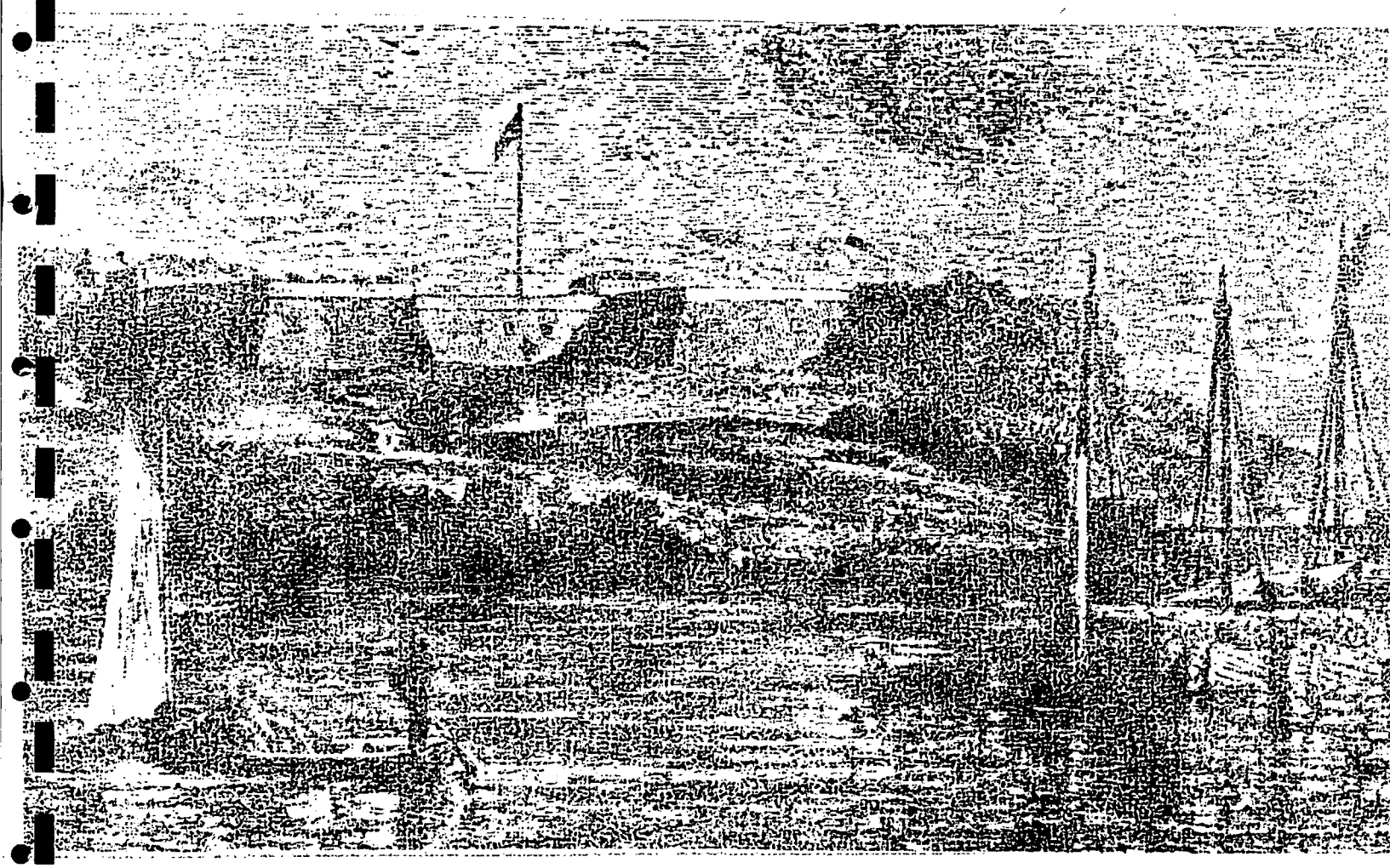
D-17 IN STORAGE

Historic Furnishings Report/HFC

FORT WASHINGTON PARK



B&W Scans
6/14/2005

PLEASE RETURN TO:

TECHNICAL INFORMATION CENTER
DENVER SERVICE CENTER
NATIONAL PARK SERVICE

ATTENTION:
Portions of this filmed document are illegible due to the poor quality of the source document.

HISTORIC FURNISHINGS REPORT

FORT WASHINGTON PARK
NATIONAL CAPITAL PARKS - EAST

Prepared under contract by
David L. Salay
Contract CX-1100-INV-279

Revised and Edited by
David H. Wallace, Ph.D.

U.S. Department of the Interior / National Park Service
Harpers Ferry Center
1986

APPROVED BY MEMORANDUM
FROM REGION
DATE: August 30, 1985

CONTENTS

LIST OF ILLUSTRATIONS /i

PREFACE AND ACKNOWLEDGMENTS /v
Footnotes /vii

INTERPRETIVE OBJECTIVES /1

OPERATING PLAN /3

ANALYSIS OF HISTORIC OCCUPANCY, 1840-1872 /5

I: Building a Fort /5
Footnotes /13

II: The Garrison, 1840-1872 /16
Footnotes /40

III: Housing the Garrison /50

Within the Fort:
Gatehouse /52
Post Commander's Office /55
Post Adjutant's Office /57
Casemates /59
Officers' Quarters /62
Enlisted Men's Quarters /66
Magazines /70
Shot Furnace /70
Commissary Storehouse /71
Commissary Store Room /71
In the Ravelin:
Stable /71
Quartermaster's Storehouse /72
Magazine /72
Blacksmith Shop /72
Shot Furnace /72
East of the Fort:
Bakehouse /73
Post Office/Noncommissioned Officers' Quarters /73

