviceable.....		31	13	2	2	2	14		1	29		1				1		
Watervliet, unserviceable.....																		
ARMORIES.																		
Springfield, sup't, serviceable.....																		
Springfield, M. S. K., serviceable.....																		
Springfield, unserviceable.....																		
Harper's Ferry, sup't, serviceable.....																		
Harper's Ferry, M. S. K., serviceable.....																		
Harper's Ferry, unserviceable.....																		
DEPOTS.																		
Charleston, serviceable.....						4	1		2		4		6		2	1	16	1
Charleston, unserviceable.....																		
Detroit, serviceable.....			2		2				1									
Detroit, unserviceable.....																		
Galena, serviceable.....																		
Galena, unserviceable.....																		
Middletown, serviceable.....																		
Middletown, unserviceable.....																		
New York, serviceable.....									1									
New York, unserviceable.....						20												
West Point, serviceable.....	1	1	1			1			1									
West Point, unserviceable.....																		
Total serviceable.....	2	43	37	2	7	10	23	1	4	44	4	1	6	2	2	16	1	
Total unserviceable.....	1		6			20							2					

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 2.—ARTILLERY CARRIAGES.													CLASS 3.—ARTILLERY EQUIP ^{ts} .					
	Rocket carriages.	Cohorn beds.	Casemate carriages.				Mortar beds.						Beds for swivels.	Sponges and rammers.					
			42-pounder.	32-pounder.	24-pounder.	18-pounder.	13-inch sea-coast, iron.	10-inch sea-coast, iron.	10-inch siege, iron.	8-inch siege, iron.	10-inch sea-coast, wood.	10-inch siege, wood.		5½-inch siege, wood.	24-pounder barbette carriages.	42-pounder.	32-pounder.	24-pounder.	18-pounder.
ARSENALS.																			
Allegheny, serviceable																	2		
Allegheny, unserviceable																			
Augusta, serviceable																			
Augusta, unserviceable																			
Baton Rouge, serviceable																			
Baton Rouge, unserviceable																			
Bellona, serviceable																	3	2	2
Bellona, unserviceable																			
Champlain, serviceable	1																	3	4
Champlain, unserviceable																	4	7	34
Fort Monroe, serviceable			1		5			1		1				2				6	1
Fort Monroe, unserviceable																			
Frankford, serviceable																	25	50	50
Frankford, unserviceable																			
Kennebec, serviceable																			
Kennebec, unserviceable																			
Mount Vernon, serviceable																			
Mount Vernon, unserviceable																			
Pikesville, serviceable																	87	56	29
Pikesville, unserviceable																			
Rome, serviceable																		4	36
Rome, unserviceable																			
St. Louis, serviceable														4					
St. Louis, unserviceable																			
Washington, serviceable					1			2	27		1	1					15	12	15
Washington, unserviceable												1							
Watertown, serviceable									4			1					11	48	26
Watertown, unserviceable						1	1	1											
Watervliet, serviceable																	12	42	31
Watervliet, unserviceable																			
ARMORIES.																			
Springfield, sup't, serviceable																			
Springfield, M. S. K., serviceable																			
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable																			
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable												4					3	13	7
Charleston, unserviceable																			
Detroit, serviceable																	6	10	25
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable			10	39													8	114	72
New York, unserviceable																			
West Point, serviceable		3		1	2				1		4	3	1					2	
West Point, unserviceable																		4	2
Total serviceable	1	3	11	39	8			3	32	1	10	5	1	2	4	8	278	320	294
Total unserviceable						1	1	1			1						4	11	36

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

		CLASS 3.—ARTILLERY EQUIPMENTS.																	
		Sponges and rammers.																	
Arsenals, armories, and depots.		12-pounder, garrison.	12-pounder, field.	9-pounder, field.	6-pounder, field.	6-pounder, crooked handles.	4-pounder.	3-pounder.	24-pounder carronade.	18-pounder carronade.	12-pounder carronade.	10-inch mortar.	8-inch howitzer.	5½-inch howitzer.	24-pounder howitzer.	100-pounder columbiad.	56-pounder columbiad.	Assorted.	
ARSENALS.																			
Allegheny, serviceable	8														6				
Allegheny, unserviceable																			
Augusta, serviceable					2														
Augusta, unserviceable																			
Baton Rouge, serviceable					5														
Baton Rouge, unserviceable																			
Bellona, serviceable																			
Bellona, unserviceable																			
Champlain, serviceable	4				1														
Champlain, unserviceable	10				50										17				
Fort Monroe, serviceable	6				9							1							
Fort Monroe, unserviceable	16		4		13														
Frankford, serviceable		124			200	15		11			9				5			5	
Frankford, unserviceable																			
Kennebec, serviceable					2														
Kennebec, unserviceable																			
Mount Vernon, serviceable															2				
Mount Vernon, unserviceable					7														
Pikesville, serviceable	35				17														
Pikesville, unserviceable																			
Rome, serviceable	15	138			58				3	4					2				
Rome, unserviceable																			
St. Louis, serviceable		4			4														
St. Louis, unserviceable																		93	
Washington, serviceable					88														
Washington, unserviceable																			
Watertown, serviceable	31	49			8						9	11	2						
Watertown, unserviceable																			
Watervliet, serviceable	53	163			28						20	13	19	7				2	
Watervliet, unserviceable																			
ARMORIES.																			
Springfield, sup't, serviceable																			
Springfield, M. S. K., serviceable	1				1														
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable																			
Harper's Ferry, M. S. K., serviceable		2																	
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable					10						1	3		4					
Charleston, unserviceable																			
Detroit, serviceable	3	25			35	2							2						
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable	10				99											10	65		
New York, unserviceable																			
West Point, serviceable	4				10		3				6	2		2					
West Point, unserviceable		8			16							2							
Total serviceable	170	505			577	15	2	3	11	3	13	37	29	23	28	10	65	7	
Total unserviceable	26	8	4		86								2		17			93	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 3.—ARTILLERY EQUIPMENTS.																		
	Ladies and worms.												Ladies and staves.						
	100-pounder.	50-pounder.	42-pounder.	32-pounder.	24-pounder.	18-pounder.	12-pounder, garrison.	12-pounder, field.	9-pounder.	6-pounder.	4-pounder.	3-pounder.	10-inch mortar.	8-inch howitzer.	24-inch howitzer.	Assorted.	42-pounder.	32-pounder.	24-pounder.
ARSENALS.																			
Allegheny, serviceable.....				4			7			79					6				
Allegheny, unserviceable.....																			
Augusta, serviceable.....									1										
Augusta, unserviceable.....																			
Baton Rouge, serviceable.....				8	6	4	35	10	10	5									
Baton Rouge, unserviceable.....																		3	
Bellona, serviceable.....																			
Bellona, unserviceable.....																			
Champlain, serviceable.....						5	4			23									
Champlain, unserviceable.....				2	3	2	1		2					5					
Fort Monroe, serviceable.....				1	1	2	1			9							1		4
Fort Monroe, unserviceable.....					6	4	5			2									
Frankford, serviceable.....					32	29		92		96								13	
Frankford, unserviceable.....																			
Kennebec, serviceable.....																			
Kennebec, unserviceable.....																			
Mount Vernon, serviceable.....																			
Mount Vernon, unserviceable.....										5						2			
Pikesville, serviceable.....						2	7												
Pikesville, unserviceable.....																			
Rome, serviceable.....								16		2				1					
Rome, unserviceable.....																			
St. Louis, serviceable.....																			
St. Louis, unserviceable.....															16				
Washington, serviceable.....										31									
Washington, unserviceable.....																			
Watertown, serviceable.....				6	12	11	20	14		8		1					1	4	8
Watertown, unserviceable.....																			
Watervliet, serviceable.....					18	37	15	50	29	21	7	1							1
Watervliet, unserviceable.....																			
ARMORIES.																			
Springfield, sup't, serviceable.....																			
Springfield, M. S. K., serviceable.....															1				
Springfield, unserviceable.....																			
Harper's Ferry, sup't, serviceable.....																			
Harper's Ferry, M. S. K., serviceable.....																			
Harper's Ferry, unserviceable.....																			
DEPOTS.																			
Charleston, serviceable.....				1	19	1			29	4			3	1					8
Charleston, unserviceable.....																			
Detroit, serviceable.....				4	7	10	2	12		27									
Detroit, unserviceable.....																			
Galena, serviceable.....																			
Galena, unserviceable.....																			
Middletown, serviceable.....																			
Middletown, unserviceable.....																			
New York, serviceable.....	1	16	9	4	26	6				12							7	35	45
New York, unserviceable.....																			
West Point, serviceable.....					1		3			15		1							1
West Point, unserviceable.....														1					
Total serviceable.....	1	16	9	28	122	107	94	184	68	338	12	2	1	3	8	1	9	55	67
Total unserviceable.....				2	9	6	6		2	7				6	20				

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 3.—ARTILLERY EQUIPMENTS.																		
	Sponges.				Tompions.														
	6-pounder.	10-inch mortar.	8-inch howitzer.	5 8-10-inch howitzer.	100-pounder.	50-pounder.	42-pounder.	32-pounder.	24-pounder.	18-pounder.	12-pounder.	9-pounder.	6-pounder.	3-pounder.	10-inch mortar.	8-inch mortar.	8-inch howitzer.	5 8-10-inch howitzer.	Assorted.
ARSENALS.																			
Allegheny, serviceable	50												39						11
Allegheny, unserviceable																			
Augusta, serviceable													2						
Augusta, unserviceable																			
Baton Rouge, serviceable	3										16		21						4
Baton Rouge, unserviceable																			
Bellona, serviceable																			
Bellona, unserviceable																			
Champlain, serviceable																			
Champlain, unserviceable																			
Fort Monroe, serviceable	29					3	13	19		6		4				2	6		
Fort Monroe, unserviceable																			
Frankford, serviceable	26																		
Frankford, unserviceable																			
Kennebec, serviceable													2						
Kennebec, unserviceable																			
Mount Vernon, serviceable								2					1						
Mount Vernon, unserviceable													1						
Pikesville, serviceable		20	70	30									58						
Pikesville, unserviceable																			
Rome, serviceable	9								1	11	12				1		1		
Rome, unserviceable																			
St. Louis, serviceable	9											4	4						
St. Louis, unserviceable																			11
Washington, serviceable	85								1	3	6		70						
Washington, unserviceable	25												2						
Watertown, serviceable	13																		
Watertown, unserviceable																			
Watervliet, serviceable	92												54						
Watervliet, unserviceable																			
ARMORIES.																			
Springfield, sup't, serviceable																			
Springfield, M. S. K., serviceable																			2
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable																			
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable	22							13	43	7	29		38						
Charleston, unserviceable																			
Detroit, serviceable									1		3		6						
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable					4	44	39	90	67	51	47		2		12				
New York, unserviceable																			
West Point, serviceable									5		2		8	1	1		2		
West Point, unserviceable			1					1											
Total serviceable	338	20	70	30	4	44	42	116	139	72	148	4	305	1	14	2	9	4	13
Total unserviceable	25		1					1					3						11

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 3.—ARTILLERY EQUIPMENTS.																		
	Aprons.				Buckets.			Budge barrels.	Bricoles.	Cannon gimlets.	Cannon equipments, complete.	Cannon spikes.	Cannon locks.	Drag ropes.	Dark lanterns.	Elevating machines.	Fuso saws.	Fuso augers.	Fuso setters, wood.
	Copper for garrison guns.	Lead for garrison guns.	Lead for field guns.	Leather for vent covers.	Sponge.	Ter.	Garrison.												
ARSENALS.																			
Allegheny, serviceable			49	102	28			650			75		22	46					
Allegheny, unserviceable																			
Augusta, serviceable		12		2				15											
Augusta, unserviceable		2		1				16											
Baton Rouge, serviceable				9	2	1	1	47			22								
Baton Rouge, unserviceable								14											
Bellona, serviceable								6											
Bellona, unserviceable																			
Champlain, serviceable				3	10		2	199					17			1		27	
Champlain, unserviceable																			
Fort Monroe, serviceable		7		8				93			210	6	9		3	5	2	10	
Fort Monroe, unserviceable																			
Frankford, serviceable			16	5	1		66	32	56		75		82	10					4
Frankford, unserviceable		8						21											
Kennebec, serviceable				2				16											
Kennebec, unserviceable																			
Mount Vernon, serviceable		3		5	4		2	28		12									
Mount Vernon, unserviceable		3																	
Pikesville, serviceable	20	4		2	1		2	121			93						3	2	
Pikesville, unserviceable																			
Rome, serviceable				38	9	53		115			25								16
Rome, unserviceable																			
St. Louis, serviceable			8	5	8			64											
St. Louis, unserviceable				9	11			110					8	6					
Washington, serviceable		1		84	3		11	721			125		23	11				4	
Washington, unserviceable		3																	
Watertown, serviceable				25			68	204			11		55					1	3
Watertown, unserviceable							47						13						
Watervliet, serviceable			3	8	69	8		417			290	7	11	87		4	4	8	
Watervliet, unserviceable								41						12					
ARMORIES.																			
Springfield, sup't, serviceable																			
Springfield, M. S. K., serviceable		7											2						
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable																			
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable		54		32	5	14	75	210			139		173	20		2		2	
Charleston, unserviceable								10											
Detroit, serviceable		29	4		2	5		74					56	8		1		2	
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable			8			20	39							2					
New York, unserviceable								9											
West Point, serviceable		13		2		13	4	85				2	22			3	1	2	
West Point, unserviceable																			
Total serviceable	20	130	88	8	393	81	106	276	3,151	56	12	1,065	15	482	184	3	17	15	76
Total unserviceable		16		10	11		47	200	21				21	18					

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

CLASS 3.—ARTILLERY EQUIPMENTS.

Arsenals, armories, and depots.	CLASS 3.—ARTILLERY EQUIPMENTS.																			
	Fuse setters, copper.	Fuse extractors.	Fuse rasps.	Fuse mallets.	Grenade match pipes.	Graduated scales.	Gunners' belts.	Gunners' haversacks.	Gunners' culpeps.	Gunners' quadrants.	Gunners' spirit levels.	Gunners' plummets.	Gunners' punches.	Hoof hooks.	Hot shot, tongs for	Hot shot, rakes for	Hot shot, ladles for	Hot shot, forks for	Hausers for guns.	
ARSENALS.																				
Allegheny, serviceable	6						62	80												
Allegheny, unserviceable																				
Augusta, serviceable				2				4												
Augusta, unserviceable							2	2												
Baton Rouge, serviceable	1						11	2		3										
Baton Rouge, unserviceable								3												
Bellona, serviceable																				
Bellona, unserviceable																				
Champlain, serviceable	2			21			58	51	1						3		9			
Champlain, unserviceable																				
Fort Monroe, serviceable	2	3			54			37	2	2	2	2								12
Fort Monroe, unserviceable							3													
Frankford, serviceable	1						341	204	8	26	26		8	3			8	3		
Frankford, unserviceable																				
Kennebec, serviceable								2	2											
Kennebec, unserviceable																				
Mount Vernon, serviceable	1						4	8												
Mount Vernon, unserviceable																				
Pikesville, serviceable							10	29	3	2										
Pikesville, unserviceable																				
Rome, serviceable				6			67	22		10	2									
Rome, unserviceable							2													
St. Louis, serviceable							8	6												
St. Louis, unserviceable	6						4	3							1					
Washington, serviceable	4					3	36	282		3	6									
Washington, unserviceable							2													
Watertown, serviceable	4			10			57	1		15					3	2	9			
Watertown, unserviceable																				
Watervliet, serviceable	4	9	4	6			113	111		10	3									
Watervliet, unserviceable								4		11										
ARMORIES.																				
Springfield, sup't, serviceable																				
Springfield, M. S. K., serviceable							2	2	1											
Springfield, unserviceable																				
Harper's Ferry, sup't, serviceable																				
Harper's Ferry, M. S. K., serviceable																				
Harper's Ferry, unserviceable																				
DEPOTS.																				
Charleston, serviceable			2	2				63		2					10		11	1		
Charleston, unserviceable																				
Detroit, serviceable	2	2	2				33	27							4					
Detroit, unserviceable																				
Galena, serviceable																				
Galena, unserviceable																				
Middletown, serviceable																				
Middletown, unserviceable																				
New York, serviceable								11	3	2		84		11			11			
New York, unserviceable							10													
West Point, serviceable	1	3					13	62	6	2	1									
West Point, unserviceable																				
Total serviceable	4	33	14	49	54	3	817	1,004	24	77	40	2	84	8	34	2	37	15	12	
Total unserviceable	6						23	12		11		1		1						

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

		CLASS 3.—ARTILLERY EQUIPMENTS.																		
Arsenals, armories, and depots.		Implement straps.	Kit hades.	Linestocks.	Muzzle caps.	Pass boxes.	Portfire stocks.	Portfire cases.	Portfire clippers.	Prolongs.	Priming horns.	Priming wires.	Sponge covers.	Sighting tubes.	Shell hooks.	Shell funnels.	Shell scrapers.	Shell plug screws.	Torpedons for guns.	Torpedons for ammunition.
ARSENALS.																				
Allegheny, serviceable	248	121				133	54	8	6	386	80	53							2	
Allegheny, unserviceable																				
Augusta, serviceable		8				6			2	2	4									
Augusta, unserviceable		11				20			4											
Baton Rouge, serviceable		9				25			1			4							2	
Baton Rouge, unserviceable																				
Bellona, serviceable																				
Bellona, unserviceable																				
Champlain, serviceable	2	46				44	33	1	9	25	146									
Champlain, unserviceable																				
Fort Monroe, serviceable		1	47			140	34		2	101	244	1		3	4				6	1
Fort Monroe, unserviceable																				
Frankford, serviceable		286			32	94	2	10			83	3		2		2				
Frankford, unserviceable						2					167									
Kennebec, serviceable		2				2														
Kennebec, unserviceable																				
Mount Vernon, serviceable		5		2	6	2	2	1	2										2	
Mount Vernon, unserviceable		1				2				8										
Pikesville, serviceable	149	182				143		1	37	50	3	123		3		4				
Pikesville, unserviceable									4		25									
Rome, serviceable		200				263	1	2	18	6	103									
Rome, unserviceable																				
St. Louis, serviceable		8				8	11			8		8								
St. Louis, unserviceable		28				20	5				12									
Washington, serviceable		79				78		36	5	21	27	77	1	11		7	1	6		
Washington, unserviceable							91													
Watertown, serviceable		92				95		5	6	100	451			14		16	3			
Watertown, unserviceable																				
Watervliet, serviceable	169	214	4			289		17	14	168	878	201		19		4				3
Watervliet, unserviceable						42														
ARMORIES.																				
Springfield, sup't, serviceable																				
Springfield, M. S. K., serviceable		4				4														3
Springfield, unserviceable																				
Harper's Ferry, sup't, serviceable																				
Harper's Ferry, M. S. K., serviceable																				
Harper's Ferry, unserviceable																				
DEPOTS.																				
Charleston, serviceable		130				114		20	60	40	206	39		2						
Charleston, unserviceable							35													
Detroit, serviceable	110	21				26		10	12	29	140	18		1					4	6
Detroit, unserviceable							13													
Galena, serviceable							3													
Galena, unserviceable																				
Middletown, serviceable																				
Middletown, unserviceable																				
New York, serviceable		251		123	194					230	696	2								
New York, unserviceable							2													4
West Point, serviceable	2	16				16		13	7	10	6	13		1	13	4	3			
West Point, unserviceable							13							16						
Total serviceable	676	4	1,675	51	168	1,689	333	124	181	1,176	3,267	542	1	55	18	33	11	19	10	
Total unserviceable			40			44	8		8	12	204			16						10

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 3.—ARTILLERY EQUIPMENTS.									CLASS 4.—CANNON BALLS, SHELLS, ETC.						
	Tube boxes.	Tube pouches.	Thumbballs.	Vent wrenches.	Artillery harness.						Balls.					
					Sets for two wheel horses.	Sets for two leading horses.	Sets for one thill horse.	Sets for four horses.	Artillery saddles.	Men's harness, sets.	Harness, sets of, assorted.	100-pounder.	50-pounder.	42-pounder.	32-pounder.	24-pounder.	18-pounder.
ARSENALS.																
Allegheny, serviceable		64	33			7		2					1,652		357	
Allegheny, unserviceable																
Augusta, serviceable		2			3	3		7								
Augusta, unserviceable			2													
Baton Rouge, serviceable		9	2											4,949		
Baton Rouge, unserviceable																
Bellona, serviceable													1,336			
Bellona, unserviceable																
Champlain, serviceable													97	9,003	2,291	
Champlain, unserviceable														444	821	
Fort Monroe, serviceable	48	1	94	127	2	2		1						3,571	6,849	
Fort Monroe, unserviceable	24											563	405		3,960	
Frankford, serviceable	39	4	1		2	4								320	7,660	
Frankford, unserviceable															781	
Kennebec, serviceable		2	2													
Kennebec, unserviceable																
Mount Vernon, serviceable	2		3		2	2		2		1						
Mount Vernon, unserviceable														657	570	
Pikesville, serviceable	37		156					2		1				133		
Pikesville, unserviceable																
Rome, serviceable	9		18											61	408	
Rome, unserviceable					1			1						11		
St. Louis, serviceable	8														2	
St. Louis, unserviceable	7					10									1,713	
Washington, serviceable		93	26		4									9,860	2,047	
Washington, unserviceable					7				2			1			98	
Watertown, serviceable	44													182	26,882	
Watertown, unserviceable															1,068	
Watervliet, serviceable	265	40	23		13	8		2	2					1,989	2,317	
Watervliet, unserviceable															1,220	
ARMORIES.																
Springfield, sup't, serviceable																
Springfield, M. S. K., serviceable																
Springfield, unserviceable																
Harper's Ferry, sup't, serviceable																
Harper's Ferry, M. S. K., serviceable																
Harper's Ferry, unserviceable																
DEPOTS.																
Charleston, serviceable	36	36	196		16	16		8						1,574	5,950	
Charleston, unserviceable															7,719	
Detroit, serviceable	16	15	47		19	19		10						174	1,946	
Detroit, unserviceable															1,972	
Galena, serviceable																
Galena, unserviceable																
Middletown, serviceable																
Middletown, unserviceable																
New York, serviceable	156		327									554	718	4,956	7,761	
New York, unserviceable															4,894	
West Point, serviceable	11		22						2						221	
West Point, unserviceable															135	
Total serviceable	671	266	950	127	61	71	2	33	4	1	554	1,271	5,361	23,740	72,428	
Total unserviceable	31		2		8		1	2			1			668	1,149	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 4.—CANNON BALLS, SHELLS, &C.														
	Balls.							Star shot, assorted.	Shot and shells, assorted.	Shells.					
	12-pounder.	9-pounder.	6-pounder.	4-pounder.	3-pounder.	1-pounder, lead.	13-inch.			12-inch.	10-inch.	8-inch.	5 8-10-inch.	5 1/2-inch.	2 1/2-inch.
ARSENALS.															
Allegheny, serviceable	2,730		9,546												
Allegheny, unserviceable															
Augusta, serviceable			1,529		242										
Augusta, unserviceable															
Baton Rouge, serviceable	14,159	7,003	3,129	3,488	235				3		2		68	204	
Baton Rouge, unserviceable															
Bellona, serviceable															
Bellona, unserviceable	74			46				1,000							
Champlain, serviceable	2,142		2,303								170	534			
Champlain, unserviceable	779		2,117	139							8	26			
Fort Monroe, serviceable	4,981		16,973								979	574			
Fort Monroe, unserviceable															
Frankford, serviceable	813		3,467				40				2,209	417			
Frankford, unserviceable															
Kennebec, serviceable															
Kennebec, unserviceable															
Mount Vernon, serviceable															
Mount Vernon, unserviceable	420		2,370								425	1,259	113		
Pikesville, serviceable			2,396								1,455	260	4,074		
Pikesville, unserviceable				6											
Rome, serviceable	849		483		669						620	673			
Rome, unserviceable	14		99												
St. Louis, serviceable	4,776		24,644			359									
St. Louis, unserviceable															
Washington, serviceable	1,245		4,225								137				
Washington, unserviceable									2						
Watertown, serviceable	2,012		19,345						103		1,152	182		605	
Watertown, unserviceable															
Watervliet, serviceable	433		4,626		259						553	84			
Watervliet, unserviceable												5			
ARMORIES.															
Springfield, sup't, serviceable															
Springfield, M. S. K., serviceable			11,523												
Springfield, unserviceable															
Harper's Ferry, sup't, serviceable															
Harper's Ferry, M. S. K., serviceable															
Harper's Ferry, unserviceable															
DEPOTS.															
Charleston, serviceable	1,211		456								964	230			
Charleston, unserviceable															
Detroit, serviceable	1,050		2,651									1			
Detroit, unserviceable															
Galena, serviceable															
Galena, unserviceable															
Middletown, serviceable															
Middletown, unserviceable															
New York, serviceable	1,949		10								2,999	1,244			
New York, unserviceable															
West Point, serviceable	200		346								31	32			
West Point, unserviceable															
Total serviceable	38,560	7,003	107,657	3,488	1,425	359	40		103	3	11,274	4,233	4,074	673	204
Total unserviceable	1,287		4,856	193				1,000	2		433	1,290	113		

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 4.—CANNON BALLS, SHELLS, ETC.																		
	Shells.							Spherical case shot.											
	32-pounder.	24-pounder.	18-pounder.	12-pounder.	9-pounder.	6-pounder.	3-pounder.	Assorted.	Stevens's elongated boxes.	Stevens's elongated 32-pounders.	Stevens's elongated 24-pounders.	32-pounder.	24-pounder.	18-pounder.	12-pounder.	6-pounder.	4-pounder.	3-pounder.	8-inch.
ARSENALS.																			
Allegheny, serviceable																			
Allegheny, unserviceable																			
Augusta, serviceable		7																	
Augusta, unserviceable	509																		
Baton Rouge, serviceable		142																	
Baton Rouge, unserviceable																			
Bellona, serviceable																			
Bellona, unserviceable																			
Champlain, serviceable		18														20			
Champlain, unserviceable																			
Fort Monroe, serviceable		569										3,586		910					
Fort Monroe, unserviceable																			
Frankford, serviceable																			
Frankford, unserviceable																			
Kennebec, serviceable																			
Kennebec, unserviceable																			
Mount Vernon, serviceable																			
Mount Vernon, unserviceable																			
Pikesville, serviceable																			
Pikesville, unserviceable																			
Rome, serviceable		4,083											1,555	2,119	2,562				
Rome, unserviceable		10					7							23	22				
St. Louis, serviceable		73																	
St. Louis, unserviceable		324																	
Washington, serviceable		355	346																6
Washington, unserviceable																			
Watertown, serviceable		864										810		683	3,378				
Watertown, unserviceable																			
Watervliet, serviceable		2,485	50									58		1		1	1	87	
Watervliet, unserviceable																			2
ARMORIES.																			
Springfield, sup't, serviceable																			
Springfield, M. S. K., serviceable																			
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable																			
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable		381											193		200				
Charleston, unserviceable																			
Detroit, serviceable		76	20	16	69	21	178	40											
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable		91						100	202	381									
New York, unserviceable																			
West Point, serviceable		10																	
West Point, unserviceable																			
Total serviceable	509	9,154	20	412	69	21	178	140	202	381		4,647	1,555	3,913	5,980	1	1	93	
Total unserviceable		334						7						23	22				2

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 4.—CANNON BALLS, SHELLS, ETC.													
	Loose grape shot, pounds.				Loose canister shot, pounds.					Mixed loose grape shot, pounds.	Mixed loose canister shot, pounds.	Mixed loose grape and canister shot, lbs.	Chain shot.	Hand grenades.
	12-pounder.	9-pounder.	6-pounder.	3-pounder.	42-pounder.	32-pounder.	24-pounder.	18-pounder.	12-pounder.						6-pounder.
ARSENALS.														
Allegheny, serviceable.....											4,310			
Allegheny, unserviceable.....														
Augusta, serviceable.....											21,178			
Augusta, unserviceable.....														
Baton Rouge, serviceable.....	4,050	4,050				7,200				2,100	675	2,800	309	
Baton Rouge, unserviceable.....														
Bellona, serviceable.....														
Bellona, unserviceable.....														
Champlain, serviceable.....	3,800													
Champlain, unserviceable.....														
Fort Monroe, serviceable.....											47	967		
Fort Monroe, unserviceable.....														
Frankford, serviceable.....												161,000		
Frankford, unserviceable.....														
Kennebec, serviceable.....														
Kennebec, unserviceable.....														
Mount Vernon, serviceable.....														
Mount Vernon, unserviceable.....			96							550	24,100			
Pikesville, serviceable.....										2,700				
Pikesville, unserviceable.....														
Rome, serviceable.....	5,400	3,600	700											
Rome, unserviceable.....														
St. Louis, serviceable.....			1,255	172										
St. Louis, unserviceable.....														
Washington, serviceable.....											27,613	5,446		
Washington, unserviceable.....														
Watertown, serviceable.....	33,445	20,000									7,746	30,202		
Watertown, unserviceable.....														
Watervliet, serviceable.....					788	15,421	134	1,190	1,561	1,983	42,350	12,310	13,300	5
Watervliet, unserviceable.....														
ARMORIES.														
Springfield, sup't, serviceable.....														
Springfield, M. S. K., serviceable.....														
Springfield, unserviceable.....														
Harper's Ferry, sup't, serviceable.....														
Harper's Ferry, M. S. K., serviceable.....														
Harper's Ferry, unserviceable.....														
DEPOTS.														
Charleston, serviceable.....											450	5,506		
Charleston, unserviceable.....														
Detroit, serviceable.....											7,366	2,118		
Detroit, unserviceable.....														
Galena, serviceable.....														
Galena, unserviceable.....														
Middletown, serviceable.....														
Middletown, unserviceable.....														
New York, serviceable.....											2,300			
New York, unserviceable.....														
West Point, serviceable.....														
West Point, unserviceable.....														
Total serviceable.....	51,695	27,650	1,955	172	788	22,621	134	1,190	4,261	4,083	87,872	81,745	178,067	5
Total unserviceable.....			96							550	24,100			

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 5.—STRAPPED, CANISTER, AND GRAPE SHOT, ETC.																		
	Strapped shot.							Canister shot.											
	24-pounder.	12-pounder.	6-pounder.	4-pounder.	2-pounder.	12-pounder, fixed.	6-pounder, fixed.	4-pounder, fixed.	2-pounder, fixed.	1-pounder, fixed.	100-pounder.	42-pounder.	32-pounder.	24-pounder.	18-pounder.	12-pounder.	9-pounder.	6-pounder.	4-pounder.
ARSENALS.																			
Allegheny, serviceable	6					4	511												
Allegheny, unserviceable																			
Augusta, serviceable							567												
Augusta, unserviceable																			
Baton Rouge, serviceable						12	170	478	98			173			12			11	42
Baton Rouge, unserviceable																		42	
Bellona, serviceable																			
Bellona, unserviceable																			
Champlain, serviceable	264	837				542	1,096								88			133	
Champlain, unserviceable												9	62		42		9		
Fort Monroe, serviceable	167	185					130								85				
Fort Monroe, unserviceable																			
Frankford, serviceable			68										64	242	1,552			1,310	
Frankford, unserviceable																			
Kennebec, serviceable							196												
Kennebec, unserviceable							239												
Mount Vernon, serviceable	4	4										4						2	
Mount Vernon, unserviceable																			
Pikesville, serviceable	912	4,532				96	20	32	48			79		9	1,602			1,220	289
Pikesville, unserviceable																			
Rome, serviceable	452	1,282				500	689	81							1,253			1,338	
Rome, unserviceable																			
St. Louis, serviceable						276	234												132
St. Louis, unserviceable																			
Washington, serviceable	128	97										1	4	247	312			523	
Washington, unserviceable																			
Watertown, serviceable	158	27		346		664	92								23	61		123	
Watertown, unserviceable																			
Watervliet, serviceable	421	920	61	27	1,387	1,382								288	688	139		567	
Watervliet, unserviceable																			
ARMORIES.																			
Springfield, sup't, serviceable																			
Springfield, M. S. K., serviceable																			
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable																			
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable	74						300						85	42					238
Charleston, unserviceable																			
Detroit, serviceable	3						504						109	16					500
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable	99									13	214	99	626	42	106				
New York, unserviceable																			
West Point, serviceable	18	132				50	30								76				
West Point, unserviceable																			
Total serviceable	18	2,820	7,952	61	373	3,531	5,964	478	211	48	13	214	356	888	914	4,803	139	6,097	331
Total unserviceable							196						9	62		42		9	42

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 5.—STRAPPED, CANISTER, AND GRAPE SHOT, ETC.																		
	Canister shot.											Grape shot.							
	3-pounder.	2-pounder.	1-pounder.	8-inch howitzer.	5½-inch howitzer.	2½-inch howitzer.	24-pounder.	18 pounder.	18-pounder, fixed.	12-pounder, fixed.	6-pounder, fixed.	3-pounder, fixed.	4-pounder, for wall pieces.	50-pounder, columbiad.	18-pounder, columbiad.	50-pounder.	42-pounder.	32-pounder.	24-pounder.
ARSENALS.																			
Allegheny, serviceable									4	720								99	300
Allegheny, unserviceable																			
Augusta, serviceable																			
Augusta, unserviceable																			160
Baton Rouge, serviceable	191	90	88																
Baton Rouge, unserviceable																			
Bellona, serviceable																			
Bellona, unserviceable																			
Champlain, serviceable						542			281	631									
Champlain, unserviceable						103												25	4
Fort Monroe, serviceable																		52	378
Fort Monroe, unserviceable																			
Frankford, serviceable				372		108													
Frankford, unserviceable																			
Kennebec, serviceable																			
Kennebec, unserviceable											144								
Mount Vernon, serviceable											120								
Mount Vernon, unserviceable																			
Pikesville, serviceable										78	452						449	60	217
Pikesville, unserviceable																			
Rome, serviceable						539			345	316	90								
Rome, unserviceable																			
St. Louis, serviceable			600						370	24									
St. Louis, unserviceable																			
Washington, serviceable						50			64			33	65						
Washington, unserviceable																			
Watertown, serviceable									284	444							680	316	
Watertown, unserviceable																			
Watervliet, serviceable	17			32	153			176	528	348		135							
Watervliet, unserviceable																			
ARMORIES.																			
Springfield, sup't, serviceable																			
Springfield, M. S. K., serviceable																			
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable																			
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable				15						25	100								189
Charleston, unserviceable																			
Detroit, serviceable						96				8	504								120
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable								99		103					48	127	556	539	
New York, unserviceable																			
West Point, serviceable										80									
West Point, unserviceable																			
Total serviceable	208	90	688	429	153	96	1,239	275	1,987	3,842	90	136	33	65	48	576	1,447	2,326	
Total unserviceable							103			144								23	4

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 5.—STRAPPED, CANISTER, AND GRAPE SHOT, ETC.																	
	Grape shot.							Spherical case shot.				Carcasses filled.		Cannon wads.				
	18-pounder.	12-pounder.	9-pounder.	6-pounder.	4-pounder.	3-pounder.	1-pounder.	6-pounder, fixed.	24-pounder, strapped.	18-pounder, strapped.	12-pounder, strapped.	6-pounder, strapped.	8-inch, strapped.	24-pounder.	12-pounder.	42-pounder.	32-pounder.	24-pounder.
ARSENALS.																		
Allegheny, serviceable.....	1,026	980																
Allegheny, unserviceable.....																		
Augusta, serviceable.....																		
Augusta, unserviceable.....																		
Baton Rouge, serviceable.....		364	832	12													25	25
Baton Rouge, unserviceable.....																		
Bellona, serviceable.....																	121	
Bellona, unserviceable.....																		
Champlain, serviceable.....																		
Champlain, unserviceable.....	11	15	10	18					18			92						285
Fort Monroe, serviceable.....	4									333	264					22	428	675
Fort Monroe, unserviceable.....		159		563														
Frankford, serviceable.....		190										94						
Frankford, unserviceable.....																		
Kennebec, serviceable.....																		
Kennebec, unserviceable.....																		
Mount Vernon, serviceable.....								200										
Mount Vernon, unserviceable.....																		
Pikesville, serviceable.....	309																	171
Pikesville, unserviceable.....																		
Rome, serviceable.....									32	54	102	143		3	6			
Rome, unserviceable.....																		
St. Louis, serviceable.....	600						18											
St. Louis, unserviceable.....																		
Washington, serviceable.....		10															19	66
Washington, unserviceable.....																		
Watertown, serviceable.....	1,253																	
Watertown, unserviceable.....																		
Watervliet, serviceable.....			50	16	21	171			799	737								
Watervliet, unserviceable.....																		
ARMORIES.																		
Springfield, sup't, serviceable.....																		
Springfield, M. S. K., serviceable.....																		
Springfield, unserviceable.....																		
Harper's Ferry, sup't, serviceable.....																		
Harper's Ferry, M. S. K., serviceable.....																		
Harper's Ferry, unserviceable.....																		
DEPOTS.																		
Charleston, serviceable.....	188	37		40													312	189
Charleston, unserviceable.....																		
Detroit, serviceable.....																		
Detroit, unserviceable.....																		
Galena, serviceable.....																		
Galena, unserviceable.....																		
Middletown, serviceable.....																		
Middletown, unserviceable.....																		
New York, serviceable.....	238	102		164														
New York, unserviceable.....																		
West Point, serviceable.....				82							8		10					
West Point, unserviceable.....																		
Total serviceable.....	3,623	1,683	832	314	21	171	18	200	831	791	435	415	94	13	6	41	952	1,069
Total unserviceable.....	11	174	10	581					18			92						285

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 5.—STRAPPED, CANISTER, AND GRAPE SHOT, ETC.						CLASS 6.—SMALL ARMS.									
	Cannon wads.					Junk wads.	Muskets complete.									
	18-pounder.	12-pounder.	6-pounder.	4-pounder.	10-inch.		Standard models.	National armory, browned.	National armory, bright.	Contract, brown.	Contract, bright.	Repaired.	French.	English.	Various models.	Hall's patent.
ARSENALS.																
Allegheny, serviceable						127	57,811	3,348	24		3,158				2	
Allegheny, unserviceable							914								723	
Augusta, serviceable							12			4,800	9,877	387	140			
Augusta, unserviceable																
Baton Rouge, serviceable	25										12,321				1	
Baton Rouge, unserviceable							196	2								
Bellona, serviceable																
Bellona, unserviceable			40													
Champlain, serviceable								3,820	720		80					
Champlain, unserviceable		100									33					
Fort Monroe, serviceable							11		99		727	7				
Fort Monroe, unserviceable							9									
Frankford, serviceable							185	11,105	17,492	3,360	418					
Frankford, unserviceable																
Kennebec, serviceable							10,000		1,939							
Kennebec, unserviceable							278									
Mount Vernon, serviceable							6	37								
Mount Vernon, unserviceable								6								
Pikesville, serviceable	140	198									2,749					
Pikesville, unserviceable							164									
Rome, serviceable								142			4,148					
Rome, unserviceable									41		14					
St. Louis, serviceable							12,122	260			3,256				2	
St. Louis, unserviceable							47	2,202								
Washington, serviceable	14	103				23	17,218	12,542	154	36	4,826	407				
Washington, unserviceable															107	
Watertown, serviceable							20	6,857	19,772	7,125					590	
Watertown, unserviceable															82	
Watervliet, serviceable						1,427	37,450	4,413	32,700	6,430	7,202		7		1	
Watervliet, unserviceable															577	
ARMORIES.																
Springfield, sup'l, serviceable																
Springfield, M. S. K., serviceable							124,391	3,846	872	30,569	226					
Springfield, unserviceable							33									
Harper's Ferry, sup'l, serviceable						5						4				
Harper's Ferry, M. S. K., serviceable							54,680	20,634	102						10	
Harper's Ferry, unserviceable																
DEPOTS.																
Charleston, serviceable	50	442		620						4,869						
Charleston, unserviceable							127								688	
Detroit, serviceable							1,053	695			1,779					
Detroit, unserviceable							363									
Galena, serviceable																
Galena, unserviceable																
Middletown, serviceable								2,540								
Middletown, unserviceable																
New York, serviceable		200	100													
New York, unserviceable																
West Point, serviceable					27						3					
West Point, unserviceable																
Total serviceable	215	854	243	620	27	1,554	28	317,399	67,699	78,743	52,323	50,797	805	147	605	1
Total unserviceable		100						2,131	2,210	41		47			2,175	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 6.—SMALL ARMS.												Pistols.					
	Muskets without bayonets.				Rifles.													
	National armory, browned.	Repaired.	French.	Various modes.	Harper's Ferry, halfstocked, new.	Harper's Ferry, full stocked, new.	Contract, full stocked, browned.	Contract, full stocked, bright.	Repaired, half stocked.	Repaired, full stocked.	Various modes.	Hall's patent, new.	Hall's patent, repaired.	Hall's patent, without bayonets.	Rifle calibre, browned.	Rifle calibre, bright.	Musket calibre, bright.	
ARSENALS.																		
Allegheny, serviceable					3,154		2,005									753		
Allegheny, unserviceable																		
Augusta, serviceable										67	19							
Augusta, unserviceable																22		
Baton Rouge, serviceable							1,571				1					3		
Baton Rouge, unserviceable					61													
Bellona, serviceable																		
Bellona, unserviceable																		
Champlain, serviceable												1						
Champlain, unserviceable																		
Fort Monroe, serviceable							1		13				106			60		
Fort Monroe, unserviceable																		
Frankford, serviceable					17		1,150	3				801			2,253		199	
Frankford, unserviceable					152						1				4			
Kennebec, serviceable																		
Kennebec, unserviceable																1		
Mount Vernon, serviceable																		
Mount Vernon, unserviceable																		4
Pikesville, serviceable					7		1,000					2						4
Pikesville, unserviceable																		
Rome, serviceable					1													
Rome, unserviceable																		
St. Louis, serviceable					1		19		69	22		40		22	468	2	12	
St. Louis, unserviceable					423		140				4			271	775		4	
Washington, serviceable	3	97	42		17	1	2,426			33		518		1,000		923		
Washington, unserviceable					1		1							14				
Watertown, serviceable					1		900					200	1		144			
Watertown, unserviceable																		
Watervliet, serviceable					461		1,575	258	202	20	1	701	20	1	574		565	
Watervliet, unserviceable																		
ARMORIES.																		
Springfield, sup't, serviceable																		
Springfield, M. S. K., serviceable							180					1,320		7,950			1,000	
Springfield, unserviceable																		
Harper's Ferry, sup't, serviceable															2			
Harper's Ferry, M. S. K., serviceable							64					131			5			
Harper's Ferry, unserviceable																		
DEPOTS.																		
Charleston, serviceable							200								200			
Charleston, unserviceable												24						
Detroit, serviceable					2		297					450			2		292	
Detroit, unserviceable																		
Galena, serviceable																		
Galena, unserviceable																		
Middletown, serviceable							540											
Middletown, unserviceable																		
New York, serviceable																		2
New York, unserviceable																		
West Point, serviceable			1							10		10						
West Point, unserviceable																		
Total serviceable	3	97	42	1	3,661	1	11,928	261	284	75	78	4,318	127	8,973	4,484	925	1,574	
Total unserviceable					637		141				5	24		285	782		4	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 6.—SMALL ARMS.																		
	Pistols.			Carbines.		Repeaters.	Chevaux de friso.	Rampart arms.	Small arms, various models.	Blunderbusses.	Fusils.	Wall pieces.	Swords.						
	Repaired, rifle calibre.	Repaired, musket calibre.	Various models.	New.	Repaired.								Officers' artillery.	Officers' infantry.	Cadets'.	Non-commissioned officers' artillery.	Non-commissioned officers' infantry.	Musicians'.	Lafayette.
ARSENALS.																			
Allegheny, serviceable	7		2								2		6		147				
Allegheny, unserviceable																			
Augusta, serviceable			165																
Augusta, unserviceable																			
Baton Rouge, serviceable	3								2		1								
Baton Rouge, unserviceable															26	27	87		
Bellona, serviceable																			2
Bellona, unserviceable																			
Champlain, serviceable																			
Champlain, unserviceable																			
Fort Monroe, serviceable			2														7		
Fort Monroe, unserviceable																			
Frankford, serviceable	16																		
Frankford, unserviceable									1	1									
Kennebec, serviceable																			
Kennebec, unserviceable																			
Mount Vernon, serviceable																			
Mount Vernon, unserviceable													2			142			
Pikesville, serviceable				1	1														
Pikesville, unserviceable						171													
Rome, serviceable	292	77																	
Rome, unserviceable																			
St. Louis, serviceable	50				1						1								7
St. Louis, unserviceable			21					30		1									6
Washington, serviceable				110					78										
Washington, unserviceable					17												35		
Watertown, serviceable			8																913
Watertown, unserviceable																			3
Watervliet, serviceable				48						2	23	2	72	278	191	8			
Watervliet, unserviceable													1		2				36
ARMORIES.																			
Springfield, sup't, serviceable																			
Springfield, M. S. K., serviceable			50	683															
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable			1																
Harper's Ferry, M. S. K., serviceable																10			
Harper's Ferry, unserviceable				64															
DEPOTS.																			
Charleston, serviceable																			
Charleston, unserviceable													6						
Detroit, serviceable													42			15			
Detroit, unserviceable													4			34			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable																			
New York, unserviceable																			
West Point, serviceable						1						4							
West Point, unserviceable																			
Total serviceable	361	84	226	844	2	171	1	78	4	24	9	116	284	191	322	913	94		1
Total unserviceable			21	64	17			30	1	2		11			104	30	8		36

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 6.—SMALL ARMS.								CLASS 7.—ACCOUTREMENTS, ETC., FOR SMALL ARMS.							
	Swords.		Sabres.				Outlasses.	Spontoons.	Pikes.	For muskets.						
	Artillery.	Various kinds.	Officers.	Non-com. officers, cavalry.	Cavalry.	Cavalry, without scabbards.				Cartridge-boxes.	Cartridge-box belts, buff.	Cartridge-box belts, black.	Bayonet scabbards.	Bayonet scabbard belts, buff.	Bayonet scabbard belts, black.	Gun slings, russet.
ARSENALS.																
Allegheny, serviceable.....	1,155				2,647				6,362	4,353	114	6,619	4,941	110	.....
Allegheny, unserviceable.....																
Augusta, serviceable.....	161				400				69	441		693	536		133	
Augusta, unserviceable.....	10								233	84		392	94		236	
Baton Rouge, serviceable.....	265				200				641	179		524	123	160	152	
Baton Rouge, unserviceable.....	11								1,554	4	182	1,330	1,452	192	526	
Bellona, serviceable.....																
Bellona, unserviceable.....																
Champlain, serviceable.....										53			80		2	
Champlain, unserviceable.....																
Fort Monroe, serviceable.....	2								131			146				
Fort Monroe, unserviceable.....	5								69	53		100	55		258	
Frankford, serviceable.....	1,078		21		1,025				100	8,115		2,190	7,912		2,121	
Frankford, unserviceable.....								15					56			
Kennebec, serviceable.....																
Kennebec, unserviceable.....		10							324	249		111	263		166	
Mount Vernon, serviceable.....									50	49		49	49			
Mount Vernon, unserviceable.....																
Pikesville, serviceable.....					64				53		352			552	466	
Pikesville, unserviceable.....									59			217	57		86	
Rome, serviceable.....		5			40				2,575	380	950	421	400	1,200	953	
Rome, unserviceable.....								20	639	468		1,132	70			
St. Louis, serviceable.....					313				272	104		66	30		49	
St. Louis, unserviceable.....				59	604				2,374	280	340	1,080	1,059	580	135	
Washington, serviceable.....	161		21		392				273	324		265	308		656	
Washington, unserviceable.....											22	138		32		
Watertown, serviceable.....	357				649		37	1,042	17	808	1,209	506	834	790	157	
Watertown, unserviceable.....			39						320	311		336	365			
Watervliet, serviceable.....	130				1,436		111	185	188	2,707	387	319	2,490	115	1,100	
Watervliet, unserviceable.....	42				3				468	151		663	151			
ARMORIES.																
Springfield, sup't, serviceable.....																
Springfield, M. S. K., serviceable.....																
Springfield, unserviceable.....																
Harper's Ferry, sup't, serviceable.....																
Harper's Ferry, M. S. K., serviceable.....																
Harper's Ferry, unserviceable.....																
DEPOTS.																
Charleston, serviceable.....					100				7,723	5,108	2,500	7,106	5,300	2,679	3,747	
Charleston, unserviceable.....									5			482				
Detroit, serviceable.....					300				3,602	680		2,073	564		998	
Detroit, unserviceable.....									994	883		1,095			344	
Galena, serviceable.....																
Galena, unserviceable.....																
Middletown, serviceable.....																
Middletown, unserviceable.....																
New York, serviceable.....					480											
New York, unserviceable.....												5				
West Point, serviceable.....					50											
West Point, unserviceable.....																
Total serviceable.....	3,309	5	81		8,496		111	37	1,127	22,006	23,301	5,512	20,977	23,367	5,606	10,539
Total unserviceable.....	68	10		59	607				35	7,038	3,083	544	7,137	3,566	804	1,751

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 7.—ACCOUTREMENTS, ETC., FOR SMALL ARMS.														
	For muskets.							For carbines.							
	Gun slings, black.	Brushes and picks.	Bullet moulds.	Screw-drivers.	Wipers.	Ball-screws.	Spring vices.	Flint caps.	Bullet clippers.	Bullet moulds.	Screw-drivers.	Priming boxes.	Wipers.	Percussion caps.	Percussion cap boxes.
ARSENALS.															
Allegheny, serviceable.....	1,580	110		60,625	62,590	7,639	6,437	97,782							
Allegheny, unserviceable.....															
Augusta, serviceable.....		14	5	5,068	1,647	907	6	53							
Augusta, unserviceable.....		1,587		4											
Baton Rouge, serviceable.....	647	447		2,576	2,401	252	203								
Baton Rouge, unserviceable.....	45	1,431		37	5	11	11								
Bellona, serviceable.....															
Bellona, unserviceable.....															
Champlain, serviceable.....															
Champlain, unserviceable.....															
Fort Monroe, serviceable.....		63		383	420	59	54	625						1,000	
Fort Monroe, unserviceable.....		18													
Frankford, serviceable.....		3,125	27	35,217	68,310	16,395	3,486	32,558	2						
Frankford, unserviceable.....															
Kennebec, serviceable.....				11,947	1,194	11,202	1,194								
Kennebec, unserviceable.....		362													
Mount Vernon, serviceable.....	49	43	1	19	2	16	4								
Mount Vernon, unserviceable.....															
Pikesville, serviceable.....		323	8	248		66	42	75	1	1	1	1	250		
Pikesville, unserviceable.....		36		34	41										
Rome, serviceable.....	635		1	1,887	200	90									
Rome, unserviceable.....															
St. Louis, serviceable.....			1	920	1,060	86	64		3						
St. Louis, unserviceable.....		54							1						
Washington, serviceable.....		185	3	28,618	19,042	3,044	2,968		1	144	109	136	109	27,250	
Washington, unserviceable.....			218½												
Watertown, serviceable.....	826	786	3	26,950	17,950	2,858	2,477	2,620							
Watertown, unserviceable.....	154	43		63	80	12	1								
Watervliet, serviceable.....	1,014	521		77,076	73,206	7,181	7,208	72,076							
Watervliet, unserviceable.....	32	10		272	1,407	23									
ARMORIES.															
Springfield, sup't, serviceable.....															
Springfield, M. S. K., serviceable.....				164,004	162,453	17,548	16,176	121,112							
Springfield, unserviceable.....															
Harper's Ferry, sup't, serviceable.....															
Harper's Ferry, M. S. K., serviceable.....				32,034	25,814	2,027	2,156	48,924							
Harper's Ferry, unserviceable.....															
DEPOTS.															
Charleston, serviceable.....	4,532	4,732	4	5,147	5,832	631	500	4,988							
Charleston, unserviceable.....															
Detroit, serviceable.....	1,435	1,664	5	1,005	473	703	37								
Detroit, unserviceable.....		468	3	103			1								
Galena, serviceable.....															
Galena, unserviceable.....															
Middletown, serviceable.....															
Middletown, unserviceable.....															
New York, serviceable.....		55													
New York, unserviceable.....															
West Point, serviceable.....			6						2						
West Point, unserviceable.....															
Total serviceable.....	10,718	12,073	64	444,725	442,594	70,704	43,012	380,813	8	145	110	137	110	28,500	
Total unserviceable.....	231	4,009	221½	543	1,533	46	13		1						

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 7.—ACCOUTREMENTS, ETC., FOR SMALL ARMS.																
	For rifles.																
	Belts.	Flasks.	Pouches and belts.	Powder horns.	Cartridge-boxes.	Cartridge-box belts, white.	Cartridge-box belts, black.	Bullet moulds.	Screw-drivers.	Wipers.	Ball-screws.	Spring vices.	Copper flasks.	Changers.	Accoutrements, sets of.	Accoutrements, sets of, incomplete.	Equipments for flint's rifle.
ARSENALS.																	
Allegheny, serviceable	251	307	558				4,031	5,157	6,147	525	347						124
Allegheny, unserviceable.....																	
Augusta, serviceable		7	7		25		50	500	458	50	50						
Augusta, unserviceable.....																	
Baton Rouge, serviceable.....	728	727	728				31										
Baton Rouge, unserviceable			6	54	38												
Bellona, serviceable.....																	
Bellona, unserviceable.....																	
Champlain, serviceable.....	1	1					1	1	1								
Champlain, unserviceable.....																	
Fort Monroe, serviceable.....	117	117	103			66	154	115	113		11	105					
Fort Monroe, unserviceable	51																
Frankford, serviceable			1,030				102	700	741	133	70	2,924					
Frankford, unserviceable.....																	
Kennebec, serviceable																	
Kennebec, unserviceable.....																	
Mount Vernon, serviceable.....							1										
Mount Vernon, unserviceable.....																	
Pikesville, serviceable.....	7	7					2										
Pikesville, unserviceable.....																	
Rome, serviceable				40			99						3				
Rome, unserviceable.....																	
St. Louis, serviceable			180		180		618	26	103	5	29	435	119	313	12	99	
St. Louis, unserviceable	295	247	83	594								85					
Washington, serviceable	1,024	1,031		26			685	4,027	3,998	85	406						1,631
Washington, unserviceable.....	101	41		1													
Watertown, serviceable.....		89	89				21	200	200		20						
Watertown, unserviceable.....																	
Watervliet, serviceable.....	3	3	25	38			1,155	4,209	4,440	400	416						
Watervliet, unserviceable.....	17	19															
ARMORIES.																	
Springfield, sup't, serviceable.....																	
Springfield, M. S. K., serviceable				12			138	1,500	1,500	110	150						
Springfield, unserviceable.....																	
Harper's Ferry, sup't, serviceable.....																	
Harper's Ferry, M. S. K., serviceable	4,805	4,805					769	8,061			752						
Harper's Ferry, unserviceable.....																	
DEPOTS.																	
Charleston, serviceable.....	24	24					23	85	25		3	200	300				
Charleston, unserviceable.....																	
Detroit, serviceable							204	550	550	30	55						
Detroit, unserviceable.....							19										
Galena, serviceable																	
Galena, unserviceable.....																	
Middletown, serviceable.....																	
Middletown, unserviceable.....																	
New York, serviceable.....												1	1				
New York, unserviceable.....																	
West Point, serviceable	10	10					1										
West Point, unserviceable.....																	
Total serviceable.....	5,546	7,121	3,751	50	231	66	8,084	25,131	18,276	1,338	2,311	3,665	122	514	12	1,844	
Total unserviceable.....	169	55	253	177	633		19					85					

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 7.—ACCOUTREMENTS, ETC., FOR SMALL ARMS.															
	Buckshot moulds.	For pistols.				Sword belts.				Sabre belts.				Flints.		
		Cartridge-boxes.	Cartridge-box belts, buff.	Cartridge-box belts, black.	Screw-drivers.	Ball-screws.	Waist, white.	Waist, black.	Shoulder, white.	Shoulder, black.	Waist, white.	Waist, black.	Shoulder, white.	Shoulder, black.	Musket.	Rifle.
ARSENALS.																
Allegheny, serviceable	603		7			1,262		60		253	159			890,600	152,200	
Allegheny, unserviceable																
Augusta, serviceable	2					7		7		500				311,580		
Augusta, unserviceable																
Baton Rouge, serviceable								305						983,533	67,500	
Baton Rouge, unserviceable						19	16									
Bellona, serviceable																
Bellona, unserviceable																
Champlain, serviceable														39,000	5,430	
Champlain, unserviceable																
Fort Monroe, serviceable						66		113						15,427	1,000	
Fort Monroe, unserviceable																
Frankford, serviceable	1					1,000		485		1,000	180	500		1,567,600	643,000	
Frankford, unserviceable																
Kennebec, serviceable														261,890	98,600	
Kennebec, unserviceable																
Mount Vernon, serviceable	1															
Mount Vernon, unserviceable						5										
Pikesville, serviceable						730								203,600	315,000	
Pikesville, unserviceable						4										
Rome, serviceable														46,560	19,400	
Rome, unserviceable																
St. Louis, serviceable										517				671,600	47,500	
St. Louis, unserviceable						9				302						
Washington, serviceable	7			48	48	146	55		500	100				1,412,581	65,605	
Washington, unserviceable							10									
Watertown, serviceable	5	2	1			117		100	309		24		55	603,836	92,633	
Watertown, unserviceable						7		2								
Watervliet, serviceable	763	143	620			1,279	99	20			25			1,723,966	284,500	
Watervliet, unserviceable														288,600		
ARMORIES.																
Springfield, sup't, serviceable																
Springfield, M. S. K., serviceable														12,940		
Springfield, unserviceable																
Harper's Ferry, sup't, serviceable																
Harper's Ferry, M. S. K., serviceable														9,806		
Harper's Ferry, unserviceable																
DEPOTS.																
Charleston, serviceable											100			41,859	3,820	
Charleston, unserviceable														803		
Detroit, serviceable	3									13			59	44,429	7,400	
Detroit, unserviceable	1					42		23								
Galena, serviceable																
Galena, unserviceable																
Middletown, serviceable																
Middletown, unserviceable																
New York, serviceable	1					1					1	250		4,663	5,920	
New York, unserviceable																
West Point, serviceable	1													1,793		
West Point, unserviceable																
Total serviceable	19	1,370	144	627	48	48	4,608	154	1,090	809	2,383	489	750	114	9,028,166	1,809,508
Total unserviceable	1						86	26	25		302				298,406	803

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 7.—ACCOUTREMENTS, ETC., FOR SMALL ARMS.										CLASS 8.—POWDER, ETC.				
	Flints.			Belt plates.	For dragoons.					Accountments, various models.	Powder, pounds.				
	Pistol.	Cannon.	Assorted.		Saddles.	Bridles.	Holsters.	Halters.	Spurs.		Cannon.	Musket.	Rifle.	Mealed.	Powder, not marked.
ARSENALS.															
Allegheny, serviceable						851				16,787	26,700	5,825			
Allegheny, unserviceable															
Augusta, serviceable				108						1,477	2,423	700		17,700	
Augusta, unserviceable															
Baton Rouge, serviceable				871						19,800	18,416	4,145	237		
Baton Rouge, unserviceable					3	2				1,444	500				
Bellona, serviceable										1,000	250		80		
Bellona, unserviceable										1,956	281	46	262		
Champlain, serviceable															
Champlain, unserviceable										1,956	281	46	262		
Fort Monroe, serviceable															
Fort Monroe, unserviceable										79,700	114,700	12,600	2,000		
Frankford, serviceable	386,376					1		1							
Frankford, unserviceable										1,800	1,000				
Kennebec, serviceable															
Kennebec, unserviceable										4,366		825	80		
Mount Vernon, serviceable			20,559	49											
Mount Vernon, unserviceable															
Pikesville, serviceable	50,000		2,800							14,870	7,965	573½	119		
Pikesville, unserviceable															
Rome, serviceable	10,131									10,594	9,730				
Rome, unserviceable		5,400	6,200								100				
St. Louis, serviceable				419		77				40,700	13,745	5,800	152		
St. Louis, unserviceable						532				18	768				
Washington, serviceable	21,800			2,303					46	66,540½	4,998½	303	44		
Washington, unserviceable															
Watertown, serviceable	88,000	7,450		3		1				32,514	30,200				
Watertown, unserviceable															
Watervliet, serviceable	244,400				2	10		35		56,750	26,425	1,275			
Watervliet, unserviceable															
ARMORIES.															
Springfield, sup't, serviceable															
Springfield, M. S. K., serviceable	21,800		63,832								4,100	5			
Springfield, unserviceable										372		100			
Harper's Ferry, sup't, serviceable											1,341				
Harper's Ferry, M. S. K., serviceable															
Harper's Ferry, unserviceable															
DEPOTS.															
Charleston, serviceable									287	8,250	3,100	900			
Charleston, unserviceable						29									
Detroit, serviceable	5,391			282						7,193	3,151	3,066			
Detroit, unserviceable															
Galena, serviceable															
Galena, unserviceable															
Middletown, serviceable															
Middletown, unserviceable															
New York, serviceable						250				7,438	870		999		
New York, unserviceable															
West Point, serviceable										800		209	127		
West Point, unserviceable										12,900					
Total serviceable	917,498	7,450	87,291	4,035	2	10	1,209	35	288	46	383,984	269,894	26,272	4,145	17,700
Total unserviceable		5,400	6,200		3		534				23,390	868	180		

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 8.—POWDER, ETC.																
	Nitre, pounds.		Brimstone, pounds.			Charcoal, pounds.				Flannel cartridges.							
	Crude.	Refined.	Crude.	Rolled.	Pulverized.	Coarse.	Pulverized.	Saltpetre, pounds.	Composition, pounds.	32-pounder.	24-pounder.	18-pounder.	12-pounder.	9-pounder.	6-pounder.	3-pounder.	1-pounder.
ARSENALS.																	
Allegheny, serviceable	1,375															40	
Allegheny, unserviceable.....																	
Augusta, serviceable.....		2,012		143½	76½												
Augusta, unserviceable.....																	
Baton Rouge, serviceable		39		380½		184											
Baton Rouge, unserviceable.....															45	25	
Bellona, serviceable.....																	
Bellona, unserviceable																	
Champlain, serviceable		122			98	180		2*		314	690	260					
Champlain, unserviceable.....																	
Fort Monroe, serviceable.....	1,879		140	35	348	131											
Fort Monroe, unserviceable																	
Frankford, serviceable		594,997	155,546	164,078	740	504	332										
Frankford, unserviceable.....																	
Kennebec, serviceable																	
Kennebec, unserviceable.....																	
Mount Vernon, serviceable		285	100			85											
Mount Vernon, unserviceable																	
Pikesville, serviceable		775		930		83	778	112			320	60					
Pikesville, unserviceable.....																	
Rome, serviceable				26	90			27½		201	125	905		18	63		
Rome, unserviceable.....																	
St. Louis, serviceable.....												6		27			
St. Louis, unserviceable.....	143½		2														56
Washington, serviceable		325	201½	10	205	199					18	31		45			
Washington, unserviceable.....																	
Watertown, serviceable		4,610	779	55,305				102							16		
Watertown, unserviceable																	
Watervliet, serviceable		625	431	112							528	936	922				
Watervliet, unserviceable.....																	
ARMORIES.																	
Springfield, sup'l, serviceable.....																	
Springfield, M. S. K., serviceable																	
Springfield, unserviceable																	
Harper's Ferry, sup'l, serviceable.....																	
Harper's Ferry, M. S. K., serviceable.....																	
Harper's Ferry, unserviceable																	
DEPOTS.																	
Charleston, serviceable.....		40			15				25	344	248	93					
Charleston, unserviceable.....																	
Detroit, serviceable																	
Detroit, unserviceable.....																	
Galena, serviceable																	
Galena, unserviceable.....																	
Middletown, serviceable.....																	
Middletown, unserviceable.....																	
New York, serviceable.....																	
New York, unserviceable																	
West Point, serviceable				146		137				8							
West Point, unserviceable.....																	
Total serviceable	3,254	603,830	153,207½	222,176	1,570,635	1,200,778	281	25	859	1,929	2,291	922	3,046	63			
Total unserviceable.....	143½		2											45	25	56	

* Kegs.

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 8.—POWDER, ETC.															
	Flannel cartridges.			Fixed ammunition, assorted.	Flannel cartridge bags.											
	8-inch mortar.	8-inch howitzer.	24-inch howitzer.		42-pounder.	32-pounder.	24-pounder.	18-pounder.	12-pounder.	8-pounder.	4-pounder.	3-pounder.	13-inch mortar.	10-inch mortar.	8-inch mortar.	8-inch howitzer.	5½-inch howitzer.
ARSENALS.																
Allegheny, serviceable					28	91	68	80	388							
Allegheny, unserviceable																
Augusta, serviceable				67					186							
Augusta, unserviceable																
Baton Rouge, serviceable						39			2							
Baton Rouge, unserviceable						12										
Bellona, serviceable					84											
Bellona, unserviceable																
Champlain, serviceable	247		548	12				287	38			2,314	1,534			
Champlain, unserviceable																
Fort Monroe, serviceable	44				214	33		108	1,937	71	81					
Fort Monroe, unserviceable																
Frankford, serviceable					250		3,700		4,864							
Frankford, unserviceable																
Kennebec, serviceable									20							
Kennebec, unserviceable																
Mount Vernon, serviceable																
Mount Vernon, unserviceable																
Pikesville, serviceable				45			1,035	1,340	206							
Pikesville, unserviceable							296	100								
Rome, serviceable			373			92		2,250	1,149			94			1,140	
Rome, unserviceable																
St. Louis, serviceable																
St. Louis, unserviceable																
Washington, serviceable			169			68	735	264	273							
Washington, unserviceable																
Watertown, serviceable							118									384
Watertown, unserviceable																
Watervliet, serviceable			405			641	1,040	1,097	117							155
Watervliet, unserviceable																
ARMORIES.																
Springfield, sup't, serviceable																
Springfield, M. S. K., serviceable																
Springfield, unserviceable																
Harper's Ferry, sup't, serviceable																
Harper's Ferry, M. S. K., serviceable																
Harper's Ferry, unserviceable																
DEPOTS.																
Charleston, serviceable		81	239				424	306	898							125
Charleston, unserviceable					20	72	200	180								68
Detroit, serviceable			298		480	1,006	450	300	584		24					
Detroit, unserviceable							3,082		174	50						
Galena, serviceable																
Galena, unserviceable																
Middletown, serviceable																
Middletown, unserviceable									129							
New York, serviceable																
New York, unserviceable									178							
West Point, serviceable																
West Point, unserviceable																
Total serviceable	291	81	2,032	79	45	1,056	1,975	7,570	6,032	10,969	71	105	94	2,314	1,534	1,265
Total unserviceable						20	84	3,578	280	174	50					68

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 8.—POWDER, ETC.														
	Flannel cartridge bags.			Paper cartridge bags, flannel bottoms.						Canvas bags.				Cartridges.	
	24-pounder.	12-pounder carronade.	Assorted.	42-pounder.	32-pounder.	24-pounder.	18-pounder.	12-pounder.	6-pounder.	32-pounder.	24-pounder.	18-pounder.	12-pounder.	Musket ball.	Musket blank.
ARSENALS.															
Allegheny, serviceable					804									207,150	10,800
Allegheny, unserviceable														95,080	
Augusta, serviceable														1,920	
Augusta, unserviceable														1,080	
Baton Rouge, serviceable															
Baton Rouge, unserviceable															
Bellona, serviceable					100	271									
Bellona, unserviceable															
Champlain, serviceable	916					1,527	1,645	198						77,980	
Champlain, unserviceable														28,026	
Fort Monroe, serviceable	108					200	50							56,270	1,116
Fort Monroe, unserviceable															
Frankford, serviceable	1,000	2,400												530,000	
Frankford, unserviceable															
Kennebec, serviceable															
Kennebec, unserviceable														16,750	
Mount Vernon, serviceable														5,890	
Mount Vernon, unserviceable															
Pikesville, serviceable						40	581		182		320	160		593,600	
Pikesville, unserviceable						12	120		13						
Rome, serviceable	3,400					1,474	644							532,800	20,000
Rome, unserviceable															
St. Louis, serviceable														61,000	
St. Louis, unserviceable															
Washington, serviceable					93	28								458,933	16,080
Washington, unserviceable															
Watertown, serviceable														120,800	5,310
Watertown, unserviceable															
Watervliet, serviceable				620	6,003	7,274	7,926							488,340	20,700
Watervliet, unserviceable			3,615												
ARMORIES.															
Springfield, sup't, serviceable															
Springfield, M. S. K., serviceable															
Springfield, unserviceable															
Harper's Ferry, sup't, serviceable															
Harper's Ferry, M. S. K., serviceable															
Harper's Ferry, unserviceable															
DEPOTS.															
Charleston, serviceable						26								32,043	10,921
Charleston, unserviceable															
Detroit, serviceable						25	1,273							254,686	192
Detroit, unserviceable														3,300	
Galena, serviceable															
Galena, unserviceable															
Middletown, serviceable															
Middletown, unserviceable															
New York, serviceable				227	861	32	973	282						1,016,110	2,274
New York, unserviceable						39									
West Point, serviceable						31		60						12,276	14,050
West Point, unserviceable															
Total serviceable	5,424	2,400		847	7,861	10,928	13,092	540	182		320	160		4,554,038	101,443
Total unserviceable			3,615			51	120	13						50,096	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 8.—POWDER, ETC.											
	Cartridges.		Bullets, pounds.					Paper.				
	Pistol ball.	Rifle ball.	Musket.	Rifle and pistol.	Carbine.	Wall piece.	Buckshot.	Musket cartridge, pounds.	Cannon cartridge, pounds.	Cannon cartridge, varnished.	Rocket.	Portfire.
ARSENALS.												
Allegheny, serviceable			24,800	12,440			2,500	990	261		585	
Allegheny, unserviceable												
Augusta, serviceable			5,350					325	154		62	
Augusta, unserviceable												
Baton Rouge, serviceable							790	312	505	135		64
Baton Rouge, unserviceable									292			
Bellona, serviceable									147			
Bellona, unserviceable												
Champlain, serviceable			303½				508½		80			
Champlain, unserviceable												
Fort Monroe, serviceable	10,170		23,125	953			7,068	950	859		400	672
Fort Monroe, unserviceable												
Frankford, serviceable		2,500	21,300	984			8,200	160½	936	68	232	186
Frankford, unserviceable			12,112									
Kennebec, serviceable								77	246		62	
Kennebec, unserviceable												
Mount Vernon, serviceable			47,700					366	515		270	
Mount Vernon, unserviceable												
Pikesville, serviceable	47,400	65,400			2,970	74		563½	195½	515		
Pikesville, unserviceable												
Rome, serviceable	31,320	25,800	43,222				8,886	65	534		520	
Rome, unserviceable			743									
St. Louis, serviceable			317	1,250			274	248	1,241		267	
St. Louis, unserviceable												
Washington, serviceable			13,386				1,256	702	1,515½	175	214½	
Washington, unserviceable												
Watertown, serviceable	518		11,638				1,167	1,105	2,045	200	145	
Watertown, unserviceable												
Watervliet, serviceable	3,000	8,450	50,396	800			6,582	2,174½	6,192	3,962	2,936	1,032½
Watervliet, unserviceable			220									
ARMORIES.												
Springfield, sup't, serviceable												
Springfield, M. S. K., serviceable												
Springfield, unserviceable												
Harper's Ferry, sup't, serviceable												
Harper's Ferry, M. S. K., serviceable												
Harper's Ferry, unserviceable												
DEPOTS.												
Charleston, serviceable			3,500				11	1,717				
Charleston, unserviceable												
Detroit, serviceable	4,100	2,000	13,910				6,598	141	200			
Detroit, unserviceable												
Galena, serviceable												
Galena, unserviceable												
Middletown, serviceable												
Middletown, unserviceable												
New York, serviceable		9,660							160			
New York, unserviceable												
West Point, serviceable	4,250		3,708	9			300	75	86			
West Point, unserviceable												
Total serviceable	97,758	113,810	262,552½	16,436	2,970	74	44,649½	9,001½	15,871½	5,055	5,693½	1,974½
Total unserviceable			13,075						292			

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 8.—POWDER, ETC.												
	Fuses, empty.							Papers cut for 24-pounder cylinders.	Percussion primers.	Thundering barrels.	Portfires.	Slowmatch, pounds.	Quickmatch, pounds.
	8-inch.	5½-inch.	4 2-5-inch.	2½-inch.	24-pounder.	6-pounder.	Assorted.						
ARSENALS.													
Allegheny, serviceable		881									1,794	50	35
Allegheny, unserviceable												29½	
Augusta, serviceable													
Augusta, unserviceable													
Baton Rouge, serviceable				619							570	335	
Baton Rouge, unserviceable											30		
Bellona, serviceable								3,100				3	
Bellona, unserviceable													
Champlain, serviceable												1,231	
Champlain, unserviceable											1,027		
Fort Monroe, serviceable	186				919		306		19,403		85	3	3½
Fort Monroe, unserviceable													
Frankford, serviceable							770		3,500		295	2,000	
Frankford, unserviceable													
Kennebec, serviceable											39		
Kennebec, unserviceable													
Mount Vernon, serviceable	29										23	83	
Mount Vernon, unserviceable													
Pikesville, serviceable	801	4,130									4,561	4,426½	21
Pikesville, unserviceable													
Rome, serviceable											3,405	1,440	
Rome, unserviceable													
St. Louis, serviceable					35			204			164	196	
St. Louis, unserviceable													
Washington, serviceable	327				109						333	2,301	
Washington, unserviceable													
Watertown, serviceable					2,620	2,994					1,248	523	39½
Watertown, unserviceable							53					2,151	
Watervliet, serviceable	900	2,665	3,600				736		3,000		3,234	11,630	
Watervliet, unserviceable													
ARMORIES.													
Springfield, sup't, serviceable													
Springfield, M. S. K., serviceable											78	95	
Springfield, unserviceable													
Harper's Ferry, sup't, serviceable													
Harper's Ferry, M. S. K., serviceable													
Harper's Ferry, unserviceable													
DEPOTS.													
Charleston, serviceable											185	108½	
Charleston, unserviceable													
Detroit, serviceable	264										326	184	24
Detroit, unserviceable						209							
Galena, serviceable													
Galena, unserviceable													
Middletown, serviceable													
Middletown, unserviceable													
New York, serviceable											1,740	1,458	
New York, unserviceable													
West Point, serviceable					242					1	63	67	6½
West Point, unserviceable													
Total serviceable	2,507	7,676	3,600	619	4,125	2,994	1,812	3,304	25,903	1	18,143	26,183½	129½
Total unserviceable						209	53				1,057	2,151	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 8.—POWDER, ETC.						CLASS 9.—PARTS OR INCOMPLETE SETS OF ANY OF THE ARTICLES MENTIONED IN THE PRECEDING CLASSES.						
	Rockets.						Parts of field carriages.						
	Kit-match, pounds.	3-inch iron case.	3½-inch paper case.	2½-inch paper case.	2-inch paper case.	Assorted.	Fire balls.	12-pounder cheeks.	6-pounder cheeks.	Limbers for carriages.	Wheels for carriages.	Wheels for limbers.	Wheels for caissons.	12-pounder caisson bodies.
ARSENALS.													
Allegheny, serviceable						48			2	11			
Allegheny, unserviceable													
Augusta, serviceable													
Augusta, unserviceable													
Baton Rouge, serviceable	40								2	4			
Baton Rouge, unserviceable			17										
Bellona, serviceable							2						
Bellona, unserviceable										51			
Champlain, serviceable										24	24		
Champlain, unserviceable													
Fort Monroe, serviceable	6									6	14	8	
Fort Monroe, unserviceable													
Frankford, serviceable													
Frankford, unserviceable													
Kennebec, serviceable													
Kennebec, unserviceable													
Mount Vernon, serviceable													
Mount Vernon, unserviceable									1				
Pikesville, serviceable													
Pikesville, unserviceable										6			
Rome, serviceable	12	76			10								
Rome, unserviceable													
St. Louis, serviceable								8	9	2			
St. Louis, unserviceable													
Washington, serviceable						15							
Washington, unserviceable													
Watertown, serviceable	117	188											
Watertown, unserviceable									13				
Watervliet, serviceable	152		52				9		7				1
Watervliet, unserviceable									1				
ARMORIES.													
Springfield, sup't, serviceable													
Springfield, M. S. K., serviceable													
Springfield, unserviceable													
Harper's Ferry, sup't, serviceable													
Harper's Ferry, M. S. K., serviceable													
Harper's Ferry, unserviceable													
DEPOTS.													
Charleston, serviceable					103				5	3			
Charleston, unserviceable													
Detroit, serviceable	1												
Detroit, unserviceable													
Galena, serviceable													
Galena, unserviceable													
Middletown, serviceable													
Middletown, unserviceable													
New York, serviceable													
New York, unserviceable													
West Point, serviceable					153	310							
West Point, unserviceable													
Total serviceable	323	264	52		266	63	319	2	8	25	50	24	1
Total unserviceable			17							15	57	14	8

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

		CLASS 9.—PARTS OR INCOMPLETE SETS OF ANY OF THE ARTICLES MENTIONED IN THE PRECEDING CLASSES.																			
		Parts of field carriages.																			
Arsenals, armories, and depots.		6-pounder caisson bodies.	12-pounder iron axle-trees.	6-pounder iron axle-trees.	3-pounder iron axle-trees.	Iron axle-trees, assorted.	Axle arms.	12-pounder ammunition boxes.	6-pounder ammunition boxes.	24-pounder trail handspikes.	18 pounder trail handspikes.	12-pounder trail handspikes.	6-pounder trail handspikes.	Elevating screws, male.	Elevating screws, female.	Elevating screws, assorted.	Sweep bars.	Swingtree bars.	Swingtrees.	Plinths.	
ARSENALS.																					
Allegheny, serviceable																					
Allegheny, unserviceable																					
Augusta, serviceable																					
Augusta, unserviceable																					
Baton Rouge, serviceable	15	20												5	5						
Baton Rouge, unserviceable														2	2						
Bellona, serviceable					439			13													
Bellona, unserviceable																					
Champlain, serviceable								34												68	
Champlain, unserviceable																					
Fort Monroe, serviceable								5				8	11								
Fort Monroe, unserviceable																					
Frankford, serviceable	5	42	1			36							12			4	4	20	24		
Frankford, unserviceable																					
Kennebec, serviceable																					
Kennebec, unserviceable																					
Mount Vernon, serviceable									*12	4			6							4	
Mount Vernon, unserviceable																					
Pikesville, serviceable													18					2	8		
Pikesville, unserviceable																					
Rome, serviceable							5					12		13			22	26	8		
Rome, unserviceable																					
St. Louis, serviceable					2			9			4		6			11		13	15		
St. Louis, unserviceable																					
Washington, serviceable						3															
Washington, unserviceable	1		1			6															
Watertown, serviceable						34												11	38		
Watertown, unserviceable																					
Watervliet, serviceable	1				46			46				93	46							251	
Watervliet, unserviceable	1																				
ARMORIES.																					
Springfield, sup't, serviceable																					
Springfield, M. S. K., serviceable																					
Springfield, unserviceable																					
Harper's Ferry, sup't, serviceable																					
Harper's Ferry, M. S. K., serviceable																					
Harper's Ferry, unserviceable																					
DEPOTS.																					
Charleston, serviceable											159							1	3	4	
Charleston, unserviceable																					
Detroit, serviceable														2					5		
Detroit, unserviceable																					
Galena, serviceable																					
Galena, unserviceable																					
Middletown, serviceable																					
Middletown, unserviceable																					
New York, serviceable	1									18	34	119	172						13	11	
New York, unserviceable																					
West Point, serviceable																					
West Point, unserviceable																					
Total serviceable	1	21	62	1	490	70	66	58	22	197	232	271	20	5	19	23	77	427	24		
Total unserviceable	1	1		1		6								2	2	3					

* Assorted.

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

CLASS 9.—PARTS OR INCOMPLETE SETS OF ANY OF THE ARTICLES MENTIONED IN THE PRECEDING CLASSES.																		
Arsenals, armories, and depots.	Of sea-coast carr'ges.			Parts of casemate carrriages.						Of mortar beds.			Parts assort'd.					
	24-pounder cheeks.	Iron truck-wheels for chassis.	Traversing handspikes.	Rollers.	Wheels.	Irons for transom of chassis.	Irons for rear transom.	Pintles.	Traversing handspikes.	Assorted.	10-inch cheeks.	Iron trucks.	Axle-trees.	Traversing handspikes.	Iron nave boxes.	Travelling forges, incomplete.	Caisson loops.	Transoms.
ARSENALS.																		
Allegheny, serviceable																		
Allegheny, unserviceable																		
Augusta, serviceable																		
Augusta, unserviceable																		
Baton Rouge, serviceable																		
Baton Rouge, unserviceable																		4
Bellona, serviceable																		
Bellona, unserviceable															16			
Champlain, serviceable																		
Champlain, unserviceable																		
Fort Monroe, serviceable						16	16	8	5	55								
Fort Monroe, unserviceable																		
Frankford, serviceable																		
Frankford, unserviceable																		
Kennebec, serviceable																		
Kennebec, unserviceable																		
Mount Vernon, serviceable																		
Mount Vernon, unserviceable																		
Pikesville, serviceable																		
Pikesville, unserviceable																		
Rome, serviceable		34	23															
Rome, unserviceable																		
St. Louis, serviceable										6								
St. Louis, unserviceable																		
Washington, serviceable	1		2		2							8	4	8				
Washington, unserviceable												2						
Watertown, serviceable		133		2					37	4	1							
Watertown, unserviceable																		
Watervliet, serviceable																7	8	
Watervliet, unserviceable																		
ARMORIES.																		
Springfield, sup't, serviceable																		
Springfield, M. S. K., serviceable																		
Springfield, unserviceable																		
Harper's Ferry, sup't, serviceable																		
Harper's Ferry, M. S. K., serviceable																		
Harper's Ferry, unserviceable																		
DEPOTS.																		
Charleston, serviceable																		
Charleston, unserviceable																		
Detroit, serviceable																		
Detroit, unserviceable																		
Galena, serviceable																		
Galena, unserviceable																		
Middletown, serviceable																		
Middletown, unserviceable																		
New York, serviceable				173	150													
New York, unserviceable																		
West Point, serviceable														2				
West Point, unserviceable																		
Total serviceable	1	167	24	174	153	16	16	8	42	65	1	8	4	10	7	8	4	
Total unserviceable												2			16			

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

		CLASS 9.—PARTS OR INCOMPLETE SETS OF ANY OF THE ARTICLES MENTIONED IN THE PRECEDING CLASSES.																		
		Parts of implements and equipments.																		
Arsenals, armories, and depots.		12-pounder sponge heads.	9-pounder sponge heads.	6-pounder sponge heads.	4-pounder sponge heads.	100-pounder rammer heads.	32-pounder rammer heads.	24-pounder rammer heads.	18-pounder rammer heads.	12-pounder rammer heads.	9-pounder rammer heads.	6-pounder rammer heads.	4-pounder rammer heads.	42-pounder ladles, without staves.	32-pounder ladles, without staves.	24-pounder ladles, without staves.	18-pounder ladles, without staves.	12-pounder ladles, without staves.	6-pounder ladles, without staves.	
ARSENALS.																				
Allegheny, serviceable																				
Allegheny, unserviceable																				
Augusta, serviceable																				
Augusta, unserviceable																				
Baton Rouge, serviceable																				
Baton Rouge, unserviceable																				
Bellona, serviceable																				
Bellona, unserviceable																				
Champlain, serviceable																				
Champlain, unserviceable																				
Fort Monroe, serviceable	34	22	36	19		25	40	36	48	35	60	42					4		5	
Fort Monroe, unserviceable																				
Frankford, serviceable																				
Frankford, unserviceable																				
Kennebec, serviceable																				
Kennebec, unserviceable																				
Mount Vernon, serviceable																				
Mount Vernon, unserviceable																				
Pikesville, serviceable	44					56	89	119	158		166								8	
Pikesville, unserviceable																				
Rome, serviceable											20								2	
Rome, unserviceable																				
St. Louis, serviceable																				
St. Louis, unserviceable																				
Washington, serviceable																				
Washington, unserviceable																				
Watertown, serviceable														7						
Watertown, unserviceable																				
Watervliet, serviceable																			7	16
Watervliet, unserviceable																				
ARMORIES.																				
Springfield, sup't, serviceable																				
Springfield, M. S. K., serviceable																				
Springfield, unserviceable																				
Harper's Ferry, sup't, serviceable																				
Harper's Ferry, M. S. K., serviceable																				
Harper's Ferry, unserviceable																				
DEPOTS.																				
Charleston, serviceable				5		9	8		3		8			1	1	2	3	4	3	
Charleston, unserviceable																				
Detroit, serviceable																				
Detroit, unserviceable																				
Galena, serviceable																				
Galena, unserviceable																				
Middletown, serviceable																				
Middletown, unserviceable																				
New York, serviceable	20		27		4		95	105			42									
New York, unserviceable																				
West Point, serviceable							4	17	17		50							2	1	
West Point, unserviceable																				
Total serviceable	98	22	63	24	4	90	232	260	209	35	296	42		8	1	2	7	21	24	
Total unserviceable							4	17	17		50							2	1	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	CLASS 9.—PARTS OR INCOMPLETE SETS OF ANY OF THE ARTICLES MENTIONED IN THE PRECEDING CLASSES.													Parts of prepared ammunition.					
	Parts of artillery harness.													24-pounder shot blocks.	12-pounder shot blocks.	9-pounder shot blocks.			
	Breechings.	Backbands.	Bellybands.	Cruppers.	Halters.	Halter chains.	Trace chains.	Breast chains.	Side chains.	Stay chains.	Bridles.	Saddles.	Saddle chains.				Rings and discs for.	Headstalls.	Assorted.
ARSENALS.																			
Allegheny, serviceable					104		76	39											
Allegheny, unserviceable																			
Augusta, serviceable					11						1								
Augusta, unserviceable					8						3	2							
Baton Rouge, serviceable																			
Baton Rouge, unserviceable																			
Bellona, serviceable			1			sets, 2				1	1								
Bellona, unserviceable										1	1								
Champlain, serviceable																			207
Champlain, unserviceable																			
Fort Monroe, serviceable											2								
Fort Monroe, unserviceable																	3	6	3
Frankford, serviceable		64			2	606	406	15		19									
Frankford, unserviceable																			
Kennebec, serviceable																			
Kennebec, unserviceable																			
Mount Vernon, serviceable	6	2	8			20	6			8						3			
Mount Vernon, unserviceable																			
Pike-ville, serviceable		1	2	2			7			2						4			
Pikesville, serviceable																			
Rome, serviceable						152	13		7							13			
Rome, unserviceable																			
St. Louis, serviceable					6						1								
St. Louis, unserviceable																			22
Washington, serviceable																			
Washington, unserviceable													91						
Watertown, serviceable	26	31	31	19	32		13			24					40			796	
Watertown, unserviceable																			
Watervliet, serviceable	4		6		10	66		83		11	5	9		4					
Watervliet, unserviceable																			
ARMORIES.																			
Springfield, sup't, serviceable																			
Springfield, M. S. K., serviceable																			
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable																			
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable						119				16						154	159		
Charleston, unserviceable																			
Detroit, serviceable																			
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable																			
New York, unserviceable																			
West Point, serviceable																			
West Point, unserviceable																			
Total serviceable	36	108	48	21	61	170	905	591	54	18	72	8	9	91	4	60	154	1,184	
Total unserviceable					8						4	3				3	6		3