Northeast of Fort:
Commanding Officer's Quarters /73
Officers' Quarters /74
Hospital /74
Enlisted Men's Barracks /75
Laundresses' Quarters /75
Chapel and Schoolhouse /76
Hospital Steward's Quarters /76
Footnotes /77

EVIDENCE OF ORIGINAL FURNISHINGS, 1840-1872 /87

IV: Flagstaff and Flags /87
Footnotes /91

V: Ordnance at Fort Washington, 1840-1872 /93
Footnotes /122

VI: Guardhouse and Guardroom /127
Footnotes /136

VII: Post Commander's Office /139
Footnotes /143

VIII: Post Adjutant's Office /144
Footnotes /148

IX: Officers' Quarters /150
Footnotes /158

X: Enlisted Men's Barracks /159
Footnotes /174

XI: Post Bakery /179

RECOMMENDED FURNISHINGS /182
Introduction /182

XII: Flagstaff and Flags /185
Footnotes /188

XIII: Ordnance /189
Footnotes /193

XIV: Guardhouse and Cells /194
Footnotes /198

XV: Guardroom /199
Footnotes /206

XVI: Post Commander's Office /207

XVII: Post Adjutant's Office /215

XVIII: Officers' Quarters /226
Officers' Mess /228
2nd Lieutenant's Quarters (a) /231
Officers' Kitchen /236

XIX: Enlisted Men's Barracks /244
Squadroom /245
Footnotes /250

XX: Cost Estimates /251

XXI: Floor Plans and Elevations /261

APPENDIXES /273

A. Units Stationed at Fort Washington, 1840-1872 /274

B. Commanding Officers at Fort Washington, 1840-1872 /275

C. Selected Post Returns, Fort Washington, 1848-1872 /276

D. Seeley's Inventory: "Approximate Statement of Quartermaster Stores, Clothing, Camp and Garrison Equipage in Possession of Erwin Seeley, 2nd Lieut., 4th U.S. Artillery A[cting] A[ssistant] Quartermaster, U.S. Army at Fort Washington, Md., on the last day of the month of May, 1865. RG92, Entry 1203, Monthly Returns of Quartermaster Stores, 1861-73, Box No. 1, NA /278

E. Articles to Be Kept by Sutler, Fort Washington, Post Orders, May 12, 1863, and September 10, 1867 /292

F. List of Books, Reports, Rolls, and Papers Kept by the Company Clerk, from August V. Kautz, The Company Clerk (Philadelphia: J.B. Lippincott & Co., 1864) /297

G. Forms and Reports Required by Army Regulations, selected from Revised Regulations for the Army of the United States, 1861 /301

H. Extracts from Bread and Bread Making (1864) /322

BIBLIOGRAPHY /333

ILLUSTRATIONS /350

LIST OF ILLUSTRATIONS

1. "Plan of a part of Waberton showing the Position and Plan of Fort Washington on the Potomack," c. 1815.

2. "Plan of Fort Washington on the 1st Novr. 1821," by Theodore W. Maurice, Captain of Engineers.

3. "Plan of Fort Washington on the Potomac November 1823," by Theodore W. Maurice, Captain of Engineers.

4. Ground Plan of Fort Washington, c. 1871.

5. Elevations of Gate-way, Fort Washington, by John W. Barry, before December 5, 1839.

6. "Barracks &c Fort Washington, Md.," drawn by J. Waller Barry, Lt. of 1st Artillery. Undated, c. 1834. This shows (A) Commanding Officer's Quarters, (B) Lt. Barry's Quarters, (C) Officers' Quarters, (D) Enlisted Men's Quarters, (E) Stable, and (F) Blacksmith Shop.

7. Plans and Elevation of Enlisted Men's Barracks, Fort Washington, undated.

8. "Elevation and Plans of Soldiers' Barracks, Fort Washington," drawn by G.C. Humphries after Samuel Cooper, February 1849.

9. Elevations of Enlisted Men's Barracks ("Co. A Qrs"), c. 1867.

10. Floor Plans, Enlisted Men's Barracks, c. 1867.

11. Commissary Store House, Fort Washington, plan and elevations by Col. Van Vliet, April 29, 1871.

12. "School Room & Flour Store Room" (Commissary Store Room), plan and elevations by Van Vliet, April 1871.

13. "Stables," plan and elevations by Van Vliet, April 1871.

14. Quartermaster Store House, Fort Washington, plan and elevations by Van Vliet, April 1871.

15. Commanding Officer's Quarters ("C.O. Qrs"), Fort Washington, plans and elevations by Van Vliet, April 1871.

16. Officers' Quarters (new), Fort Washington, plans and elevation by Van Vliet, April 1871.

17. "Hospital," Fort Washington, plan and elevations, c. 1867.

18. "Hospital at Fort Washington," plans and elevations, 1872.

19. "Co. M Qrs," (New Enlisted Men's Barracks), Fort Washington, c. 1867.

20. "Quarters for Eight Laundresses at Fort Washington," plan and elevation, 1868.

21. "Laundresses Qrs," Fort Washington, plan and elevations, 1868.

22. "Archeological Base Map for the 1978-1982 Fort Washington Restoration," National Park Service, showing location of original flagstaff foundations.

23. "Capitol, South West View," c. 1847-48.

24. "Fort Washington, Potomac Riv. Opposite Mt. Vernon," from a print, c. 1830.

25. "Fort Washington," from a print of unknown date.

26. Fort Massachusetts (later Fort Stevens).

27. "Fort Washington, Md., Armament Sketch, December 31, 1902, to accompany Lieut. Col. Allen's letter of January 22, 1903."

28. Officer's Tent, c. 1861-65.

29. Inside of Tent, c. 1861-65.

30. "Lieut. J.B. Neill, 153rd New York Infantry."

31. Dr. C.K. Ervine's office/quarters, 72nd New York Infantry.

32. Surgeon McKay's Quarters, c. 1861-65

33. Camp of Chief Ambulance Officer, c. 1861-65.

34. "Soldiers' Dining Room," c. 1861-65.

35. "Soldiers" Dining Room," c. 1861-65.

36. "Harewood Hospital Mess Hall," Washington, D.C., 1864.

37. "Soldier's Rest -- Kitchen," Alexandria, Va., c. 1863-65.

38. "Non-commissioned Officers' Mess, Company D, 93rd New York Infantry, Bealton, Virginia, 1863."

39. 7th New York Militia, Camp Cameron, D.C., 1861."

40. "7th New York State Militia, Camp Cameron, D.C.," c. 1861.

41. "6th New York Artillery," camp kitchen, c. 1861-65.

42. "Cook at Work," c. 1861-65.

43. "Mode of Ventilating Temporary Barracks and Hospitals...," from Brinkerhoff, The Volunteer Quartermaster (1865).

44. "Sleeping-bunks of the First Rhode Island Regiment, at the Patent Office, Washington," from Harper's Weekly, June 1, 1861.

45. "The Stag Dance," from Harper's Weekly, February 6, 1864, p. 93.

46. An "Average" Bunk: Side View, from Clary, "History of Furniture."

47. An "Average" Bunk: End View, ibid.

48. An "Average" Bunk: Top View, ibid.

49. "Pile of Shot at Fort Rodgers," c. 1861-65.

50. "Wilder's Patent Salamander Safes," from Art Journal Advertiser, Vol. 3, no. 2 (1859).

PREFACE AND ACKNOWLEDGMENTS

"About five miles below was Fort Washington, very picturesque, but regarded as nearly useless, as stone forts had been proved not strong enough to withstand modern artillery."[1]

This statement by Janet Steward in 1863 might summarize the history of Fort Washington. When it was completed in 1824, it was included in the "permanent system" of America's coastal defenses. But its role changed during the following 120 years--from a front line of national defense to a national historic site. The "old fort" represents a time when the principal threat came from attacks by sea, and stone and masonry forts were deterrents to naval attacks. Because of advances in military technology, and because of its location and construction, the brick and masonry fort soon became outmoded. As it slipped into obsolescence, Fort Washington became part of our historic past.

During the 1950s and early 1960s, several archeological projects were undertaken in different parts of the fort. Some excellent research was done on the fort's construction and general history. Stanley McClure's and Thomas McGarry's work has been very useful. The application of their work has been limited, however. This is unfortunate because Fort Washington is an impressive feature and because it represents a great resource for historical interpretation. It is ideally suited to interpret a theme that has received relatively little attention--the life of the common soldier.

This Historic Furnishings Report, written under Contract CX-1100-INV-279 for Harpers Ferry Center, National Park Service, is an analysis of the use and furnishings of several buildings at Fort Washington

from 1840 through 1872: gatehouse, officers' quarters, enlisted men's barracks, and a casemate; it also covers the flagstaff and the fort's ordnance during the same period.

Although many of Fort Washington's records have survived, there are significant gaps in a number of areas of special interest. Unfortunately, the commonplace events and material of an historic period are the least likely to survive. Much has been discovered about Fort Washington, but much remains to be learned. An attempt was made to fill these gaps through records of activities and furnishings at similar posts. It is hoped that this report can serve as an initial guide to the furnishings and interpretive programs at Fort Washington.

Many people have assisted with this project. The curators and librarians at the Schuylkill County Historical Society, William Penn Memorial Museum, Pennsylvania State Library, Maryland Historical Society, Library of Congress, and the National Archives were very helpful. Dr. Richard Sommers and John Slonaker and their assistants at the United States Army Military History Institute provided many useful suggestions and prompt responses to all requests. The staff of the National Park Service--Harpers Ferry Center, Fort Laramie National Historic Site, and Fort McHenry National Historic Site--were very gracious with their assistance. I would particularly like to thank John Demer and Sarah Olson, Harpers Ferry Center, for their many courtesies.

The staff at Fort Washington--particularly Al Korson, Don Steiner, Roy Ashley, and Jeff Deeschmacher--were a great resource; their interest in Fort Washington can only be commended. Their thoughtful probing and questions have been a constant goad and sounding board. I am sorry that we could not answer all of the questions we set out to resolve--and the new ones we raised along the way.

Footnotes: Preface and Acknowledgments

1. Alfred Seelye Roe, The Ninth New York Heavy Artillery (Worcester, Massachusetts: By the author, 1899), p. 402.

INTERPRETIVE OBJECTIVES

Fort Washington, with its high masonry walls, gun positions, dry moat, and drawbridge, is an excellent example of early nineteenth-century coastal defense. The structure represents the military philosophy held during the early days of the nation. Fort Washington was only one in a chain of forts built from Maine to Louisiana.

Its significance is derived from the capital city it was constructed to defend, yet circumstances dictated that the fort be denied a share of glory in the nation's history. Protracted boredom and quiet desperation, along with periods of activity, are part of the story told in its interpretive program.