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

		CLASS 9.—PARTS OR INCOMPLETE SETS OF ANY OF THE ARTICLES MENTIONED IN THE PRECEDING CLASSES.																	
Arsenals, armories, and depots.		Parts of small arms.																	
		Tin straps for shot.	Musket barrels.	Musket ramrods.	Musket bayonets.	Musket stocks.	Musket locks.	Musket lock plates.	Musket cocks.	Musket jaws.	Musket pans.	Musket hammers.	Musket tumblers.	Musket bridles.	Musket sears.	Musket mal springs.	Musket hammer springs.	Musket sear springs.	Musket small lock pins.
ARSENALS.																			
Allegheny, serviceable	319																		
Allegheny, unserviceable				1,118															
Augusta, serviceable																			
Augusta, unserviceable																			
Baton Rouge, serviceable	66			87		1													
Baton Rouge, unserviceable				232															
Bellona, serviceable																			
Bellona, unserviceable																			
Champlain, serviceable																			
Champlain, unserviceable																			
Fort Monroe, serviceable		30	12	12	66				3		33	47	50	13	17	211	35		
Fort Monroe, unserviceable																			
Frankford, serviceable		90	190			50	80	90	178	82	92	76	65	114	116	176			
Frankford, unserviceable																			
Kennebec, serviceable																			
Kennebec, unserviceable																			
Mount Vernon, serviceable																			
Mount Vernon, unserviceable																			
Pikesville, serviceable		50	38			13	38	38	38	38	38	38	38	63	63	63			
Pikesville, unserviceable		150	135																
Rome, serviceable		79	100																
Rome, unserviceable			45																
St. Louis, serviceable	186				229	197	183	157		105	106	54	88	11	64	34			
St. Louis, unserviceable	172		1,743	172															
Washington, serviceable		681	258	196	221	29	253	160		257	369		180	277			374	4,683	
Washington, unserviceable	196																		
Watertown, serviceable			4		139			253		191	51		173						
Watertown, unserviceable	3														16	3	13		
Watervliet, serviceable	39																		
Watervliet, unserviceable			216																
ARMORIES.																			
Springfield, sup't, serviceable																			
Springfield, M. S. K., serviceable																			
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable																			
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable	1,126																		
Charleston, unserviceable																			
Detroit, serviceable																			
Detroit, unserviceable		3	44																
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable																			
New York, unserviceable																			
West Point, serviceable																			
West Point, unserviceable																			
Total serviceable	1,126	610	930	689	208	656	289	554	721	216	706	703	218	557	482	254	682	4,683	
Total unserviceable		374	150	3,533	172										16	3	13		

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

CLASS 9.—PARTS OR INCOMPLETE SETS OF ANY OF THE ARTICLES MENTIONED IN THE PRECEDING CLASSES.																
Parts of small arms.																
Arsenals, armories, and depots.	Pistol small lock pins.	Pistol tumbler pins.	Pistol cock pins.	Pistol side pins.	Pistol triggers.	Pistol butt plated screws.*	Pistol band springs.	Parts of Hall's rifles.	Parts of small arms, assorted.	Cavalry sabre blades.	Sword blades, assorted.	Scabbards.	Blocks for cartridge-boxes.	Thins for cartridge-boxes.	Spare flint caps.	Belt plates.
ARSENALS.																
Allegheny, serviceable																8,849
Allegheny, unserviceable															500	
Augusta, serviceable																
Augusta, unserviceable																
Baton Rouge, serviceable																
Baton Rouge, unserviceable												1				
Bellona, serviceable																
Bellona, unserviceable																
Champlain, serviceable																
Champlain, unserviceable																
Fort Monroe, serviceable									380							53
Fort Monroe, unserviceable																
Frankford, serviceable																5,439
Frankford, unserviceable																
Kennebec, serviceable																401
Kennebec, unserviceable																
Mount Vernon, serviceable																
Mount Vernon, unserviceable																
Pikesville, serviceable																633
Pikesville, unserviceable																
Rome, serviceable										171	80					551
Rome, unserviceable																
St. Louis, serviceable								984								585
St. Louis, unserviceable												1				1,011
Washington, serviceable	179	72	94	48	21	21	1,063						33	473	1,330	61
Washington, unserviceable									1							
Watertown, serviceable																1,251
Watertown, unserviceable																414
Watervliet, serviceable															76,553	
Watervliet, unserviceable																286
ARMORIES.																
Springfield, sup't, serviceable																
Springfield, M. S. K., serviceable																
Springfield, unserviceable																
Harper's Ferry, sup't, serviceable																
Harper's Ferry, M. S. K., serviceable																
Harper's Ferry, unserviceable																
DEPOTS.																
Charleston, serviceable																400
Charleston, unserviceable																
Detroit, serviceable															562	
Detroit, unserviceable																
Galena, serviceable																
Galena, unserviceable																
Middletown, serviceable																
Middletown, unserviceable																
New York, serviceable																
New York, unserviceable																
West Point, serviceable																
West Point, unserviceable																
Total serviceable	179	72	94	48	21	21	2,047	380	171	80	1	2	33	473	78,945	18,223
Total unserviceable										1		2				1,711

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

	CLASS 9.—PARTS OR INCOMPLETE SETS OF ANY OF THE ARTICLES MENTIONED IN THE PRECEDING CLASSES.										CLASS 10.—MISCELLANEOUS.							
	Parts of ammunition.										Arches for shot furnaces.	Blocks, assorted.	Cannon gauges.	Cannon miltros.	Cannon drifts.	Cannon scrapers.	Cannon scorchers.	
	Congreve rocket cases.	4½-inch rocket cases, iron.	4-inch rocket cases, iron.	3-inch rocket cases, iron.	2-inch rocket cases, iron.	1 8-10-inch rocket cases, iron.	Portfire cases, paper.	Cases for hot shot.	Rocket sticks.	2-inch rocket pots.								2-inch rocket caps.	Flunnel bottoms.
Arsenals, armories, and depots.																		
ARSENALS.																		
Allegheny, serviceable																		
Allegheny, unserviceable																		
Augusta, serviceable																		
Augusta, unserviceable																		
Baton Rouge, serviceable						per 60										2		
Baton Rouge, unserviceable																		
Bellona, serviceable																		
Bellona, unserviceable																		
Champlain, serviceable						66	800				200							
Champlain, unserviceable																		
Fort Monroe, serviceable	1																	
Fort Monroe, unserviceable																		
Frankford, serviceable									1									
Frankford, unserviceable																		
Kennebec, serviceable																		
Kennebec, unserviceable																		
Mount Vernon, serviceable																		
Mount Vernon, unserviceable																	3	
Pikesville, serviceable							322				1,084				1	3		
Pikesville, unserviceable											1,749							
Rome, serviceable					66			67	66	66					1			
Rome, unserviceable								93										
St. Louis, serviceable																		
St. Louis, unserviceable																		
Washington, serviceable	2	6	74				505		1							7		
Washington, unserviceable																		
Watertown, serviceable													12	1			1	
Watertown, unserviceable																		
Watervliet, serviceable																		
Watervliet, unserviceable																		
ARMORIES.																		
Springfield, sup't, serviceable																		
Springfield, M. S. K., serviceable							200											
Springfield, unserviceable																		
Harper's Ferry, sup't, serviceable																		
Harper's Ferry, M. S. K., serviceable																		
Harper's Ferry, unserviceable																		
DEPOTS.																		
Charleston, serviceable									83							3		
Charleston, unserviceable																		
Detroit, serviceable																		
Detroit, unserviceable																		
Galena, serviceable																		
Galena, unserviceable																		
Middletown, serviceable																		
Middletown, unserviceable																		
New York, serviceable												21	33					
New York, unserviceable																		
West Point, serviceable																		
West Point, unserviceable																2		
Total serviceable	1	2	6	74	126	66	1,837		72	66	66	1,284	21	33	12	1	14	4
Total unserviceable								93				1,749					2	

A.—Statement of the tools and materials in the land service, made up from the returns of the fourth quarter of 1834.

Arsenals, armories, and depots.	CLOTHS, THREAD, YARN, ETC.																	
	Cloth.							Thread, &c.										
	Bunting, yards.	Cloth, yards.	Cotton, coarse, yards.	Duck, Russia, yards.	Duck, ravens, yards.	Duck, cotton, yards.	Flannel, yards.	Linen, coarse, yards.	Linen, tow, yards.	Cotton wick, pounds.	Flax, pounds.	Fringe, pounds.	Oakum, pounds.	Thread, cartridge, pounds.	Tow, pounds.	Thread, cotton, pounds.	Thread, sicc, pounds.	Twine, pounds.
ARSENALS.																		
Allegheny, serviceable				9			293							19½				1
Allegheny, unserviceable.....																		
Augusta, serviceable							45											2½
Augusta, unserviceable.....																		
Baton Rouge, serviceable.....								79½										1
Baton Rouge, unserviceable																		
Bellona, serviceable							10											
Bellona, unserviceable																		
Champlain, serviceable.....							42											
Champlain, unserviceable																		
Fort Monroe, serviceable.....				11			254											4½
Fort Monroe, unserviceable.....																		
Frankford, serviceable																		
Frankford, unserviceable.....																		
Kennebec, serviceable					1													
Kennebec, unserviceable.....																		
Mount Vernon, serviceable														10				5
Mount Vernon, unserviceable.....							18											
Pikesville, serviceable.....										13½								
Pikesville, unserviceable																		
Rome, serviceable.....												261		1				
Rome, unserviceable																		
St. Louis, serviceable.....				21		23½	82½		5					½				50
St. Louis, unserviceable.....																		
Washington, serviceable				23½			51½							12				419
Washington, unserviceable					594	59½												
Watertown, serviceable.....							34½	1	3		26							577
Watertown, unserviceable.....														42½				
Watervliet, serviceable.....				42							20			1,154½			13½	331½
Watervliet, unserviceable																		
ARMORIES.																		
Springfield, sup't, serviceable.....																		
Springfield, M. S. K., serviceable.....																		3
Springfield, unserviceable																		
Harper's Ferry, sup't, serviceable.....	5-5-16			14														*1
Harper's Ferry, M. S. K., serviceable																		
Harper's Ferry, unserviceable																		
DEPOTS.																		
Charleston, serviceable.....												423						½
Charleston, unserviceable																		
Detroit, serviceable								3			1							
Detroit, unserviceable.....																		
Galena, serviceable																		
Galena, unserviceable.....																		
Middletown, serviceable.....																		
Middletown, unserviceable																		
New York, serviceable.....																		30
New York, unserviceable																3		
West Point, serviceable.....											13			19				40
West Point, unserviceable.....																		
Total serviceable.....	5-5-16		120½	595	82½	813	83½	8	13½	60	261	423	1,199	62½	3½	19		1,486½
Total unserviceable.....						18												

* Ball.

† Ounces.

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	IRONMONGERY.																		
	Bolts and nuts, number.	Bolts, round, number.	Blades, awl.	Bress knobs.	Bristles, pounds.	Brads, number.	Copper.					Chains.							
							Braziers'.	Pig, pounds.	Bar, pounds.	Sheet, pounds.	Scrap, pounds.	Copper clamps.	Feet of.	Fence, pounds.	Scale, sets.	Log, number.	Assorted.		
ARSENALS.																			
Allegheny, serviceable					20				188				290	277					
Allegheny, unserviceable.....																			
Augusta, serviceable																			
Augusta, unserviceable.....																			
Baton Rouge, serviceable.....										233									
Baton Rouge, unserviceable																			
Bellona, serviceable.....																			
Bellona, unserviceable.....																			
Champlain, serviceable.....	1	14-16				1	8-16								3				
Champlain, unserviceable																			
Fort Monroe, serviceable								8½	76	320									
Fort Monroe, unserviceable.....																			
Frankford, serviceable									1,097	731		1,400	1	7					
Frankford, unserviceable																			
Kennebec, serviceable.....	6		12							426					1				
Kennebec, unserviceable																			
Mount Vernon, serviceable.....	25		1	*4	3,000					250				1					
Mount Vernon, unserviceable.....																			
Pikesville, serviceable.....										112									
Pikesville, unserviceable																			
Rome, serviceable.....									25										
Rome, unserviceable																			
St. Louis, serviceable.....	25	13	6		529				207	33					2				
St. Louis, unserviceable.....																			
Washington, serviceable.....	42		5		144		31,603	157											
Washington, unserviceable																			
Watertown, serviceable					1½	1½		450	20½										
Watertown, unserviceable.....	2,015																		
Watervliet, serviceable.....					8,000				162					3	745				
Watervliet, unserviceable																			
ARMORIES.																			
Springfield, sup't, serviceable.....																			
Springfield, M. S. K., serviceable																			
Springfield, unserviceable.....																			
Harper's Ferry, sup't, serviceable								1,282	79	114	563½								
Harper's Ferry, M. S. K., serviceable					½														
Harper's Ferry, unserviceable.....																			
DEPOTS.																			
Charleston, serviceable.....																			
Charleston, unserviceable.....																			
Detroit, serviceable.....															2½				
Detroit, unserviceable.....																			
Galena, serviceable.....																			
Galena, unserviceable.....																			
Middletown, serviceable.....																			
Middletown, unserviceable.....																			
New York, serviceable.....																			
New York, unserviceable																			
West Point, serviceable.....																			
West Point, unserviceable.....																			
Total serviceable.....	67	2,060	14-16	6	22	22	11,674½	1	8-16	32,885	87½	2,238	2,612½	320	1,400	290	1	290½	751
Total unserviceable.....																			

* Glass.

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	IRONMONGERY.															
	Iron.								Lead.					Locks.		
	Sheet, pounds.	Nail rod, pounds.	Scrap, pounds.	Castings, pounds.	Hoop, pounds.	Nail plate.	Swedish plate.	Turnings plate.	Assorted plate.	Pig or bar, pounds.	Sheet, pounds.	Scrap, pounds.	Dross, pounds.	Assorted, pounds.	Door, iron.	Stock.
ARSENALS.																
Allegheny, serviceable	480		9,700	6,850						170,710	663					
Allegheny, unserviceable.....																
Augusta, serviceable.....	47	11					45			76,992						
Augusta, unserviceable																
Baton Rouge, serviceable.....	2,840		3,599							18,316					1	
Baton Rouge, unserviceable																
Bellona, serviceable.....			7,000	390												
Bellona, unserviceable																
Champlain, serviceable.....	28	4	6,668							48,534						
Champlain, unserviceable																
Fort Monroe, serviceable.....	26½		7	1,538	44½					96,218						
Fort Monroe, unserviceable																
Frankford, serviceable.....	32									14,500	349,800					
Frankford, unserviceable.....																
Kennebec, serviceable	18	262	1,120			28				199,081		591		53		
Kennebec, unserviceable.....															9	
Mount Vernon, serviceable.....	138	46	1,460	1,409				114		154,884						
Mount Vernon, unserviceable																
Pikesville, serviceable			2,979							105,128½						
Pikesville, unserviceable																
Rome, serviceable			5,300							5,060						
Rome, unserviceable.....			90													
St. Louis, serviceable.....	6		2,040		62					83,943	2,579	799½		2		
St. Louis, unserviceable																
Washington, serviceable	56		20,868	No. 5	19		2,000			342,832	168	436		1		
Washington, unserviceable.....																
Watertown, serviceable.....	50		9,404	1,184						186,569		888				
Watertown, unserviceable.....																
Watervliet, serviceable.....			32							355,369		450				
Watervliet, unserviceable.....										97,040						
ARMORIES.																
Springfield, sup't, serviceable.....																
Springfield, M. S. K., serviceable.....										18,105						
Springfield, unserviceable																
Harper's Ferry, sup't, serviceable.....			141,708	106,803	182		221,582	22,538		8,660	273½	37		1		
Harper's Ferry, M. S. K., serviceable.....								3,872								
Harper's Ferry, unserviceable																
DEPOTS.																
Charleston, serviceable.....										39,828	132					
Charleston, unserviceable																
Detroit, serviceable										296				3	1	
Detroit, unserviceable.....																
Galena, serviceable										248,045						
Galena, unserviceable.....																
Middletown, serviceable.....																
Middletown, unserviceable																
New York, serviceable.....			11,120	2,060												
New York, unserviceable																
West Point, serviceable.....										211						
West Point, unserviceable																
Total serviceable.....	3,627	155	232,147	131,359	307½	28	45	223,588	22,658	2,173,281½	353,615½	2,751½	450	53	8	1
Total unserviceable.....			90					3,872		97,040					9	

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	LABORATORY STORES.					GUN-CARRIAGE TIMBER AND BUILDING MATERIALS.															
	Soap, pounds.	Turpentine, pounds.	Tallow, pounds.	Varnish for fuses, gallons.	Whiskey, gallons.	Timber for field carriages.															
						Axle-trees for field carriages.	Axle-bodies for field carriages.	Bolsters for field carriages.	Double-trees for field carriages.	Felloes for field carriages.	Felloes for caissons.	Hounds for carriages.	Naves for carriages.	Naves for limbers.	Plank, number of, for 12-pounder cheeks.	Plank, number of, for 12-pounder transoms.					
ARSENALS.																					
Allegheny, serviceable 2...	20					16	18	216				67	170		14						
Allegheny, unserviceable.....						47	35														
Augusta, serviceable.....		10	8																		
Augusta, unserviceable.....																					
Baton Rouge, serviceable.....																					
Baton Rouge, unserviceable.....																					
Bellona, serviceable.....								640	3,474			654		2							
Bellona, unserviceable.....									234												
Champlain, serviceable.....																					
Champlain, unserviceable.....																					
Fort Monroe, serviceable.....						15	16		401		7	229		6	9						
Fort Monroe, unserviceable.....																					
Frankford, serviceable.....																					
Frankford, unserviceable.....																					
Kennebec, serviceable.....																					
Kennebec, unserviceable.....																					
Mount Vernon, serviceable.....																					
Mount Vernon, unserviceable.....																					
Pikesville, serviceable.....																					
Pikesville, unserviceable.....																					
Rome, serviceable.....			3																		
Rome, unserviceable.....																					
St. Louis, serviceable.....	3½	9	237½									200									
St. Louis, unserviceable.....																					
Washington, serviceable.....	668				4	230	513	215	6,636		443	268	285	143							
Washington, unserviceable.....																					
Watertown, serviceable.....			5			29	29		8,342	1,393		380		201	33						
Watertown, unserviceable.....																					
Watervliet, serviceable.....				3		47			87		11	512									
Watervliet, unserviceable.....																					
ARMORIES.																					
Springfield, sup't, serviceable.....																					
Springfield, M. S. K., serviceable.....																					
Springfield, unserviceable.....																					
Harper's Ferry, sup't, serviceable.....	13½		288½																		
Harper's Ferry, M. S. K., serviceable.....																					
Harper's Ferry, unserviceable.....																					
DEPOTS.																					
Charleston, serviceable.....									76												
Charleston, unserviceable.....																					
Detroit, serviceable.....																					
Detroit, unserviceable.....																					
Galena, serviceable.....																					
Galena, unserviceable.....																					
Middletown, serviceable.....																					
Middletown, unserviceable.....																					
New York, serviceable.....																					
New York, unserviceable.....																					
West Point, serviceable.....		10																			
West Point, unserviceable.....									163												
Total serviceable.....	704½	29	542	3	4	337	513	278	856	19,016	1,393	528	2,813	285	466	42					
Total unserviceable.....						47		35		937				184							

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

		GUN-CARRIAGE TIMBER AND BUILDING MATERIALS.																	
		Timber for field carriages.																	
Arsenals, armories, and depots.		Plank, number of, for 6-pounder checks.	Plank, number of, for 6-pounder transoms.	Plank, number of, for caisson bodies.	Perches for caissons.	Sets 24-pounder carriages, complete.	Sets for 12-pounder.	Sets for 6-pounder.	Sets for sea-coast mortar beds.	Sets for ammunition wagons.	Scantling for wagons.	Spokes for field carriages.	Sweep bars for field carriages.	Swingtree bars for field carriages.	Swingtrees for field carriages.	Sliders for field carriages.	Trail handspikes.	Tongues.	
ARSENALS.																			
Allegheny, serviceable				49			42	318				2,784			141	50			
Allegheny, unserviceable																		5	
Augusta, serviceable																			
Augusta, unserviceable																			
Baton Rouge, serviceable																			
Baton Rouge, unserviceable																			
Bellona, serviceable												10,776			7				
Bellona, unserviceable																			
Champlain, serviceable																			
Champlain, unserviceable																			
Fort Monroe, serviceable	6				6							2,576	1	1	56			5	
Fort Monroe, unserviceable																			
Frankford, serviceable																			
Frankford, unserviceable																			
Kennebec, serviceable																			
Kennebec, unserviceable																			
Mount Vernon, serviceable																			
Mount Vernon, unserviceable																			
Pikesville, serviceable																			
Pikesville, unserviceable																			
Rome, serviceable																			
Rome, unserviceable																			
St. Louis, serviceable												829							
St. Louis, unserviceable																			
Washington, serviceable	403	372	1,024	74	2			31				11,425	74		1,169	44	623	308	
Washington, unserviceable																			
Watertown, serviceable	132											5,392					570	19	
Watertown, unserviceable																			
Watervliet, serviceable						45	231		48	18,270		9,285		410	410				
Watervliet, unserviceable																			
ARMORIES.																			
Springfield, sup't, serviceable																			
Springfield, M. S. K., serviceable																			
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable																			
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable												85							
Charleston, unserviceable																			
Detroit, serviceable																			
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable																			
New York, unserviceable																			
West Point, serviceable																			
West Point, unserviceable												163							
Total serviceable	541	372	1,073	80	2	87	549	31	48	18,270	43,152	75	411	1,783	94	1,193	332		
Total unserviceable											163							5	

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	GUN-CARRIAGE TIMBER AND BUILDING MATERIALS.																		
	Sundries.																		
	Bass wood, feet of.	Beech for 13-inch fuses, feet of.	Beech for 10-inch fuses, feet of.	Beech for 8-inch fuses, feet of.	Beech for 5½-inch fuses, feet of.	Columns, number.	Curbstones, feet of.	Fuses, rough, number.	Hoop poles.	Heading, pieces.	Lignum-vite, pounds.	Pickets, cypress, number of.	Pieces of hickory.	Staves.	Shot blocks.	Stocks, musket, rough.	Stocks, rifle.	Stocks, pistol.	Window sashes.
ARSENALS.																			
Allegheny, serviceable								1,692								705	605		
Allegheny, unserviceable.....																			
Augusta, serviceable																1,877			
Augusta, unserviceable.....																			
Baton Rouge, serviceable.....								3,391			1,500								
Baton Rouge, unserviceable																			
Bellona, serviceable.....										40		160							
Bellona, unserviceable																			
Champlain, serviceable.....																			
Champlain, unserviceable																			
Fort Monroe, serviceable												117				252			
Fort Monroe, unserviceable.....																			
Frankford, serviceable								6,000									6,541	9,585	
Frankford, unserviceable																			
Kennebec, serviceable																			40
Kennebec, unserviceable																			
Mount Vernon, serviceable						80				70									
Mount Vernon, unserviceable.....																			
Pikesville, serviceable.....								750								2,544			
Pikesville, unserviceable																			
Rome, serviceable								10,672	906					1,794					
Rome, unserviceable.....																			
St. Louis, serviceable																354			
St. Louis, unserviceable																500			
Washington, serviceable																1,023	202		
Washington, unserviceable.....																			
Watertown, serviceable																			
Watertown, unserviceable																			
Watervliet, serviceable.....	14,999	4,004½	2,915	1,698	1,413			4,000											
Watervliet, unserviceable																671			
ARMORIES.																			
Springfield, sup't, serviceable.....																			
Springfield, M. S. K., serviceable																			
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable.....										28						24,793	210	9,158	
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																463			
DEPOTS.																			
Charleston, serviceable.....										74									
Charleston, unserviceable																			
Detroit, serviceable																			
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable.....																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable.....																			
New York, unserviceable.....																			
West Point, serviceable																			
West Point, unserviceable.....																			
Total serviceable.....	14,999	4,004½	2,915	1,698	1,413	80		26,505	906	212	1,500	117	160	1,794	33,523	7,553	18,743	40	
Total unserviceable															963				

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	LUMBER, ETC.														
	Building materials.														
	Boards or plank, ash, feet of.	Boards or plank, beech, feet of.	Boards or plank, cherry, feet of.	Boards or plank, mahogany, feet of.	Boards or plank, oak, feet of.	Boards or plank, cypress, feet of.	Boards or plank, pine, feet of.	Boards or plank, walnut, feet of.	Boards or plank, poplar, number of.	Boards or plank, hemlock, feet of.	Bricks, number.	Bricks, coping.	Barrels, cement.	Cedar posts.	Chestnut posts.
ARSENALS.															
Allegheny, serviceable	1,652	157	2,218				6,000								
Allegheny, unserviceable.....															
Augusta, serviceable.....							2,474								
Augusta, unserviceable.....															
Baton Rouge, serviceable.....						1,000									
Baton Rouge, unserviceable															
Bellona, serviceable.....							3,622			30					
Bellona, unserviceable															
Champlain, serviceable.....															
Champlain, unserviceable															
Fort Monroe, serviceable.....		734					608			56,000					
Fort Monroe, unserviceable															
Frankford, serviceable															
Frankford, unserviceable.....															
Kennebec, serviceable	365						24,025		1,372	1,460			Feet, 600		
Kennebec, unserviceable.....							19,206		682						
Mount Vernon, serviceable.....				45	128	3,258	21,074			75,000	205	2			
Mount Vernon, unserviceable.....															
Pikesville, serviceable		1,634													
Pikesville, unserviceable															
Rome, serviceable							200								
Rome, unserviceable.....															
St. Louis, serviceable.....							23,266	1,527		12,610				26	
St. Louis, unserviceable.....															
Washington, serviceable	1,600		60	7			14,901	640	356					102	
Washington, unserviceable.....															
Watertown, serviceable	1,911	4,389			1,288		1,879							4	4
Watertown, unserviceable															
Watervliet, serviceable	205½				70,930		7,856							Cords, 12	
Watervliet, unserviceable.....															
ARMORIES.															
Springfield, sup't, serviceable.....															
Springfield, M. S. K., serviceable.....															
Springfield, unserviceable															
Harper's Ferry, sup't, serviceable.....							68,461			3,507		1,356		42	
Harper's Ferry, M. S. K., serviceable.....															
Harper's Ferry, unserviceable.....															
DEPOTS.															
Charleston, serviceable.....															
Charleston, unserviceable.....															
Detroit, serviceable	10,000	19,800			1,574		25,389			530,300					
Detroit, unserviceable.....															
Galena, serviceable															
Galena, unserviceable.....															
Middletown, serviceable.....															
Middletown, unserviceable.....															
New York, serviceable.....					1,480										
New York, unserviceable															
West Point, serviceable.....							30								
West Point, unserviceable.....															
Total serviceable	15,733½	26,714	2,278	52	75,400	4,258	199,785	2,167	356	1,372	679,107	205	1,358½		4
Total unserviceable.....							19,206			682					

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	LUMBER, ETC.															
	Building materials.															
	Hair plastering, bushels.	Lathing, number of.	Lime, bushels.	Logs, oak.	Plaster of Paris.	Poles, scotfolding.	Rails, hemlock, feet of.	Scantling, beech, feet of.	Scantling, linn, feet of.	Scantling, maple, feet of.	Scantling, oak, feet of.	Scantling, poplar, feet of.	Scantling, pine, feet of.	Scantling, walnut, feet of.	Scantling, pine, yellow, feet of.	Scantling, birch, feet of.
ARSENALS.																
Allegheny, serviceable								255								
Allegheny, unserviceable																
Augusta, serviceable																
Augusta, unserviceable																
Baton Rouge, serviceable																
Baton Rouge, unserviceable																
Bellona, serviceable		9,300														
Bellona, unserviceable																
Champlain, serviceable																
Champlain, unserviceable																
Fort Monroe, serviceable				54		54					3,918	31,342				
Fort Monroe, unserviceable																
Frankford, serviceable																
Frankford, unserviceable																
Kennebec, serviceable	12½		9									3,651				
Kennebec, unserviceable																
Mount Vernon, serviceable	4		77		2							13,460				
Mount Vernon, unserviceable																
Pikesville, serviceable											167		63			
Pikesville, unserviceable																
Rome, serviceable						3										300
Rome, unserviceable																
St. Louis, serviceable										16,530		1,092				
St. Louis, unserviceable																
Washington, serviceable			20	1		1,200			1,303		8,523			2,431		
Washington, unserviceable																
Watertown, serviceable							3,183									
Watertown, unserviceable																
Watervliet, serviceable						172										
Watervliet, unserviceable																
ARMORIES.																
Springfield, sup't, serviceable																
Springfield, M. S. K., serviceable																
Springfield, unserviceable																
Harper's Ferry, sup't, serviceable			271½			2										
Harper's Ferry, M. S. K., serviceable																
Harper's Ferry, unserviceable																
DEPOTS.																
Charleston, serviceable			50													
Charleston, unserviceable																
Detroit, serviceable		22,215												8,873		
Detroit, unserviceable			25													
Galena, serviceable																
Galena, unserviceable																
Middletown, serviceable																
Middletown, unserviceable																
New York, serviceable																
New York, unserviceable																
West Point, serviceable																
West Point, unserviceable																
Total serviceable	16½	31,515	452½	55	2	231	1,200	3,183	255	1,303	16,530	12,608	49,555	63	11,304	300
Total unserviceable																

* Feet.

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	LUMBER, ETC.														
	Building materials.												Leather, buff, pounds.		
	Scantling, hemlock, feet of.	Assorted.	Stone, unhewn, feet.	Stone, cut, cubic feet.	Slate, squares of 100 square feet.	Shingles, cypress, number.	Shingles, pine.	Sand, bushels.	Timber, ash and beech, feet.	Timber, oak, feet.	Timber, pine, feet.	Timber, poplar, feet.		Timber, hemlock, feet.	Timber, walnut, feet.
ARSENALS.															
Allegheny, serviceable														110	
Allegheny, unserviceable.....														10	
Augusta, serviceable															
Augusta, unserviceable.....															
Baton Rouge, serviceable.....						37,133									
Baton Rouge, unserviceable.....															
Bellona, serviceable.....							3,000								
Bellona, unserviceable.....															
Champlain, serviceable.....															
Champlain, unserviceable.....															
Fort Monroe, serviceable.....			176	15,580			1,015	2,093							
Fort Monroe, unserviceable.....															
Frankford, serviceable.....															
Frankford, unserviceable.....															
Kennebec, serviceable.....			44	113		2,250				1,612			630		
Kennebec, unserviceable.....															
Mount Vernon, serviceable.....			18			104,550									
Mount Vernon, unserviceable.....															
Pikesville, serviceable.....									6,404					29	
Pikesville, unserviceable.....															
Rome, serviceable.....	794									142			661		
Rome, unserviceable.....															
St. Louis, serviceable.....				84½											
St. Louis, unserviceable.....															
Washington, serviceable.....							928	603*	9,336	290	3,129		442		
Washington, unserviceable.....															
Watertown, serviceable.....								33							
Watertown, unserviceable.....															
Watervliet, serviceable.....								3,169*	64,895						
Watervliet, unserviceable.....															
ARMORIES.															
Springfield, sup'l, serviceable.....															
Springfield, M. S. K., serviceable.....															
Springfield, unserviceable.....															
Harper's Ferry, sup'l, serviceable.....							4,923		309					103½	
Harper's Ferry, M. S. K., serviceable.....															
Harper's Ferry, unserviceable.....															
DEPOTS.															
Charleston, serviceable.....															
Charleston, unserviceable.....															
Detroit, serviceable.....		3,008	587	57		500	120		4,956						
Detroit, unserviceable.....															
Galena, serviceable.....															
Galena, unserviceable.....															
Middletown, serviceable.....															
Middletown, unserviceable.....															
New York, serviceable.....			262												
New York, unserviceable.....															
West Point, serviceable.....															
West Point, unserviceable.....															
Total serviceable.....	794	3,008	280	807	15,834½	39,383	113,901	1,173	5,865	85,900	2,044	3,129	1,291	442	252½
Total unserviceable.....															

* Beech.

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	STATIONERY.													ARTIFICERS' TOOLS.					
	Ammunition, pounds.	Paper.	Penknives, number.	Parchment, pounds.	Pencils, lead, number.	Pencils, brushes, number.	Pounce boxes, number.	Quills, number.	Regulations, ordnance.	Regulations, army.	Scissors, Gunter's.	Sand, pounds.	Sealingwax, pounds.	Sand boxes, number.	Steel pens, number.	Tape, pieces.	Waters.	Axes, broad.	Axes, hand.
ARSENALS.																			
Allegheny, serviceable	3,033																	6	6
Allegheny, unserviceable																		1	5
Augusta, serviceable							15			1	3				7	3-12	2	1	
Augusta, unserviceable																			
Baton Rouge, serviceable					2		10	1	1						1	1			
Baton Rouge, unserviceable																			
Bellona, serviceable					5		94	1			1			1	1-16				
Bellona, unserviceable																			
Champlain, serviceable					6		20	1	1							1	1	1	
Champlain, unserviceable	98																		
Fort Monroe, serviceable							50	1	1							3			
Fort Monroe, unserviceable																			
Frankford, serviceable		70		8			50	2							8	1	2	2	
Frankford, unserviceable																			
Kennebec, serviceable		1					50	1			3	8	1			1	1	2	
Kennebec, unserviceable																			
Mount Vernon, serviceable				6			75	1			2		2		box 1		4	2	
Mount Vernon, unserviceable																			
Pikesville, serviceable							25	1											
Pikesville, unserviceable																			
Rome, serviceable							25	1			1		1		3	box 1	1	4	
Rome, unserviceable																			
St. Louis, serviceable				12		2	50	1			8	1 1/2	2	28		1	2	4	
St. Louis, unserviceable																			
Washington, serviceable											4	1/2	2	2		1		14	
Washington, unserviceable																			
Watertown, serviceable				8			65	2	1			1/2			1		2		
Watertown, unserviceable																			
Watervliet, serviceable				4						1							4	10	
Watervliet, unserviceable	1,052																		
ARMORIES.																			
Springfield, sup't, serviceable																		3	9
Springfield, M. S. K., serviceable						1							2					1	
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable				2			475											1	
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable							21	1		1		1/2	1					1	
Charleston, unserviceable																			
Detroit, serviceable				4			40	1				1/2	2		2				1
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable								1				1/2				1			1
New York, unserviceable																			
West Point, serviceable								1										1	
West Point, unserviceable																			
Total serviceable	4,183	1	70	55	2	3	1,065	17	3	4	20 1/2	12 1/2	13	30	22 1/2	6 1/2	33	57	
Total unserviceable																			5

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	ARTIFICERS' TOOLS.																	
	Axes, coopers'.	Adzes, carpenters'.	Adzes, coopers'.	Augers, assorted.	Awls.	Awl blades.	Braces and bits.	Bevels.	Bolts, sets.	Baking tools, sets.	Chisels, turners.	Chisels, mortiso.	Chisels, firmers.	Chisels, assorted.	Compasses.	Chalk lines.	Crucets.	Caulking irons.
ARSENALS.																		
Allegheny, serviceable	1	8	3	101	27			13	19		9	2		110	9	4	5	
Allegheny, unserviceable	1	2	1	27														
Augusta, serviceable		1		11									1	28	1			
Augusta, unserviceable																		
Baton Rouge, serviceable		3			1		6							34				
Baton Rouge, unserviceable																		
Bellona, serviceable		1					56	1						39	2			
Bellona, unserviceable																		
Champlain, serviceable		6	1				1				11			7	2	1		
Champlain, unserviceable																		
Fort Monroe, serviceable		2		2				1						5	1			
Fort Monroe, unserviceable																		
Frankford, serviceable		1		26	15	16	2		12			32	74	4	10	4	3	
Frankford, unserviceable				8														
Kennebec, serviceable		1		6			1	1						21	1	3	1	3
Kennebec, unserviceable														10				
Mount Vernon, serviceable		1		24			2		5		sets 3	23	7	3				
Mount Vernon, unserviceable																		
Pikesville, serviceable													1		2			
Pikesville, unserviceable																		
Rome, serviceable	1	2	2	11			2	1			5		1		2		3	
Rome, unserviceable		1		7								2	10			6		
St. Louis, serviceable	1	6	2	18	4	10	2	3		1		9	6	44	3	7		
St. Louis, unserviceable				3								4	2	2	4			
Washington, serviceable	1	6	3	75	42			3				74	78	1	14	11	3	
Washington, unserviceable																		
Watertown, serviceable														5		2		
Watertown, unserviceable																		
Watervliet, serviceable	1	3	2	56	21		4	7			26	73		6	4			
Watervliet, unserviceable																		
ARMORIES.																		
Springfield, sup't, serviceable	2	4		39	44		5	5			17	15	73		7	44	4	
Springfield, M. S. K., serviceable																		
Springfield, unserviceable																		
Harper's Ferry, sup't, serviceable				29							73	2		13				
Harper's Ferry, M. S. K., serviceable																		
Harper's Ferry, unserviceable																		
DEPOTS.																		
Charleston, serviceable		1		4	3			1				4	8	2	2			
Charleston, unserviceable																		
Detroit, serviceable				1										3			2	
Detroit, unserviceable																		
Galena, serviceable																		
Galena, unserviceable																		
Middletown, serviceable																		
Middletown, unserviceable																		
New York, serviceable							1						5		1			
New York, unserviceable																		
West Point, serviceable		1		12	10			1				4	10	2	8	2		
West Point, unserviceable													1					
Total serviceable	7	47	13	415	154	26	82	37	36	1	141	18	281	313	85	84	21	3
Total unserviceable	1	3	1		45							6	13	12	4	6		

A.—Statement of the tools and materials in the land service, &c.—Continued.

Arsenals, armories, and depots.	ARTIFICERS' TOOLS.																		
	Clevis and bolt.	Can hooks.	Coopers' drivers.	Carpenters' scrapers.	Coopers' crow's.	Collar rods.	Drawing knives.	Drill strings.	Drill bows.	Dividers.	Edges, straight.	Froes.	Files, hand saw.	Fire-carriers.	Frames, wheel pit.	Flagging irons.	Facets.	Formers, assorted.	
ARMORIES.																			
Allegheny, serviceable	2	1	3						3	2	2							187	
Allegheny, unserviceable							2												
Augusta, serviceable							2												
Augusta, unserviceable							3												
Baton Rouge, serviceable							1												
Baton Rouge, unserviceable							1											1	
Bellona, serviceable							1												
Bellona, unserviceable							1												
Champlain, serviceable							1												
Champlain, unserviceable							1												
Fort Monroe, serviceable							1												
Fort Monroe, unserviceable							6							2					
Frankford, serviceable							1						6						
Frankford, unserviceable							1						42						
Kennebec, serviceable							3						42						
Kennebec, unserviceable	1						3					2	42					23	
Mount Vernon, serviceable																			
Mount Vernon, unserviceable																			
Pikesville, serviceable																			
Pikesville, unserviceable																			
Rome, serviceable				2			8		1		2	3						4	
Rome, unserviceable							1												
St. Louis, serviceable							3		2						1	1	2		
St. Louis, unserviceable																			
Washington, serviceable					2	2	9				2	2				1		26	
Washington, unserviceable																			
Watertown, serviceable																			
Watertown, unserviceable																			
Watervliet, serviceable				1			17				1	30						46	
Watervliet, unserviceable																			
ARMORIES.																			
Springfield, sup't, serviceable	2						14				1	28							
Springfield, M. S. K., serviceable																			
Springfield, unserviceable																			
Harper's Ferry, sup't serviceable							136	2											
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable							2					1							
Charleston, unserviceable																			
Detroit, serviceable													3						
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable																			
New York, unserviceable																			
West Point, serviceable							2				16	19							
West Point, unserviceable																			
Total serviceable	1	4	1	3	5	2	73	136	2	6	5	26	131	2	1	2	2	287	
Total unserviceable							1					42							

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	ARTIFICERS' TOOLS.																	
	Gauges, assorted.	Gimlets.	Glue pots.	Grindstones.	Gauges, assorted.	Gutter tongs.	Glaziers' diamonds.	Hammers.	Hatchets.	Hoops, trussing.	Horses, harness-makers'.	Howels or bung-borers.	Knives, assorted.	Lathic-heads.	Lathic-rests.	Lathic, turning.	Mallets.	Measuring tape.
ARSENALS.																		
Allegheny, serviceable	37	14	1	7	98	1	19	11	8	65	2	1	21	.....	.....	.....	.....	.....
Allegheny, unserviceable .....	.....	.....	.....	.....	1	.....	.....	.....	.....	10	1	.....	.....	.....	.....	.....	.....	.....
Augusta, serviceable .....	.....	6	1	4	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Augusta, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge, serviceable .....	.....	.....	.....	.....	set 1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bellona, serviceable	15	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....
Bellona, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Champlain, serviceable	12	12	1	.....	2	.....	1	.....	.....	.....	.....	.....	.....	1	1	.....	2	.....
Champlain, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Monroe, serviceable	1	1	.....	.....	8	.....	2	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Fort Monroe, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Frankford, serviceable	30	20	.....	1	10	.....	11	6	.....	.....	.....	2	.....	.....	1	12	.....	.....
Frankford, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kennebec, serviceable	11	4	.....	1	2	.....	11	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Kennebec, unserviceable	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mount Vernon, serviceable	set 1	2	.....	4	4	.....	.....	6	.....	.....	.....	6	.....	.....	.....	.....	.....	1
Mount Vernon, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pikesville, serviceable .....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pikesville, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rome, serviceable	9	.....	3	.....	17	.....	6	4	10	.....	1	3	.....	2	1	1	.....	.....
Rome, unserviceable	16	.....	.....	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, serviceable	43	27	2	1	8	.....	1	3	4	5	1	19	.....	.....	.....	.....	7	1
St. Louis, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington, serviceable	23	29	2	10	76	.....	1	12	4	12	.....	1	8	.....	13	1	13	.....
Washington, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
Watertown, serviceable .....	.....	51	.....	1	.....	.....	3	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Watertown, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Watervliet, serviceable	27	10	3	4	168	.....	3	2	.....	.....	.....	.....	.....	.....	.....	1	26	1
Watervliet, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ARMORIES.																		
Springfield, sup't, serviceable	21	18	7	8	382	.....	11	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	17
Springfield, M. S. K., serviceable .....	.....	16	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Springfield, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harper's Ferry, sup't, serviceable	420	23	1	45	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harper's Ferry, M. S. K., serviceable .....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harper's Ferry, unserviceable .....	.....	.....	.....	137	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
DEPOTS.																		
Charleston, serviceable	7	4	.....	1	.....	.....	.....	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Charleston, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Detroit, serviceable .....	.....	2	.....	4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Detroit, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Galena, serviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Galena, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Middletown, serviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Middletown, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York, serviceable .....	.....	12	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
New York, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Point, serviceable .....	.....	15	2	.....	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
West Point, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total serviceable	657	267	23	92	794	1	5	83	64	27	9	2	106	2	16	9	101	7
Total unserviceable	20	.....	.....	139	1	.....	.....	2	1	.....	.....	.....	10	1	.....	.....	6	.....