The ebb and flow of the activity of the garrison is related to the concerns of the nation. The first fort on the site, called Fort Warburton, was destroyed in 1814 when the British attacked the nation's capital. Quickly, work began on a new fort to be called Fort Washington. By 1824 the fort was completed and the number of troops stationed at the fort slowly decreased until 1836, when the fort became quiet.

During the 1840s an extensive project to strengthen the fort was carried out. In 1848 troops were once again stationed there, but after a few years they left for other posts and Fort Washington was again to be quiet until the Civil War. Troops were rushed to Fort Washington in 1861 at the beginning of that war and the fort played a role in defense of the capital until the Fort Circle Defenses of Washington were completed by 1864.

Troops continued to be garrisoned at the fort until 1872 when the old fort was finally abandoned.

The objectives of interpretation are to give the visitor a better understanding of the significance of the fort and to show how the people assigned to the fort carried out their duties.

The furnishing of the Officers' Quarters, the Enlisted Men's Barracks and the Gatehouse, and the restoration of the flagstaff and part of the fort's armament, will contribute greatly to meeting the interpretive objectives of the fort.

The years between 1840 and 1872 are representative of the events and non-events that took place at Fort Washington. There is no single event that can tell the story of the long vigil of this significant fortification of the nation's capital. It is hoped that the furnishings will help to point up the contribution of a number of individuals in order to give the park visitor a keener awareness, appreciation, and understanding of Fort Washington.

OPERATING PLAN

Interpretive staffing will consist of one person at the main gateway and one roving interpreter, supplemented with VIPs as needed and available.

The pattern of visitation will generally be self-guided or guided tours, depending on availability of staff. At most times, visitors will be able to view, but not enter, the furnished areas; barriers may be removed, however, when staffing permits guided tours. The fort is open to the public daily from 8:30 a.m. to 5:00 p.m. (October-April) or 8:00 p.m. (May-September).

The Site's furnishing priorities are:

1. Flagstaff and flags

2. Gatehouse, including Guardhouse and cells, Guardroom, Post Commander's Office and Post Adjutant's Office

3. Ordnance:

    a. Carriage and implements for a 24-pounder seige and garrison howitzer, to be located in the casemate overlooking the drawbridge (62 on 1902 Armament Sketch). The barrel is in the Site collection.

    b. Reproduction 24-pounder tube, carriage and implements, model 1839, for demonstration firing.

    Other recommended ordnance should be acquired as funds permit in the future.

4. Officers' Quarters: the Site places highest priority on furnishing the north wing, basement and ground floor rooms, i.e., kitchen, mess room, and one officer's room. The last should represent a typical junior officer of the period rather than a particular individual or a special type (such as chaplain or doctor).

5. Enlisted Men's Barracks. An alternative is to exhibit only the ground floor, including the kitchen, mess hall, and one or two enlisted men's squadrooms in place of the non-commissioned officers' room recommended in this report.

Fire alarm and intrusion systems have been requested for the fort, as well as assignment of a maintenance person to the visitor center and inside the fort for routine cleaning and maintenance.

ANALYSIS OF HISTORICAL OCCUPANCY, 1840-1872

I: BUILDING A FORT

During the first decades of the nineteenth century, America based its security on the development of a naval force and a system of seacoast fortifications.[1] A third component of this defensive system was a network of roads and canals to supply the forts and navy, to transfer troops to points of conflict, and to maintain internal commerce to help sustain the war effort. Railroads eventually lessened the need for the system of transportation first proposed by military engineers, but the development of a navy and the construction of coastal fortifications remained central features of America's nineteenth-century military program.[2]

It was a contemporary military precept that guns ashore were superior to guns afloat.[3] Thus, it was reasoned, fortifications would provide a deterrent to attack. This was an important consideration for a young nation with an extensive coastline. For a nation keyed to a defensive rather than an offensive strategy, fortifications were an ideal solution. If their threatening posture alone did not scare off the enemy, the fortifications could then fulfill their specific military objectives:[4]

- -- to protect naval depots and harbors and deny the enemy a safe anchorage.
- -- to insure the retention of strategic military points.
- -- to force the enemy to move along predetermined lines dominated by the defender.
- -- to protect coastal cities.
- -- to bar the enemy's advance into the interior by way of major waterways.

This was the reasoning behind the second and third "systems" of American coastal fortifications and, specifically, the construction of Fort Washington.

On March 20, 1794, Congress authorized a series of defensive works designed to protect the harbors of major cities.[5] The monies allocated for these "first system" fortifications were small and the forts constructed were open works with earthen parapets or small blockhouses.[6] The armament at most sites was ten or twelve guns while several were small batteries mounting two or four guns. These fortifications were manned sporadically and were either left incomplete or were allowed to deteriorate because of a lack of urgency and limited funds. Not even the undeclared war with France (1798-1800) had a significant impact on America's defensive program.

The disputes between the French and British during the Napoleonic Wars spilled over into the Western Hemisphere and led to America's "second system" of fortifications. It was the Chesapeake incident of June 1807 that prompted Congress to authorize a new defensive program.[7] In November, Congress appropriated three million dollars for defensive works and a new building program began. By the time the War of 1812 started, most major coastal cities had at least one battery for protection.

It was as part of this "second system" of fortifications that Fort Warburton (the first Fort Washington) was built. Fort Warburton had a short and rather ignominious history. Completed on December 1, 1809, the fort was destroyed by its own garrison on August 27, 1814.[8] Captain Samuel T. Dyson, the commanding officer, ordered the fort blown up on the approach of Rear Admiral Sir George Cockburn's British fleet.[9] Washington had fallen to the enemy without Fort Warburton having fired a shot in her defense.