A.—Statement of the tools and materials in the land service, &c—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	ARTIFICERS' TOOLS.																		
	Machine, winding.	Oil stones.	Planes, moulding, assorted.	Planes, grooving, pairs.	Planes, assorted.	Plane irons.	Plane handles.	Painters' jacks.	Pallet knives.	Paint stones.	Patty knives.	Pitch-forks.	Plumb-bobs.	Plains.	Paint brushes.	Placers, pairs.	Rules, carpenters'.	Rasps, wood.	
ARSENALS.																			
Allegheny, serviceable		12			98	71				1		3	1			2	6		
Allegheny, unserviceable					43														
Augusta, serviceable		2			27	8											1		
Augusta, unserviceable																			
Baton Rouge, serviceable						1			1										
Baton Rouge, unserviceable																			
Bellona, serviceable			48		21														
Bellona, unserviceable																			
Champlain, serviceable		1			7							1			1		1		
Champlain, unserviceable																			
Fort Monroe, serviceable		1			set 1										7		2		
Fort Monroe, unserviceable																			
Frankford, serviceable	1		23	5	72			1	2	1	2	5				3	3		
Frankford, unserviceable					32														
Kennebec, serviceable		1			48					1					6		1		
Kennebec, unserviceable																			
Mount Vernon, serviceable		13	8	5	37				1						18		5	6	
Mount Vernon, unserviceable																			
Pikesville, serviceable																			
Pikesville, unserviceable																			
Rome, serviceable		2	56	3	12	3			1	1		1			4		2		
Rome, unserviceable					17										8				
St. Louis, serviceable		6	25	1	41	7						3			42	2		2	
St. Louis, unserviceable					1											1			
Washington, serviceable		10	26	6	43	12				1	2	2		1	19		9		
Washington, unserviceable																		2	
Watertown, serviceable		1				33	27								4	3			
Watertown, unserviceable																			
Watervliet, serviceable		15	11		86	5				1		6		8	1		8		
Watervliet, unserviceable																			
ARMORIES.																			
Springfield, sup't, serviceable		35	14	10	73	9						1				1	4		
Springfield, M. S. K., serviceable																			
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable					32	64													
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable		2	17		5														
Charleston, unserviceable																			
Detroit, serviceable					1											1			
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable					3										1		2		
New York, unserviceable																			
West Point, serviceable		2	6	2	19							29					2	3	
West Point, unserviceable																			
Total serviceable	1	103	234	32	626	213	27	1	5	6	4	51	1	9	103	12	46	11	
Total unserviceable					93										8	1	2		

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	ARMORERS' AND SMITHS' TOOLS.																	
	Bridle sets.	Blow pipes.	Barrel scrapers.	Hoisters.	Brushes.	Breast plates.	Bows and blocks.	Blocks, vice.	Blocks, lead.	Bellows irons.	Bick horns.	Boring banks.	Turrs.	Callipers, pairs.	Chisels, cold.	Chisels, assorted.	Countersinks.	Clamps, assorted.
ARSENALS.																		
Allegheny, serviceable			2	40	5									10	78	131	57	20
Allegheny, unserviceable					4											59		
Augusta, serviceable														2				
Augusta, unserviceable																		
Baton Rouge, serviceable														1	36		2	
Baton Rouge, unserviceable																		
Bellona, serviceable																		
Bellona, unserviceable																		
Champlain, serviceable										1					6			
Champlain, unserviceable																		
Fort Monroe, serviceable																		
Fort Monroe, unserviceable																		
Frankford, serviceable														2	31	29	11	5
Frankford, unserviceable																		
Kennebec, serviceable								3							5	1		
Kennebec, unserviceable																		
Mount Vernon, serviceable				2										1	12	21		
Mount Vernon, unserviceable																		
Pikesville, serviceable																		
Pikesville, unserviceable								2										
Rome, serviceable			2											3	5	1	3	23
Rome, unserviceable																		
St. Louis, serviceable	4	1	4											1	65	24	17	3
St. Louis, unserviceable																		
Washington, serviceable			2	2	13		1	2						6	51	35	14	20
Washington, unserviceable																		
Watertown, serviceable						1		18							6	9	1	3
Watertown, unserviceable																		
Watervliet, serviceable	1	1	2	4				7						17	133	45	12	26
Watervliet, unserviceable														3				
ARMORIES.																		
Springfield, sup't, serviceable					24						21	15	51		223	284	61	34
Springfield, M. S. K., serviceable																		
Springfield, unserviceable																		
Harper's Ferry, sup't, serviceable																		
Harper's Ferry, M. S. K., serviceable					2										2			
Harper's Ferry, unserviceable																		
DEPOTS.																		
Charleston, serviceable															1			
Charleston, unserviceable																		
Detroit, serviceable			1							2						2		2
Detroit, unserviceable																		
Galena, serviceable																		
Galena, unserviceable																		
Middletown, serviceable																		
Middletown, unserviceable																		
New York, serviceable														1				
New York, unserviceable																		
West Point, serviceable					267													
West Point, unserviceable																		
Total serviceable	4	2	12	46	315	1	1	23	9	3	21	15	51	47	654	573	178	136
Total unserviceable					4													

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

		ARMORERS' AND SMITHS' TOOLS.																	
Arsenals, armories, and depots.		Drill presses.	Drifts, assorted.	Drivers.	Dogs, turners'.	Dogs, assorted.	Emery wheels.	Engines, assorted.	Engavers, assorted.	Files, assorted.	Fire tools, sets of.	Fire kettles.	Fullers.	Floats, assorted.	Frames for proving muskets.	Flint cap moulds.	Flint cap cutters.	Flettoners.	Grinders.
ARSENALS.																			
Allegheny, serviceable				25	13					1,745			26	3			3		135
Allegheny, unserviceable				2	5									5			3		18
Augusta, serviceable	1							1		770									
Augusta, unserviceable																			
Baton Rouge, serviceable																			
Baton Rouge, unserviceable																			
Bellona, serviceable								1											
Bellona, unserviceable																			
Champlain, serviceable										18	1								
Champlain, unserviceable																			
Fort Monroe, serviceable										179									
Fort Monroe, unserviceable																			
Frankford, serviceable	2						4			73		1	11						
Frankford, unserviceable										355									
Kennebec, serviceable										8			4						
Kennebec, unserviceable																			
Mount Vernon, serviceable	1									123			6						
Mount Vernon, unserviceable																			
Pikesville, serviceable																			
Pikesville, unserviceable																			
Rome, serviceable	1	1								5	1		3	1					
Rome, unserviceable								2		122				1					
St. Louis, serviceable	1									1,139			3	5	1	1			15
St. Louis, unserviceable																			1
Washington, serviceable		69		5						242	7	42	2	1				1	
Washington, unserviceable																			
Watertown, serviceable											2								
Watertown, unserviceable																			
Watervliet, serviceable				15	7	11	8			275	6	27	2						
Watervliet, unserviceable																			
ARMORIES.																			
Springfield, sup't, serviceable					16									87		2			11
Springfield, M. S. K., serviceable								8											
Springfield, unserviceable																			
Harper's Ferry, sup't, serviceable																			
Harper's Ferry, M. S. K., serviceable																			
Harper's Ferry, unserviceable																			
DEPOTS.																			
Charleston, serviceable																			
Charleston, unserviceable																			
Detroit, serviceable											1								
Detroit, unserviceable																			
Galena, serviceable																			
Galena, unserviceable																			
Middletown, serviceable																			
Middletown, unserviceable																			
New York, serviceable																			
New York, unserviceable																			
West Point, serviceable										12									
West Point, unserviceable																			
Total serviceable	6	69	26	49	7	15	18			4,589	18	1	122	102	2	3	3	1	161
Total unserviceable			2	5				2		477				4			3		19

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	ARMORERS' AND SMITHS' TOOLS.																	
	Lovers.	Lockers.	Mandrels.	Milling tools.	Machines, stocking.	Machines for cutting screws.	Machines, assorted.	Nippers.	Pincers.	Punches, pairs.	Planes, assorted, stockers.	Pliers, pairs.	Pan borers.	Pritchets.	Presses.	Pans, assorted.	Plugs, assorted.	Pinching beds.
ARSENALS.																		
Allegheny, serviceable			92	1		1	9	17	2	200		6		2	7	9	8	
Allegheny, unserviceable.....								1										
Augusta, serviceable																		
Augusta, unserviceable.....																		
Baton Rouge, serviceable.....								1	1		5	1						
Baton Rouge, unserviceable																		
Bellona, serviceable.....																		
Bellona, unserviceable																		
Champlain, serviceable.....									2	11								
Champlain, unserviceable.....																		
Fort Monroe, serviceable.....																		
Fort Monroe, unserviceable.....																		
Frankford, serviceable.....			48	48						43		15	1					
Frankford, unserviceable.....																		
Kennebec, serviceable									2	17				1				
Kennebec, unserviceable.....																		
Mount Vernon, serviceable.....			27				2	4	2	16				1		6		
Mount Vernon, unserviceable.....																		
Pikesville, serviceable.....																		
Pikesville, unserviceable.....																		
Rome, serviceable			2	11					3	28		7						
Rome, unserviceable										10	1							
St. Louis, serviceable.....			3			1		2	10	80	16	2						
St. Louis, unserviceable.....									1									
Washington, serviceable.....							15		4	107	21	1			3			
Washington, unserviceable.....											1							
Watertown, serviceable.....										4		1						
Watertown, unserviceable.....																		
Watervliet, serviceable.....			41	114			21	6	112			5			1	10	6	7
Watervliet, unserviceable.....																		
ARMORIES.																		
Springfield, sup't, serviceable.....	4	4	308	9	9	7	23			254	93	57			14	217	328	1
Springfield, M. S. K., serviceable																		
Springfield, unserviceable																		
Harper's Ferry, sup't, serviceable.....											13							
Harper's Ferry, M. S. K., serviceable.....																		
Harper's Ferry, unserviceable.....																		
DEPOTS.																		
Charleston, serviceable.....																		
Charleston, unserviceable.....																		
Detroit, serviceable.....									1	2				2		1		
Detroit, unserviceable.....																		
Galena, serviceable.....																		
Galena, unserviceable.....																		
Middletown, serviceable.....																		
Middletown, unserviceable.....																		
New York, serviceable.....										40								
New York, unserviceable.....																		
West Point, serviceable								2		3								
West Point, unserviceable.....																		
Total serviceable.....	4	4	521	146	9	9	70	30	139	805	148	95	1	6	25	243	342	8
Total unserviceable.....								1	1	10								

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	ARMORERS' AND SMITHS' TOOLS.																	
	Pins, assorted.	Remmers, assorted.	Rasps.	Knife leathers.	Tools, wiping,	Tools, rifling.	Rests.	Rolls grooved for musket barrels.	Rolling mills.	Run of grindstones.	Screw engines.	Screw plates.	Screw taps.	Screw stocks.	Stakes.	Saws, hack.	Spring vices.	Swedges.
ARSENALS.																		
Allegheny, serviceable	82	15	.....	8	6	.....	1	.....	.....	.....	20	176	.....	21	9	.....	115
Allegheny, unserviceable	15	14	.....	.....	.....	.....	.....	.....	.....	.....	16	.....	.....	.....	.....	.....	26
Augusta, serviceable .....	.....	25	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....
Augusta, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge, serviceable	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bellona, serviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bellona, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Champlain, serviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
Champlain, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Monroe, serviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Monroe, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
Frankford, serviceable	32	2	.....	.....	.....	.....	.....	.....	.....	.....	9	70	.....	14	2	1	15
Frankford, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kennebec, serviceable	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	.....	1	.....	.....	.....
Kennebec, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mount Vernon, serviceable	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	2	.....	8
Mount Vernon, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pikesville, serviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pikesville, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rome, serviceable	10	1	.....	3	.....	.....	.....	.....	.....	.....	9	36	4	12	.....	1	25
Rome, unserviceable .....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Louis, serviceable	28	3	1	4	5	6	.....	.....	.....	.....	16	41	5	7	.....	1	11
St. Louis, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	1
Washington, serviceable	37	.....	.....	4	.....	.....	.....	.....	.....	.....	2	52	5	.....	2	2	103
Washington, unserviceable	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Watertown, serviceable .....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....
Watertown, unserviceable	99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Watervliet, serviceable .....	.....	7	.....	4	3	.....	1	.....	.....	.....	11	50	.....	23	6	.....	.....
Watervliet, unserviceable	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ARMORIES.																		
Springfield, sup't, serviceable .....	.....	28	.....	15	1	.....	.....	.....	18	.....	16	254	.....	132	31	.....	.....
Springfield, M. S. K., serviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	277
Springfield, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harper's Ferry, sup't, serviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harper's Ferry, M. S. K., serviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Harper's Ferry, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
DEPOTS.																		
Charleston, serviceable .....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Charleston, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Detroit, serviceable .....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Detroit, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Galena, serviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Galena, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Middletown, serviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Middletown, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York, serviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Point, serviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Point, unserviceable .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total serviceable	12	309	90	1	33	15	6	1	1	18	85	698	14	213	53	5	554
Total unserviceable	15	15	16	3	27

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	ARMORERS' AND SMITHS' TOOLS.																	
	Stamps.	Scrapers, stock.	Screws, flask.	Sets, assorted.	Stocks, assorted.	Shears.	Saw blades, hack.	Saddles, copper.	Scribers.	Shoeing tools.	Sheets.	Saws, assorted.	Screw mills.	Saws, cast iron.	Sheathis.	Shapes and husks.	Screw-drivers.	Screw-holders.
ARSENALS.																		
Allegheny, serviceable	17		3	9	28	5												
Allegheny, unserviceable	25			7		1												
Augusta, serviceable																		
Augusta, unserviceable																		
Baton Rouge, serviceable							2											
Baton Rouge, unserviceable																		
Bellona, serviceable																		
Bellona, unserviceable																		
Champlain, serviceable					3						1							
Champlain, unserviceable																		
Fort Monroe, serviceable																		
Fort Monroe, unserviceable																		
Frankford, serviceable																		
Frankford, unserviceable																		
Kennebec, serviceable					1	1												
Kennebec, unserviceable																		
Mount Vernon, serviceable	1			3	2	2												
Mount Vernon, unserviceable																		
Pikesville, serviceable																		
Pikesville, unserviceable																		
Rome, serviceable	6			2		2		1			5							
Rome, unserviceable																		
St. Louis, serviceable	46	9																
St. Louis, unserviceable																		
Washington, serviceable	26	7		3	1	1	6	1	1	1								
Washington, unserviceable																		
Watertown, serviceable									1				2					
Watertown, unserviceable																		
Watervliet, serviceable	53			22	20	4					1							
Watervliet, unserviceable																		
ARMORIES.																		
Springfield, sup't, serviceable	204			90		18					38		46	6			*165	7
Springfield, M. S. K., serviceable																		
Springfield, unserviceable																		
Harper's Ferry, sup't, serviceable						1											1,336	
Harper's Ferry, M. S. K., serviceable																		
Harper's Ferry, unserviceable																		
DEPOTS.																		
Charleston, serviceable																		
Charleston, unserviceable																		
Detroit, serviceable				1														
Detroit, unserviceable																		
Galena, serviceable	6																	
Galena, unserviceable																		
Middletown, serviceable																		
Middletown, unserviceable																		
New York, serviceable																		
New York, unserviceable																		
West Point, serviceable																		
West Point, unserviceable																		
Total serviceable	359	16	3	130	55	34	8	2	2	1	1	44	2	46	6	1,336	165	7
Total unserviceable	25			7		1									4			

* The screw-drivers at the other places are included in the " artificers' tools."

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	ARMORERS' AND SMITHS' TOOLS.																
	Sets of tools, assorted.	Tongs.	Turning tools.	Tools for making tube moulds.	Tools, grooving.	Tools, mortising.	Tools for making swedges.	Tools, assorted.	Toe knives.	Trimmers.	Tilt hammers.	Vices, bench.	Vices, hand.	Vices, assorted.	Wrenches.	Whedriving for polishing.	Wheels, assorted.
ARSENALS.																	
Allegheny, serviceable.....		107	1	1	3	1	4				36	9	8		43		
Allegheny, unserviceable.....												7			1		
Augusta, serviceable.....		5									8	5					
Augusta, unserviceable.....											1						
Baton Rouge, serviceable.....			4					34									
Baton Rouge, unserviceable.....											1						
Bellona, serviceable.....															4		
Bellona, unserviceable.....																	
Champlain, serviceable.....		8									1				2		
Champlain, unserviceable.....															2		
Fort Monroe, serviceable.....																	
Fort Monroe, unserviceable.....																	
Frankford, serviceable.....		22	1								12	5			14	1	
Frankford, unserviceable.....																	
Kennebec, serviceable.....		12							1		3				1		
Kennebec, unserviceable.....																	
Mount Vernon, serviceable.....		15	7		1			5		1	3	1	1		5		1
Mount Vernon, unserviceable.....															1		
Pikesville, serviceable.....															4		
Pikesville, unserviceable.....																	
Rome, serviceable.....		23				16		5			16	8	2		7	6	
Rome, unserviceable.....		2															
St. Louis, serviceable.....		32	1								11	7			13		
St. Louis, unserviceable.....																	
Washington, serviceable.....		73	66	1							17	3			23		1
Washington, unserviceable.....																	
Watertown, serviceable.....		4													3		
Watertown, unserviceable.....																	
Watervliet, serviceable.....		4	97	65							24	9	12		33		5
Watervliet, unserviceable.....																	
ARMORIES.																	
Springfield, sup't, serviceable.....		268	20					7			13	163	33	22		167	
Springfield, M. S. K., serviceable.....																	
Springfield, unserviceable.....																	
Harper's Ferry, sup't, serviceable.....		14									1	3			lbs. 3,390		
Harper's Ferry, M. S. K., serviceable.....																	
Harper's Ferry, unserviceable.....																	
DEPOTS.																	
Charleston, serviceable.....											1				7		
Charleston, unserviceable.....																	
Detroit, serviceable.....		3	8					9			2						
Detroit, unserviceable.....																	
Galena, serviceable.....																	
Galena, unserviceable.....																	
Middletown, serviceable.....																	
Middletown, unserviceable.....																	
New York, serviceable.....												1			2		
New York, unserviceable.....																	
West Point, serviceable.....			21								1						
West Point, unserviceable.....																	
Total serviceable.....	7	688	186	2	4	17	4	60	1	1	13	299	85	45		7	7
Total unserviceable.....		2										2	7				

A.—Statement of the tools and materials in the land service, &c.—Continued

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	INTRENCHING AND MINING TOOLS.																		
	Axes, felling.	Axes, picks.	Axes, assorted.	Axes, slings.	Augers, stone.	Augers, earth.	Bill-hooks.	Barrow slings.	Crowbars.	Chisels, stone.	Drills, steel.	Hammers, stone.	Handbarrows.	Hammers, assorted.	Hoes.	Hatchets, fische.	Mattocks.	Shovels.	
ARSENALS.																			
Allegheny, serviceable.....	204	93	2					2				2	1	3			40	8	
Allegheny, unserviceable.....																			
Augusta, serviceable.....	145	60		54				1									64		
Augusta, unserviceable.....				68															
Baton Rouge, serviceable.....								23											
Baton Rouge, unserviceable.....																			
Bellona, serviceable.....																			
Bellona, unserviceable.....																			
Champlain, serviceable.....		6																	
Champlain, unserviceable.....																			
Fort Monroe, serviceable.....	1			46															
Fort Monroe, unserviceable.....																			
Frankford, serviceable.....	6	4					120	1											20
Frankford, unserviceable.....																			
Kennebec, serviceable.....	4	6				1		5		56									
Kennebec, unserviceable.....																			
Mount Vernon, serviceable.....	6	9	4					7	12					2	4		1	19	
Mount Vernon, unserviceable.....																			
Pikesville, serviceable.....		135		145				15											33
Pikesville, unserviceable.....																			
Rome, serviceable.....	31	47	1	15				1				1			6		5	4	
Rome, unserviceable.....																			
St. Louis, serviceable.....	26	1			1			1				1					4	6	
St. Louis, unserviceable.....	2			168															6
Washington, serviceable.....	4	4						8							7				4
Washington, unserviceable.....																			6
Watertown, serviceable.....	58	18																	
Watertown, unserviceable.....																			
Watervliet, serviceable.....	269	79		151				3					1			85	2		
Watervliet, unserviceable.....																			
ARMORIES.																			
Springfield, sup't, serviceable.....								25	7						3				15
Springfield, M. S. K., serviceable.....																			2
Springfield, unserviceable.....																			
Harper's Ferry, sup't, serviceable.....	1																		
Harper's Ferry, M. S. K., serviceable.....																			
Harper's Ferry, unserviceable.....																			
DEPOTS.																			
Charleston, serviceable.....	9	6						3											
Charleston, unserviceable.....																			
Detroit, serviceable.....	6	5		385			22	1			1				117				15
Detroit, unserviceable.....																			
Galena, serviceable.....	1																		
Galena, unserviceable.....																			
Middletown, serviceable.....																			
Middletown, unserviceable.....																			
New York, serviceable.....	1							12											1
New York, unserviceable.....																			
West Point, serviceable.....	2																		
West Point, unserviceable.....																			
Total serviceable.....	773	473	7	796	1	1	142	15	93	19	56	5	2	5	137	85	116		126
Total unserviceable.....	2			236															12

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	LABORATORY TOOLS.																	
	Chargers, assorted.	Caps, assorted.	Calipers.	Conductors for rockets.	Cutters for rockets.	Cartridge tables.	Crucibles.	Drifts, assorted.	Dippers, assorted.	Drift rollers.	Filting tubs.	Fuses, bench.	Fuse augers.	Grate for cleaning shot.	Kettles, assorted.	Moulds for flint caps.	Mortar and pestle.	Mealing table.
ARSENALS.																		
Allegheny, serviceable.....			1			9	34	27				1			86		3	1
Allegheny, unserviceable.....															1			
Augusta, serviceable.....																		
Augusta, unserviceable.....																		
Baton Rouge, serviceable.....																		
Baton Rouge, unserviceable.....																		
Bellona, serviceable.....																		
Bellona, unserviceable.....																		
Champlain, serviceable.....								4							1			
Champlain, unserviceable.....																		
Fort Monroe, serviceable.....								3										
Fort Monroe, unserviceable.....																		
Frankford, serviceable.....								12	2		2			1		1	1	1
Frankford, unserviceable.....																		
Kennebec, serviceable.....																		
Kennebec, unserviceable.....																		
Mount Vernon, serviceable.....	2	17	1					22							2			
Mount Vernon, unserviceable.....																		
Pikesville, serviceable.....								48		5					2			
Pikesville, unserviceable.....																		
Rome, serviceable.....	1			2			2	11							5		1	1
Rome, unserviceable.....															1			
St. Louis, serviceable.....						1		6	8						1		2	
St. Louis, unserviceable.....								3										
Washington, serviceable.....						3		3										
Washington, unserviceable.....																		
Watertown, serviceable.....																		
Watertown, unserviceable.....																		
Watervliet, serviceable.....				15	5		3	42				1			4		1	
Watervliet, unserviceable.....																		
ARMORIES.																		
Springfield, sup't, serviceable.....															9			
Springfield, M. S. K., serviceable.....																		
Springfield, unserviceable.....																		
Harper's Ferry, sup't, serviceable.....																		
Harper's Ferry, M. S. K., serviceable.....																		
Harper's Ferry, unserviceable.....																		
DEPOTS.																		
Charleston, serviceable.....								4										
Charleston, unserviceable.....																		
Detroit, serviceable.....			3															
Detroit, unserviceable.....																		
Galena, serviceable.....																		
Galena, unserviceable.....																		
Middletown, serviceable.....																		
Middletown, unserviceable.....																		
New York, serviceable.....																		
New York, unserviceable.....																		
West Point, serviceable.....	14						3	42	16						1		1	4
West Point, unserviceable.....																		
Total serviceable.....	17	17	5	17	5	13	42	224	26	5	2	1	1	1	111	1	9	7
Total unserviceable.....								3							2			

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	LABORATORY TOOLS.																	
	Mallets.	Mould pipes.	Moulds, assorted.	Mirrors, carcass.	Magazine lanterns.	Millers.	Machine for making primers.	Moulds for making primers.	Nipples.	Palm irons.	Polishing barrels.	Pulverizing barrels.	Rocket moulds.	Rollers.	Reamers' tube.	Rocket nippers.	Rammers for cannon yards.	Reels.
ARSENALS.																		
Allegheny, serviceable			9	1		4							2		1			
Allegheny, unserviceable													1					
Augusta, serviceable																		
Augusta, unserviceable																		
Baton Rouge, serviceable																		
Baton Rouge, unserviceable																		
Bellona, serviceable																		
Bellona, unserviceable																		
Champlain, serviceable			2			2							1					
Champlain, unserviceable																		
Fort Monroe, serviceable			7			1												
Fort Monroe, unserviceable																		
Frankford, serviceable						4	1	6			1	1	1					
Frankford, unserviceable																		
Kennebec, serviceable																		
Kennebec, unserviceable																		
Mount Vernon, serviceable	7					5							2	1				
Mount Vernon, unserviceable																		
Pikesville, serviceable		32	20										3	14				
Pikesville, unserviceable																		
Rome, serviceable						6						2	1					2
Rome, unserviceable																		1
St. Louis, serviceable													1					
St. Louis, unserviceable													1					
Washington, serviceable						4										2	2	
Washington, unserviceable																		
Watertown, serviceable																		
Watertown, unserviceable																		
Watervliet, serviceable			46		1	7						1	7		2		4	
Watervliet, unserviceable																		
ARMORIES.																		
Springfield, sup't, serviceable																		
Springfield, M. S. K., serviceable																		
Springfield, unserviceable																		
Harper's Ferry, sup't, serviceable		3									2							
Harper's Ferry, M. S. K., serviceable																		
Harper's Ferry, unserviceable																		
DEPOTS.																		
Charleston, serviceable													1					
Charleston, unserviceable																		
Detroit, serviceable																		
Detroit, unserviceable																		
Galena, serviceable																		
Galena, unserviceable																		
Middletown, serviceable																		
Middletown, unserviceable																		
New York, serviceable																		
New York, unserviceable																		
West Point, serviceable	40					6		1					5					
West Point, unserviceable																		
Total serviceable	47	35	84	1	1	39	1	6	1		3	4	25	15	1	4	2	6
Total unserviceable													1					1

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	LABORATORY TOOLS.										MISCELLANEOUS.							
	Tube molds.	Tube provers.	Tube injectors.	Tube wires.	Trevis.	Tin powder measures.	Wooden howls.	Wad formers.	Wad drifts.	Wimbles.	Ammunition chests.	Ammunition kegs.	Arm chests.	Andirons.	Awnings.	Air-heaters and apparatus.	Boxes, packing.	Barrels, empty.
ARSENALS.																		
Allegheny, serviceable	15	1	1,200	1			1			9								
Allegheny, unserviceable																		
Augusta, serviceable	2										5						696	
Augusta, unserviceable																		
Baton Rouge, serviceable																		
Baton Rouge, unserviceable																		
Bellona, serviceable																		
Bellona, unserviceable																		
Champlain, serviceable					1		2				2							
Champlain, unserviceable																		
Fort Monroe, serviceable																	38	
Fort Monroe, unserviceable																		
Frankford, serviceable	12	2				1	1	1			26							
Frankford, unserviceable												1						
Kennebec, serviceable																	611	5
Kennebec, unserviceable																		
Mount Vernon, serviceable	2									1							3	
Mount Vernon, unserviceable																		
Pikesville, serviceable	16	1	624														130	
Pikesville, unserviceable																		
Home, serviceable						2					1	68		1			11	
Home, unserviceable						4						100						
St. Louis, serviceable										1		10	22					
St. Louis, unserviceable																		
Washington, serviceable	4	1						4					6	12	2	2		240
Washington, unserviceable																		
Watertown, serviceable																	6	1
Watertown, unserviceable																		
Watervliet, serviceable		3				20								7			1	
Watervliet, unserviceable																		
ARMORIES.																		
Springfield, sup't, serviceable																		
Springfield, M. S. K., serviceable											1	6,658						
Springfield, unserviceable																		
Harper's Ferry, sup't, serviceable																	3	42
Harper's Ferry, M. S. K., serviceable													625					
Harper's Ferry, unserviceable																		
DEPOTS.																		
Charleston, serviceable							1				16							
Charleston, unserviceable																		
Detroit, serviceable														2			41	
Detroit, unserviceable																		
Galena, serviceable																		
Galena, unserviceable																		
Middletown, serviceable																	154	
Middletown, unserviceable																		
New York, serviceable						2					5						30	
New York, unserviceable																		
West Point, serviceable	1	1	1			9	33											
West Point, unserviceable																		
Total serviceable	52	1	9	1,624	2	11	58	7	1	11	66	78	7,311	22	2	2	1,724	283
Total unserviceable						4					100	1						

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	MISCELLANEOUS.																	
	Brushes, assorted.	Bricks, furnace.	Bells.	Brooms.	Boats.	Bushings.	Brands.	Boxes, assorted.	Bunks.	Bags, linen.	Bedsteads.	Bridles.	Burcaus.	Bookcases.	Benches.	Bars, pinch.	Blankets.	Baskets.
ARSENALS.																		
Allegheny, serviceable							225				8	2	4	1				
Allegheny, unserviceable																		
Augusta, serviceable	3											1					3	
Augusta, unserviceable																		
Baton Rouge, serviceable	1		1				5	1										
Baton Rouge, unserviceable			1							1								
Bellona, serviceable																		
Bellona, unserviceable																		
Champlain, serviceable	5		1	4													1	
Champlain, unserviceable																		
Fort Monroe, serviceable				11														
Fort Monroe, unserviceable																		
Frankford, serviceable	12					7										10		
Frankford, unserviceable			180															
Kennebec, serviceable	7				1		1									3	2	
Kennebec, unserviceable					1													
Mount Vernon, serviceable			2		1						2		1	1				
Mount Vernon, unserviceable							4											
Pikesville, serviceable																		
Pikesville, unserviceable																		1
Rome, serviceable	1									18			1	2	2			1
Rome, unserviceable																		
St. Louis, serviceable	17		1				2	15					1	26				
St. Louis, unserviceable																		
Washington, serviceable		346		6		1	6	11		1	2			21				
Washington, unserviceable																		
Watertown, serviceable	2			7														
Watertown, unserviceable																		
Watervliet, serviceable	2		1	30	3	17		8							13	4	5	
Watervliet, unserviceable																		
ARMORIES.																		
Springfield, sup't, serviceable	1		1		1		277				2				2	3		
Springfield, M. S. K., serviceable																		
Springfield, unserviceable																		
Harper's Ferry, sup't, serviceable	1	2,806		17														3
Harper's Ferry, M. S. K., serviceable																		
Harper's Ferry, unserviceable																		
DEPOTS.																		
Charleston, serviceable																		
Charleston, unserviceable																		
Detroit, serviceable	2		1			2							1	2				
Detroit, unserviceable																		
Galena, serviceable									20		3		2					
Galena, unserviceable																		
Middletown, serviceable																		
Middletown, unserviceable																		
New York, serviceable				2														
New York, unserviceable																		
West Point, serviceable																		
West Point, unserviceable																		
Total serviceable	54	3,152	8	87	6	7	26	511	34	39	9	12	4	7	77	12	11	4
Total unserviceable					1			4										

* Pounds.

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	MISCELLANEOUS.																	
	Boxes for cart wheels.	Basins.	Beetles.	Coal, pit, bushels.	Coal, charred, bushels.	Coal, anthracite, bushels.	Clay, furnace.	Corks, number.	Cord, tarred, pounds.	Common tents.	Cartridge sacks.	Currycombs.	Carts, ox.	Carts, horse.	Carts, assorted.	Canisters, tin.	Casks, water.	Casks, assorted.
ARSENALS.																		
Allegheny, serviceable				1,000	200									3		12		
Allegheny, unserviceable.....																		
Augusta, serviceable.....					10						2							
Augusta, unserviceable																		
Baton Rouge, serviceable					27½		50											
Baton Rouge, unserviceable.....																		
Bellona, serviceable											1				4			
Bellona, unserviceable																		
Champlain, serviceable					40						1		1					
Champlain, unserviceable.....																		
Fort Monroe, serviceable.....			83½	129											2		7	
Fort Monroe, unserviceable																		
Frankford, serviceable.....			125						114					2				
Frankford, unserviceable.....																		
Kennebec, serviceable				76							1			2				
Kennebec, unserviceable.....																		
Mount Vernon, serviceable.....				62½								7	3				1	
Mount Vernon, unserviceable	4																	
Pikesville, serviceable																		2
Pikesville, unserviceable.....																		
Rome, serviceable				10											2			
Rome, unserviceable.....																		
St. Louis, serviceable.....				791										2				
St. Louis, unserviceable.....														1				
Washington, serviceable			3,133	778½	3	1½	3	1	7	1			3					
Washington, unserviceable.....																		
Watertown, serviceable.....			61	177														
Watertown, unserviceable.....																		
Watervliet, serviceable							gr. 19½		1	23	1	1	3	1			1	
Watervliet, unserviceable.....																		
ARMORIES.																		
Springfield, sup'l, serviceable.....	7	1		141,993														
Springfield, M. S. K., serviceable.....																		
Springfield, unserviceable.....																		
Harper's Ferry, sup'l, serviceable.....			13,318	9,066			56½							3				5
Harper's Ferry, M. S. K., serviceable																		
Harper's Ferry, unserviceable.....																		
DEPOTS.																		
Charleston, serviceable																3		
Charleston, unserviceable.....																		
Detroit, serviceable				125											1	2		
Detroit, unserviceable.....																		
Galena, serviceable.....																		
Galena, unserviceable																		
Middletown, serviceable.....																		
Middletown, unserviceable.....																		
New York, serviceable												1						
New York, unserviceable																		
West Point, serviceable.....										5					1			
West Point, unserviceable.....																		
Total serviceable	4	7	1	18,520	143,483½	3	1½	126	3	116	35	7	9	22	11	17	9	7
Total unserviceable.....														1				

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and dep'ts.	MISCELLANEOUS.																		
	Demijohns.	Earthen bowls.	Fire engines.	Fire buckets.	Fire hooks.	Furnaces.	Fire dogs.	Fusks.	Fenders.	Funnels.	Fire stones.	Frainers, assorted.	Glass bubbles.	Garrison flags.	Gag, gallons.	Grates.	Gun-racks.	Grindstone axles.	
ARSENALS.																			
Allegheny, serviceable.....			2	51				31	1	4									
Allegheny, unserviceable.....																			
Augusta, serviceable.....			1																
Augusta, unserviceable.....																			
Baton Rouge, serviceable.....			1																
Baton Rouge, unserviceable.....																			
Bellona, serviceable.....				26															
Bellona, unserviceable.....	1		1																
Champlain, serviceable.....			1										1						
Champlain, unserviceable.....																			
Fort Monroe, serviceable.....																			
Fort Monroe, unserviceable.....																			
Frankford, serviceable.....			1	80		1							3						
Frankford, unserviceable.....																			
Kennebec, serviceable.....			1								2	20				1			
Kennebec, unserviceable.....																			
Mount Vernon, serviceable.....	5		1																
Mount Vernon, unserviceable.....																			
Pikesville, serviceable.....			1																
Pikesville, unserviceable.....													1						
Rome, serviceable.....			1					6											
Rome, unserviceable.....																			
St. Louis, serviceable.....			1				9												
St. Louis, unserviceable.....																			
Washington, serviceable.....			2	45		2		14							60	6			
Washington, unserviceable.....			1																
Watertown, serviceable.....			2	28	4														
Watertown, unserviceable.....																			
Watervliet, serviceable.....	8		3	6		1				4									
Watervliet, unserviceable.....																			
ARMORIES.																			
Springfield, sup't, serviceable.....						1												7	
Springfield, M. S. K., serviceable.....												25							
Springfield, unserviceable.....															1,854				
Harper's Ferry, sup't, serviceable.....	9	1	3	116															34
Harper's Ferry, M. S. K., serviceable.....																			
Harper's Ferry, unserviceable.....																			
DEPOTS.																			
Charleston, serviceable.....														1					
Charleston, unserviceable.....																			
Detroit, serviceable.....				2								6							
Detroit, unserviceable.....																			
Galena, serviceable.....																			
Galena, unserviceable.....																			
Middletown, serviceable.....																			
Middletown, unserviceable.....																			
New York, serviceable.....						1													
New York, unserviceable.....																			
West Point, serviceable.....		12																	
West Point, unserviceable.....																			
Total serviceable.....	22	13	21	354	4	6	9	51	1	8	2	51	3	2	60	7	7	34	
Total unserviceable.....	1		2										1		1,854				

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	MISCELLANEOUS.																	
	Horses, number.	Horse cards.	Harrow.	Hoes.	Harness for large wagon, sets.	Harness for light wagon, sets.	Harness for cart, sets.	Hospital chests.	Handcuffs.	Horn lights, sheets of.	Halters.	Hods.	Handspikes.	Hose, suction.	Hose pipes.	Hose, leading.	Hooks, assorted.	Hose for engine.
ARSENALS.																		
Allegheny, serviceable	3	1	10	1	1	2			34	3	1	5						
Allegheny, unserviceable																		
Augusta, serviceable	1																	
Augusta, unserviceable																		
Baton Rouge, serviceable	1																	
Baton Rouge, unserviceable																		
Bellona, serviceable	1														1	2		2
Bellona, unserviceable																		
Champlain, serviceable	1					1												
Champlain, unserviceable																		
Fort Monroe, serviceable	2																	
Fort Monroe, unserviceable																		
Frankford, serviceable	2	2	7	2	2	2												
Frankford, unserviceable																		
Kennebec, serviceable	2	1	4	1	1					3								
Kennebec, unserviceable			3															
Mount Vernon, serviceable	2				1	6												
Mount Vernon, unserviceable																		
Pikesville, serviceable								1						1	1	50†		2
Pikesville, unserviceable																		
Rome, serviceable	1							4										
Rome, unserviceable																		
St. Louis, serviceable	4	1	1	1		3	1	1										
St. Louis, unserviceable																		
Washington, serviceable	2				1	1				4		6	1			1	13	
Washington, unserviceable																		
Watertown, serviceable	2		3	3										1				
Watertown, unserviceable																		
Watervliet, serviceable	3	1	6	1	1	1				5						250†		
Watervliet, unserviceable																		
ARMORIES.																		
Springfield, sup't, serviceable	3										1	3						
Springfield, M. S. K., serviceable																		
Springfield, unserviceable																		
Harper's Ferry, sup't, serviceable	3				4	2												
Harper's Ferry, M. S. K., serviceable																		
Harper's Ferry, unserviceable																		
DEPOTS.																		
Charleston, serviceable																		
Charleston, unserviceable																		
Detroit, serviceable												9					1	
Detroit, unserviceable																		
Galena, serviceable	3							1*		1								
Galena, unserviceable																		
Middletown, serviceable																		
Middletown, unserviceable																		
New York, serviceable																		
New York, unserviceable																		
West Point, serviceable																		
West Point, unserviceable																		
Total serviceable	33	3	6	31	14	7	16	2	6	34	17	13	11	3	2		14	4
Total unserviceable				3														

* Iron.

† Feet.

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Arsenals, armories, and depots.	MISCELLANEOUS.																	
	Physicians.	Pasteboards, pounds.	Patterns, assorted.	Pitchers.	Pokers.	Paint pots.	Pails.	Pans, varnish.	Portmanteau.	Ploughs, assorted.	Pile-drivers.	Proving boards.	Rope, white, pounds.	Rope, tarred, pounds.	Rulers.	Recls.	Rakes.	Rollers, stone.
ARSENALS.																		
Allegheny, serviceable			14	3	2	2		2	1				60	11	1		9	3
Allegheny, unserviceable																		
Augusta, serviceable													220					1
Augusta, unserviceable																		
Baton Rouge, serviceable										1			98	23				
Baton Rouge, unserviceable																		
Bellona, serviceable																		
Bellona, unserviceable																		
Champlain, serviceable																	4	
Champlain, unserviceable																		
Fort Monroe, serviceable																		
Fort Monroe, unserviceable																		
Frankford, serviceable																		
Frankford, unserviceable																		
Kennebec, serviceable					1					2			168		1		8	
Kennebec, unserviceable													140					
Mount Vernon, serviceable			5										216		2		1	1
Mount Vernon, unserviceable																		
Pikesville, serviceable													153					
Pikesville, unserviceable																		
Rome, serviceable						10				1					1		3	
Rome, unserviceable																		
St. Louis, serviceable													13		2	1	6	1
St. Louis, unserviceable													92					
Washington, serviceable	1	11				4				1	1	1	938				2	1
Washington, unserviceable													659					
Watertown, serviceable														88				
Watertown, unserviceable																		
Watervliet, serviceable						6				1			150				4	
Watervliet, unserviceable																		
ARMORIES.																		
Springfield, sup't, serviceable				1	39	9	36											73
Springfield, M. S. K., serviceable																		
Springfield, unserviceable																		
Harper's Ferry, sup't, serviceable				1														3
Harper's Ferry, M. S. K., serviceable													48					
Harper's Ferry, unserviceable																		
DEPOTS.																		
Charleston, serviceable	1																	
Charleston, unserviceable																		
Detroit, serviceable							2								1			
Detroit, unserviceable																		
Galena, serviceable																		
Galena, unserviceable																		
Middletown, serviceable																		
Middletown, unserviceable																		
New York, serviceable																		
New York, unserviceable																		
West Point, serviceable	1																	
West Point, unserviceable																		
Total serviceable	3	11	19	5	42	31	38	2	1	6	1	1	2,186	122	8	1	113	7
Total unserviceable													790					

A.—Statement of the tools and materials in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Armories, arsenals, and depots.	MISCELLANEOUS.																		
	Flat trips.	Scale beams.	Scale, patent balance.	Scale, tin.	Sand bags.	Stoves.	Spy glasses.	Sealing tadders.	Sand, casting, bushels.	Fuses, powder barrel.	Spouting, copper, feet of.	Spout heads.	Shutter springs.	Steelyards.	Scythes and snathes.	Stove pipe, feet of.	Spools and spindles.	Scythe stone.	
ARSENALS.																			
Allegheny, serviceable.....		6	1	5		8								1	2				
Allegheny, unserviceable.....																			
Augusta, serviceable.....																			
Augusta, unserviceable.....																	lbs. 48		
Baton Rouge, serviceable.....						1										10			
Baton Rouge, unserviceable.....																			
Bellona, serviceable.....		2				1									1				
Bellona, unserviceable.....															2				
Champlain, serviceable.....						1									2				
Champlain, unserviceable.....																			
Fort Monroe, serviceable.....									11										
Fort Monroe, unserviceable.....																			
Frankford, serviceable.....			2			6					210	8	125		1				
Frankford, unserviceable.....																			
Kennebec, serviceable.....		1	1			4					68 $\frac{1}{2}$			1	2				
Kennebec, unserviceable.....											134				2				
Mount Vernon, serviceable.....						1								1	1				
Mount Vernon, unserviceable.....																			
Pikesville, serviceable.....			2																
Pikesville, unserviceable.....																			
Rome, serviceable.....			1			5			3					1		lbs. 50			
Rome, unserviceable.....																			
St. Louis, serviceable.....		1	2	1		7								1	4	135	16	12	
St. Louis, unserviceable.....																			
Washington, serviceable.....		3	2			7			6					1					
Washington, unserviceable.....																			
Watertown, serviceable.....			3	3				2											
Watertown, unserviceable.....																			
Watervliet, serviceable.....		3	2	2	1,120	16			5										
Watervliet, unserviceable.....																			
ARMORIES.																			
Springfield, sup't, serviceable.....																			2
Springfield, M. S. K., serviceable.....			1																
Springfield, unserviceable.....																			
Harper's Ferry, sup't, serviceable.....		2	6											1		467			
Harper's Ferry, M. S. K., serviceable.....																			
Harper's Ferry, unserviceable.....																			
DEPOTS.																			
Charleston, serviceable.....			1			1								1					
Charleston, unserviceable.....																			
Detroit, serviceable.....			1			3								3		45			
Detroit, unserviceable.....																			
Galena, serviceable.....			2			2									1				
Galena, unserviceable.....																			
Middletown, serviceable.....																			
Middletown, unserviceable.....																			
New York, serviceable.....			1					3											
New York, unserviceable.....																			
West Point, serviceable.....					6,300									1					
West Point, unserviceable.....		2																	
Total serviceable.....	2	16	28	11	7,420	63	2	3	25		278 $\frac{1}{2}$	8	125	12	18	755	16	12	
Total unserviceable.....		2													2				

A.—Statement of the ordnance and ordnance stores in the land service, made up from the returns of the fourth quarter of 1834.