The destruction of a number of public buildings in the city of Washington demonstrated both the need for a strong system of fortifications and the weakness of the "second system" defenses. At Digges Point, site of Fort Warburton, rebuilding began almost immediately. From March to July 1815, Major Pierre L'Enfant directed the construction of a ravelin and the rebuilding of the wharf.[10] His work was suspended on July 8 (see Illustration 1). After a short delay, Lieutenant Colonel Walker K. Armistead and Captain Theodore Maurice, who did the design, were assigned to build a new fortification. Work began on the main fortification on February 27, 1816.[11] The wharf and ravelin started by L'Enfant were retained, but the site of the fort, renamed Fort Washington, was moved east to the bluff overlooking the Potomac.[12]

Digges Point, the site of Fort Washington, on the east bank of the Potomac River, is eleven miles south of the city of Washington in Prince Georges County, Maryland. It was a seemingly ideal location for defending the Potomac River and the city of Washington. At Digges Point the river channel narrows and swings to the east or Maryland shore. The narrow channel forced vessels to approach the fort "bow on" and pass upriver "stern on"; only directly opposite the fort could a ship bring its guns to bear.[13]

At the same time, approaching ships were vulnerable to the fort's guns. Fort Washington's elevated position gave it a commanding view of the river. The guns in the ravelin, or water battery, were 53 feet above water level; the casemate guns were 89 feet above the river; and the guns mounted <u>en barbette</u>, to fire over the wall, were 115 feet above the water.[14] From these heights Fort Washington's 24- and 32-pounders had a range of more than a mile up and down the river. An enemy ship coming up the Potomac would have been subjected to a

heavy fire before reaching the fort, would have come under a devastating fire directly opposite the fort, and still would have been under fire had it succeeded in getting past Digges Point.

In addition to providing a commanding view of the Potomac, Digges Point also provided some natural defenses for the fort itself.[15] It was surrounded on three sides by water: Swan Creek to the north, the Potomac River to the west, and Piscataway Creek to the south. To the east, or land side, the terrain was a mixture of steep ravines and heavy forest. Even so, Fort Washington was vulnerable from the land side. It was particularly susceptible to attack from an enemy landing below Piscataway Creek and moving inland under protection of the ravine east of the fort to the hills in the northeast. From this point enemy cannon could dominate the fort. As we shall see, this was a danger that the engineers noted and took steps to correct.

The Fort Washington that Armistead and Maurice designed and built was more substantial than the earthen and masonry works which had preceded it. The new fort was a casemated brick and stone fortification with earthen outworks--basic elements of American fortifications during the early nineteenth century.

The fort as completed in 1824 had the same profile as today. Fort Washington is roughly trapezoidal in outline; it has a bilateral symmetry in that the northern half is a mirror image of the southern half.[16] This outline, or trace, was designed to provide flanking cover at all points around the fort's perimeter.

The fort was sited to concentrate the greatest firepower in the direction of the river.[17] A long curtain or wall paralleled the river to provide a spacious placement for guns. To enfilade, or protect,

the curtain, two demi-bastions--one at the northwest corner and one at the southwest corner--were built. The demi-bastions had casemates which added to the potential for armament and defense.

The eastern, or landward, side of the fort had a long curtain broken by a lunette bastion--a projecting work to enfilade the curtain.[18] At the northeast and southeast corners of the landside curtain, bastions with flank casemates were provided. The bastions covered the curtain and flanks of the fort and provided protection for two of the entrances into the fort.

The fort could be entered through three gates.[19] The main gate was in the center of the north flank. As originally built, the gatehouse was a one-story structure with an arched brick bombproof passageway, a drawbridge, and heavy doors. A second entry was through the sally port in the center of the west (or river) curtain. This provided access from the fort to the ravelin and water battery; entry into the fort was by way of the sally port door, covered passageway and ramp, a single stairway to the casemate level, and then a double stairway to the parade ground. The third entrance was through the postern gate in the right (or south) face of the southeast bastion. The postern gate and a fixed bridge provided access to the reverse fire casemate and mortar battery.

Bridges were required at the main and postern gates because the fort was ditched on two faces by a thirty-foot wide dry moat or ditch.[20]

In addition to the flanking protection from within Fort Washington, Armistead and Maurice provided outworks to strengthen the fort. The major outwork was the large V-shaped ravelin started by L'Enfant. The ravelin protected the riverfront curtain and adjoining bastion

flanks from cannon fire and also covered the sally port. It consisted of a dry ditch in front of a salient topped by an earthen parapet. An earthen glacis extended from the counterscarp toward the river.[21]

South of the moat, on the fort's left flank, a mortar battery provided additional defense against attack. The mortar battery had a trapezoidal shape with sheer walls to the north, east, and west, and a sloping southern wall. The interior was divided by walls into three levels.[22]

A reverse fire casemate on the counterscarp of the southeast bastion completed the outworks. This was an L-shaped structure manned by soldiers to cover the ditch and mortar battery against assault.[23]

Two drawings: "Plan of Fort Washington on the 1st Novr. 1821" (Illustration 1) and "Plan of Fort Washington on the Potomac November 1823" (Illustration 2)--illustrate both the progress of construction and the alterations in design during these two years. For one thing, the reverse fire casemate Maurice proposed for the north flank was not built. The caponniere in the east curtain was changed to a lunette bastion. At the same time, much construction had been completed and there is a marked difference illustrated by the two maps. One should also note the changing designations for certain areas, particularly the gatehouse.

The fort Armistead and Maurice completed was a substantial piece of military engineering. It included twenty-two to twenty-six foot wide terrepleins on which to mount cannon, seven and one-half foot parapets over which they could fire, and substantial arched casemates. As reported by the Board of Engineers in 1826, Fort Washington pre-

sented a formidable defense of the Potomac approaches to the city of Washington:[24]

> Fort Washington, a work recently completed, covers these cities from any attack by water--and will oblige an enemy to land at some 15 to 18 miles from Alexandria, should that city be the object. It will also serve the very valuable purpose of covering the troops crossing from Virginia with a view to fall upon the flanks of an enemy moving against the Metropolis. . . . the works in the Patuxent being constructed & the militia of the surrounding country being in a due state of preparation, an enterprize against these cities would be one of great hazard.

Because of these strengths, the Board of Engineers recommended that Fort Washington be included in a new general system of national defenses (the "third" or "permanent" system); this system would predominate until the Civil War.[25] The Board also may have been influenced by the $446,467.37 recently spent on Fort Washington's construction.[26]

The fort accepted as part of the "third system" of fortifications was slightly different from the Fort Washington which stands today.[27] Beginning in 1841, Captain Fred A. Smith, United States Engineers, undertook the repairs needed to stabilize the fort and to improve its defenses. Much of Smith's effort was directed toward the stabilization of the earthen embankments so as to prevent the washouts which were undermining the walls. Smith also was concerned with improving Fort Washington's defenses. He oversaw the addition of a second story to the main gatehouse and the construction of gun emplacements over the entrance. Smith had the parapets modified to accommodate the 32-pounder cannon developed in 1829. He also paved the terreplein, constructed shot furnaces within the fort and ravelin, and modified the magazines. In 1842 Smith mounted Fort Washington's first heavy artillery.

Smith also directed his attention to the fort's weak land (or eastern) defenses. He raised the east curtain and replaced the lunette bastion and its double ramp with a caponniere and a single ramp. He also directed that the hill north of the fort be cleared of trees to prevent an enemy from placing guns there. Lastly, Smith and his successor Samuel Cooper had the doors of the entries rebuilt and strengthened and a drawbridge built for the main entrance. The fort Smith and Cooper left in 1848 was substantially as it stands today.

Footnotes: Building A Fort

1. Much of this first chapter is drawn from Emanuel Raymond Lewis, Seacoast Fortifications of the United States: An Introductory History (Washington, D.C.: Smithsonian Institution Press, 1970); Willard B. Robinson, American Forts: Architectural Form and Function (Fort Worth, Texas: Amon Carter Museum of Western Art, 1977); Thomas E. McGarry, "Archeological Investigations for the Restoration of Old Fort Washington, Maryland, National Capital Parks--East, 1977-78, Volume I: The Excavations," (unpublished research report, United States National Park Service, Denver Service Center, May 30, 1980); Benjamin B. Powell, "Archeological Investigations 'Old Fort' Area, Fort Washington, Maryland, May 12-23, 1958" (unpublished research report, United States National Park Service, 1958). Specific citations are provided as applicable.

2. Robinson, American Forts, p. 88; "Defenses of the Seacoast, March 23, 1826," Miscellaneous Reports of the Board of Engineers, Office of the Chief Engineer, 1821-1834, RG 77, Entry 233, Box 1, National Archives (NA). Earlier reports state primarily the same plan.

3. Lewis, Seacoast Fortifications, p. 3.

4. Ibid., p. 7; Robinson, American Forts, pp. 87-88; "Defenses of the Seacoast, March 24, 1826."

5. Lewis, Seacoast Fortifications, pp. 3, 21; Robinson, American Forts, pp. 63-65.

6. The systems described in this section were summarized in a number of official documents including Joseph G. Totten, Report on Fortifications, 32nd Congress, 1st sess., 1851, House Executive Document No. 5; and F.P. Blair, Jr., Permanent Fortifications and Sea-Coast Defences, 37th Cong., 2nd sess., 1862, Report 86.

7. Lewis, Seacoast Fortifications, p. 25. The U.S. frigate Chesapeake was stopped by the British frigate Leopard and ordered to submit to a search for British deserters. When the American commander refused, the British opened fire, killing four men and wounding eighteen. This incident aroused strong anti-British sentiment.

8. Powell, "Archeological Investigations"; "Complete History and Geographical Description, 1812-1912," Miscellaneous Post Orders, Fort Washington, RG 393, NA.

9. McGarry, "Archeological Investigations," p. 1.

10. Ibid.

11. Captain Theodore W. Maurice to Major General Alexander Macomb, November 17, 1823, Office of the Chief Engineer, Letters Received, RG 77, Entry 17, NA.

12. Ibid. See also Illustration 1: "Plan of a part of Waberton Showing the Position and Plan of Fort Washington on the Potomack," RG 79, NCP 117.8-3, Map Division, NA, (hereafter cited as "Plan of Waberton").

13. McGarry, "Archeological Investigations," p. 1.

14. Stanley W. McClure, "The Restoration of the Drawbridge at Fort Washington, Md." (unpublished research report, National Park Service, Fort Washington, Maryland, July 4, 1941), p. 3. McGarry's elevations (p. 5) differ somewhat. They are as follows: Ravelin--46 feet above mean low tide; Casements--82 feet above mean low tide; Terreplein--108 feet above mean low tide. Captain Maurice's "Plan of Fort Washington on the 1st Novr, 1821" RG 79, NCP 117.8-13, Map Division, NA (hereafter cited as Maurice, "Plan of Fort Washington") gives an elevation of 55 feet above high tide for the ravelin and 112 feet above high tide for the main parade (Illustration 2).