Forts, &c.	CLASS 1.—ORDNANCE.																					
	Brass cannon.					Brass howitzers.			Brass mortars.			Iron cannon.										
	24-pounder.	12-pounder.	6-pounder.	4-pounder.	3-pounder.	8-inch.	6½-inch.	5 8-10-inch.	5½-inch.	24-pounder.	10-inch.	8-inch.	6½-inch.	42-pounder.	36-pounder, trun's below axis.	32-pounder, in centre.	24-pounder.	24-pounder, below axis.	18-pounder, heavy.	18-pounder, light.	12-pounder, garrison.	
Armstrong.....																						
Brady.....																						
Baton Rouge.....																						
Baltimore.....																						
Columbus.....																						
Constitution and McClary.....								1										28	7		8	
Crawford.....																						
Castle Pinckney.....								2			1											
Dearborn.....																						
Gibson.....																						
Gratlot.....																						
Hamilton and Lafayette.....													3		188				3			1
Howard.....																						
Hancock Barracks.....			3																			
Independence and Warren.....															29		39				5	
Jackson.....																4	4		1		3	
Johnston, North Carolina.....																						
Jesup.....				2	2			1														
Jefferson Barracks.....																						
St. Phillip.....									1							2	35					
Leavenworth.....																						
McHenry.....			1			2								5				17		5		
Mackinac.....		2																	2			
Marion.....							2			1		1					5				4	
Mitchell.....																						
Monroe.....																14	6					
Moultrie and Johnston, South Carolina.....																						
Morgan.....															36		10					
Madison Barracks.....		1							3	3							3		7		13	
Military Academy.....																						
Niagara.....																					7	
New Orleans.....																						
Newport, Kentucky.....																						
Pike.....																	4					
Preble and Scammel.....									1								24				8	
Pensacola, Barrancas, &c.....		2													7	12					6	
Snelling.....																						2
Severn.....																		4				
Sullivan.....																						4
Towson.....				1																		
Trumbull and Griswold.....									1									21	9		3	
Washington.....							2															
Winnebago.....																						
Wolcott and Adams.....								3		6					10	10					2	
Wood, New York.....																						
Wood, Louisiana.....																	4					
Key West.....																						
Oglethorpe Barracks.....																	8				11	
Macon.....																						
Coffee, Camps Jackson and Washita.....																						
	2	3	4	3	2	4	2	1	6	5	10	1	1	3	5	286	164	74	29	53	24	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 1.—ORDNANCE.																						
	Iron cannon.					Columbiads.			Iron howitzers.			Iron mortars.			Unserviceable.								
	12-pounder, field.	9-pounder, field.	6-pounder, field.	4-pounder, field.	3-pounder, field.	100-pounder.	50 pounder.	18-pounder.	12-pounder enroudes.	5 8-10-inch.	5½-inch.	24-pounder.	13-inch, sea coast.	10-inch, sea-coast.	10-inch, siege.	Iron swivels.	4-pounder brass cannon.	32-pounder iron cannon.	24-pounder iron cannon.	18-pounder iron cannon.	12-pounder iron cannon.	6-pounder iron cannon.	
Armstrong	1		6																				
Brady			4								1												
Baton Rouge			2																				
Baltimore																							
Columbus	6		2																				
Constitution and McClary	3		4			2		2															
Crawford	2		1																				
Castle Pinckney											2		1										
Dearborn	3		1																				
Gibson			5													1							
Graiot																							
Hamilton and Lafayette			4			1	7																
Howard			2							1													
Hancock Barracks			1																				
Independence and Warren	24		7			4					2		1										
Jackson	4		4			2					1												
Johnston, North Carolina			4													4	4	18	15	6	2		
Jesup			5													4							
Jefferson Barracks			2																				
St. Phillip																		3					4
Leavenworth			9		1																		
McHenry	6		7										4										
Mackinnac	3	2	5	1						1													
Marion			3								2								7	5		1	
Mitchell			2																				
Monroe			12																				
Moutrie and Johnston, South Carolina																							
Morgan													2				3	8	5	2	2		
Madison Barracks			11	1			1	1															
Military Academy													1										
Niagara	2		4									3											
New Orleans																							
Newport, Kentucky																							
Pike			2																				
Preble and Scammel	6		5			4							1										
Pensacola, Barrancas, &c.	14	12			8																		
Snelling			3							2													
Severn	5		4																				
Sullivan	4		4								1			1									
Towson			4																				
Trumbull and Griswold	5		4																				
Washington			4																				
Winnebago			2																				
Wolcott and Adams	20		6																				
Wood, New York			4																				
Wood, Louisiana			2																				
Key West	2	1																					
Oglethorpe Barracks			4																				
Macon																							
Coffee, Camps Jackson and Washita			1																				
Total	110	14	156	2	9	1	19	1	3	4	3	9	1	9	2	5	4	3	36	25	8	9	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 1.—ORDNANCE.			CLASS 2.—CARRIAGES.														
	Unserviceable.			Field artillery.									Caissons.					
	4-pounder.	32-pounder carronades.	Iron swivels.	24-pounder, complete.	18-pounder, travelling.	12-pounder.	6-pounder.	6-pounder, block-house.	4-pounder.	8-inch howitzer.	5½-inch howitzer.	24-inch howitzer.	18-pounder.	12-pounder.	6-pounder.	Siege, not stated.	Travelling forges.	18-pounder siege carriages.
Armstrong.....						1	3											
Brady.....							4											
Baton Rouge.....							2											
Baltimore.....																		
Columbus.....						6	2											
Constitution and McClary.....																		
Crawford.....						2	2											
Castle Pinckney.....						2	2					2						
Dearborn.....						3												
Gibson.....							1	1								1		
Gratlot.....																		
Hamilton and Lafayette.....							4											
Howard.....							8											
Hancock Barracks.....							4											
Independence and Warren.....						2	6					2						
Jackson.....							4											
Johnston, North Carolina.....	8						4					1						
Jesup.....							3											
Jefferson Barracks.....							2											
St. Phillip.....																		
Leavenworth.....			10															
McHenry.....							6									1		
Mackinac.....					2	2	5		1									
Marion.....											2							
Mitchell.....							4											
Monroe.....							12											
Moultrie and Johnston, South Carolina.....																		
Morgan.....		5																
Madison Barracks.....				3	3	4						1		1			1	
Military Academy.....																		
Niagara.....							4											5
New Orleans.....																		
Newport, Kentucky.....																		
Pike.....							2											
Preble and Seammel.....																		
Pensacola, Barrancas, &c.....																		
Snelling.....							1	3										
Severn.....							4											
Sullivan.....						3	4											
Towson.....							3		1									
Trumbull and Griswold.....																		1
Washington.....							4											
Winnebago.....							2											
Wolcott and Adams.....				16	1	4	6			2					1			
Wood, New York.....							4											
Wood, Louisiana.....							2											
Key West.....						2												
Oglethorpe Barracks.....							4											
Macon.....							3											
Coffee, Camps Jackson and Washita.....							3											
Total.....	8	5	10	19	6	32	126	1	2	2	2	6	1	2	6	2	2	6

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 2.—CARRIAGES.																	
	24-pounder frame garrison carriages.	24-pounder tiller carriages.	18-pounder truck carriages.	12-pounder truck carriages.	6-pounder truck carriages.	5 8-10-inch howitzer carriages.	24-pounder sea-coast carriages.	32-pounder casemate carriages.	24-pounder casemate carriages.	Mortar beds.					Unserviceable.			
										10-inch sea-coast, iron.	10-inch siege, wood.	8-pounder siege, wood.	5½-pounder siege, wood.	Assorted.	12-pounder field carriages.	6-pounder field carriages.	24-pounder garrison carriages.	
Armstrong.....					1													
Brady.....																		
Baton Rouge.....																		
Baltimore.....																		
Columbus.....																		
Constitution and McClary.....															2	3		
Crawford.....																		
Castle Pinckney.....							4	4			1	2					1	
Dearborn.....																		
Gibson.....					2													
Gratiot.....																		
Hamilton and Lafayette.....								36										
Howard.....																		
Hancock Barracks.....																		
Independence and Warren.....											1							
Jackson.....									3									
Johnston, North Carolina.....																		
Jesup ..	2																	
Jefferson Barracks.....																		
St. Philip.....																		
Leavenworth.....																		
McHenry.....										3								
Mackinac.....																		
Marion.....																	4	
Mitchell.....																		
Monroe.....								14	6									
Moultrie and Johnston, South Carolina.....																		
Morgan.....										3								
Madison Barracks.....											5						1	
Military Academy.....																		
Niagara.....															2			
New Orleans ..																		
Newport, Kentucky.....																		
Pike.....										4								
Preble and Scammel.....																	2	
Pensacola, Barrancas, &c.....																		
Snelling.....				2		1											3	1
Severn.....																		
Sullivan.....			4								1							
Towson.....																		
Trumbull and Griswold.....	6	8														1	4	1
Washington.....																		
Winnebago.....																		
Wolcott and Adams.....											2							
Wood, New York.....																		
Wood, Louisiana.....										4								
Key West.....																		
Oglethorpe Barracks.....																		
Macon.....																		
Coffee, Camps Jackson and Washita.....																		
Total.....	8	8	4	2	3	1	4	50	24	11	1	1	2	2	6	16	1	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 2.—CARRIAGES.						CLASS 3.—ARTILLERY EQUIPMENTS.											
	Unserviceable.						Sponges and rammers.											
	18-pounder siege carriages.	12-pounder siege carriages.	4-pounder siege carriages.	5½-inch howitzers.	10-inch mortar beds, wood.	Caissons.	42-pounder.	32-pounder.	24-pounder.	18-pounder.	12-pounder garrison.	12-pounder field.	9-pounder field.	6-pounder field.	4-pounder field.	3-pounder field.	8-inch howitzer.	5 8-10-inch howitzer.
Armstrong.....										3				6				
Brady.....														3				
Baton Rouge.....														2				
Baltimore.....																		
Columbus.....																		
Constitution and McClary.....				1				29	3	7				3				
Crawford.....										3				1				
Castle Pinckney.....								1		4				4				
Dearborn.....										6				1				
Gibson.....						1								2				
Gratiot.....																		
Hamilton and Lafayette.....							25	71	127	133	5			11				
Howard.....											1			10				1
Hancock Barracks.....														13				
Independence and Warren.....								14	71	6	24	13		24				
Jackson.....														2				
Johnston, North Carolina.....														4				
Jesup.....														6	2	2		
Jefferson Barracks.....														7				
St. Phillip.....								4	50	3							1	
Leavenworth.....																		
McHenry.....							13	16	4	8	6			13				
Mackinac.....		1								9		9	2	10	1	1		1
Marion.....																		
Mitchell.....														4				
Monroe.....														6				
Moultrie and Johnston, South Carolina.....																		
Morgan.....																		
Madison Barracks.....		3							10	2	7							
Military Academy.....																		
Niagara.....	2	2			2					5				4				
New Orleans.....																		
Newport, Kentucky.....																		
Pike.....																		
Preble and Scammel.....	4							3	36	17			12	5				
Pensacola, Barrancas, &c.....																		
Snelling.....										3				7				2
Severn.....										2				7				
Sullivan.....									1	3	7			8				
Towson.....														4	2			
Trumbull and Griswold.....	1	3							51	26	6			6				
Washington.....														4				
Winnebago.....														4				
Wolcott and Adams.....								63	37	28	6			7			1	
Wood, New York.....														4				
Wood, Louisiana.....									4									
Key West.....																		
Oglethorpe Barracks.....														4				
Macon.....														3				
Coffee, Camps Jackson and Washita.....														1				
Total.....	7	9	1	1	2	1	38	171	421	243	96	34	2	200	5	3	2	4

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 3.—ARTILLERY EQUIPMENTS.																	
	Sponges and rammers.				Ladles and worms.								Ladles and staves.					
	5½-inch howitzer.	24-pounder howitzer.	10-inch mortar.	Assorted.	33-pounder.	32-pounder.	24-pounder.	18-pounder.	12-pounder garrison.	12-pounder field.	9-pounder field.	6-pounder field.	4-pounder.	3-pounder.	5 8-10-inch howitzer.	5½-inch howitzer.	42-pounder.	33-pounder.
Armstrong								1			3							
Brady.....	1										5							
Baton Rouge.....																		
Baltimore.....																		
Columbus.....								5			2							
Constitution and McClary.....	1					18	8	9	3		6							
Crawford.....								2										
Castle Pinckney.....																		
Dearborn.....								3			1							
Gibson.....											2							
Gratiot.....																		
Hamilton and Lafayette.....						12	14	43			4					11	12	
Howard.....								1			9			1				
Hancock Barracks.....											3							
Independence and Warren.....		4				1			13		2							5
Jackson.....		1				1					2							
Johnston, North Carolina.....																		
Jesup.....											6	1	2					
Jefferson Barracks.....											3							
St. Phillip.....						1	1	1	3		4				2			6
Leavenworth.....																		
McHenry.....					14	16	16	12	9									
Mackinac.....								3	6		2	3	2					
Marion.....											1							
Mitchell.....											1							
Monroe.....											2							5
Moultrie and Johnston, South Carolina.....																		
Morgan.....							2											
Madison Barracks.....						1	9	6										
Military Academy.....																		
Niagara.....											2							
New Orleans.....																		
Newport, Kentucky.....																		
Pike.....		1		2						2								
Preble and Scammel.....						4	17	10	6		6							
Pensacola, Barrancas, &c.....																		
Snelling.....																		
Severn.....			1						1		3							
Sullivan.....								5	2		3							
Towson.....											2	1						
Trumbull and Griswold.....							20	8	6									
Washington.....																		
Winnebago.....											4							
Wolcott and Adams.....																		
Wood, New York.....		9				19	16	4	2		3							
Wood, Louisiana.....											4							
Key West.....				4							2							
Oglethorpe Barracks.....						5	13		1		2							
Macon.....											2							
Coffee, Camps Jackson and Washita.....																		
Total.....	11	6	1	6	14	52	112	116	62	19	2	94	4	2	1	2	11	28

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 3.—ARTILLERY EQUIPMENTS.																	
	Ladles and staves.				Worms and staves.						Rammers & staves.			Sponges and staves.				
	24-pounder.	18-pounder.	12-pounder.	6-pounder.	42-pounder.	32-pounder.	24-pounder.	18-pounder.	12-pounder.	6-pounder.	3-pounder.	32-pounder.	24-pounder.	Assorted.	24-pounder.	6-pounder.	3-pounder.	10-inch mortar.
Armstrong.....				1						1	1					2	1	
Brady.....																		
Baton Rouge.....																		
Baltimore.....																		
Columbus.....																		
Constitution and McClary.....	16	2	8					13	12									
Crawford.....																		
Castle Pinckney.....	4		1					4		1			8		8			
Dearborn.....																		
Gibson.....																		
Gratnot.....																		
Hamilton and Lafayette.....	6	8			18	29	22	20				3						
Howard.....																		
Hanecek Barracks.....																		1
Independence and Warren.....	6							9		5								
Jackson.....	2							2					4		4			
Johnston, North Carolina.....										2								
Jesup.....																		
Jefferson Barracks.....																		
St. Phillip.....	16	1						12		1	1							
Leavenworth.....																		
McHenry.....									3									
Mackinac.....																		
Marion.....																		
Mitchell.....																		
Monroe.....	2					5	2			3		14	6		20			
Moultrie and Johnston, South Carolina.....																		
Morgan.....													5		5			
Madison Barracks.....								2										
Military Academy.....																		
Niagara.....																		
New Orleans.....																		
Newport, Kentucky.....																		
Pike.....	2						2						4		4			
Preble and Scammel.....																		
Pensacola, Barrancas, &c.....																		
Snelling.....																		
Severn.....																		
Sullivan.....			2															
Towson.....							1			1								
Trumbull and Griswold.....	5																	
Washington.....											2							
Winnebago.....																		
Wolcott and Adams.....								8	2	1								
Wood, New York.....																		
Wood, Louisiana.....	2						2					4	2					
Key West.....																		
Oglethorpe Barracks.....							4			2								
Macon.....																		
Coffee, Camps Jackson and Washita.....																		
Total.....	61	13	9	1	18	34	59	47	15	19	1	17	31	2	41	2	1	1

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 3.—ARTILLERY EQUIPMENTS.																		
	Sponges.						Tompions.										Aprons.		
	32-pounder.	24-pounder.	18-pounder.	12-pounder.	6-pounder.	Assorted.	50-pounder.	32-pounder.	24-pounder.	18-pounder.	12-pounder.	9 pounder.	6-pounder.	4-pounder.	10-inch mortar.	5½-inch howitzer.	Assorted.	Lead for field guns.	Lead for garrison guns.
Armstrong																			
Brady																			
Baton Rouge																			
Baltimore																			
Columbus				2							6	2						8	
Constitution and McClary							2	23	7	13	4	4			1			17	
Crawford				4	4						2	1						3	
Castle Pinckney					4			8										4	
Dearborn																			
Gibson												3						4	
Gratiot																			
Hamilton and Lafayette												4						4	
Howard																		10	
Hancock Barracks																	2	2	
Independence and Warren									3	2		5		1		2	12	9	
Jackson	2	6	1			1		4		4		8			2		4	4	
Johnston, North Carolina												4						8	8
Jesup												4				3		3	
Jefferson Barracks												2					2	2	
St. Phillip																		9	
Leavenworth												2						2	
McHenry				6				6	6	6	6	2						6	
Maekinae										2	4	2	5						
Marion																			
Mitchell																		2	
Monroe								14	6			12						12	
Moultrie and Johnston, South Carolina																			
Morgan									2										
Madison Barracks									3	7	12	11	1						
Military Academy																			
Niagara																		6	
New Orleans																			
Newport, Kentucky																			
Pike									4								2	2	
Preble and Scammel						81												1	
Pensacola, Barrancas, &c.																			
Snelling																			6
Seyern					10						6	8							11
Sullivan			4	5	6				1		3	1							10
Towson					5							4	1						4
Trumbull and Griswold																			15
Washington												6							4
Winnebago																			
Wolcott and Adams																		85	84
Wood, New York												4							4
Wood, Louisiana					11				4										4
Key West																	2		2
Oglethorpe Barracks												2							4
Macon					3							3							3
Coffee, Camps Jackson and Washita												1							
Total	2	6	5	17	43	82	2	20	69	22	58	2	102	2	1	3	96	45	34

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 3.—ARTILLERY EQUIPMENTS.																	
	Buckets.			Hudge barrels.	Bricoles.	Cannon spikes.	Cannon locks.	Drag ropes.	Dark lanterns.	Fuse saws.	Fuse augers.	Fuse setters, wood.	Fuse setters, copper.	Fuse extractors.	Fuse rasps.	Fuse mallets.	Fuse machines.	Gunners' bolts, complete.
	Sponge.	Tar.	Garrison, water.															
Armstrong	2	6	3	27				2	6									10
Brady	4	4	5	56						1		1						5
Baton Rouge	2			16														2
Baltimore																		
Columbus	8			64														
Constitution and McClary	6		24	52								1		1				72
Crawford	4	3																3
Castle Pinckney	10		8	16	10			7	2			2			1	2		2
Dearborn				50														4
Gibson	3	1	2	30				2										3
Gratiot																		
Hamilton and Lafayette	4		51	32														17
Howard	8		6	40						1		1		1				8
Hancock Barracks	6			56														4
Independence and Warren	15	4		166	3		3					4	6					78
Jackson	9		10	80		4		1										
Johnston, North Carolina	4			32														
Jesup	8	4	2	58														8
Jefferson Barracks	3	4		20														3
St. Phillip					10													
Leavenworth	3	2		12										1				
McHenry	6		14	236	16			1										
Mackinac	2			17				3										19
Marion																		
Mitchell	2	2	4	20														2
Monroe	32		20	84		20		20										
Moultrie and Johnston, South Carolina																		
Morgan	5		10															
Madison Barracks	7	7	11	40	4			2										6
Military Academy				32														3
Niagara	9	2																
New Orleans																		
Newport, Kentucky																		
Pike	6		8	16		4												2
Preble and Scammel	2		4	16	6					2		2		1	2		1	15
Pensacola, Barrancas, &c																		
Snelling		1	7	44				3	1	1								3
Severn	5	1			11													4
Sullivan	6			30														4
Towson	5			40				2										1
Trumbull and Griswold	2	2		17				2										26
Washington	4			32														4
Winnebago	2			16														2
Wolcott and Adams	6	2	80	36	78		48	4	2		16					10		20
Wood, New York	4			32														4
Wood, Louisiana	6		9	20		4		1										2
Key West				16														2
Oglethorpe Barracks	4			32														6
Macon	3			24														
Coffee, Camps Jackson and Washita				1				2										1
Total	217	43	4	274	1,586	150	32	60	49	9	1	27	6	5	3	13	1	345

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 3.—ARTILLERY EQUIPMENTS.																	
	Gunners' haversacks.	Gunners' culpers.	Gunners' quadrants.	Gunners' spirit levels.	Gunners' gonges.	Kit ladles.	Kit brushes.	Implement straps.	Linstocks.	Portfire stocks.	Portfire cuses.	Portfire clippers.	Pass boxes.	ming horns.	Priming vices.	Prolongs.	Sponges covers.	Shot, hot, tongs for.
Armstrong.....	9		1						10	11	6	1		5	9			
Brady.....	5							6	5	5	5			5				
Baton Rouge.....	2								2	2	2			2				
Baltimore.....																		
Columbus.....	33								8	8	8	2		8	8	5		
Constitution and McClary.....	6		2			1			70	54			28	100	37			
Crawford.....	3								3	3	3	3		3			4	
Castle Pinckney.....	6		2					3	11	11	12	8		14	42		10	4
Dearborn.....	4								7	7	3			4			6	
Gibson.....	5								5	3	1			2		4		
Gratot.....																		
Hamilton and Lafayette.....	16	2	1					4	24	15	4	4	163	21	4	4	50	17
Howard.....	15		1						13	15	9	2		11		4	6	
Hancock Barracks.....	16								10	10	2			6	12		2	
Independence and Warren.....	49	2				2			164	163	12	2	62	114	119	6	4	13
Jackson.....	16		1						14	12	12	4		8	21	4	16	
Johnston, North Carolina.....	8		1						4	4	4				4		4	
Jesup.....	13							12	9	8	4				9	2		
Jefferson Barracks.....	5								5	3	4			3				
St. Phillip.....									25	15								2
Leavenworth.....															4			
McHenry.....	28		3						6	6	6	3	20	12	6		6	7
Mackinac.....	20	1							19	19				24	52	4		
Marion.....																	3	
Mitchell.....	10								2	2	2	2		4		4	2	
Monroe.....	30							6	12	12	12			6	38	6	6	
Moultrie and Johnston, South Carolina.....																		
Morgan.....									5	5				5	20		5	
Madison Barracks.....	12							4	8	2	2	2		4				4
Military Academy.....	12								3	2								
Niagara.....	24					2					10	2		6				
New Orleans.....																		
Newport, Kentucky.....																		
Pike.....	4								6	6	8			6	16		4	
Preble and Scammel.....	17	2	2			1			28	20		4		20	14	2		2
Pensacola, Barrancas, &c.....																		
Snelling.....	3	1		1					9	9	10			5		3		
Severn.....		1							4	5	6	4	1	7	18	3		
Sullivan.....	18							6	6	6	9	2		8	1	2	3	
Towson.....	10							1	5	5	5	1		1	4	1	2	
Trumbull and Griswold.....	8								32	29	2	2	12	39	53			1
Washington.....	8								4	4	6						2	
Winnebago.....	4								4	4	2		2	4				
Wolcott and Adams.....	27	1	1		37	2			123	123			48	125	113			
Wood, New York.....	8								5	5	4	4		4	1	4	4	
Wood, Louisiana.....	7				2				6	6	6	6		10	16		14	
Key West.....	8							4	2	2	2			2		2	4	
Ogthorpe Barracks.....	16								4	4				2		4	4	3
Macon.....	6								3	3	6	3		3	6	3	3	
Coffee, Camps Jackson and Washita.....	1									1	1							
Total.....	491	10	15	1	39	7	1	50	686	630	188	58	335	603	627	67	114	43

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

CLASS 3.—ARTILLERY EQUIPMENTS.

Forts, &c.	Shot, hot, blocks for.	Shot, hot, forks for.	Shot, hot, handles for.	Shell hooks.	Shell scrapers.	Shell plug-screws.	Tarpaulings for guns.	Tarpaulings for ammunition.	Tube pouches.	Tube boxes.	Thumbstalls.	Artillery harness.						
												Sets for two wheel horses.	Sets for two leading horses.	Sets for four horses.	Sets for one wheel horse.	Sets for one leading horse.	Artillery saddles.	Sets, men's harness.
Armstrong.....							13			1	15	3					3	
Brady.....												2	1					
Baton Rouge.....										2	2							
Baltimore.....																		
Columbus.....								2		8	8							
Constitution and McClary.....		4	4							2	59							
Crawford.....			2							1	3	3					4	2
Castle Pinckney.....			4	2			1			11	18							
Dearborn.....										3	11							
Gibson.....									3		5	2						
Gratiot.....																		
Hamilton and Lafayette.....		11	39							22	4							
Howard.....										6	11							
Hancock Barracks.....									6	6	6							
Independence and Warren.....			3	3	3				4	50	26							
Jackson.....							4	1	8	5	21							
Johnston, North Carolina.....									4		4							
Jesup.....										6	4							
Jefferson Barracks.....									2	1								
St. Phillip.....			4			174												
Leavenworth.....	100									3								
McHenry.....			12			2				19	11							
Mackinac.....										11	14							
Marion.....																		
Mitchell.....									2			3	3				6	
Monroe.....										12	106							
Moultrie and Johnston, South Carolina.....																		
Morgan.....									5		20							
Madison Barracks.....			5	2							7							
Military Academy.....										3								
Niagara.....											4							
New Orleans.....																		
Newport, Kentucky.....																		
Pike.....										6	18							
Preble and Scammel.....		6	2	1						18								
Pensacola, Barrancas, &c.....																		
Snelling.....							14		2	2								
Severn.....							4		3	8								
Sullivan.....								2	7	3								
Towson.....							5		4	1	5		2					
Trumbull and Griswold.....		14	7							31	8							
Washington.....									4		4							
Winnchago.....											1							
Wolcott and Adams.....		3	5	4						41	19							
Wood, New York.....									4		4							
Wood, Louisiana.....								1	6	20								
Key West.....										2	2							
Oglethorpe Barracks.....			4						4									
Macon.....									3		6							
Coffee, Camps Jackson and Washita.....										1	1							
Total.....	100	38	91	12	3	176	48	6	55	290	462	13	7	2	1	1	13	2

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 3.—UNSERVICEABLE.																
	Sponges and rammers.									Ladles and worms.							
	36-pounder.	32-pounder.	24-pounder.	18-pounder.	12-pounder.	9-pounder.	6-pounder.	5 8-10-inch howitzer.	10-inch mortar.	24-pounder.	18-pounder.	12-pounder.	6-pounder.	5 8-10-inch howitzer.	Assorted.	Worms and staves, assorted.	Ladles and staves, assorted.
Armstrong.....																	
Brady.....																	
Baton Rouge.....																	
Baltimore.....																	
Columbus.....																	
Constitution and McClary.....			29	3	6		6										
Crawford.....																	
Castle Pinckney.....																	
Dearborn.....																	
Gibson.....																	
Gratiot.....																	
Hamilton and Lafayette.....																	
Howard.....																	
Hancock Barracks.....																	
Independence and Warren.....									1		13	2					
Jackson.....							2										
Johnston, North Carolina.....			7	15					2	2					8	5	
Jesup.....																	
Jefferson Barracks.....																	
St. Phillip.....			3	1													3
Leavenworth.....							6					4					
McHenry.....	28	13	29	11	15		2										
Mackinac.....					7	1	1								1		
Marion.....																	
Mitchell.....																	
Monroe.....																	
Moultrie and Johnston, South Carolina.....																	
Morgan.....																	
Madison Barracks.....																	
Military Academy.....																	
Niagara.....				13	14		3	5	1		8	3	3	4			
New Orleans.....																	
Newport, Kentucky.....																	
Pike.....																	
Preble and Scammel.....																	
Pensacola, Barrancas, &c.....																	
Snelling.....					3						4	5					
Severn.....							1			1		1				1	
Sullivan.....																	
Towson.....																	
Trumbull and Griswold.....																	
Washington.....																	
Winnebago.....																	
Wolcott and Adams.....							20										
Wood, New York.....																	
Wood, Louisiana.....																	
Key West.....																	
Oglethorpe Barracks.....																	
Macon.....																	
Coffee, Camps Jackson and Washita.....																	
Total.....	28	13	68	43	45	1	41	5	1	4	10	20	15	4	1	9	8

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 3.—UNSERVICEABLE.																		
	Rammers and staves, assorted.	Sponges and staves, assorted.	Budge barrels.	Bricoles.	Drag ropes.	Gunners' belts.	Gunners' quadrants.	Gunners' gages.	Gunners' haversacks.	Gunners' culpers.	Lead aprons for guns.	Lanterns.	Linestocks	Portfire stocks.	Portfire cases.	Pass boxes.	Prolonges.	Priming horns.	
Armstrong.....																			
Brady.....																			
Baton Rouge.....																			
Baltimore.....																			
Columbus.....																			
Constitution and McClary.....																			
Crawford.....																			
Castle Pinckney.....																			
Dearborn.....																			
Gibson.....									2				2	2					
Gratot.....																			
Hamilton and Lafayette.....																			
Howard.....																			
Hancock Barracks.....																			
Independence and Warren.....																			
Jackson.....																			
Johnston, North Carolina.....			7			20			4				12	4					7
Jesup.....																			
Jefferson Barracks.....																			
St. Phillip.....			2			5		19		8			5	10		34			4
Leavenworth.....			1			4					1	2	4	4	2				
McHenry.....				16										24					
Mackinac.....													6	12					
Marion.....															2				
Mitchell.....																			
Monroe.....	6	6																	
Moultrie and Johnston, South Carolina.....																			
Morgan.....																			
Madison Barracks.....																			
Military Academy.....																			
Niagara.....				20		4							35	27					9
New Orleans.....																			
Newport, Kentucky.....																			
Pike.....																			
Preble and Scammel.....																			
Pensacola, Barrancas, &c.....																			
Snelling.....				31	9	11	1		23			3	5	4					1
Severn.....																			
Sullivan.....																			
Towson.....																			
Trumbull and Griswold.....																			
Washington.....																			
Winnebago.....																			
Wolcott and Adams.....																			
Wood, New York.....																			
Wood, Louisiana.....			1						1										2
Key West.....																			
Oglethorpe Barracks.....																			
Macon.....																			
Coffee, Camps Jackson and Washita.....																			
Total.....	6	6	11	67	9	44	1	19	30	8	1	5	69	87	4	34	2	21	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 4.—CANNON BALLS, SHELLS, ETC.																
	Balls.				Shells.												
	9-pounder.	6-pounder.	4-pounder.	3-pounder.	13-inch.	10-inch.	8-inch.	6½-inch.	5 8-10-inch.	5½-inch.	3-inch.	42-pounder.	32-pounder.	24-pounder.	18-pounder.	12-pounder.	6-pounder.
Armstrong.....		405	8	7		1					3						
Brady.....		515								132							
Baton Rouge.....		7												5			
Baltimore.....																	
Columbus.....																	
Constitution and McClary.....		294								199							
Crawford.....																	
Castle Pinckney.....		146				108	100							274			
Dearborn.....		86															
Gibson.....		906															
Gratiot.....																	
Hamilton and Lafayette.....																	
Howard.....		1,492							131								
Hancock Barracks.....		417												30			
Independence and Warren.....		1,068				50						84	145		1,031		
Jackson.....		89			15		480			91			100				
Johnston, North Carolina.....		749	281														
Jesup.....		184	718	164					154								
Jefferson Barracks.....																	
St. Phillip.....		196			67		43										
Leavenworth.....		1,902		157									267				
McHenry.....	8	269	3		76	178											
Mackinac.....	86	337						133									
Marion.....		526					168		100								
Mitchell.....		17															
Monroe.....																	
Moultrie and Johnston, South Carolina.....																	
Morgan.....																	
Madison Barracks.....		2,300			237	208		258						17	424	8	
Military Academy.....					42				50								
Niagara.....		223			57								253	147			
New Orleans.....																	
Newport, Kentucky.....																	
Pike.....																	
Preble and Scammel.....		1,435			90								168				
Pensacola, Barrancas, &c.....																	
Snelling.....		1,255															
Severn.....		114															
Sullivan.....		334			41								94				
Towson.....		182															
Trumbull and Griswold.....	130	88											194				
Washington.....		1,048															
Winnebago.....		100															
Wolcott and Adams.....		1,015			89	306			437								
Wood, New York.....																	
Wood, Louisiana.....		88															
Key West.....																	
Oglethorpe Barracks.....		463						203									
Macon.....		300															
Coffee, Camps Jackson and Washita.....		30															
Total.....	224	18,586	1,010	328	82	891	1,315	168	879	1,009	3	84	1,530	164	1,455	8	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 4.—CANNON BALLS, SHELLS, ETC.												CLASS 4.—UNSERVICABLE.					
	Bar shot.			Spherical case shot.			Iron stands for grape shot.			Carcasses.	Loose cannister shot, pounds.	Loose grape shot, mixed, pounds.	Balls.					
	32-pounder.	24-pounder.	12-pounder.	24-pounder.	12-pounder.	6-pounder.	24-pounder.	12-pounder.	6-pounder.				Assorted.	32-pounder.	24-pounder.	18-pounder.	12-pounder.	9-pounder.
Armstrong.....																		
Brady.....																		
Baton Rouge.....																		
Baltimore.....																		
Columbus.....																		
Consitution and McClary.....												6,356						
Crawford.....																		
Castle Pinckney.....					70													
Dearborn.....					304													
Gibson.....																		
Gratiot.....																		
Hamilton and Lafayette.....												1,330						
Howard ..						271		108										
Hancock Barracks.....			43															
Independence and Warren.....	116	75																
Jackson.....																	300	
Johnston, North Carolina.....										905	3,174							
Jesup.....										356	1,067							
Jefferson Barracks.....		45																
St. Phillip.....							8						3	1,034	3	163	164	209
Leavenworth.....									266	325	1,409							
McHenry.....										1	317							
Mackinac.....																		
Marion.....												434						
Mitchell.....																		
Monroe.....																		
Moultrie and Johnston, South Carolina.....																		
Morgan.....													30	48	43	37		
Madison Barracks.....																		
Military Academy.....																		
Niagara.....												420						
New Orleans.....																		
Newport, Kentucky.....																		
Pike.....																		
Preble and Scammel.....																		
Pensacola, Barrancas, &c.....																		
Snelling.....				240								546						
Sovern.....																		
Sullivan.....																		
Towson.....																		
Trumbull and Griswold.....		12									1,194							
Washington.....																		
Winnebago.....																		
Wolcott and Adams.....						206												
Wood, New York.....																		
Wood, Louisiana.....																		
Key West.....																		
Oglethorpe Barracks.....																		
Macon.....																		
Coffee, Camps Jackson and Washita.....																		
Total.....	116	132	43	240	374	477	8	108	266	1	3,097	14,736	33	1,083	45	405	164	209

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 4.—UNSERVICEABLE.						CLASS 5.—STRAPPED SHOT, ETC.									
	Shells.				32-pounder stands for grape shot.	Loose grape shot, assorted, pounds.	Strapped shot.					Strapped shot, fixed.		Canister shot.		
	8½-inch.	5½-inch.	24-pounder.	Assorted.			24-pounder.	12-pounder.	6-pounder.	4-pounder.	3-pounder.	24-pounder.	12-pounder.	6-pounder.	24-pounder.	18-pounder.
Armstrong.....												36	473			
Brady.....																
Baton Rouge.....																
Baltimore.....																
Columbus.....																
Con-stitution and McClary.....							32	172					14	326	45	392
Crawford.....												276	90			
Castle Pinckney.....														220		14
Dearborn.....																
Gibson.....													83			
Gratiot.....																
Hamilton and Lafayette.....													99			
Howard.....												21	139			
Hancock Barracks.....																
Independence and Warren.....														22		
Jackson.....																
Johnston, North Carolina.....																
Jesup.....								200	28	45						
Jefferson Barracks.....																
St. Phillip.....				311												
Leavenworth.....								95					33			
McHenry.....						10							400			
Mackinac.....																
Marion.....																
Mitchell.....													156			
Monroe.....																
Moultrie and Johnston, South Carolina.....																
Morgan.....	37	386	157		386											
Madison Barracks.....																
Military Academy.....								46								
Niagara.....							47	310							35	
New Orleans.....																
Newport, Kentucky.....																
Pike.....								150								
Preble and Scammel.....																100
Pensacola, Barrancas, &c.....																
Snelling.....								60				154	88			11
Severn.....								169								
Sullivan.....																
Towson.....									100							
Trumbull and Griswold.....								195						40	179	218
Washington.....																
Winnebago.....																
Wolcott and Adams.....							15			33						
Wood, New York.....																
Wood, Louisiana.....													50			
Key West.....												258				
Oglethorpe Barracks.....																
Macon.....													300			
Coffee, Camps Jackson and Washita.....																
Total.....	37	386	157	311	386	10	47	242	1,202	128	75	745	1,925	608	259	735

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 5.—STRAPPED SHOT, ETC.																
	Canister shot.							Canister shot, fixed.				Grape shot.					
	6-pounder.	4-pounder.	3-pounder.	8-inch howitzer.	5½-inch howitzer.	5¼-inch howitzer.	24-pounder howitzer.	Assorted.	32-pounder.	24-pounder.	18-pounder.	12-pounder.	6-pounder.	4-pounder.	50-pounder.	42-pounder.	32-pounder.
Armstrong.....	40										101	218					
Brady.....						185						584					
Baton Rouge.....																	
Baltimore.....																	
Columbus.....																	
Constitution and McClary.....	245	249										12		34			
Crawford.....											210	13					
Castle Pinckney.....	10																
Dearborn.....																	
Gibson.....	569											78					
Gratiot.....																	
Hamilton and Lafayette.....															327	659	
Howard.....	150																
Hancock Barracks.....																	
Independence and Warren.....	28			20												90	
Jackson.....																	
Johnston, North Carolina.....												200					
Jesup.....												200					
Jefferson Barracks.....																	
St. Phillip.....															197	2,630	
Leavenworth.....												55					
McHenry.....								27	309	166		100					
Mackinac.....																	
Marion.....																	
Mitchell.....	80						55										
Monroe.....																	
Moultrie and Johnston, South Carolina.....																	
Morgan.....																43	
Madison Barracks.....																	
Military Academy.....																	
Niagara.....	286						212										
New Orleans.....																	
Newport, Kentucky.....																	
Pike.....	150											50					
Preble and Scammel.....	95																
Pensacola, Barrancas, &c.....																	
Snelling.....	218				100						153	264					
Severn.....																	
Sullivan.....																	
Towson.....	200												6				
Trumbull and Griswold.....	60																
Washington.....																	
Winnabago.....												400					
Wolcott and Adams.....	171		17													15	
Wood, New York.....																	
Wood, Louisiana.....												100					
Key West.....											196						
Oglethorpe Barracks.....	72																
Macon.....												100					
Coffee, Camps Jackson and Washita.....																	
Total.....	2,374	249	17	20	100	185	212	55	27	309	166	672	2,362	6	34	524	3,437

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 5.—STRAPPED SHOT, ETC.																			
	Grape shot.					Spherical case shot, strapped.				Cannon wads.										
	24-pounder.	18-pounder.	12-pounder.	6-pounder.	Assorted.	24-pounder.	18-pounder.	6-pounder.	5½-inch.	50-pounder.	42-pounder.	36-pounder.	32-pounder.	24-pounder.	18-pounder.	12-pounder.	6-pounder.	Assorted.	Shell eplins.	Hand grenades.
Armstrong.....																				
Brady.....																				
Baton Rouge.....				36																
Baltimore.....																				
Columbus.....																				
Constitution and McClary.....	405	23	63	45										2,225						
Crawford.....																				
Castle Pinckney.....			40	10										744				35		
Dearborn.....			96																	
Gibson.....																				
Gratiot.....																				
Hamilton and Lafayette.....	1,756	1,149	539	299						135		33	780	870	600					
Howard.....																				
Hancock Barracks.....																				
Independence and Warren.....	91		1	125		27	21											188	100	
Jackson.....									2			2	139	4				1		
Johnston, North Carolina.....																				
Jesup.....					444															
Jefferson Barracks.....																				
St. Phillip.....	3,073	362	275	327	lead 552															18
Leavenworth.....					16															
McHenry.....											200	200	200	200	200	73				
Mackinac.....																				
Marion.....																				
Mitchell.....																				
Monroe.....												112	48							
Moultrie and Johnston, South Carolina.....																				
Morgan.....	132													300						
Madison Barracks.....																				
Military Academy.....							50													
Niagara.....		159					40													
New Orleans.....																				
Newport, Kentucky.....																				
Pike.....														152						
Preble and Seammel.....	100	100																		
Pensacola, Barrancas, &c.....																				
Snelling.....								72												
Severn.....																				
Sullivan.....		50																		
Towson.....																				
Trumbull and Griswold.....	18	27												10						
Washington.....																				
Winnebago.....																				
Wolcott and Adams.....	12	33										50	48	50						
Wood, New York.....																				
Wood, Louisiana.....													166							
Key West.....																				
Oglethorpe Barracks.....																		338		
Macon.....																				
Coffee, Camps Jackson and Washita.....																				
Total.....	5,587	1,903	1,014	842	1,012	27	40	71	72	2	135	200	397	4,812	1,124	800	446	189	100	18

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 5.—UNSERVICEABLE.														
	12-pounder strapped shot.	6-pounder strapped shot.	Canister shot.						Grape shot.						
			32-pounder.	24-pounder.	12-pounder.	9-pounder.	6-pounder.	6-pounder, fixed.	5½-inch howitzer.	32-pounder.	24-pounder.	12-pounder.	6-pounder.	Stands of, assorted.	Common wads.
Armstrong.....															
Brady.....															
Baton Rouge.....															
Baltimore.....															
Columbus.....															
Constitution and McClary.....															
Crawford.....															
Castle Pinckney.....															
Dearborn.....															
Gibson.....															
Gratiot.....															
Hamilton and Lafayette.....															
Howard.....															
Hancock Barracks.....															
Independence and Warren.....															
Jackson.....		100													
Johnston, North Carolina.....															773
Jesup.....															
Jefferson Barracks.....															
St. Phillip.....			14	54	14	39	15		67	140	190				
Leavenworth.....															
McHenry.....															
Mackinac.....		70			130	106						209	1		
Marion.....															
Mitchell.....															
Monroe.....															
Moultrie and Johnston, South Carolina.....															
Morgan.....															
Madison Barracks.....															
Military Academy.....															
Niagara.....															
New Orleans.....															
Newport, Kentucky.....															
Pike.....															
Preble and Scammel.....															
Pensacola, Barrancas, &c.....															
Snelling.....	186	84			100		96								
Severn.....															
Sullivan.....															
Towson.....															
Trumbull and Griswold.....															
Washington.....															
Winnebago.....															
Wolcott and Adams.....															
Wood, New York.....															
Wood, Louisiana.....															
Key West.....															
Oglethorpe Barracks.....															
Macon.....															
Coffee, Camps Jackson and Washita.....															
Total.....	186	254	14	54	244	145	111		67	140	190	209	1		773

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 6.—SMALL ARMS, ETC.																
	Muskets.			Rifles.			Pistols.						Swords, &c.				
	National armory, new, browned.	National armory, new, bright.	Various models.	Muskets without bayonets.	Harpers Ferry, half-stocked, new.	Hall's patent, new, with bayonets.	Browned.	Rifle calibre, browned.	Assorted.	Wall pieces	Carbines.	Yaugers.	Cavalry sabres.	Chiefs' swords.	Non-commissioned officers' swords.	Various models.	Pikes.
Armstrong.....																	
Brady.....		1															
Baton Rouge.....															4		
Baltimore.....																3	
Columbus.....																	
Constitution and McClary.....																	
Crawford.....					3			6									
Castle Pinckney.....																	
Dearborn.....						50											
Gibson.....				7	324		403		1	5		170		1			
Gratiot.....																	
Hamilton and Lafayette.....																	
Howard.....																	
Hancock Barracks.....															3		
Independence and Warren.....																	
Jackson.....																	
Johnston, North Carolina.....					25												
Jesup.....					6	6		2									
Jefferson Barracks.....	1													1	57		
St. Phillip.....																	
Leavenworth.....						165											
McHenry.....																	193
Mackinac.....					1												
Marion.....																	
Mitchell.....																21	
Monroe.....																	
Moultrie and Johnson, South Carolina.....																	
Morgan.....																	
Madison Barracks.....																	
Military Academy.....	360			3									4	66	2		
Niagara.....	3	16															
New Orleans.....																	
Newport, Kentucky.....																7	
Pike.....	97																
Preble and Scammel.....	2																12
Pensacola, Barrancas, &c.....															6		
Snelling.....																	
Severn.....	8																
Sullivan.....																	
Towson.....											1					1	
Trumbull and Griswold.....																	
Washington.....																	
Winnebago.....																	
Wolcott and Adams.....																	
Wood, New York.....	200		2													1	
Wood, Louisiana.....																	
Key West.....																	
Oglethorpe Barracks.....																5	
Macon.....																	
Coffee, Camps Jackson and Washita.....																	
Total.....	671	17	2	10	359	56	165	403	8	1	5	1	170	4	81	97	205

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 7.—ACCOUTREMENTS, ETC., FOR SMALL ARMS.																			
	For muskets.						For rifles.						For carbines.							
	Bullet moulds.	Screw-drivers.	Wipers.	Ball-screws.	Spring vices.	Backshot moulds.	Wall piece bullet moulds.	Chargers.	Flasks and belts.	Pouches and belts.	Bullet moulds.	Screw-drivers.	Wipers.	Ball-screws.	Spring vices.	Screw-drivers.	Wipers.	Bullet moulds.	Tubes.	
Armstrong.....	set 1																			
Brady.....																				
Baton Rouge.....																				
Baltimore.....																				
Columbus.....																				
Constitution and McClary.....	1					1														
Crawford.....	1																			
Castle Pinckney.....																				
Dearborn.....									300		5	50		5						
Gibson.....	2					2		174	56	406	259	323	374	43	29	112	119	19	10	
Gratiot.....																				
Hamilton and Lafayette.....																				
Howard.....	2					2														
Hancock Barracks.....																				
Independence and Warren.....			1					3												
Jackson.....																				
Johnston, North Carolina.....	3					1														
Jesup.....	3					1			5		9		74	14	5					
Jefferson Barracks.....			4																	
St. Phillip.....																				
Leavenworth.....	2					2				89	13	86								
McHenry.....	1																			
Mackinac.....		32									1									
Marion.....	1																			
Mitchell.....																				
Monroe.....																				
Moultrie and Johnston, South Carolina.....																				
Morgan.....																				
Madison Barracks.....																				
Military Academy.....		356	212	4	10															
Niagara.....																				
New Orleans.....																				
Newport, Kentucky.....		80	83	10	10															
Pike.....		36																		
Preble and Scammel.....	2																			
Pensacola, Barrancas, &c.....																				
Snelling.....	7	1				3	8													
Severn.....																				
Sullivan.....																				
Towson.....	1		1							1										
Trumbull and Griswold.....																				
Washington.....																				
Winnebago.....		94		12																
Wolcott and Adams.....																				
Wood, New York.....																				
Wood, Louisiana.....																				
Key West.....																				
Oglethorpe Barracks.....																				
Macon.....																				
Coffe, Camps Jackson and Washita.....																				
Total.....	27	599	301	26	20	12	8	177	361	496	287	459	498	57	39	112	119	19	10	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 7.—UNSERVICEABLE.																
	For pistols.		For swords.			For sabres.		Throggs.	Belt plates.	Flints.				Cartridge-boxes.	Bayonet scabbards.	Brushes and picks.	Wipers.
	Cartridge-boxes.	Dragon holsters, pairs.	Belts, waist, white.	Belts, waist, black.	Belts, shoulder, white.	Belts, waist, white.	Belts, waist, black.			Musket.	Rifle.	Pistol.	Assorted.				
Armstrong.....										16,760	7,322						
Brady.....										3,600							
Baton Rouge.....					1					754							
Baltimore.....			3					3									
Columbus.....										500							
Constitution and McClary.....										2,028							
Crawford.....										1,023							
Castle Pinckney.....										100							
Dearborn.....			10							6,800		98	88	73			
Gibson.....	62	223	2	50		2	172	219		8,561	7,472		6	1			
Gratiot.....										1,970							
Hamilton and Lafayette.....										270							
Howard.....										6,658	306						
Hancock Barracks.....			13							3,130							
Independence and Warren.....										138							
Jackson.....										395							
Johnston, North Carolina.....										4,230	175						
Jesup.....																	
Jefferson Barracks.....		2	2		3			5		1,880	2,289						
St. Phillip.....																	
Leavenworth.....								2		2,136	771						
McHenry.....										63		3	8				
Mackinac.....										7,332	345						
Marion.....										7,946							
Mitchell.....										6,390							
Monroe.....										4,500							
Moultrie and Johnston, South Carolina.....																	
Morgan.....																	
Madison Barracks.....										1,100							
Military Academy.....			10					290 113									
Niagara.....										1,559		25	21				
New Orleans.....										326							
Newport, Kentucky.....			9					99		40							
Pike.....								55		1,050							
Preble and Scammel.....										778							
Pensacola, Barrancas, &c.....					2												
Snelling.....										7,749							
Severn.....										867							
Sullivan.....										575							
Towson.....										3,783	565						
Trumbull and Griswold.....										17							
Washington.....										166							
Winnebago.....										1,010							
Wolcott and Adams.....										1,000							
Wood, New York.....								200		884							
Wood, Louisiana.....										3,800							
Key West.....										627							
Oglethorpe Barracks.....										2,010							
Macon.....										327							
Coffee, Camps Jackson and Washita.....		6															
Total.....	62	231	49	50	6	2	172	290	686	115,132	18,671	565	126	123	73	1	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

F ris, &c.	CLASS 7.—UNSERVICE-ABLE.					CLASS 8.—POWDER, ETC.											
	Gun slings.	Powder horns.	Betplates.	Sword belts.	Equipments and accoutrements, assorted.	Powder.						FLANNEL CARTRIDGES.					
						Cannon, pounds.	Musket, pounds.	Rifle, pounds.	Mixed, pounds.	Refined nitre, pounds.	Putrized brimstone, pounds.	24-pounder.	18-pounder.	12-pounder.	6-pounder.	5 8-10-inch howitzer.	Cartridges, flannel bottoms.
Armstrong							811½	609						4	81		
Brady						742	292									57	
Baton Rouge																	
Baltimore																	
Columbus						1,000	30										
Constitution and McClary						1,195			10	4							
Crawford						53	400	200									
Castle Pinckney						675											
Dearborn	77		38	5		123	910	175									
Gibson			13	176		1,043	1,618	484½									
Gratiot																	
Hamilton and Lafayette						724				9							
Howard						3,933	245										
Hancock Barracks						2,008	200										
Independence and Warren						850	25	25									
Jackson								470			200						
Johnston, North Carolina						448		470	12	30							
Jesup		4				511	229½	129								13	
Jefferson Barracks							6½	158								184	
St. Phillip																	
Leavenworth	44	1				25	1,937	325	58	68						95	
McHenry						969	84½		3½		76					365	
Mackinac						2,881	896½	90	11	32½	495	208			1,755		
Marion							10										
Mitchell						317	8										
Monroe						420									261		75
Moultrie and Johnston, South Carolina																	
Morgan						2,400											
Madison Barracks							11					206					
Military Academy																	
Niagara						825	170										
New Orleans																	
Newport, Kentucky																	
Pike						570											
Preble and Scammel						260											
Pensacola, Barrancas, &c.									26								
Snelling			4				1,825	1,513	10						28	143	
Severn						315	156½										
Sullivan						471											
Towson							385									243	
Trumbull and Griswold						805						30			293		
Washington						250	405										
Winnebago							1,483										
Wolcott and Adams						360	137	48									
Wood, New York						174											
Wood, Louisiana						71	34				7						
Key West												576					
Oglethorpe Barracks						569									6		
Macon						844	98								53		
Coffee, Camps Jackson and Washita																	
Total	121	5	51	9	176	25,861	11,498	4,174	127	111½	143½	283	495	1,024	3,434	143	75

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 8.—POWDER, ETC.														Musket bullets, pounds.	Rifle bullets, pounds.	Buckshot, pounds.	
	Paper cartridges.	Cartridge bags, paper, flannel bottoms.					Cartridge bags, flannel.					8-inch howitzer.	5½-inch howitzer.					
		32-pounder.	24-pounder.	18-pounder.	12-pounder.	6-pounder.	Assorted.	32 pounder.	24-pounder.	18-pounder.	12-pounder.			6-pounder.				
Armstrong...										5	50					783	150	23
Brady											600					564		54
Baton Rouge.....																		
Baltimore																		
Columbus											70	300						
Constitution and McClary.....							58				43	59		149		1,655		45
Crawford																		
Castle Pinckney.....										135		400	182					
Dearborn											94	178				2,550		
Gibson												351						
Gratiot																		
Hamilton and Lafayette.....		180	300			228												
Howard												486				1,673		249
Hancock Barracks												403						
Independence and Warren.....		113	165								38	156						
Jackson									288							75		
Johnston, North Carolina.....												172				150	139	
Jesup																1,093½		153
Jefferson Barracks																		
St. Phillip																3,770		
Leavenworth																2,739		
McHenry.....											100	239				*10,200		
Mackinac																		
Marion												232						
Mitchell												76						
Monroe	116																	
Moultrie and Johnston, South Carolina.....																		
Morgan			300															
Madison Barracks												181				100		
Military Academy.....																		
Niagara											188	100	323			200		
New Orleans																		
Newport, Kentucky.....																		
Pike										200						69		
Preble and Scammel											69	172						
Pensacola, Barrancas, &c.....																		
Snelling																131	305	175
Severn												320						
Sullivan				84	610	289						385						
Towson																*20,000		
Trumbull and Griswold			95	9												490		189
Washington												449						
Winnebago												217				177		100
Wolcott and Adams		376	100	100				78	21	100		134	64					
Wood, New York												87						
Wood, Louisiana									200			50						
Key West																		
Oglethorpe Barracks																696		
Macon							208											
Coffee, Camps Jackson and Washita																		
Total.....	116	669	960	193	610	517	266	78	844	357	850	5,802	64	119	47,115½	594	987	

* Numbers.

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 8.—POWDER, ETC.															
	Cartridges.						Paper.			Fuses.						
	Musket ball.	Musket blank.	Musket buckshot.	Musket ball and buckshot.	Rifle ball.	Pistol ball.	Carbine ball.	Musket cartridge, pounds.	Cannon cartridge, pounds.	Rocket cartridge, pounds.	Priming tubes, filled.	Priming tubes, empty.	13-inch fuses, filled.	10-inch fuses, filled.	8-inch fuses, filled.	5½-inch fuses, filled.
Armstrong.....	49,562	1,700	11,156	39,287				167½	14½		1,105					
Brady.....	27,800										1,067	197				
Baton Rouge.....	1,671	2,988									196					
Baltimore.....																
Columbus.....	1,000	5,000														
Constitution and McClary.....	90,000	1,772						6½			23					199
Crawford.....		5,820		17,243				96½			83					
Castle Pinckney.....											2,468		336	250		270
Dearborn.....	78,300	25,000						14			1,743					
Gibson.....	19,504	1,610			21,490	45,880	9,640	48	130		1,634					
Griatol.....	53,900															
Hamilton and Lafayette.....	5,000	5,670									832					
Howard.....	51,744	366						48	24		989					
Hancock Barracks.....	14,898	16,815						35½	68		968					
Independence and Warren.....	1,049							60			473	11	100	54		140
Jackson.....	30,180				1,800				85		685					120
Johnston, North Carolina.....																
Jesup.....		91		177				9			520					
Jefferson Barracks.....	5,000	1,697						39			205					
St. Phillip.....																
Leavenworth.....	12,000	5,665			1,796						270					
McHenry.....	7,154	8,930		10,000		60					1,302			60		
Mackinac.....	36,888	8,700						24½	23	7	1,670	1,450				
Marion.....	14,236	2,218														
Mitchell.....	28,733										296					
Monroe.....	3,780	5,000									900					
Moultrie and Johnston, South Carolina.....																
Morgan.....											300					
Madison Barracks.....	7,833							16			43		6	24		27
Military Academy.....		4,272											100			99
Niagara.....	8,624	3,862									470					
New Orleans.....	8,958	6,000														
Newport, Kentucky.....	5,000	452														
Pike.....																
Preble and Scammel.....	9,982	2,744											90			
Pensacola, Barrancas, &c.....																
Snelling.....	31,300	2,047						17	327½		3,761					439
Severn.....	1,597	2,380		6,000				7			385					
Sullivan.....	3,460	4,430									900		90			
Towson.....	8,150	3,542						25			815					
Trumbull and Griswold.....	440	1,100									175					
Washington.....		500		864							445					
Winnebago.....	7,990							3½			886					
Wolcott and Adams.....											205					
Wood, New York.....	1,630	5,000														
Wood, Louisiana.....	1,540								67							
Key West.....	5,959										257					
Oglethorpe Barracks.....	19,728							32								
Macon.....	4,960	5,545						4			1,082					
Coffee, Camps Jackson and Washita.....																
Total.....	660,040	140,916	11,156	73,571	25,086	45,940	9,640	654	724½	21½	27,153	1,450	208	722	388	1,294

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 8.—UNSERVICEABLE.								CLASS 9.—PARTS OR INCOMPLETE SETS OF ANY OF THE ARTICLES INSERTED IN THE PRECEDING CLASSES.										
	Printing tubes, filled.	Fuses.	Cartridge paper, pounds.	Portfires, number.	Slowmatch, pounds.	Kit match.	Rocket signals.	Musket bullets, pounds.	Cartridge bags.	For field carriages.									
										6-pounder checks.	18-pounder carriages, with 4 limbers.	12-pounder iron axle-trees.	6-pounder iron axle-trees.	18-pounder ammunition boxes.	12-pounder ammunition boxes.	6-pounder ammunition boxes.	Assorted.	18-pounder trail handspikes.	
Armstrong																			
Brady																			
Baton Rouge																			
Baltimore																			
Columbus																			
Constitution and McClary																			
Crawford																			
Castle Pinckney			11				37			12									
Dearborn									744										
Gibson																			
Gratiot																			
Hamilton and Lafayette																			
Howard																1			
Hancock Barracks																	8		
Independence and Warren													4						
Jackson						10											2		
Johnston, North Carolina																			
Jesup																		2	
Jefferson Barracks																	3	1	
St. Phillip		485			125	1													
Leavenworth									3										
McHenry											1	1					6	2	
Mackinac																4			
Marion			14		3														
Mitchell																			
Monroe																			
Moultrie and Johnston, South Carolina																			
Morgan																			
Madison Barracks											4			1	8	2			6
Military Academy																			
Niagara	1,800	149		101													4		10
New Orleans																			
Newport, Kentucky																			
Pike	400			50		124													
Preble and Scammel						10												7	4
Pensacola, Barrancas, &c																			
Snelling					162														
Severn	213								100										
Sullivan					14							1			1				
Towson																			
Trumbull and Griswold																			
Washington																			
Winnabago																			
Wolcott and Adams				71															
Wood, New York																			
Wood, Louisiana	212			68	10			44											
Key West																			
Oglethorpe Barracks														4					
Macon																			
Coffee, Camps Jackson and Washita																			
Total	2,625	634	25	290	314	145	37	44	844	15	4	2	5	5	14	25	19	20	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 9.—PARTS OR INCOMPLETE SETS OF ANY OF THE ARTICLES INSERTED IN THE PRECEDING CLASSES.																	
	For field carriages.											For siege carriages.						
	12-pounder trail handspikes.	6-pounder trail handspikes.	Whiffletrees and lending bars.	Swingtrees.	Swingtree bars.	Elevating screws, male.	Elevating screws, female.	Wheels.	Handspikes.	Limbers.	Pintles.	Nut washers.	24-pounder cheeks.	18-pounder cheeks.	12-pounder cheeks.	Axle-trees.	Transoms.	Transverse boards.
Armstrong.....		4																
Brady																		
Baton Rouge																		
Baltimore																		
Columbus																		
Constitution and McClary.....								98										
Crawford.....																		
Castle Pinckney								35										
Dearborn																		
Gibson																		
Gratiot																		
Hamilton and Lafayette.....								56										
Howard	1	4		sets 3														
Hancock Barracks.....		8																
Independence and Warren.....																		
Jackson		4																4
Johnston, North Carolina.....					4			45										
Jesup				5														
Jefferson Barracks.....																		
St. Phillip																		
Leavenworth				1	3	5	4											
McHenry.....				2				259										
Mackinac								14										
Marion								4										
Mitchell																		
Monroe																		
Moultrie and Johnston, South Carolina.....																		
Morgan																		5
Madison Barracks.....	21	2	4	14				4		3								
Military Academy																		
Niagara		8																
New Orleans																		
Newport, Kentucky																		4
Pike																		
Preble and Scammel	4																	
Pensacola, Barrancas, &c.....																		
Snelling	2	6		10	4			9										
Severn								16		1								
Sullivan						1		2			1							
Towson						5												
Trumbull and Griswold.....						32		28	150		421	6	4	24	17	79		
Washington																		
Winnebago.....																		
Wolcott and Adams								144	126									
Wood, New York																		
Wood, Louisiana.....								4										4
Key West.....																		
Oglethorpe Barracks.....																		
Macon																		
Coffee, Camps Jackson and Washita.....																		
Total	28	36	4	35	11	43	4	194	800	4	1	421	6	4	24	17	79	17

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 9.—PARTS OR INCOMPLETE SETS OF ANY OF THE ARTICLES INSERTED IN THE PRECEDING CLASSES.													Gunners' bolts.	Gunners' hammers.	Gunners' gimlets.		
	Iron gun-carriage, mounting, pounds.	Frames for carriages.	For sea-coast carriages.				Casemate carriages.			Parts of implements.								
			Chassis.	Wheels.	Trav. handspikes.	Quoins.	Wheels.	Handspikes.	Track irons.	6-pounder ladles, without worms.	18-pounder rammer heads.	33-pounder worms.	18-pounder worms.				6-pounder worms.	
Armstrong.....																		
Brady.....													1					
Baton Rouge.....																		
Baltimore.....																		
Columbus.....																		
Constitution and McClary.....																	41	36
Crawford.....																		
Castle Pinckney.....																	10	10
Dearborn.....																		
Gibson.....																		
Gratot.....																		
Hamilton and Lafayette.....									11									
Howard.....																		
Hancock Barracks.....																		
Independence and Warren.....					350	50											8	16
Jackson.....			1															
Johnston, North Carolina.....				8			18					8						
Jesup.....	2																	
Jefferson Barracks.....																		
St. Phillip.....							133									9		33
Leavenworth.....																		
McHenry.....																		
Maackinac.....																	12	13
Marion.....																		
Mitchell.....												1						
Monroe.....																		
Moultrie and Johnston, South Carolina.....																		
Morgan.....																		
Madison Barracks.....																		
Military Academy.....																		
Niagara.....																		
New Orleans.....																		
Newport, Kentucky.....																		
Pike.....																		
Preble and Scammel.....																		
Pensacola, Barrancas, &c.....																		
Snelling.....																		
Severn.....																		2
Sullivan.....					4													
Towson.....																		
Trumbull and Griswold.....	3,798					50	17											
Washington.....																		
Winnebago.....																		
Wolcott and Adams.....								64					19	9	6			
Wood, New York.....																		
Wood, Louisiana.....																		2
Key West.....																		
Oglethorpe Barracks.....																		
Macon.....																	3	4
Coffee, Camps Jackson and Washita.....																		
Total.....	3,798	2	1	8	354	100	168	64	11	1	9	19	9	6	9	76	114	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 9.—PARTS OR INCOMPLETE SETS OF ANY OF THE ARTICLES INSERTED IN THE PRECEDING CLASSES.																	
	Parts of artillery harness.																	
	Gunnery's punches.	Gunnery's pincers.	Gunnery's vent wrenches.	Horse collars.	Harness, pairs.	Breechings.	Back bands.	Belly bands.	Halter chains.	Trace chains.	Breast chains.	Stretcher chains.	Bridles.	Saddles.	Saddl' blankets.	Harness for one horse.	Sets of reins.	Wagon whips.
Armstrong.....																	4	
Brady.....																		
Baton Rouge.....																		
Baltimore.....																		
Columbus.....																		
Constitution and McClary.....	4	3		8	8	6	8	8					8					
Crawford.....																		
Castle Pinckney.....		10	10							7								
Dearborn.....																		
Gibson.....																		
Gratiot.....																		
Hamilton and Lafayette.....																		
Howard.....																		
Hancock Barracks.....																		
Independence and Warren.....																		
Jackson.....													7			7		
Johnston, North Carolina.....																		
Jesup.....																		
Jefferson Barracks.....																		
St. Phillip.....																		
Leavenworth.....																		
McHenry.....																		
Mackinac.....		12				3												
Marion.....																		
Mitchell.....					3						6		1	1	2			3
Monroe.....																		
Moultrie and Johnston, South Carolina.....																		
Morgan.....																		
Madison Barracks.....					2													
Military Academy.....																		
Niagara.....																		
New Orleans.....																		
Newport, Kentucky.....																		
Pike.....																		
Preble and Scammel.....																		
Pensacola, Barrancas, &c.....																		
Snelling.....					10				8	10	6	3	10					
Severn.....		1																
Sullivan.....																		
Towson.....			1											1				
Trumbull and Griswold.....																		
Washington.....																		
Winnebago.....																		
Wolcott and Adams.....																		
Wood, New York.....																		
Wood, Louisiana.....																		
Key West.....																		
Oglethorpe Barracks.....																		
Macon.....																		
Coffee, Camps Jackson and Washita.....																		
Total.....	4	26	11	8	23	9	8	8	8	17	12	3	26	2	2	7	4	3

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 9.—PARTS OR INCOMPLETE SETS, ETC.					CLASS 9.—UNSERVICEABLE.											
	Tompson collars.	Shot blocks.	Musket bayonets.	Juffie barrels.	Rifle leads.	24-pounder cheeks.	6-pounder cheeks.	Assorted.	Wheels for carriages.	Wheels for limbers.	12-pounder limbers.	Hounds.	Axle-trees.	Ammunition boxes.	Checks, assorted.	Quoins.	Handspikes.
Armstrong																	
Brady																	
Baton Rouge																	
Baltimore																	
Columbus																	
Constitution and McClary																	
Crawford																	
Castle Pinckney	4																
Dearborn				50													
Gibson		100															
Gratier																	
Hamilton and Lafayette																	
Howard																	
Hancock Barracks																	
Independence and Warren	4																
Jackson																	
Johnston, North Carolina														4			
Jesup																	
Jefferson Barracks																	
St. Phillip								22						1			
Leavenworth						1	2	3	18	6	2		6		3	2	3
McHenry																	6
Mackinac																	
Marion																	
Mitchell																	
Monroe	6		1														
Moultrie and Johnston, South Carolina																	
Morgan																	
Madison Barracks										2							
Military Academy																	
Ningara																	
New Orleans																	
Newport, Kentucky			96														
Pike																	
Preble and Scammel																	
Pensacola, Barrancas, &c.																	
Snelling																	
Severn	4																
Sullivan																	
Tovson				1								1					
Trumbull and Griswold																	
Washington																	
Winnebago																	
Wolcott and Adams																	
Wood, New York																	
Wood, Louisiana																	
Key West																	
Oglethorpe Barracks																	
Macon																	
Coffee, Camps Jackson and Washita																	
Total	18	100	97	1	50	1	2	3	40	6	4	1	6	5	3	2	9

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 9.—UNSERVICEABLE.																
	18-pounder worms, without staves.	12-pounder worms, without staves.	6-pounder worms, without staves.	6-pounder ladles, without staves.	Ladles worn out.	Parts of harness.			Gunners' gimlets.	Gunners' pinners.	Canister cases.	Swivels for cases.	Sword blades.	Sword scabbards.	Sword hilts.	Sword guards.	Spare flint caps.
						Horse collars.	Breechings.	Artillery saddles.									
Armstrong																	
Brady																	
Baton Rouge																	
Baltimore																	
Columbus																	
Constitution and McClary																	
Crawford																	
Castle Pinckney																	
Dearborn																	
Gibson																	
Gratnot																	
Hamilton and Lafayette																	
Howard																	
Hancock Barracks																	
Independence and Warren																	
Jackson																	
Johnston, North Carolina																	
Jesup										939	271						24
Jefferson Barracks																	
St. Phillip									3								
Leavenworth									3								
McHenry																	
Mackinac																	
Marion																	
Mitchell																	
Monroe																	
Moultrie and Johnston, South Carolina																	
Morgan																	
Madison Barracks	1	1	1	1													
Military Academy																	
Niagara																	
New Orleans																	
Newport, Kentucky																	
Pike																	53
Preble and Scammel																	
Pensacola, Barrancas, &c.							9	13	5				13	15	7	2	
Snelling																	
Severn																	
Sullivan																	
Towson																	
Trumbull and Griswold																	
Washington																	
Winnebago																	
Wolcott and Adams																	
Wood, New York																	
Wood, Louisiana																	
Key West																	
Oglethorpe Barracks																	
Macon																	
Coffee, Camps Jackson and Washita																	
Total	1	1	1	1		9	13	5	3	3	939	271	13	15	7	2	77

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 10.—MISCELLANEOUS.																		
	Gins.	Gin falls.	Gin slings.	Gin blocks.	Gin handspikes.	Handspikes, lever.	Horn lights, sheets of.	Hand scrapers.	Iron chests.	Iron chests, ammunition.	Kettles.	Jackscraws.	Lanterns.	Machines, elevating.	Mortar, eprouyettes.	Balls for.	Penthouses.	Sling curts.	
Armstrong.....																			
Brady.....																			
Baton Rouge.....																			
Baltimore.....																			
Columbus.....																			
Constitution and McClary.....	2			1															
Crawford.....							4												
Castle Pinckney.....	1		1	2														8	
Dearborn.....																			
Gibson.....																			
Gratiot.....																			
Hamilton and Lafayette.....	1	1		1															
Howard.....																			
Hancock Barracks.....																			
Independence and Warren.....	1	1		2	10					2		1							
Jackson.....	2	2	2	4	6	4	9	1				1		4					1
Johnston, North Carolina.....				4						5									
Jesup.....																			
Jefferson Barracks.....										1									
St. Phillip.....			1	17															
Leavenworth.....																			
McHenry.....	1	1		3	2						2				1	2			
Mackinac.....												1							
Marion.....				4															
Mitchell.....																			
Monroe.....																			
Moultrie and Johnston, South Carolina.....																			
Morgan.....		1		1	4														
Madison Barracks.....	1	1		24	2													5	
Military Academy.....																			
Niagara.....	1	1		3	4														
New Orleans.....																			
Newport, Kentucky.....																			
Pike.....	1	1		2						5									
Preble and Scammel.....	1	1		4															
Pensacola, Barrancas, &c.....																			
Snelling.....													2						
Severn.....	1	1		2															
Sullivan.....	1	1	1	2															
Towson.....																			
Trumbull and Griswold.....	1	1		2															
Washington.....																			
Winnebago.....																			
Wolcott and Adams.....	2	1		4						2									1
Wood, New York.....																			
Wood, Louisiana.....	1	1	1	2			4												
Key West.....																			
Oglethorpe Barracks.....																			
Macon.....																			
Coffee, Camps Jackson and Washita.....										1									
Total.....	18	15	6	84	28	4	17	1		16	2	3	2	4	1	2	13		2

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 10.—MISCELLANEOUS.											CLASS 10.—UNSERVICEABLE.					
	Chains for sling carts.	Screws and wrenches for sling carts.	Searchers for cannon.	Scrapers for cannon.	Scales and beams.	Screws, elevating and index.	Stretchers, chain.	Sweeping brushes.	Tackle and blocks.	Blocks, assorted.	Wedges and quoins.	Ammunition chests.	Blocks, assorted.	Gins.	Sling cart and chain.	Jackscraws.	Wheels for sling carts.
Armstrong.....																	
Brady.....																	
Baton Rouge.....																	
Baltimore.....																	
Columbus.....																	
Constitution and McClary.....			1		1			2	10								
Crawford.....																	
Castle Pinckney.....																	
Dearborn.....																	
Gibson.....																	
Gratiot.....																	
Hamilton and Lafayette.....	2																
Howard.....																	
Hancock Barracks.....																	
Independence and Warren.....				2							10		2	1			
Jackson.....	2	1		1													
Johnston, North Carolina.....				1					11								
Jesup.....																	
Jefferson Barracks.....																	
St. Phillip.....												2					
Leavenworth.....													2		1	2	
McHenry.....	3									25							
Mackinac.....																	
Marion.....							2	1									
Mitchell.....																	
Monroe.....																	
Moultrie and Johnston, South Carolina.....																	
Morgan.....	1																
Madison Barracks.....																	
Military Academy.....																	
Niagara.....				2													
New Orleans.....																	
Newport, Kentucky.....																	
Pike.....	1																
Preble and Scammel.....																	
Pensacola, Barrancas, &c.....																	
Snelling.....																	
Severn.....	1																
Sullivan.....																	
Towson.....																	
Trumbull and Griswold.....																	
Washington.....																	
Winnebago.....																	
Wolcott and Adams.....																	
Wood, New York.....				7													
Wood, Louisiana.....																	
Key West.....																	
Oglethorpe Barracks.....																	
Macon.....																	
Coffee, Camps Jackson and Washita.....																	
Total.....	10	1	1	13	1		2	1	2	21	25	10	2	4	1	1	2

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	CLASS 10.—CLOTHS, ETC.						IRONMONGERY.												
	Flannel, yards.	Flax, pounds.	Tow, pounds.	Thread, cotton, pounds.	Thread, cartridge, pounds.	Twine, pounds.	Unserviceable.		Copper.			Iron.			Lead.				
							Flannel, yards.	Thread, cartridge, pounds.	Bar, pounds.	Scrap, pounds.	Brass, sheet, pounds.	Bar, pounds.	Nail rod, pounds.	Scrap, pounds.	Castings, pounds.	Pig, pounds.	Scrap, pounds.	Sheet, pounds.	
Armstrong	25				24												2,883		
Brady																			
Baton Rouge																			
Baltimore																			
Columbus						3													
Constitution and McClary		½		½									540	177½			1,941		
Crawford						5													3,100
Castle Pinckney						1¾													
Dearborn						2													
Gibson						2													2,526½
Gratot																			
Hamilton and Lafayette																			
Howard						10													436
Hancock Barracks						14½													
Independence and Warren									4		48		7,786	20					
Jackson													3,000						
Johnston, North Carolina											210								5,420
Jesup	3½					2			7½		1½						718		
Jefferson Barracks											2						260		
St. Phillip																			
Leavenworth													374				5,099		
McHenry													1,215						
Mackinac					1½	1¾							403				659		293
Marion																			
Mitchell					1						10	12	1						
Monroe																			
Moultrie and Johnston, South Carolina																			
Morgan																			
Madison Barracks	6				1	½							171						
Military Academy																			
Niagara																			
New Orleans																			
Newport, Kentucky																			
Pike																			
Preble and Scammel		½																	
Pensacola, Barrancas, &c																			
Snelling	50		10		13		7	13									4,786		294
Severn					1								597						
Sullivan						4½													
Tovson					4¾														48
Trumbull and Griswold																			
Washington																			
Winnabago																			
Wolcott and Adams													2,840						
Wood, New York																			
Wood, Louisiana					1														30
Key West																			
Oglethorpe Barracks																			
Macon																			
Coffee, Camps Jackson and Washita																			
Total	84½	¾	10	½	49	48	7	13	7½	4	1½	270	12	16,927	197½	22,438½	5,716		372

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	IRONMONGERY.													LABORATORY STORES.				
	Locks.		Nails.				Steel.											
	Pad, number.	Assorted, number.	Wrought, pounds.	Cut, pounds.	Brass, pounds.	Assorted.	Cast, pounds.	German, pounds.	Ruckles, gross.	Emery, pounds.	Needles, papers.	Sandpaper, quires.	Spikes, pounds.	Tacks, saddlers', number.	Antimony, pounds.	Acid, browning, gallons.	Beeswax, pounds.	
Armstrong.....																		
Brady.....																		
Baton Rouge.....																		
Baltimore.....																		
Columbus.....													250					
Constitution and McClary.....														3				
Crawford.....													1,250					
Castle Pinckney.....																		
Dearborn.....																		
Gibson.....	2																	
Gratiot.....																		
Hamilton and Lafayette.....																		
Howard.....																		
Hancock Barracks.....																		
Independence and Warren.....											1							
Jackson.....																		
Johnston, North Carolina.....								7½										
Jesup.....						6½	8½	1½			½						1½	
Jefferson Barracks.....							1				8							
St. Phillip.....	1											1,000		12				
Leavenworth.....																		
McHenry.....																		
Mackinac.....																		
Marion.....						5												
Mitchell.....										2								
Monroe.....																		
Moultrie and Johnston, South Carolina.....																		
Morgan.....																		
Madison Barracks.....																		
Military Academy.....																		
Niagara.....													1,600					
New Orleans.....																		
Newport, Kentucky.....																		
Pike.....																		
Preble and Scammel.....	3		266															
Pensacola, Barrancas, &c.....																		
Snelling.....		3	18	20	6	½								4½				
Severn.....														487				
Sullivan.....																		
Towson.....	1																	
Trumbull and Griswold.....																		
Washington.....																		
Winnebago.....																		
Wolcott and Adams.....																		
Wood, New York.....																		
Wood, Louisiana.....																		
Key West.....																		
Oglethorpe Barracks.....																		
Macon.....																		
Coffee, Camps Jackson and Washita.....																		
Total.....	7	3	284	20	6	½	11½	9½	7½	1½	2	9½	1,000	3,591½	15	½	1½	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	LABORATORY STORES.							LEATHER.			PAINTS, OIL, ETC.							
	Glue, pounds.	Gum shellac, pounds.	Isinglass, pounds	Pitch, barrels.	Sulphure, pounds.	Tur, gallons.	Umber, pounds.	Whiting, pounds.	Harness, pounds.	Sheepskins, number.	Sheepskins, unserviceable.	Ivory, black, pounds.	Lampblack, pounds.	Lead, black.	Lead, white, dry, pounds.	Lead, red, dry, pounds.	Lead, ground in oil, pounds.	Litharge, pounds.
Armstrong.....				14lbs.					2½									
Brady.....																	31	
Baton Rouge.....																		
Baltimore.....																		
Columbus.....																		
Constitution and McClary.....			½	1					7									
Crawford.....																		
Castle Pinckney.....																		
Dearborn.....																	23	½
Gibson.....												1½					37	
Gratiot.....																		
Hamilton and Lafayette.....																		
Howard.....					6													
Hancock Barracks.....																		
Independence and Warren.....																		
Jackson.....																		
Johnston, North Carolina.....						16												
Jesup.....	6											2½			5			
Jefferson Barracks.....																		
St. Phillip.....													10					
Leavenworth.....																		
McHenry.....																		
Mackinac.....											4	13					24	
Marion.....														25				
Mitchell.....								side 1	1									
Monroe.....																		
Moultrie and Johnston, South Carolina.....																		
Morgan.....																		
Madison Barracks.....									2			¾		3				
Military Academy.....																		
Niagara.....									3								25	
New Orleans.....																		
Newport, Kentucky.....																		
Pike.....																		1
Preble and Scammel.....																		
Pensacola, Barrancas, &c.....																		3
Snelling.....	3						4		20	17	1	1½	7					
Seyern.....								18					5				49	
Sullivan.....													½				30	
Towson.....												2					25	1½
Trumbull and Griswold.....									1								38	
Washington.....																		
Winnebago.....									2			3½						1½
Wolcott and Adams.....									10									
Wood, New York.....																		
Wood, Louisiana.....									9			½		25				
Key West.....																		
Oglethorpe Barracks.....																		
Macon.....						½						¾	6	12½				½
Coffee, Camps Jackson and Washita.....																		
Total.....	6	3	½	1½	6	16½	4	18		52	1	5½	37½	16	65½	5	282	7½

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	PAINTS, OILS, ETC.										ARTIFICERS' TOOLS.							
	Lacquer for cannon, gallons.	Oil, linseed, gallons.	Putty, pounds.	Prussian blue, pounds.	Paints, mixed, black, pounds.	Sugar of lead, pounds.	Spirits of turpentine, gallons.	Varnish, black.	Varnish, copal.	Lacquer, gallons, unserviceable.	Axes, broad.	Axes, hand.	Adzes, carpenters'.	Augers, assorted.	Awls, assorted.	Braces and bits.	Bevels.	Chisels, framing.
Armstrong.....		3						4										
Brady.....		3			3		4											
Baton Rouge.....																		
Baltimore.....																		
Columbus.....																		
Constitution and McClary.....	5½																	
Crawford.....				16	8													
Castle Pinckney.....																		
Dearborn.....		1½			10		½	½										
Gibson.....		4½																
Gratiot.....																		
Hamilton and Lafayette.....																		
Howard.....	6				19		4											
Hancock Barracks.....																		
Independence and Warren.....																		
Jackson.....									2									
Johnston, North Carolina.....	3	3			4													
Jesup.....	2½	4½					1½											
Jefferson Barracks.....		1																
St. Phillip.....													18					
Leavenworth.....	7½																	
McHenry.....																		
Mackinac.....	12	22½					3½											
Marion.....																		
Mitchell.....														6				
Monroe.....																		
Moultrie and Johnston, South Carolina.....																		
Morgan.....																		
Madison Barracks.....	6½	2½																
Military Academy.....																		
Niagara.....	3	1																
New Orleans.....																		
Newport, Kentucky.....																		
Pike.....																		
Preble and Scammel.....	20	2					1½					2						
Pensacola, Barrancas, &c.....																		
Snelling.....	3 7-16	7½					15-16											
Seyern.....	5½	5					1½											
Sullivan.....	3½	3					1				1	1	9		1	1	1	
Towson.....	½	7					½											
Trumbull and Griswold.....						3												
Washington.....																		
Winnebago.....	3½	3					1½											
Wolcott and Adams.....																		
Wood, New York.....																		
Wood, Louisiana.....	5	8	5				1½											
Key West.....																		
Oglethorpe Barracks.....		1																
Macon.....			6				½											
Coffee, Camps Jackson and Washita.....																		
Total.....	88	77	11	16	44	3	18	4	½	2	1	2	1	27	6	1	1	1

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	ARTIFICERS' TOOLS.																	
	Chisels, framing.	Compasses.	Cranks.	Drawing knives.	Files, cross-cut.	Gauges, carpenters'.	Glimbs.	Gauges, carpenters'.	Grindstones.	Hammers.	Hatchets.	Irons, assorted.	Knives, assorted.	Mallets.	Oil stones.	Planes, bench, assorted.	Planes, moulding.	Punches.
Armstrong.....					6					3								
Brady.....																		
Baton Rouge.....																		
Baltimore.....																		
Columbus.....																		
Constitution and McClary.....								1										
Crawford.....																		
Castle Pinckney.....																		
Dearborn.....																		
Gibson.....																		
Gratiot.....																		
Hamilton and Lafayette.....																		
Howard.....																		
Hancock Barracks.....																		
Independence and Warren.....								2										
Jackson.....																		
Johnston, North Carolina.....																		
Jesup.....	16	1		1												1		
Jefferson Barracks.....																		
St. Phillip.....			2															
Leavenworth.....																		
McHenry.....																		
Mackinac.....																		
Marion.....																		
Mitchell.....							4			4		1						
Monroe.....																		
Moultrie and Johnston, South Carolina.....																		
Morgan.....																		
Madison Barracks.....																		
Military Academy.....																		
Niagara.....																		
New Orleans.....																		
Newport, Kentucky.....																		
Pike.....																		
Preble and Scammel.....							8						1					
Pensacola, Barrancas, &c.....																		
Snelling.....																		
Seyern.....																		
Sullivan.....	4					6	5	2		1		8			1	5	17	44
Towson.....																		
Trumbull and Griswold.....																		
Washington.....																		
Winnebago.....																		
Wolcott and Adams.....							15											
Wood, New York.....										12								
Wood, Louisiana.....																		
Key West.....																		
Oglethorpe Barracks.....																		
Macon.....																		
Coffee, Camps Jackson and Washita.....																		
Total.....	20	1	2	1	6	6	32	2	3	16	4	8	1	1	1	6	17	44