15. McGarry, "Archeological Investigations," p. 1; McClure, "Drawbridge," pp. 3-4.

16. McGarry, "Archeological Investigations," p. 3.

17. Robinson, American Forts, p. 84.

18. McGarry, "Archeological Investigations," p. 5.

19. Ibid., p. 4. See also Illustration 3, "Plan of Fort Washington on the Potomac, November 1823," RG 79, NCP 117.8-15, Map Division, NA (hereafter cited as "Fort Washington, 1823") and Maurice, "Plan of Fort Washington."

20. Maurice, "Plan of Fort Washington."

21. Ibid., and "Plan of Waberton." See also McGarry, "Archeological Investigations," p. 5.

22. Ibid.

23. Ibid.

24. "Defenses of the Seacoast, March 24, 1826," pp. 36-37. This report also noted that these objectives would have been better served at Cedar Point and recommended that a supplemental work be placed there.

25. Ibid., "Table B." See also Robinson, American Forts, pp. 85ff.

26. "Defenses of the Seacoast, March 24, 1826," p. 37.

27. The following is briefly summarized in McClure, "Drawbridge," pp. 4-5, and McGarry, "Archeological Investigations," p. 6. There is an extensive correspondence relating to these improvements between Captain Fred A. Smith and Colonel Joseph G. Totten, Chief Engineer, and between Totten and Samuel Cooper, in Office of the Chief Engineer, Letters Received: Volume 6 (1841-43), Volume 7 (1844-45) and Volume 8 (1846-48), RG 77, Entry 13, NA. Note specifically, Smith to Totten, September 30, 1845, and Cooper to Totten, September 30, 1847.

II: THE GARRISON, 1840-1872

Fort Washington was staffed only intermittently during the period from 1840 through 1872. From 1840 to 1848 and again from 1853 to 1861, the post was not garrisoned. When troops were stationed at Fort Washington, the number varied considerably. See Appendixes A-C for (A) a chronological list of units stationed at Fort Washington, 1840-72, (B) a chronological list of Fort Washington's commanding officers, 1840-72, and (C) selected post returns for Fort Washington, 1848-72. In the Site research files are a list of Fort Washington's Assistant Quartermasters, 1848-72; selective list of officers at Fort Washington, 1848-72; rosters of most of the units stationed there, 1848-72; and lists of deserters from Companies A and M, 4th U.S. Artillery, 1865-72.

1840-1848: From 1840 to 1848 the fort was not garrisoned, having been turned over to the Corps of Engineers for renovation and repairs. The resident staff was small, including, besides laborers, a superintendent, a master mason and overseer, a surveyor, a clerk, and an ordnance-sergeant.

Captain Fred A. Smith, Corps of Engineers, was the superintending engineer, with overall responsibility for carrying out the renovations and repairs.[1] He lived in the commanding officer's quarters just outside the fort.

Captain Smith was assisted at the outset by a surveyor who was employed on a per diem basis (at $3.00 per day) to re-run the boundary line and verify the elevations.[2] The surveyor was housed in "the quarters" as part of his pay.

A master mason was employed at $2.50 per day.[3] Samuel Clark, of Chester, Pennsylvania, served in this position from September 30,

1843, until September 30, 1845.[4] He was to oversee the force of masons, bricklayers, and laborers hired to re-point the brickwork, renovate the east curtain and rebuild the caponniere, work on the pavement around the casemates and on the stone and brickwork for the new drawbridge, build the shot furnaces, and lay the gun platforms. The master mason also was furnished with "quarters."

Captain Smith also had a civilian clerk, Samuel Cooper of Boston, whom he thought "indispensably necessary."[5] The clerk kept all of the records associated with the project. These included:

Letterbook	:	for copies of all outgoing correspondence.
Journal	:	of daily schedules of all employees.
Book of Materials	:	with entries of all materials received.
Ledger	:	with an accounting of all supplies.
Abstract Book	:	for copies of all paid accounts and vouchers.
Roll Book	:	listing the name, occupation, and rate of pay of every person employed and a daily record of his time.
Miscellaneous Book	:	with notes on experiments tried and items of interest concerning the project.

Each month the clerk was responsible for the payroll, a report on the work completed, and a projection of funds required for the following month. On a quarterly basis he submitted to the Chief of Engineers a "Return of Materials" and machinery with quantities and costs; "Re-

port of Work Done"; "Return of Books, Instruments, etc."; "Report of Forage" consumed; and vouchers for disbursements with an abstract of each.

He also was responsible for an annual report of monies expended and how they were allocated, a review of all works completed since the beginning of the project, and a projection of work and monies needed for the following year. Most of these reports and accounts were kept in duplicate. For his work, the clerk received $50 a month in 1841 and $60 a month in 1843.

Samuel Cooper continued as clerk until he took over as superintendent of construction in 1847.