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	ARTIFICERS' TOOLS.											ARMORERS' TOOLS.								
	Pincers, pairs.	Rasps, wood	Squares, tryng.	Screw-drivers.	Spokeshaves.	Saws, whip.	Saws, cross-cut.	Saws, hand.	Saws, tenon.	Saws, compass.	Saws, keyhole.	Unserviceable.		Anvils.	Bellows, pairs.	Braces.	Band drivers.	Bits, assorted.	Pick-irons.	
												Saws, whip.	Saws, cross-cut.							
Armstrong.....							2													
Brady.....																				
Baton Rouge.....																				
Baltimore.....																				
Columbus.....																				
Constitution and McClary.....														1		1				
Crawford.....																				
Castle Pinckney.....																				
Dearborn.....																				
Gibson.....																				
Gratiot.....																				
Hamilton and Lafayette.....																				
Howard.....																				
Hancock Barracks.....																				
Independence and Warren.....																				
Jackson.....																				
Johnston, North Carolina.....														1	1					1
Jesup.....																1	1			
Jefferson Barracks.....																2	2			
St. Phillip.....												6	6							
Leavenworth.....																				
McHenry.....																				
Mackinac.....																				
Marion.....																				
Mitchell.....								2						1	1	1				1
Monroe.....																				
Moultrie and Johnston, South Carolina.....																				
Morgan.....																				
Madison Barracks.....																				
Military Academy.....																				
Niagara.....																				
New Orleans.....																				
Newport, Kentucky.....																				
Pike.....																				
Preble and Scammel.....																				
Pensacola, Barrancas, &c.....																				
Snelling.....														1	1					
Severn.....														1						
Sullivan.....	2		2	1	1	1			1	1	1					1				
Towson.....																				
Trumbull and Griswold.....																				
Washington.....																				
Winnebago.....																				
Wolcott and Adams.....	16	6																		
Wood, New York.....																				
Wood, Louisiana.....																				
Key West.....																				
Oglethorpe Barracks.....																				
Macon.....																				
Coffee, Camps Jackson and Washita.....																				
Total.....	18	6	2	1	1	1	2	3	1	1	1	6	6	6	4	6	2	2		1

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	ARMORERS' TOOLS.																	
	Chisels, cold.	Compasses.	Countersinks.	Drills, assorted.	Drill bows.	Drill stocks.	Dies, pairs.	Die stocks.	Files, assorted.	Grinders, assorted.	Gouges, stockers'.	Hammers, bench.	Hammers, hand.	Heading tools.	Hardies.	Pincers, pairs.	Punches, assorted.	Polishing malle.
Armstrong.....																		
Brady.....																		
Baton Rouge.....																		
Baltimore.....																		
Columbus.....																		
Constitution and McClary.....	1			1												3	1	
Crawford.....																		
Castle Pinckney.....																		
Dearborn.....																		
Gibson.....																		
Gratrot.....																		
Hamilton and Lafayette.....																		
Howard.....									4									
Hancock Barracks.....																		
Independence and Warren.....																		
Jackson.....																		
Johnston, North Carolina.....					1	1						4		15				
Jesup.....	3		1	6		1			19		8	1			1		5	
Jefferson Barracks.....	2				1	1				4		1	3	1				
St. Phillip.....																		
Leavenworth.....																		
McHenry.....																		
Mackinac.....																		
Marion.....																		
Mitchell.....	3																	
Monroe.....																		
Moultrie and Johnston, South Carolina.....																		
Morgan.....																		
Madison Barracks.....																		
Military Academy.....																		
Niagara.....																		
New Orleans.....																		
Newport, Kentucky.....																		
Pike.....																		
Preble and Scammel.....		1							1				3					
Pensacola, Barrancas, &c.....																		
Snelling.....																		
Seyern.....																		
Sullivan.....				2			6	1				1						
Towson.....																		
Trumbull and Grisvold.....																		
Washington.....																		
Winnebago.....																		
Wolcott and Adams.....																		
Wood, New York.....																		
Wood, Louisiana.....				1														
Key West.....																		
Ogithorpe Barracks.....																		
Macon.....																		
Coffee, Camps Jackson and Washita.....																		
Total.....	9	1	3	8	2	3	6	1	24	4	8	7	8	16	1	1	12	1

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	ARMORERS' TOOLS.																		
	Polishing wheels.	Reamers, assorted.	Rasps.	Sets, assorted.	Swedges.	Screw plates.	Screw-drivers.	Shoeing tools.	Stakes.	Saws, hack.	Sledges.	Soldering irons.	Tongs.	Taps for screw plates.	Taps for wrenches.	Vices, bench.	Vices, hand.	Wrenches.	
Armstrong.....																			
Brady.....																			1
Baton Rouge.....																			
Baltimore.....																			
Columbus.....																			
Constitution and McClary.....	6												2			1			
Crawford.....																			
Castle Pinckney.....																			
Dearborn.....																			
Gibson.....																			
Gratiot.....																			
Hamilton and Lafayette.....																			
Howard.....						1					1								
Hancock Barracks.....																			
Independence and Warren.....	3														1	1			
Jackson.....																			
Johnston, North Carolina.....		2				1	2		1		2		15	10		1			
Jesup.....			5	1		1				1	3		2			1		2	
Jefferson Barracks.....					2		1			1		3				1	1	1	
St. Phillip.....																			2
Leavenworth.....																			
McHenry.....																			
Mackinac.....																			
Marion.....																			
Mitchell.....						1		1			1		3			1		1	
Monroe.....																			
Moultrie and Johnston, South Carolina.....																			
Morgan.....																			
Madison Barracks.....																			
Military Academy.....																			
Niagara.....																			
New Orleans.....																			
Newport, Kentucky.....																			
Pike.....																			
Prebble and Scammel.....			4																
Pensacola, Barrancas, &c.....																			
Snelling.....						2										1	1	7	
Severn.....																1			
Sullivan.....		2			1					1						1	1		
Towson.....																			
Trumbull and Griswold.....																			
Washington.....																			
Winnebago.....																			
Wolcott and Adams.....																			
Wood, New York.....																			
Wood, Louisiana.....																			1
Key West.....																			
Oglethorpe Barracks.....																			
Macon.....																			
Coffee, Camps Jackson and Washita.....																			
Total.....	9	4	9	1	3	6	3	1	1	2	5	3	25	10	1	8	4	15	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	INTRENCHING AND MINING TOOLS.										LABORATORY TOOLS.								
	Leathes, unscrutable.	Augers.	Axes, felling.	Axes, pick.	Axes, sling.	Crowbars.	Mattocks.	Spades.	Shovels.	Bullet clippers.	Copper adzes.	Copper drivers.	Copper funnels.	Copper hammers.	Copper powder measures.	Copper dredging boxes.	Dredging boxes, tin.	Copper trays.	Copper pans.
Armstrong.....																			
Brady.....															12				
Baton Rouge.....																			
Baltimore.....																			
Columbus.....										1					2				
Constitution and McClary.....										1	1				13	1		2	2
Crawford.....																			
Castle Pinckney.....										1	1				17	1			
Dearborn.....															1				
Gibson.....										1	1	1			2				
Gratlot.....																			
Hamilton and Lafayette.....										1		1			1				
Howard.....										1									
Hancock Barracks.....															2				
Independence and Warren.....	1		12	10		1		2	6	3	3	7		45	4	11			
Jackson.....										1	1				1	1			
Johnston, North Carolina.....										1	1				1	1			1
Jesup.....										1		1			1				1
Jefferson Barracks.....																			
St. Phillip.....				61			14								5				1
Leavenworth.....										2		5			9	1			
McHenry.....			18		105					1	1	1			8				
Ma kinac.....										1	1				1				
Marion.....												2			2			2	
Mitchell.....																			
Monroe.....		2	2																
Moultrie and Johnston, South Carolina.....																			
Morgan.....																			
Madison Barracks.....						3				1		1							5
Military Academy.....																			
Niagara.....					14					1	1	1			4				
New Orleans.....																			
Newport, Kentucky.....																			
Pike.....												2			2				
Preble and Scammel.....				2	4			2							14	1			
Pensacola, Barrancas, &c.....																			
Snelling.....												2			3				
Severn.....												2							
Sullivan.....				2															
Towson.....																			
Trumbull and Griswold.....										1					5				
Washington.....																			
Winnebago.....															3				
Wolcott and Adams.....										2	1	4			24	6			
Wood, New York.....												1			2				
Wood, Louisiana.....										1	1	2	1		3				
Key West.....																			
Oglethorpe Barracks.....																			
Macon.....										1		1			1				
Coffee, Camps Jackson and Washita.....																			
Total.....	1	2	32	75	126	1	14	4	6	2	21	13	34	1	283	16	11	4	5

A.—Statement of the ordnance and ordnance stores in the land service, &c—Continued.

FOURTH QUARTER 1834.

Forts, &c.	LABORATORY TOOLS.																			
	Copper kettles.	Copper canisters.	Cartridge formers.	Chargers and funnels.	Drifts.	Extractors.	Grinding machine.	Knives, laboratory.	Ladles, assorted.	Mortars.	Moulds, rocket.	Moulds, portfire.	Needles.	Powder measures, assorted.	Point brushes.	Rocket drifts.	Shot gauges.	Shell gauges.	Sieves.	
Armstrong			6	3				2							3					
Brady																				
Baton Rouge																				
Baltimore																				
Columbus				1																
Constitution and McClary	1	4	54	6	6		1		1	1	1					1	1		4	
Crawford			1																	
Castle Pinckney				4											2					
Dearborn			10												2					
Gibson															2				1	
Gratiot																				
Hamilton and Lafayette																				
Howard															2					
Hancock Barracks																				
Independence and Warren			4							1						3	4			
Jackson																	12	4		
Johnston, North Carolina					1															
Jesup			4						2										1	
Jefferson Barracks																				
St. Phillip			9																	
Leavenworth			19			2			1											
McHenry								1										1		
Mackinac										1							sets 2			
Marion																				
Mitchell																				
Monroe																				
Moultrie and Johnston, South Carolina											1									
Morgan																				
Madison Barracks									1					7						
Military Academy																				
Niagara															6					
New Orleans																				
Newport, Kentucky																				
Pike																				
Preble and Scammel																				
Pensacola, Barrancas, &c																				
Snelling																				
Seyern													set 1		8				2	
Sullivan															5				2	
Towson																				
Trumbull and Griswold													7		3				2	
Washington																				
Winnebago															6					
Wolcott and Adams																				
Wood, New York																6	sets 5	1	1	
Wood, Louisiana												2			4					
Key West																				
Oglethorpe Barracks																				
Macon															3					
Coffee, Camps Jackson and Washita																				
Total	1	4	107	14	7	2	1	2	1	5	3	2	9	8	46	10	25	5	13	

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	LABORATORY TOOLS.								MISCELLANEOUS.										
	Spoons.	Sphindles.	Scales and weights.	Trapezoids.	Vices.	Unserviceable.				Boxes, packing.	Brushes.	Blank books.	Currycombs.	Caskets.	Cloth cover for kegs.	Coal churred.	Demijohns.	Furnaces.	Fire buckets.
						Copper measures.	Copper dredging boxes.	Copper funnels.	Paint brushes.										
Armstrong.....	3	2		2						73				5					
Brady.....																			
Baton Rouge.....																			
Baltimore.....																			
Columbus.....																			
Constitution and McClary.....																		1	
Crawford.....																			
Castle Pinckney.....																			
Dearborn.....																			
Gibson.....					1														
Gratiot.....																			
Hamilton and Lafayette.....																			16
Howard.....																			
Hancock Barracks.....																			
Independence and Warren.....																			
Jackson.....									5										
Johnston, North Carolina.....			1														2		
Jesup.....																			
Jefferson Barracks.....										2									
St. Phillip.....						2	1	1											
Leavenworth.....			1																
McHenry.....										10									
Mackinac.....			1					1							3				
Marion.....			1																
Mitchell.....									1	7		9			6				
Monroe.....																			
Moultrie and Johnston, South Carolina.....																			
Morgan.....																			
Madison Barracks.....																			
Military Academy.....																			
Niagara.....																			
New Orleans.....																			
Newport, Kentucky.....																			
Pike.....											1								
Preble and Scammel.....																			
Pensacola, Barraneas, &c.....																			
Snelling.....									3										
Severn.....																			
Sullivan.....																			
Towson.....																			
Trumbull and Griswold.....																			
Washington.....																			
Winnebago.....										18			1						
Wolcott and Adams.....																			
Wood, New York.....																			
Wood, Louisiana.....																			
Key West.....																			
Oglethorpe Barracks.....																			
Macon.....																			
Coffee, Camps Jackson and Washita.....																			
Total.....	3	2	4	2	1	2	1	2	8	104	7	1	9	6	3	6	2	1	16

A.—Statement of the ordnance and ordnance stores in the land service, &c.—Continued.

FOURTH QUARTER 1834.

Forts, &c.	MISCELLANEOUS.																		
	Garrison flags.	Junk, pounds.	Jugs, oil.	Kegs.	Ladders.	Lamps.	Loggerheads.	Ordnance regulations.	Patterns, assorted.	Ploughs.	Paint pots.	Powder barrels.	Rope, pounds.	Salt, bushels.	Wharf cranes.	Unserviceable.			
																Boxes, packing.	Barrels, powder.	Cartridge kegs.	Furnaces.
Armstrong.....																			
Brady.....								1											
Baton Rouge.....								1											
Baltimore.....																			
Columbus.....								1	2										
Constitution and McClary.....	1							1											
Crawford.....								1											
Castle Pinckney.....								1											
Dearborn.....								1											
Gibson.....								1											
Gratiot.....																			
Hamilton and Lafayette.....					2	2	10								1				
Howard.....												4						14	
Hancock Barracks.....								1											
Independence and Warren.....								1											
Jackson.....																20	10		
Johnston, North Carolina.....		180	15					1					100						
Jesup.....								1											
Jefferson Barracks.....								1											
St. Phillip.....																			
Leavenworth.....																		2	
McHenry.....								1											
Mackinac.....								1											
Marion.....																			
Mitchell.....																			
Monroe.....																			
Moultrie and Johnston, South Carolina.....																			
Morgan.....																			
Madison Barracks.....			1								2								
Military Academy.....								1											
Niagara.....								1											
New Orleans.....								1											
Newport, Kentucky.....																			
Pike.....								1											
Preble and Scammel.....								1											
Pensacola, Barrancas, &c.....																			
Snelling.....								1											
Severn.....				2				1											
Sullivan.....								1	1										
Towson.....			3					1											
Trumbull and Griswold.....																			
Washington.....																			
Winnebago.....				1															
Wolcott and Adams.....				1															
Wood, New York.....								1											
Wood, Louisiana.....								1											
Key West.....								1											
Oglethorpe Barracks.....								1											
Macon.....								1											
Coffee, Camps Jackson and Washita.....																			
Total.....	1	180	19	4	2	2	10	27	2	1	2	4	100		1	20	10	14	2

Metal at West Point foundry.

	Pounds.
Copper	23,996
Tin	2,516
Borings	298
Scraps, including condemned guns	4,507

Total amount of ordnance and ordnance stores in the hands of the troops.

3 6-pounder carriages.	5,508 belt plates.
3 6-pounder sponges and rammers.	7,575 musket flints.
3 6-pounder tompons.	57 bullet moulds for rifles.
2 6-pounder sponges.	65 pouches and belts for rifles.
18 equipments for carriages.	42 flasks for rifles.
4,865 muskets, national armory.	1 charger for rifles.
65 muskets, contract.	522 holsters for pistols.
13 muskets, incomplete.	24 cartridge-boxes, unserviceable.
46 rifles.	14 cartridge-box belts, unserviceable.
598 pistols.	29 bayonet scabbards, unserviceable.
398 carbines.	14 bayonet scabbard belts, unserviceable.
191 artillery swords.	1 spring vice, unserviceable
483 non-commissioned officers' swords.	15 brushes and picks, unserviceable.
92 musicians' swords.	7 sword belts, unserviceable.
25 old pattern swords.	19 belt plates, unserviceable.
587 cavalry sabres.	3 screw-drivers, unserviceable.
80 muskets, unserviceable.	88 holsters, unserviceable.
16 rifles, unserviceable.	12,782 ball cartridges, serviceable.
13 carbines, unserviceable.	4 pounds rifle powder.
5 artillery swords, unserviceable.	13,000 percussion caps.
4 non-commissioned officers' swords, unserviceable.	8 bayonets for muskets.
1 musician's sword, unserviceable.	4 cocks for muskets.
5,033 cartridge-boxes, serviceable.	4 jaws for muskets.
5,470 cartridge-box belts.	1 tumbler for musket.
4,900 bayonet scabbards.	1 lock plate for musket.
5,414 bayonet scabbard belts.	1 sear spring for musket.
5,380 gun slings.	20 main springs for muskets.
4,930 brushes and picks.	22 sword blades.
5,603 screw-drivers.	2 sword hilts.
5,423 wipers.	2 sword guards.
633 ball-screws.	69 arm-chests.
563 spring vices.	1 chest of tools.
3,303 flint caps.	87 copies Ordnance Regulations.
1,394 sword belts.	

NOTE.—For the amount of stores in the hands of *each* regiment see statements following.

A.—Statement of the arms, &c., in the hands of companies.

FOURTH QUARTER 1834.

Regiments of artillery.	CLASS 2.		CLASS 3.				CLASS 6.										
	6-pounder cartridges.	6-pounder sponges and rammers.	6-pounder tompons.	6-pounder ladles and worms.	6-pounder sponges.	6-pounder equipments, number of.	Muskets.			Swords.		Unserviceable.					
							National armory.	Contract.	Muskets without bayonets.	Artillery.	Non-commissioned officers?.	Musicians?.	Muskets, require repairs.	Artillery swords.	Musicians' swords.		
FIRST REGIMENT OF ARTILLERY.																	
Company A.....							45		2		7						
Company B.....							57		1		12						
Company C.....							53				12						
Company D.....							53				7						
Company E.....							53				6						
Company F.....							53				7	4	2				
Company G.....							53				6						
Company H.....							36	13			6						2
Company I.....							53				6						
							456	13	3		62	11	2				2
SECOND REGIMENT OF ARTILLERY.																	
Company A.....							35				20						3
Company B.....							50				12						3
Company C.....							52						1				
Company D.....							53					12					
Company E.....							53				5						
Company F.....							55						6				1
Company G.....							53					9					
Company H.....							53					6					
Company I.....	3	3	3	2	2	18	53				7	3					
	3	3	3	2	2	18	457				44	30	7				4
THIRD REGIMENT OF ARTILLERY.																	
Company A.....							53					8	4	2			
Company B.....									52			13					
Company C.....							53				12						2
Company D.....							49				7	3	1	4			
Company E.....							56				6	1	1				
Company F.....							51					11		2			
Company G.....							53				7						
Company H.....							52					4	2				
Company I.....							53					4	2				
							420	52			32	44	10	8			2
FOURTH REGIMENT OF ARTILLERY.																	
Company A.....							50					12	5				
Company B.....							51					6					
Company C.....							53				12						
Company D.....							45				6	4	1	3	1		
Company E.....							52							1			
Company F.....							53				6	4	2				
Company G.....							46				12			6			
Company H.....							53				11			1			
Company I.....							50				6	4	2	3			1
							453				53	30	10	14	1		1
Total artillery.....	3	3	3	2	2	18	1,786	65	3	191	115	29	26	5	1		

A.—Statement of the arms, &c., in the hands of companies—Continued.

FOURTH QUARTER 1834.

Regiments of artillery.	CLASS 7.													
	Accoutrements, &c.													
	Cartridge-boxes.	Cartridge-box belts.	Bayonet scabbards.	Bayonet scabbard belts.	Gun slings.	Brushes and picks.	Screw-drivers.	Ball-screws.	Wipers.	Spring vices.	Sword belts.	Belt plates.	Flint caps.	Musket flints.
FIRST REGIMENT OF ARTILLERY.														
Company A.....	48	48	38	48	46	34	46	9	46	9	7	45	.....	.....
Company B.....	56	53	50	52	53	38	52	4	52	4	6	55	.....	.....
Company C.....	53	53	44	53	55	35	50	4	49	1	6	54	.....	.....
Company D.....	53	53	53	51	53	53	53	5	53	5	11	.....	53	.....
Company E.....	47	53	53	55	53	49	50	4	50	5	.....	53	.....	.....
Company F.....	53	53	53	55	53	53	98	8	96	10	7	.....	53	200
Company G.....	50	50	66	48	55	61	52	1	47	5	6	45	.....	.....
Company H.....	51	51	30	54	47	39	41	1	39	3	6	52	21	.....
Company I.....	52	52	44	53	49	53	45	4	47	4	.....	53	2	.....
	463	466	431	469	464	415	466	40	499	46	49	357	129	200
SECOND REGIMENT OF ARTILLERY.														
Company A.....	36	39	21	30	53	45	38	5	.....	6	20	33	.....	.....
Company B.....	102	101	83	100	106	69	52	3	53	5	8	102	.....	355
Company C.....	52	49	25	52	53	40	38	5	53	5	1	47	.....	.....
Company D.....	52	52	48	49	53	48	49	8	51	5	12	54	53	.....
Company E.....	53	53	49	56	53	45	53	5	49	5	6	54	53	.....
Company F.....	53	53	53	51	53	53	53	5	53	5	6	55	.....	.....
Company G.....	53	53	53	55	53	53	53	29	53	5	4	55	.....	.....
Company H.....	53	52	52	51	60	49	51	5	53	5	6	54	53	.....
Company I.....	53	53	86	53	53	46	51	9	53	5	9	55	53	.....
	507	505	470	497	537	448	433	74	418	46	72	514	212	355
THIRD REGIMENT OF ARTILLERY.														
Company A.....	53	53	52	51	53	53	108	5	53	8	10	55	53	.....
Company B.....	52	53	50	52	52	50	53	4	53	5	7	52	.....	.....
Company C.....	53	53	53	53	53	59	49	12	50	4	.....	51	53	.....
Company D.....	53	53	53	54	53	53	53	5	53	5	7	55	53	.....
Company E.....	53	53	45	55	53	52	44	3	41	4	6	55	.....	.....
Company F.....	53	53	53	53	.....	53	53	5	53	5	11	55	.....	.....
Company G.....	53	53	53	55	53	53	52	5	52	5	7	55	53	.....
Company H.....	53	53	48	52	53	50	52	4	52	4	2	51	.....	.....
Company I.....	53	53	53	51	53	52	53	5	53	5	6	55	53	.....
	476	477	460	476	423	475	517	48	460	45	56	484	265	.....
FOURTH REGIMENT OF ARTILLERY.														
Company A.....	52	55	46	52	115	91	61	5	60	5	6	63	50	.....
Company B.....	52	52	36	50	52	52	52	6	55	.....	.....	.....	1,624	.....
Company C.....	45	45	54	45	53	74	55	5	58	7	13	53	.....	.....
Company D.....	53	53	50	53	53	52	61	5	43	3	10	67	48	.....
Company E.....	53	53	52	51	.....	51	101	9	107	10	16	55	53	.....
Company F.....	103	103	98	103	106	99	105	9	57	9	8	53	53	.....
Company G.....	47	47	43	44	52	35	71	5	70	4	10	47	.....	.....
Company H.....	53	53	52	49	46	53	105	9	96	10	12	52	53	.....
Company I.....	53	53	53	51	53	70	66	13	53	9	10	52	.....	.....
	509	514	484	498	532	547	677	66	599	57	85	442	257	1,624
Total artillery.....	1,955	1,958	1,845	1,940	1,956	1,885	2,118	228	1,986	194	262	1,997	863	2,289

A.—Statement of the arms, &c., in the hands of companies—Continued.

FOURTH QUARTER 1834.

Regiments of artillery.	CLASS 7.					CLASS 8.	CLASS 9.			CLASS 10.—MISC'LANEOUS.		
	Unserviceable.					Musket ball cartridges.	Main springs.	Hammer springs.	Bayonets.	Arm-chests.	Chests of tools.	Ordnance Regulations.
	Bayonet scabbards.	Brushes and picks.	Sword belts.	Beit plates.	Screw-drivers.							
FIRST REGIMENT OF ARTILLERY.												
Company A.....												1
Company B.....	6											1
Company C.....												1
Company D.....												1
Company E.....												1
Company F.....												1
Company G.....												1
Company H.....												1
Company I.....									1			1
	6									1		6
SECOND REGIMENT OF ARTILLERY.												
Company A.....						490				1		1
Company B.....						1,150						1
Company C.....	20	7										1
Company D.....												1
Company E.....												1
Company F.....									3			1
Company G.....												1
Company H.....												1
Company I.....												1
	20	7				1,640				4		6
THIRD REGIMENT OF ARTILLERY.												
Company A.....							20	20	2			1
Company B.....												1
Company C.....			6									1
Company D.....												1
Company E.....												1
Company F.....												1
Company G.....												1
Company H.....												1
Company I.....												1
			6				20	20	2			4
FOURTH REGIMENT OF ARTILLERY.												
Company A.....										1	1	1
Company B.....												1
Company C.....												1
Company D.....			1	1						1		1
Company E.....												1
Company F.....												1
Company G.....												1
Company H.....										1		1
Company I.....					3							1
			1	1	3					3	1	5
Total artillery.....	26	7	7	1	3	1,640	20	20	2	8	1	21

A.—Statement of the arms, &c., in the hands of companies—Continued.

FOURTH QUARTER 1834.

Regiments of infantry.	CLASS 6.							CLASS 7.							
	Muskets complete.	Muskets incomplete.	Swords.			Unserviceable.		Accoutrements.							
			Swords.	Non-commissioned officers'.	Musicians'.	Old pattern.	Muskets.	Non-commis'd officers' swords.	Cartridge-boxes.	Cartridge-box bells.	Bayonet scabbards.	Bayonet scabbard belts.	Gun slings.	Brushes and picks.	Screw-drivers.
FIRST REGIMENT OF INFANTRY.															
Company A.....	44		3	2		2		49	49	46	48	49	48	97	
Company B.....	48		3	5				49	49	47	49	49	47	66	
Company C.....	44		2	6		5		49	49	43	51	49	49	33	
Company D.....	49	1	2	3				50	50	47	52	49	46	112	
Company E.....	45		3			1		49	49	41	51	49	47	48	
Company F.....	49		1	2				68	54	47	57	56	48	99	
Company G.....	48		2	1		2		49	49	49	46	49	49	49	
Company H.....	49	5	3	2				49	49	49	51	49	51	49	
Company I.....	49		2					49	49	49	51	49	49	64	
Company K.....	40		3	2		6		48	48	48	50	49	45	45	
	465	6	24	23		16		509	495	466	506	497	479	667	
SECOND REGIMENT OF INFANTRY.															
Company A.....	49		3	2	5			49	49	49	45	49	49	49	
Company B.....	49		10				1	50	50	49	50	49	45	46	
Company C.....	49		5		9			49	49	47	48	49	42	45	
Company D.....	44		6	3		1	2	53	79	48	52	49	48	26	
Company E.....	45	1	10	4				49	51	47	50	49	42	48	
Company F.....	45		6	6		3		48	49	46	48	48	44	39	
Company G.....	48		3	2	5			49	49	49	48	49	49	55	
Company H.....	40		5	1				48	47	48	47	49	46	53	
Company I.....	49		4	2	6			49	49	49	48	49	49	57	
Company K.....	44		13					49	49	42	48	49	40	39	
	462	1	65	20	25	4	3	493	521	474	514	489	444	457	
THIRD REGIMENT OF INFANTRY.															
Company A.....	49		10					49	49	49	51	49	41	49	
Company B.....	48	1	9					49	49	46	51	49	45	49	
Company C.....	45	1	4			1		49	49	49	55	39	40	59	
Company D.....	47		6	4				49	49	44	48	49	47	49	
Company E.....	49		10					49	49	49	51	49	48	49	
Company F.....	49		3					49	49	49	51	46	49	49	
Company G.....	49		5					49	49	47	50	49	44	44	
Company H.....	47	5	4	1				49	49	45	50	49	46	45	
Company I.....	49		3					48	48	46	51	49	44	46	
Company K.....	49		10					49	49	47	48	49	39	49	
	481	2	5	64	5	1		489	489	471	506	477	443	481	
FOURTH REGIMENT OF INFANTRY.															
Company A.....	47		10					48	48	46	47	48	19	32	
Company B.....	51	1	6			3		51	51	45	53	49	49	44	
Company C.....	46		3	2		1		47	47	36	50	28	28	28	
Company D.....	49		5					49	49	52	45	54	55	49	
Company E.....	49		5					49	49	47	51	49	38	44	
Company F.....	34		4			5		43	42	16	44	38	31	30	
Company G.....	49		5					49	49	44	48	49	45	42	
Company H.....	47		5					47	47	45	47	47	46	42	
Company I.....	48		4					49	49	43	51	48	42	39	
Company K.....	42		10					46	46	48	43	63	31	31	
	462	1	57	2		9		478	477	422	479	473	334	381	
Total infantry.....	1,870	10	5	210	50	25	20	3	1,968	1,982	4,833	2,065	1,936	1,750	1,986

A.—Statement of the arms, &c., in the hands of companies—Continued.

FOURTH QUARTER 1834.

Regiments of infantry.	CLASS 7.													
	Accoutrements.				Sword belts.		Belt plates, white.	Belt plates, yellow.	Mustet flints.	Unserviceable.				
	Wipers.	Bolt-screws.	Spring Vices.	Flint caps.	Shoulder.	Waist.				Cartridge-boxes.	Cartridge-box belts.	Bayonet scabbards.	Bayonet scabbard belts.	Spring vices.
FIRST REGIMENT OF INFANTRY.														
Company A.....	97	10	10	97	3	.....	50	.....	.....	.....	.....	.....	.....
Company B.....	64	5	5	48	2	.....	.....	51	.....	.....	.....	.....	.....
Company C.....	48	.....	5	.....	.....	.....	.....	49	.....	.....	.....	.....	.....
Company D.....	106	14	12	92	.....	.....	51	1	.....	.....	.....	.....	.....
Company E.....	43	3	5	49	.....	.....	.....	51	.....	.....	.....	.....	.....
Company F.....	112	11	9	95	.....	4	48	71	.....	.....	1	1	1
Company G.....	47	2	5	38	5	1	.....	51	.....	.....	.....	.....	.....
Company H.....	48	4	4	49	.....	.....	.....	51	.....	.....	.....	.....	.....
Company I.....	48	4	5	49	.....	.....	.....	51	.....	.....	.....	.....	.....
Company K.....	45	5	6	39	5	.....	5	50	.....	.....	.....	.....	.....
	658	58	66	555	15	5	154	426	.....	.....	1	1	1
SECOND REGIMENT OF INFANTRY.														
Company A.....	46	5	5	.....	3	5	.....	51	.....	.....	.....	.....	.....
Company B.....	44	44	4	.....	5	.....	.....	51	25	.....	.....	.....	.....
Company C.....	44	5	7	49	3	5	.....	51	.....	.....	.....	.....	.....
Company D.....	22	4	5	.....	4	6	.....	23	.....	.....	.....	.....	.....
Company E.....	41	7	5	.....	4	1	.....	51	.....	.....	.....	.....	.....
Company F.....	41	5	5	.....	3	5	.....	50	.....	.....	.....	.....	.....
Company G.....	49	11	6	.....	5	5	.....	51	.....	.....	.....	.....	.....
Company H.....	32	6	6	45	.....	5	.....	45	13	13	1	13	.....
Company I.....	51	13	7	.....	3	.....	.....	51	50	.....	.....	.....	.....
Company K.....	38	4	5	48	8	.....	1	48	.....	.....	.....	.....	.....
	408	94	55	142	38	22	1	532	75	13	13	1	13	
THIRD REGIMENT OF INFANTRY.														
Company A.....	49	.....	5	49	.....	.....	.....	50	.....	.....	.....	.....	.....
Company B.....	49	5	4	49	.....	5	.....	51	.....	.....	.....	.....	.....
Company C.....	39	12	4	49	3	.....	.....	49	.....	.....	.....	.....	.....
Company D.....	49	7	5	49	8	.....	.....	50	.....	.....	.....	.....	.....
Company E.....	49	4	5	.....	5	.....	.....	.....	.....	.....	.....	.....	.....
Company F.....	49	5	5	49	.....	.....	.....	50	.....	.....	.....	.....	.....
Company G.....	47	5	5	49	.....	.....	.....	47	100	.....	.....	.....	.....
Company H.....	46	6	5	.....	5	.....	.....	50	.....	.....	.....	.....	.....
Company I.....	47	5	5	49	.....	.....	.....	49	15	.....	.....	.....	.....
Company K.....	49	5	5	49	8	.....	.....	50	.....	.....	.....	.....	.....
	473	54	48	392	29	5	.....	446	115	.....	.....	.....	.....
FOURTH REGIMENT OF INFANTRY.														
Company A.....	25	4	5	.....	5	.....	44	.....	.....	.....	.....	.....	.....
Company B.....	45	6	6	49	1	.....	51	.....	.....	.....	.....	.....	.....
Company C.....	28	4	3	49	.....	.....	.....	49	200	.....	.....	.....	.....
Company D.....	49	5	5	49	7	.....	.....	51	250	.....	.....	.....	.....
Company E.....	46	5	5	49	.....	.....	.....	51	.....	.....	.....	.....	.....
Company F.....	32	2	6	44	.....	.....	.....	40	.....	.....	.....	.....	.....
Company G.....	43	4	4	49	3	5	51	.....	.....	.....	.....	.....	.....
Company H.....	42	4	4	47	.....	7	49	.....	.....	.....	.....	.....	.....
Company I.....	42	5	4	49	.....	4	.....	.....	.....	.....	.....	.....	.....
Company K.....	19	1	3	.....	7	.....	.....	49	.....	.....	.....	.....	.....
	371	40	45	385	23	16	195	240	450	.....	.....	.....	.....
Total infantry.....	1,910	246	214	1,474	105	58	350	1,644	640	13	13	2	14	1

A.—Statement of the arms, &c., in the hands of companies—Continued.

FOURTH QUARTER 1834.

Regiments of infantry.	CLASS 7.			CLASS 8.	CLASS 9.								CLASS 10.—MISCELLANEOUS.		
	Unserviceable.			Musket ball cartridges.	Parts of small arms.								Arm-chests.	Ordnance regulations.	
	Brushes and picks.	Sword belts.	Belt plates.		Bayonets.	Cocks.	Jaws.	Tumblers.	Lock plates.	Seat springs.	Sword blades.	Sword hilts.			Sword guards.
FIRST REGIMENT OF INFANTRY.															
Company A													3	1	
Company B													3	1	
Company C														1	
Company D													1	1	
Company E														1	
Company F			1		6	4	4	1	1	1	2	2	2	1	
Company G															
Company H														1	
Company I													2	1	
Company K													3		
			1		6	4	4	1	1	1	2	2	2	12	8
SECOND REGIMENT OF INFANTRY.															
Company A															
Company B				500										1	
Company C														1	
Company D														1	
Company E														1	
Company F														1	
Company G														1	
Company H	8		17										2	1	
Company I				400										1	
Company K														1	
	8		17	900									2	9	
THIRD REGIMENT OF INFANTRY.															
Company A														1	
Company B													2	1	
Company C														1	
Company D													3	1	
Company E													3	1	
Company F													2		
Company G														1	
Company H														1	
Company I														1	
Company K				1,000									3	1	
				1,000										13	9
FOURTH REGIMENT OF INFANTRY.															
Company A															
Company B													3	1	
Company C				1,966										1	
Company D				200									1		
Company E													3	1	
Company F													3	1	
Company G														1	
Company H														1	
Company I				1,952									3	1	
Company K													3	1	
				4,018										16	8
Total infantry	8		18	5,918	6	4	4	1	1	1	2	2	2	43	34

A.—Statement of the arms, &c., in the hands of companies.—Continued.

FOURTH QUARTER 1834.

	CLASS 6.										CLASS 7.			
	Muskets browned.	Muskets unbrowned.	Harper's Ferry half-stocked rifles.	Pistols.	Carbines.	Swords.			Unserviceable.			Accoutrements.		
						Non-commissioned officers'.	Musicians'.	Cavalry sabres.	Muskets.	Rifles.	Carbines.	Swords.	Cartridge-boxes.	Cartridge-boxbells.
Infantry and dragoons.														
FIFTH REGIMENT OF INFANTRY.														
Company A.....	49	1											49	49
Company B.....	49					6							49	49
Company C.....	49					5							49	49
Company D.....	49					10					1		49	49
Company E.....	48					5			1				49	49
Company F.....	49					5							49	49
Company G.....	45					5		5					49	49
Company H.....	48					8	2						49	49
Company I.....	49					10				2			49	49
Company K.....	49			1		10							49	49
	484	1		1		64	2	5	1	2		1	490	490
SIXTH REGIMENT OF INFANTRY.														
Company A.....	41					5			3				42	37
Company B.....	47		1			5			2				45	41
Company C.....	3					5							53	49
Company D.....	47					5			1				50	50
Company E.....	1					5							50	50
Company F.....	48					5			1				43	43
Company G.....	48					5							50	50
Company H.....	43					5			6	1			49	49
Company I.....	45					5			2				51	51
Company K.....	49					5							50	49
	372		1			50			15	1			483	469
SEVENTH REGIMENT OF INFANTRY.														
Company A.....	45					5			4				49	49
Company B.....	41					3	2						47	47
Company C.....	49					4	3						52	53
Company D.....	42					5							48	49
Company E.....	47					5							47	47
Company F.....	46					5			3				49	49
Company G.....	39					8			9				49	49
Company H.....	48					3	2						47	47
Company I.....	46					3	2		2				48	49
Company K.....	49					3	2						49	48
	452					44	11		18				485	487
DRAGOONS.														
Company A.....			33	72				75	13				55	
Company B.....				71	51			144					69	
Company C.....				62	43			73					60	
Company D.....				59	51			73					64	
Company E.....				74	45			75					67	
Company F.....				55	43			2					41	41
Company G.....			8	45	27						7		51	
Company H.....			2	59	48			70			3		51	
Company I.....			2	59	48			70			3		51	
Company K.....				41	42								43	43
			45	597	398			582		13			552	84
Total infantry and dragoons.....	1,208	1	46	598	398	158	13	587	34	16	13	1	2,010	1,530

A.—Statement of the arms, &c., in the hands of companies—Continued.

FOURTH QUARTER 1834.

Infantry and dragoons.	CLASS 7.													
	Accoutrements.									Sword belts.			Holsters.	Musket flints.
	Bayonet scabbards.	Bayonet scabbard belts.	Gun slings.	Brushes and picks.	Screw-drivers.	Wipers.	Ball-screws.	Spring vices.	Flint caps.	Shoulder.	Waist.	Bel plates.		
FIFTH REGIMENT OF INFANTRY.														
Company A	49	51	49	47	40	44	3	6	11	.....	5	51	.....	60
Company B	49	51	49	49	49	49	5	.....	.....	.....	6	51	.....	.....
Company C	47	48	49	47	46	43	5	5	.....	.....	3	5	51	.....
Company D	49	51	49	49	49	49	5	5	49	.....	2	9	49	.....
Company E	48	51	49	48	49	49	5	5	49	.....	.....	5	51	.....
Company F	49	48	49	49	49	49	3	3	49	.....	3	5	50	.....
Company G	49	49	49	48	45	45	5	5	45	.....	10	51	.....	.....
Company H	49	49	49	46	44	41	4	5	46	.....	2	5	51	15
Company I	48	49	49	49	49	49	5	5	10	5	5	5	51	.....
Company K	47	49	49	47	63	67	6	5	49	.....	2	8	51	50
	484	496	490	479	483	485	46	44	308	.....	17	63	507	125
SIXTH REGIMENT OF INFANTRY.														
Company A .....	.....	42	32	8	36	34	5	5	20	.....	5	33	.....	.....
Company B .....	.....	41	38	22	48	48	5	5	49	.....	5	35	.....	.....
Company C	50	47	50	44	49	.....	5	5	.....	.....	5	49	.....	.....
Company D	47	50	50	50	50	93	8	5	.....	.....	5	51	.....	.....
Company E	48	51	49	61	52	50	6	8	49	.....	5	85	.....	.....
Company F .....	.....	44	.....	.....	49	49	4	5	49	.....	5	.....	.....	.....
Company G	43	50	50	41	75	67	4	.....	47	.....	5	49	.....	.....
Company H .....	.....	49	49	.....	49	61	5	4	49	.....	5	48	.....	.....
Company I	42	51	52	46	71	58	8	7	.....	.....	5	50	.....	.....
Company K	47	53	56	103	59	69	9	8	49	.....	5	85	.....	.....
	277	478	426	375	538	534	62	52	312	.....	15	35	485	.....
SEVENTH REGIMENT OF INFANTRY.														
Company A	48	51	47	38	34	36	5	5	49	.....	5	44	91	35
Company B	47	51	45	48	37	41	5	6	34	.....	5	4	64	80
Company C	47	46	49	56	49	49	5	5	4	6	51	100	.....	28
Company D	45	47	48	46	49	42	3	4	49	.....	.....	5	68	52
Company E	43	50	50	42	47	52	5	8	33	.....	2	.....	50	35
Company F	46	51	48	44	34	33	4	5	35	.....	.....	42	47	211
Company G	46	48	45	23	46	42	5	4	44	.....	.....	.....	42	20
Company H	45	49	49	48	49	45	3	3	49	.....	.....	.....	50	.....
Company I	49	51	46	49	42	42	6	5	.....	.....	46	68	.....	.....
Company K	45	51	48	42	44	41	5	5	49	.....	2	.....	51	60
	461	495	475	441	431	423	46	50	346	.....	20	192	631	521
DRAGOONS.														
Company A .....	.....	.....	21	.....	26	28	4	4	.....	74	41	75	72	.....
Company B .....	.....	.....	41	.....	5	26	.....	3	.....	.....	72	.....	75	.....
Company C .....	.....	.....	.....	.....	1	.....	1	.....	.....	73	.....	50	43	.....
Company D .....	.....	.....	.....	.....	.....	.....	.....	2	.....	70	.....	.....	.....	.....
Company E .....	.....	.....	35	.....	.....	.....	.....	.....	.....	75	47	183	76	.....
Company F .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57	.....
Company G .....	.....	.....	.....	.....	15	31	.....	.....	.....	33	.....	.....	43	.....
Company H .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71	.....	.....	59	.....
Company I .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71	.....	.....	59	.....
Company K .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38	.....
	.....	.....	97	.....	47	85	5	9	.....	467	160	144	522	.....
Total infantry and dragoons	1,222	1,469	1,483	1,295	1,499	1,527	159	155	966	519	450	1,767	522	646

A.—Statement of the arms, &c., in the hands of companies—Continued.

FOURTH QUARTER 1834.

Infantry and dragoons.	CLASS 7.							CLASS 8.			CLASS 10.		
	For rifles.				Unserviceable.			Musket ball cartridges.	Rifle powder.	Percussion caps.	Aim-chests.	Ordnance Regulations.	
	Bullet moulds.	Pouches and belts.	Flasks.	Chargers.	Cartridge-boxes.	Cartridge-box belts.	Bayonet scabbards.						Holsters.
FIFTH REGIMENT OF INFANTRY.													
Company A											2	1	
Company B												1	
Company C												1	
Company D												1	
Company E												1	
Company F												1	
Company G												1	
Company H								380				1	
Company I								270			1	1	
Company K								200				1	
								850			3	9	
SIXTH REGIMENT OF INFANTRY.													
Company A												1	
Company B		1				1	1				1	1	
Company C											3		
Company D											3		
Company E													
Company F					5								
Company G												1	
Company H	1										1	1	
Company I											3	1	
Company K					6							1	
	1	1			11	1	1				11	6	
SEVENTH REGIMENT OF INFANTRY.													
Company A								20				1	
Company B								840				1	
Company C								413	4			1	
Company D								210					
Company E								160				1	
Company F								1,591				1	
Company G								60				1	
Company H								10				1	
Company I								710					
Company K								250				1	
								4,264	4			8	
DRAGOONS.													
Company A	31	53	37									1	
Company B	5												
Company C	1		1	1			22					1	
Company D							66					1	
Company E	5		1									1	
Company F	4		2									1	
Company G												1	
Company H	5	4								5,000	2	1	
Company I	5	4								5,000	2	1	
Company K		3	1							3,000		1	
	56	64	42	1			88			13,000	4	9	
Total infantry and dragoons	57	65	42	1	11	1	1	88	5,114	4	13,000	18	32

Partial recapitulation of statement A.

Fourth quarter of 1834.	Brass cannon.	Brass howitzers.	Brass mortars.	Iron guns.	Iron howitzers.	Iron mortars.	Field carriages.	Caissons.	Siege and garrison carriages.	Sea-coast and casemate carriages.	Cannon balls.	Shells.	Loose grape and canister shot, pounds.	Strapped canister and grape shot, number.	Muskets.	Rifles.	Pistols.	Carbines.
On hand at the arsenals.....	100	39	17	3,781	339	56	369	84	53	75	300,014	30,937	557,699	55,477	568,691	29,706	7,654	846
On hand at the forts	14	18	12	934	16	12	196	11	14	78	91,166	6,698	17,833	27,073	700	580	411	5

Partial recapitulation of statement A.—Continued.

Fourth quarter of 1834.	Swords and sabres.	Powder, pounds.	Flannel cartridges.	Cartridges for small arms.	Bullets and buckshot for small arms, pounds.	Flints.	Nitre, refined.	Sulphur, crude and refined.	Lead, pounds.	In the hands of the troops.				
										Muskets.	Rifles.	Pistols.	Carbines.	Swords and sabres.
On hand at the arsenals.....	13,817	711,995	10,618	4,767,049	326,861	11,849,913	603,830	308,383	2,270,321	.....	.....	.....	.....	.....
On hand at the forts	352	41,660	5,379	966,349	48,696	134,368	111½	143½	28,526	4,943	46	598	298	1,378

B.—Statement showing "the average cost of each kind of ordnance and small arms, and accoutrements in each year," from 1798 to 1835, in compliance with the resolution of the House of Representatives of February 23, 1835.

Years.	Iron canon.													Brass canon.*				Small arms.										Accoutrements.										
	42-pounder gun, per cwt.	32-pounder gun, per cwt.	24-pounder gun, per cwt.	18-pounder gun, per cwt.	12-pounder gun, per cwt.	9-pounder gun, per cwt.	6-pounder gun, per cwt.	3-pounder gun, per cwt.	100-pounder column-bred, per cwt.	50-pounder column-bred, per cwt.	18-pounder column-bred, per cwt.	12-pounder column-bred, per cwt.	5 8-10-in. howitzer, per cwt.	10-inch sea-coast mortar, per cwt.	10-in. siege mortar, per cwt.	12-inch mortar, per cwt.	12-pounder guns, per cwt.	9-pounder guns, per cwt.	4-pounder guns, per cwt.	5 1/2-in. howitzer, per cwt.	Contract muskets, each.	Contract rifles, each.	Hall's rifles, each.	Eli's rifles, each.	Carbines, each.	Pistols, per pair.	Artillery swords, each.	Officers' swords, each.	Non-com. officers' swords, each.	Cavalry swords, each.	Musket, per set.	Rifle, per set.	Cavalry, per set.	Sword belts, each.	Bayonet scabbards.			
1798																																						
1799																																						
1800		\$5 94	6 54	6 54	6 54	6 54																				\$4 00												
1801		5 80	5 80	5 80	5 80	5 80																																
1802		5 80	5 80	5 80	5 80	5 80																																
1803		5 80	5 80	5 80	5 80	5 80																																
1804		5 80	5 80	5 80	5 80	5 80																																
1805																										15 00												
1806		5 80	5 80	5 80	5 80	5 80																																
1807																	\$55 00	\$55 00	\$55 00	\$55 00	\$10 75						\$2 00											
1808		5 80	5 80	5 80	5 80	5 80								\$5 94	\$5 94					10 75																		
1809		5 94	5 94	5 94	5 94	5 94		\$6 47	\$6 47	\$6 47	\$6 47								10 75																			
1810																				10 75						14 00												
1811		5 94	5 94	5 94	5 94	5 94		6 47	6 47	6 47	6 47								13 00	\$17 00																		
1812		5 94	5 94	5 94	5 94	5 94													14 25																			
1813																					17 00																	
1814		5 94	5 94	5 94	7 07	7 07													14 25							16 00												
1815		5 94	5 94	6 47	9 68	9 68							\$5 95						14 00	17 00																		
1816		5 95	5 95	6 47	6 47	6 47							5 95						14 00																			
1817																			14 00				\$25 00															
1818		5 95	5 95	6 47	6 47	6 47							9 57		10 05				14 00	17 00					16 00													
1819																			13 00	17 00																		
1820																			13 00	17 00																		
1821																			12 25	17 00																		
1822																			12 25	14 50																		
1823																			12 25	14 50																		
1824																			12 25	17 00																		
1825																			12 25	17 00																		
1826																			12 25	17 00																		
1827																			12 25	17 00																		
1828																			12 25	17 00																		
1829																			12 25	17 00																		
1830																			12 25	17 00																		
1831	5 65	6 65	6 65	6 65	6 65	6 65												12 25	17 50																			
1832	6 65	6 65	6 65	6 65	6 65	6 65												12 25	17 50																			
1833																			12 25	17 50					\$20 00													
1834																			12 25	17 50																		
1835																			12 25	17 50																		

* The brass canon were purchased from the French government at New Orleans.

Statement of the average cost of small arms at the Springfield and Harper's Ferry armories, from the year 1795 to 1835.

Year.	Springfield.			Harper's Ferry.					Remarks.
	Muskets.	Rifles.	Wall pieces.	Muskets.	Rifles.	Pistols.	Indian guns.	Cadet muskets.	
1795.....	\$12 06	\$17 00	\$15 78	\$17 00	\$16 00	<p>The information in possession of this department, on the subject of the cost of the manufacture of small arms at the national armories, between the years 1795 and 1821, is very imperfect. These establishments were not in charge of this department, but in that of the purveyor of public supplies, under the direction of the Secretary of War, until 1816, when they were put in charge of this department.</p> <p>The average cost of the arms during the above period, (from 1795 to 1821, inclusive,) at the armories, from the best information that can be collected from the imperfect documents is, at Springfield, \$12 06, and at Harper's Ferry, \$15 78. It is to be remarked that this difference against Harper's Ferry arose from the high transportation occasioned by its then difficulty of access, the high prices of the necessaries of life, joined to the unhealthiness of its location.</p>
1796.....	.....	.....	.....	.....	.....	.....	.....	.....
1797.....	.....	.....	.....	.....	.....	.....	.....	.....
1798.....	.....	.....	.....	.....	.....	.....	.....	.....
1799.....	.....	.....	.....	.....	.....	.....	.....	.....
1800.....	12 06	17 00	.....	15 78	17 00	16 00	.....	.....
1801.....	.....	.....	.....	.....	.....	.....	.....	.....
1802.....	.....	.....	.....	.....	.....	.....	.....	.....
1803.....	.....	.....	.....	.....	.....	.....	.....	.....
1804.....	.....	.....	.....	.....	.....	.....	.....	.....
1805.....	12 06	17 00	.....	15 78	17 00	16 00	.....	.....
1806.....	.....	.....	.....	.....	.....	.....	.....	.....
1807.....	.....	.....	\$50 00	.....	.....	.....	.....	.....
1808.....	.....	.....	.....	.....	.....	.....	.....	.....
1809.....	.....	.....	.....	.....	.....	.....	.....	.....
1810.....	12 06	17 00	.....	15 78	17 00	16 00	\$13 00	.....
1811.....	.....	.....	.....	.....	.....	.....	13 00	.....
1812.....	.....	.....	.....	.....	.....	.....	.....	.....
1813.....	.....	.....	.....	.....	.....	.....	.....	.....
1814.....	.....	.....	.....	.....	.....	.....	.....	.....
1815.....	12 06	17 00	.....	15 78	17 00	16 00	.....	.....
1816.....	.....	.....	.....	.....	.....	.....	.....	.....
1817.....	.....	.....	.....	.....	.....	.....	.....	.....
1818.....	.....	.....	.....	.....	.....	.....	.....	.....
1819.....	.....	.....	.....	.....	.....	.....	.....	.....
1820.....	.....	.....	.....	.....	.....	.....	.....	.....
1821.....	12 06	17 00	.....	15 78	17 00	16 00	.....	.....
1822.....	11 35	.....	.....	11 76	.....	.....	.....	.....
1823.....	11 45	.....	.....	11 62	.....	.....	.....	.....
1824.....	11 27	.....	.....	14 26	.....	.....	.....	.....
1825.....	10 50	.....	.....	11 56	.....	.....	.....	.....
1826.....	10 47	.....	.....	12 48	.....	.....	.....	.....
1827.....	10 49	.....	.....	11 63	.....	.....	.....	.....
1828.....	10 54	.....	.....	12 40	.....	.....	.....	.....
1829.....	10 02	.....	.....	15 13	.....	.....	.....	.....
1830.....	10 98	.....	.....	11 25	.....	.....	.....	.....
1831.....	11 44	.....	.....	11 25	.....	.....	.....	\$30 00
1832.....	11 66	.....	.....	11 62	.....	.....	.....	.....
1833.....	11 80	.....	.....	11 80	.....	.....	.....	.....
1834.....	11 05	.....	.....	11 66	.....	.....	.....	.....

C.

Statement of the number of workmen employed at the respective arsenals in each year.

Stations.	1822.		1823.		1824.		1825.		1826.		1827.		1828.		1829.		1830.		1831.		1832.		1833.		1834.	
	Hired.	Enlisted.	Hired.	Enlisted.	Hired.	Enlisted.	Hired.	Enlisted.	Hired.	Enlisted.	Hired.	Enlisted.	Hired.	Enlisted.	Hired.	Enlisted.	Hired.	Enlisted.	Hired.	Enlisted.	Hired.	Enlisted.	Hired.	Enlisted.	Hired.	Enlisted.
Pittsburg	8	10	14	9	15	8	30	7	33	9	49	7	48	9	69	9	47	9	33	9	36	10	23	28	17	33
Pikesville.....	4	2	4	5	6	5	5	5	9	5	9	3	9	5	4	5	3	5	3	4	2	5	1	5	3	5
Fort Monroe.....	4	4	4	4	3	5	3	7	3	8	4	7	3	24	3	26	6	23	16
Washington City.....	5	.....	5	.....	19	41	11	42	14	40	15	43	10	56	9	40	9	34	9	35	11	22	23	19	28
Frankford	4	.....	4	.....	4	.....	5	.....	3	3	3	3	4	3	4	5	4	4	4	8	4	5	18	15	21
Watervliet.....	6	8	8	8	13	8	19	8	21	8	23	6	43	7	54	8	51	8	45	8	46	8	40	18	35	31
Watertown.....	6	5	7	5	8	5	6	4	4	7	5	6	5	6	4	5	5	3	5	5	5	3	7	3	13	
Baton Rouge.....	.....	.....	2	18	5	11	4	16	5	9	4	23	4	26	3	13	3	13	1	6	1	3	5	2	11
Rome.....	2	2	2	2	2	3	2	1	2	5	2	6	2	6	1	7	1	8	1	7	1	3	3	4	5	
Vergennes.....	.....	.....	.....	.....	.....	.....	45	.....	16	.....	18	.....	18	.....	1	.....	2	.....	6	1	3	3	6	3	.....
Augusta, Georgia.....	5	6	3	8	2	5	3	4	2	3	2	4	1	10	1	10	1	8	.....	3	2	1	3	1	2
Richmond.....	5	.....	2	.....	2	2	1	7	1	12	1	3	.....	12	.....	6	.....	14	.....	4	.....	6	.....	5	.....
New York.....	.....	.....	2	.....	2	.....	2	1	2	2	2	4	1	4	1	4	1	4	1	5	1	3	1	3	1
Detroit.....	2	.....	.....	.....	.....	1	.....	6	.....	5	.....	2	.....	2	.....	3	.....	3	.....	5	2	54	5	38	5
St. Louis.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	5	1	16	2	16	2	12	16	16	20
Mount Vernon, Alabama.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60	.....	90	.....	79	.....	46	3	24	9	23	11
Kennebec.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23	.....	31	.....	34	.....	12	.....	9	.....	6	3	8	13
Florida.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	32	.....	31	1
Charleston Depot.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	.....	3	.....

Number of officers employed at the respective arsenals in each year.

Stations.	1822.	1823.	1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.	1832.	1833.	1834.
Pittsburg	3	3	2	1	3	3	4	4	4	4	3	3	4
Pikesville.....	2	2	2	1	1	2	2	2	2	2	1	1	2
Fort Monroe.....	.....	.....	.....	2	2	2	2	2	2	2	1	2	2
Washington City.....	3	2	3	3	1	2	2	2	2	2	3	3	3
Frankford	2	2	2	2	2	2	2	2	2	2	1	2	2
Watervliet	4	4	3	4	4	4	4	3	3	3	3	3	4
Watertown.....	3	2	2	2	1	2	2	1	2	2	2	2	2
Baton Rouge.....	2	1	2	2	2	1	2	2	1	1	1	1	1
Rome.....	1	1	1	1	1	1	1	1	1	1	1	1	1
Vergennes.....	.....	.....	.....	.....	1	1	1	1	1	1	1	1	1
Augusta, Georgia*.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Richmond †.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New York.....	2	1	1	1	1	1	1	1	1	1	1	1	2
St. Louis.....	.....	.....	.....	.....	1	1	2	2	2	2	3	1	2
Mount Vernon.....	.....	.....	.....	.....	.....	.....	1	2	2	2	1	1	1
Kennebec.....	.....	.....	.....	.....	.....	.....	1	1	1	2	1	1	1
Florida.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	1
Charleston.....	1	1	1	1	1	1	1	1	1	1	2	2	1
Bellefontaine.....	1	1	1	1	1	1	1	1	.....	.....	.....	.....	.....
Detroit.....	1	1	1	1	1	1	1	1	1	1	1	1	1

* A company of artillery has been stationed at this post since 1821.
 † A company of artillery was stationed at this post from 1821 to 1831.

Number of officers and workmen employed at the respective armories in each year from 1795 to 1834, inclusive.

Arsenals.	1795.	1796.	1797.	1798.	1799.	1800.	1801.	1802.	1803.	1804.	1805.	1806.	1807.	1808.	1809.	1810.	1811.	1812.	1813.	1814.	1815.	1816.	1817.	1818.	1819.	1820.	1821.	1822.	1823.	1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.	1832.	1833.	1834.
Springfield.....	28	34	66	140	150	150	100	75	75	75	75	75	100	100	215	210	214	240	225	215	235	240	250	236	251	263	265	256	268	265	268	272	268	265	270	275	279	276	264	262
Harper's Ferry.....	28	20	37	51	67	71	87	153	197	200	210	208	210	202	222	231	237	242	253	234	237	253	280	272	221	230	217	205	196	242	272	249	255

Number of workmen devoted to the manufacture of Hall's patent rifles in each year from 1819 to 1834, inclusive.

Occupation.	1819.	1820.	1821.	1822.	1823.	1824.	1825.	1826.	1827.	1828.	1829.	1830.	1831.	1832.	1833.	1834.
On rifles and equipments.....	2½	6½	7½	5 1-3	12 1-4	16	10 1-2	13 1-4	32 11-12	31 5-6	21 1-12	26½	35 7-12	39 11-12	37½	36
On buildings, tools, and machinery.....	2½	11½	9	10 7-12	11 11-12	18 7-12	29 1-12	16 1-6	24 2-3	35	39 1-6	25½	30 1-2	35	40	19 1-12

D.

Number and kinds of arms produced in each year at Harper's Ferry armory.

Year.	Fabricated.																	Repaired.					
	Muskets.	Rifles.	Pistols.	Pattern muskets.	Pattern rifles.	Pattern pistols.	Wall pieces.	Harpoon guns.	Torpedo locks.	Torpedo lock-boxes.	Cannon locks.	Verifying instruments.	Ball-screws.	Screw-drivers.	Bullet moulds.	Wipers.	Rifle chargers.	Spring vices.	Lead flint caps, extra.	Muskets.	Rifles and carbines.	Pistols and swords.	Value of repaired arms in new muskets.
From 1796 to January 1, 1821.....	119,911	19,718	4,088	30	19	18	7	4	40	25	6	.....	19,718	37,750	19,718	19,718	19,718	6,034	.....	11,469	780	581	3,208
1821....do.....1822.....	10,000	.....	.....	32	.....	.....	.....	.....	.....	.....	.....	32	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1822....do.....1823.....	12,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,343	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1823....do.....1824.....	10,559	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,732	5,922	.....	7,173	.....	3,172	84,771	.....	.....	.....	.....
1824....do.....1825.....	14,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	500	26,926	.....	11,000	.....	.....	.....	.....	.....	.....	.....
1825....do.....1826.....	8,720	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,327	53,112	.....	31,827	.....	.....	.....	.....	.....	.....	.....
1826....do.....1827.....	12,020	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,576	.....	26,000	.....	.....	.....	10,755	.....	.....	.....	.....
1827....do.....1828.....	10,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35,679	.....	25,000	.....	10,100	.....	7,440	.....	.....	.....	.....
1828....do.....1829.....	8,915	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,653	.....	.....	.....	.....	.....	56,383	.....	.....	.....	.....
1829....do.....1830.....	10,130	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41,575	.....	.....	.....	.....
1830....do.....1831.....	11,160	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7,454	.....	.....	.....	.....
1831....do.....1832.....	12,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1832....do.....1833.....	12,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	.....	15,440	.....	.....	17,084	.....	.....	.....	.....
1833....do.....1834.....	12,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25,001	.....	21,420	.....	.....	6,000	.....	.....	.....	.....
Total.....	263,615	19,718	4,088	62	19	18	7	4	40	25	6	33	34,163	206,974	19,718	157,578	19,718	19,306	233,091	11,469	780	581	3,208

D—Continued.

Number and kinds of arms produced in each year at Springfield armory, and the number of Hall's patent rifles annually produced, and place where manufactured.

Year.	Muskets.	Pattern muskets.	Rifles.	Pistols.	Carbines.	Cadet muskets.	Muskets repaired.	Carbines repaired.	Ball-screws.	Screw-drivers.	Wipers.	Spring vices.	Flint caps.	Arm-chests.	Sets of verifying instruments.	Value of repaired arms in new muskets.	Number of rifles and sets of equipments manufactured at Hall's rifle factory.	Number of rifles manufactured at Middletown, Connecticut.
From 1796 to January 1, 1821.....	178,759		250	1,000	1,202		46,325		2,600	38,000		2,690				11,540		
1821.....do.....1822.....	13,200	30					220		1,440	13,200	2,200	1,320		659	10			
1822.....do.....1823.....	14,000								1,400	14,000	15,831	1,400		1,065			22	
1823.....do.....1824.....	14,000								1,400	14,000	15,100	1,400		861			280	1,444
1824.....do.....1825.....	15,000								1,500	15,000	15,000	1,500		237				2,620
1825.....do.....1826.....	15,000								1,550	15,500	15,500	1,550		249				1,440
1826.....do.....1827.....	14,500								1,450	14,500	14,500	1,450		824			1,000	1,500
1827.....do.....1828.....	15,500								1,550	15,500	15,500	1,550		721				
1828.....do.....1829.....	16,500								1,650	16,500	31,500	4,650		934				1,200
1829.....do.....1830.....	16,500								1,650	16,500	16,500	1,650	16,500	1,600				600
1830.....do.....1831.....	16,200					300		31	1,620	16,540	16,538	1,655	16,540	1,183				1,200
1831.....do.....1832.....	13,600							220	1,360	13,600	21,200	1,360	13,600	579			4,360	1,340
1832.....do.....1833.....	12,400								1,240	11,600	17,400	1,240	12,400	110			3,670	900
1833.....do.....1834.....	14,000								1,458	14,706	22,063	2,032	15,400				970	540
Total.....	369,659	30	250	1,000	1,202	300	46,545	251	21,868	229,146	218,832	25,447	74,440	9,082	10	11,540	11,002	11,780

TREASURY DEPARTMENT, *Second Auditor's Office, November 16, 1835.*

Sir: In compliance with the request contained in your letter of March 25, 1835, enclosing a copy of a resolution of the House of Representatives of February 23, 1835, calling for certain information respecting ordnance and ordnance stores, I have the honor to transmit herewith a statement exhibiting the amount of money expended in each year at the respective armories and arsenals, and the general object of such expenditure, from the year 1816, when the records of this office commence, to the end of 1834; together with the aggregate expense of the manufacture of arms at each armory, and the annual expenditure, as far as can be ascertained, for the manufacture of Hall's patent rifles.

Very respectfully, sir, your obedient servant,

W. B. LEWIS.

Hon. LEWIS CASS, *Secretary of War.*

Statement exhibiting the amount of money expended in each year at the respective armories and arsenals, and the general object of such expenditure, from the year 1816 to the year 1834, inclusive; the aggregate expense of the manufacture of arms at each armory; and showing, separately, the annual expenditure for buildings, machinery, implements, and workmen devoted to the manufacture of Hall's patent rifles; prepared in pursuance of a resolution of the House of Representatives, dated February 23, 1835.

Armories and arsenals.	1816.			1817.			1818.			1819.		
	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.
Springfield armory, at Springfield, Massachusetts.....	\$2,472 00	\$152,741 88	\$155,213 88	\$6,975 00	\$150,015 06	\$156,990 06	\$3,000 00	\$169,937 69	\$172,937 69	\$4,336 00	\$168,307 77	\$172,643 77
Harper's Ferry armory, at Harper's Ferry, Virginia	7,743 00	219,543 87	227,286 87	9,209 89	161,601 33	170,900 22	13,903 57	179,121 17	193,024 74	14,336 22	164,679 14	179,015 46
Kennebec arsenal, at Augusta, Maine.....												
Watertown arsenal, at Watertown, Massachusetts	46,422 92		46,422 92	37,671 37	5,791 65	43,463 02	38,671 86	14,589 88	53,261 74	24,583 61	6,026 67	30,610 28
Champlain arsenal, at Vergennes, Vermont.....					4,649 27	4,649 27		4,223 41	4,223 41		4,242 95	4,242 95
Watervliet arsenal, at Watervliet, New York.....	2,372 81	7,264 39	9,637 20	9,269 00	5,103 60	14,372 60	11,276 40	8,225 52	19,501 92		7,702 20	7,702 20
Rome arsenal, at Rome, New York	18,679 25	7,509 03	26,188 28	75 94	3,998 49	4,074 43	287 62	4,138 53	4,426 15	186 28	2,205 86	2,452 14
Allegheny arsenal, at Pittsburg, Pennsylvania.....	62,316 06	53,593 91	115,909 97	39,773 29	36,682 33	76,455 62	9,296 77	20,066 67	29,363 44	10,244 68	35,256 48	45,501 16
Frankford arsenal, at Frankford, Pennsylvania	17,259 57	27,340 65	44,600 22	25,512 44	15,004 11	40,516 55	4,855 85	9,574 27	14,430 12	10,065 00	11,493 08	21,558 08
Washington arsenal, at Washington city, District of Columbia.....	16,586 88	4,035 84	20,622 72	13,519 65	11,582 99	25,102 64	358 83	10,226 23	10,585 06	1,328 76	21,330 72	22,659 48
Bellona arsenal, at Richmond, Virginia.....	72,963 47		72,963 47	43,089 10	174 56	43,263 66	58,715 09	675 41	59,390 50	10,344 98	1,891 99	12,246 97
Augusta arsenal, at Augusta, Georgia.....	3,350 00		3,350 00	897 00	101 50	998 50	33,644 92		33,644 92	49,000 02		49,000 02
Pikesville arsenal, at Pikesville, Maryland	19,222 99	2,500 44	21,723 43	62,775 47	915 68	63,691 15	2,045 95	1,978 48	4,024 43		6,003 23	6,003 23
Mount Vernon arsenal, at Mount Vernon, Alabama.....												
Baton Rouge arsenal, at Baton Rouge, Louisiana					10,594 76	10,594 76			11,593 24	11,593 24	18,425 33	5,756 03
St. Louis arsenal, at St. Louis, Missouri											12 50	12 50
Newport arsenal, at Newport, Kentucky	3,063 97	5,935 10	8,999 07	1,306 22	7,817 54	9,123 76	130 05	2,888 70	3,018 75		1,782 16	1,782 16
Detroit depot, Detroit, Michigan Territory					3,667 16	3,667 16		3,782 98	3,782 98	8,751 17	3,078 64	11,829 81
New York depot, New York city, New York.....		13,163 97	13,163 97		3,092 45	3,092 45		4,092 00	4,092 00		12,927 92	12,927 92
Charleston depot, Charleston, South Carolina.....					3,317 88	3,317 88		4,830 85	4,830 85		4,282 57	4,282 57
Fort Monroe, Old Point Comfort, Virginia												
Apalachicola arsenal, at Chattahoochee, Florida.....												
Bellefontaine arsenal, at Bellefontaine, Missouri.....												

Statement exhibiting the amount of money expended in each year at the respective armories and arsenals, &c.—Continued.

Armories and arsenals.	1820.			1821.			1822.			1823.		
	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.
Springfield armory, at Springfield, Massachusetts	\$9,174 75	\$170,160 90	\$179,335 65	\$5,900 00	\$167,696 92	\$173,596 92	\$8,405 41	\$173,726 77	\$182,132 18	\$5,889 96	\$176,098 07	\$181,988 03
Harper's Ferry armory, at Harper's Ferry, Virginia	22,099 02	154,089 00	176,188 02	19,374 81	143,763 00	163,137 81	52,178 38	139,941 42	192,119 80	13,715 47	150,023 25	163,738 72
Kennebec arsenal, at Augusta, Maine												
Watertown arsenal, at Watertown, Massachusetts	10,784 89	7,196 85	17,981 74		2,239 97	2,239 97	275 58	1,677 47	1,953 05		3,082 07	3,082 07
Champlain arsenal, at Vergennes, Vermont		1,443 67	1,443 67									
Watervliet arsenal, at Watervliet, New York	4,156 25	7,438 00	11,594 26		1,879 54	1,879 54	1,118 20	6,761 73	7,879 93	2,773 17	8,393 59	11,166 76
Rome arsenal, at Rome, New York	326 05	1,336 60	1,662 65		520 73	520 73					573 74	573 74
Allegheny arsenal, at Pittsburg, Pennsylvania	338 60	18,367 35	18,705 95	156 60	6,102 31	6,258 91	383 36	7,688 65	8,072 01	216 93	10,003 81	10,220 74
Frankford arsenal, at Frankford, Pennsylvania	2,500 00	12,035 46	14,535 46	2,161 10	2,592 67	4,753 77	295 62	1,978 89	2,274 51	18,905 69	3,325 94	22,231 03
Washington arsenal, at Washington city, District of Columbia	421 15	20,718 37	21,139 52	248 02	8,204 39	8,452 41	142 15	6,034 00	6,176 15	7,283 28	4,374 71	11,657 99
Bellona arsenal, at Richmond, Virginia	2,248 69	4,315 41	6,564 10		1,888 45	1,888 45	£81 84	580 50	862 34		601 06	601 06
Augusta arsenal, at Augusta, Georgia	31,110 01	1,173 22	32,283 23	40,843 54	1,673 05	42,516 59	269 95	3,549 70	3,819 65		3,571 84	3,571 84
Pikesville arsenal, at Pikesville, Maryland		5,628 26	5,628 26		3,979 25	3,979 25	55 41	2,654 98	2,710 30	4 59	3,315 05	3,319 64
Mount Vernon arsenal, at Mount Vernon, Alabama												
Baton Rouge arsenal, at Baton Rouge, Louisiana	24,956 04	5,490 77	30,446 81	3,944 36	728 80	4,673 16	8,968 20	505 46	9,473 66	1,423 85	1,127 72	2,551 57
St. Louis arsenal, at St. Louis, Missouri												
Newport arsenal, at Newport, Kentucky		10,665 60	10,665 60									
Detroit depot, at Detroit, Michigan Territory	855 34	274 13	1,129 47	270 41	41 21	311 62	6 79	117 89	124 68	101 69	160 91	262 60
New York depot, at New York city, New York		8,997 70	8,997 70		3,608 37	3,608 37	89 75	1,478 18	1,567 93	12 42	1,454 82	1,467 24
Charleston depot, at Charleston, South Carolina		5,581 05	5,581 05					137 25	137 25		1,165 07	1,165 07
Fort Monroe, at Old Point Comfort, Virginia												
Apalachicola arsenal, at Chattahoochee, Florida												
Bellefontaine arsenal, at Bellefontaine, Missouri								54 53	54 53		41 86	41 86

Statement exhibiting the amount of money expended in each year at the respective armories and arsenals, &c.—Continued.

Armories and arsenals.	1824.			1825.			1826.			1827.		
	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.
Springfield armory, at Springfield, Massachusetts.....	\$21,909 75	\$167,919 26	\$189,829 01	\$8,794 53	\$174,174 28	\$182,968 81	\$8,951 47	\$172,847 01	\$181,798 48	\$14,158 10	\$163,921 17	\$178,079 27
Harper's Ferry armory, at Harper's Ferry, Virginia.....	17,476 46	151,085 43	168,561 89	10,591 46	161,172 83	171,764 29	9,733 53	145,809 91	155,543 44	13,622 61	151,079 23	164,701 84
Kennebec arsenal, at Augusta, Maine.....										4,373 47		4,373 47
Watertown arsenal, at Watertown, Massachusetts.....		5,721 37	5,721 37		3,944 25	3,941 25		3,104 27	3,104 27		4,253 50	4,253 50
Champlain arsenal, at Vergennes, Vermont.....							7,061 88		7,061 88	9,165 64		9,165 64
Watervliet arsenal, at Watervliet, New York.....		9,188 02	9,188 02	2,899 95	9,376 84	12,276 79	35,190 36	12,030 62	47,221 18	8,422 32	10,307 75	18,730 07
Rome arsenal, at Rome, New York.....		1,409 66	1,409 66		981 05	981 05		785 83	785 83		1,788 20	1,788 20
Allegheny arsenal, at Pittsburg, Pennsylvania.....		10,958 71	10,958 74		11,214 58	11,214 58	1,300 00	11,343 87	12,643 87		11,795 99	11,795 99
Frankford arsenal, at Frankford, Pennsylvania.....	114 77	2,468 59	2,583 36		2,096 33	2,096 33		4,273 30	4,273 30		4,132 86	4,132 86
Washington arsenal, at Washington city, District of Columbia.....	1,455 64	8,075 25	9,530 89	3,892 84	17,729 99	21,622 83	17,575 53	15,110 25	32,685 78	6,607 98	13,925 37	20,533 35
Bellona arsenal, at Richmond, Virginia.....		1,395 14	1,395 14		1,800 25	1,800 25		6,174 59	6,174 59		1,668 85	1,668 85
Augusta arsenal, at Augusta, Georgia.....	1,626 71	4,409 44	6,036 15	473 29	4,745 67	5,218 06	6,185 50	3,020 31	9,205 81	32,958 31	2,257 32	35,215 63
Pikesville arsenal, at Pikesville, Maryland.....		3,104 17	3,104 17		3,002 47	3,002 47		3,883 57	3,883 57		5,102 61	5,102 61
Mount Vernon arsenal, at Mount Vernon, Alabama.....												
Baton Rouge arsenal, at Baton Rouge, Louisiana.....		2,671 68	2,671 68	4,553 62	3,007 34	7,560 96	6,490 06	7,899 87	14,329 93	1,092 53	7,217 98	8,310 52
St. Louis arsenal, at St. Louis, Missouri.....										18,973 89	3,929 58	22,903 57
Newport arsenal, at Newport, Kentucky.....												
Detroit depot, at Detroit, Michigan Territory.....	74 64	280 31	354 95		662 15	662 15		615 44	615 44		343 29	343 29
New York depot, at New York city, New York.....		1,545 52	1,545 52		1,417 72	1,417 72		929 19	929 19		2,318 30	2,318 30
Charleston depot, at Charleston, South Carolina.....	39 00	2,389 19	2,428 19	60 00	740 13	800 13		25 15	25 15			
Fort Monroe, at Old Point Comfort, Virginia.....		1,225 19	1,225 19		4,785 09	4,785 09	1,033 81	5,500 61	7,133 42	397 19	8,144 18	8,531 37
Apalachicola arsenal, at Chattahoochee, Florida.....												
Bellefontaine arsenal, at Bellefontaine, Missouri.....		42 76	42 76		105 87	105 87		30 93	30 93		196 50	196 50

Statement exhibiting the amount of money expended in each year at the respective armories and arsenals, &c.—Continued.

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Armories and arsenals.	1838.			1839.			1830.			1831.		
	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Am't expended at each armory and arsenal in this year.
Springfield armory, at Springfield, Massachusetts	\$9,066 94	\$180,231 65	\$189,298 59	\$4,799 82	\$177,896 09	\$182,695 91	\$19,806 30	\$170,466 06	\$190,272 36	\$9,582 67	\$184,735 04	\$194,318 61
Harper's Ferry armory, at Harper's Ferry, Virginia	15,414 87	133,487 14	148,902 01	16,087 60	133,803 02	149,891 52	15,893 49	119,662 37	135 555 86	17,222 16	131,425 69	148,647 85
Kennebec arsenal, at Augusta, Maine	41,054 67	.....	41,054 67	49,419 54	.....	49,419 54	7,925 38	145 00	8,070 38	2,163 67	2,843 04	5,006 71
Watertown arsenal, at Watertown, Massachusetts .....	.....	4,177 90	4,177 90	1,589 04	4,313 85	5,902 89	1,779 54	2,898 39	4,677 93	143 05	2,697 90	2,840 95
Champlain arsenal, at Vergennes, Vermont	9,657 73	335 89	9,993 61	4,131 62	154 25	4,285 87	.....	205 46	205 46	479 59	691 82	1,171 41
Watervliet arsenal, at Watervliet, New York	21,798 88	13,068 96	34,867 14	710 95	25,566 76	26,277 71	10,641 98	14,990 47	25,632 45	15,302 26	13,555 93	28,858 19
Rome arsenal, at Rome, New York .....	.....	1,763 93	1,763 93	.....	2,078 49	2,078 49	.....	1,944 96	1,944 96	.....	2,522 50	2,522 50
Allegheny arsenal, at Pittsburg, Pennsylvania .....	.....	17,045 27	17,045 27	11,612 47	15,536 29	27,148 76	8,499 51	9,548 13	18,047 64	8,337 05	8,668 59	17,005 64
Frankford arsenal, at Frankford, Pennsylvania .....	.....	18,464 83	18,464 83	.....	21,197 12	21,197 12	2,068 30	2,551 15	4,610 45	446 56	3,046 83	3,493 39
Washington arsenal, at Washington city, District of Columbia	653 88	13,334 75	13,988 63	6,334 66	14,765 22	21,099 88	3,389 27	14,419 47	17,808 74	912 96	9,248 14	10,161 10
Bellona arsenal, at Richmond, Virginia .....	.....	1,554 58	1,554 58	.....	4,892 91	4,892 91	.....	4,427 51	4,427 51	.....	5,059 54	5,059 54
Augusta arsenal, at Augusta, Georgia	29,188 28	3,083 44	32,271 72	580 18	5,429 48	6,009 66	1,031 63	4,405 96	5,437 59	53 10	4,867 78	4,920 88
Pikesville arsenal, at Pikesville, Maryland	850 00	4,832 75	5,682 75	.....	2,498 92	2,498 92	50 00	2,187 85	2,237 85	.....	1,844 07	1,844 07
Mount Vernon arsenal, at Mount Vernon, Alabama .....	.....	.....	23,539 18	.....	23,539 18	23,539 18	41,731 43	.....	41,731 43	35,243 91	.....	35,243 91
Baton Rouge arsenal, at Baton Rouge, Louisiana	6,992 68	7,637 31	14,629 99	9,832 70	6,469 59	16,292 29	2,607 98	5,082 91	7,689 99	281 62	4,570 75	4,852 37
St. Louis arsenal, at St. Louis, Missouri	21,617 56	7,507 44	29,125 00	7,671 55	1,163 47	8,835 02	14,177 54	4,162 26	18,339 80	14,574 15	2,606 92	17,181 07
Newport arsenal, at Newport, Kentucky .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Detroit depot, at Detroit, Michigan Territory .....	.....	612 38	612 38	.....	626 36	626 36	.....	878 75	878 75	306 74	845 01	1,151 75
New York depot, at New York city, New York .....	.....	4,091 84	4,091 84	.....	4,238 82	4,238 82	.....	2,693 46	2,693 46	.....	2,514 05	2,514 05
Charleston depot, at Charleston, South Carolina .....	.....	1,114 70	1,114 70	.....	1,009 06	1,009 06	.....	1,186 24	1,186 24	.....	1,107 25	1,107 25
Fort Monroe, at Old Point Comfort, Virginia .....	.....	5,243 49	5,243 49	.....	6,206 03	6,206 03	226 31	10,450 91	10,677 22	.....	7,569 05	7,569 05
Apalachicola arsenal, at Chattahoochee, Florida .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bellefontaine arsenal, at Bellefontaine, Missouri	174 14	174 14	111 85	111 85

1836.]

ORDNANCE AND ORDNANCE STORES.

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Statement exhibiting the amount of money expended in each year at the respective armories and arsenals, &c.—Continued.

Armories and arsenals.	1832.			1833.			1834.		
	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Amount expended at each army and arsenal in this year.	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Amount expended at each army and arsenal in this year.	Purchase of land and erection and repair of buildings.	Expense of the manufacture and repair of arms, and construction and repair of gun-carriages.	Amount expended at each army and arsenal in this year.
Springfield armory, at Springfield, Massachusetts	\$5,442 58	\$177,385 05	\$182,827 63	\$16,906 60	\$165,570 10	\$182,476 96	\$22,914 63	\$159,446 56	\$182,361 39
Harper's Ferry armory, at Harper's Ferry, Virginia.....	14,033 30	158,262 02	172,295 32	28,285 99	139,068 65	167,954 64	30,668 96	150,784 97	181,653 93
Kennebec arsenal, at Augusta, Maine.....	4,881 63	1,375 39	6,256 02	4,527 77	1,704 20	6,232 07	9,886 68	2,724 35	12,611 03
Watertown arsenal, at Watertown, Massachusetts.....	1,636 54	2,712 13	4,348 67	278 74	2,724 70	3,003 44	89 63	4,169 20	4,258 83
Champlain arsenal, at Vergennes, Vermont.....	20 41	1,082 13	1,102 54	.....	795 98	795 98	1,161 21	706 19	1,867 40
Watervliet arsenal, at Watervliet, New York.....	9,344 20	19,433 23	28,777 43	24,838 09	13,863 89	38,721 98	13,119 26	23,630 26	36,749 52
Rome arsenal, at Rome, New York.....	.....	2,067 93	2,067 93	.....	2,322 04	2,322 04	.....	2,792 54	2,792 54
Allegheny arsenal, at Pittsburg, Pennsylvania.....	4,855 32	13,178 01	18,033 33	7,542 38	11,171 59	18,713 97	3,309 35	12,577 56	15,886 91
Frankford arsenal, at Frankford, Pennsylvania.....	4,162 40	6,450 28	10,612 68	6,319 34	8,244 94	14,564 28	18,324 88	8,495 67	26,820 55
Washington arsenal, at Washington city, District of Columbia.....	9,347 00	13,372 03	22,719 03	2,999 99	20,038 75	23,033 74	460 97	14,285 11	14,746 08
Bellona arsenal, at Richmond, Virginia.....	.....	2,950 47	2,950 47	.....	1,491 25	1,491 25	.....	1,133 43	1,133 43
Augusta arsenal, at Augusta, Georgia.....	150 00	1,797 17	1,947 17	.....	1,157 20	1,157 20	.....	717 24	717 24
Pikesville arsenal, at Pikesville, Maryland.....	.....	1,540 20	1,540 20	.....	1,504 41	1,504 41	700 00	1,478 13	2,178 13
Mount Vernon arsenal, at Mount Vernon, Alabama.....	16,021 06	143 00	16,164 06	9,634 04	1,416 00	11,050 04	15,743 22	1,733 00	17,476 22
Baton Rouge arsenal, at Baton Rouge, Louisiana.....	61 63	2,735 04	2,796 67	.....	2,832 52	2,832 52	288 00	3,433 27	3,721 27
St. Louis arsenal, at St. Louis, Missouri.....	8,736 72	5,174 95	13,911 67	8,798 95	6,618 92	15,417 87	27,252 78	10,334 13	37,566 91
Newport arsenal, at Newport, Kentucky.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Detroit depot, at Detroit, Michigan Territory.....	1,082 71	1,094 73	2,177 44	30,466 96	1,518 83	31,985 79	22,180 95	1,114 32	23,295 27
New York depot, at New York city, New York.....	.....	3,769 42	3,769 42	.....	2,489 16	2,489 16	.....	2,093 12	2,093 12
Charleston depot, at Charleston, South Carolina.....	.....	1,832 14	1,832 14	.....	2,829 84	2,829 84	.....	298 30	298 30
Fort Monroe, at Old Point Comfort, Virginia.....	4,826 46	9,144 92	13,971 38	5,223 70	18,170 41	23,394 11	5,978 71	14,332 47	20,311 18
Apalachicola arsenal, at Chattahoochee, Florida.....	1,561 44	.....	1,561 44	32,094 26	.....	32,094 26	39,453 30	.....	39,453 30
Bellefontaine arsenal, at Bellefontaine, Missouri.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

NOTE.—Aggregate expense of the manufacture of arms at each army during the foregoing period, viz: At Springfield armory, \$3,411,765 20; at Harper's Ferry armory, \$3,230,884 23.

Statement of the expenditures at the rifle factory, Harper's Ferry armory, since its establishment, to December 31, 1834.

Years.	For water power and mill-dams.	Buildings, mill-wright work.	Tools and machinery.	Manufacture of rifles and equipments.	Amount expended in each year.
1819 to 1821, inclusive		\$4,130 14	\$11,917 03	\$10,544 62	\$26,591 79
1822.....		47 38	5,083 95	1,319 96	6,456 29
1823.....		42 44	5,933 48	3,768 68	9,749 60
1824.....		1,557 01	12,216 04	6,922 72	20,695 77
1825.....		1,076 72	14,448 72	4,709 81	20,235 25
1826.....		236 18	8,002 06	4,647 68	12,885 92
1827.....		5,952 93	15,879 10	18,911 40	40,743 43
1828.....		5,665 93	17,779 77	26,322 91	49,768 61
1829.....		3,425 96	19,384 43	17,351 85	40,162 24
1830.....		837 45	10,671 85	20,958 15	32,517 45
1831.....		2,491 27	9,355 78	27,016 23	38,863 28
1832.....		3,837 40	12,100 76	25,060 51	50,998 67
1833.....	\$2,600 00	968 62	1,883 60	35,593 53	41,045 75
1834.....	1,999 50	895 87	4,744 32	34,545 56	42,185 25
Total	4,599 50	31,215 30	149,410 89	247,673 61	432,899 30

NOTE.—No separate accounts having been kept of the yearly expenditures at the rifle factory in 1819, 1820, and 1821, it is now impracticable to furnish the annual expense for those years as required by the resolution.

W. B. LEWIS.

TREASURY DEPARTMENT, *Second Auditor's Office, November 16, 1835.*