The ordnance-sergeant at Fort Washington during the 1840s was Joseph Cameron. Congress had established the rank of ordnance-sergeant on April 5, 1832, because there were not enough commissioned officers to handle the ordnance work. By this act, the Secretary of War was authorized to select sergeants of the line who had served in the army for at least eight years and had held the rank of non-commissioned officer for at least four of those years. The Secretary of War could appoint as many ordnance-sergeants as required but could assign only one to a post.[6] Sergeant Cameron was assigned to Fort Washington on July 1, 1835, and served at the post through 1872.[7]

Ordnance-sergeants were recommended by their company commanders. Their recommendations were reviewed by the colonel of the regiment and forwarded to the Adjutant General for the consideration of the Secretary of War. Officers recommending sergeants for the rank of ordnance-sergeant were cautioned to be "judicious" in their selections. An ordnance-sergeant was to be appointed on the basis of his

> general character as to fidelity and sobriety, his qualifications as a clerk, and his fitness for the duties to be performed by an ordnance sergeant.[8]

This care was taken because ordnance-sergeants held positions of responsibility, might have to act independently, and were to serve as models for the other enlisted men. Appointment as an ordnance-sergeant also was viewed as a reward for faithful service and was to serve as an inducement for good work by the other enlisted men. "Colonels and Captains cannot, therefore, be too particular in investigating the characters of the candidates . . . ."[9]

Ordnance-sergeants were permanently assigned to a post and could be transferred only by order of the Adjutant General. Sergeant Cameron, as noted, served for thirty-seven years at Fort Washington. The ordnance-sergeant was considered part of the non-commissioned staff and reported directly to the commanding officer of the post. He had to appear with his arms at all reviews and inspections.[10]

When the garrison was withdrawn, the ordnance-sergeant stayed on at the post. He then reported directly to the Adjutant General and kept him informed of his and the post's status by submitting a monthly report.[11]

The ordnance-sergeant's duties included the care and maintenance of the "ordnance, arms, ammunition, and other military stores at the post to which he may be attached . . . ."[12] He supervised the magazine and the supplies stored in it and any casemates used to house carts, carriages, or cannon. When the garrison was withdrawn, he was left in charge of all the property left behind.

These were the duties which Sergeant Cameron carried out. He oversaw Fort Washington's ordnance stores and, during the 1840s, the post's clothing, camp, and garrison equipment. When the garrison withdrew in 1853, he acted as guardian and caretaker until the troops returned in 1861. During his years at the post, Cameron also served, from time to time, as postmaster and lighthouse keeper. He lived in the non-commissioned officer's house off the path leading from the wharf to the main gate.[13]

In addition to the small staff detailed above, there was a crew of bricklayers, masons, plasterers, carpenters, painters, teamsters, and general laborers. Some were contracted for on a daily basis, others were hired by the job. Some of these workers were housed in the enlisted men's barracks.[14] The number of laborers at work on Fort Washington declined as the project neared completion. In October 1848, the work was completed and, according to the Annual Report of the Secretary of War for 1849, the post was turned "over to the line for occupation."[15]

1848-1853: In 1848, President James K. Polk redistributed the army's regiments and assigned one company of artillery to Fort Washington.[16] Company H, 1st United States Artillery, left their regimental headquarters at Fort Columbus, New York, on October 14 and arrived at Fort Washington on October 15. A detachment of Company F, 1st United States Artillery, left Fort McHenry on October 14 and also arrived at Fort Washington on the 15th.[17] The force sent to the post, as listed in the return of October 1848, included:

1 Captain
1 1st Lieutenant
2 2nd Lieutenants
1 Assistant Surgeon
1 Quartermaster

5 Sergeants
2 Drummers
2 Fifers
40 Enlisted Men[18]

The company officers were Captain George Nauman (Company F), 1st Lieutenant William H. Fowler (Company H), 2nd Lieutenant Jefferson C. Davis (Company F), 2nd Lieutenant Thornby S. Everett (Company H), and Assistant Surgeon J.H. Boyne.[19] Copies of the rosters of these and other companies stationed at Fort Washington, 1848-1872, are in the Site files.

The garrison remained the same for almost a year. On September 26, 1849, Company H left Fort Washington for Florida.[20] An additional detachment of Company F was then sent to the post as a replacement; twenty-eight men, along with 1st Lieutenant Seth Williams, arrived on October 2, 1849.[21] Company F remained at Fort Washington until October 28, 1850, when they, too, were withdrawn, leaving the post without a garrison until mid-December.[22]

Fort Washington was re-activated on December 12, 1850, when Company I, 4th United States Artillery, arrived from Baton Rouge Barracks.[23] (See roster in Site files.) The post returns for December included:[24]

1 Captain
2 1st Lieutenants
1 2nd Lieutenant
1 Surgeon
1 Assistant Surgeon
2 Sergeants
4 Corporals
1 Drummer
1 Fifer
1 Artificer
18 Enlisted Men on Duty
5 Enlisted Men on Extra Duty
2 Enlisted Men on Sick Call

The total complement was forty officers and men. Two officers--Captain John B. Scott, the commanding officer, and 2nd Lieutenant William A. Nimmo--arrived with the men.[25] The rest of the officers reported for duty later in the month: 1st Lieutenant John P. McCown (December 24), 1st Lieutenant Orlando B. Willcox (December 17), and Assistant Surgeon Lewis A. Edwards (December 16).

In January 1851, the post was reinforced by a detachment of Company F, 4th United States Artillery, Captain John C. Pemberton and seventeen men reporting for duty on the third with Lieutenant George H. Hazzard reporting on the fifteenth.[26] (See Site files for the roster of Company F.) Company F remained at the post until November 19, 1852, when they were transferred to Fort Hamilton, New York.[27]

Company I remained on duty at Fort Washington for another year.[28] They left Fort Washington for Fort Independence on October 10, 1853.[29] With the garrison gone, the post again became inactive, only Ordnance-Sergeant Joseph Cameron remaining to care for the fort.

During the period October 1848-October 1853 the quarters provided in the initial plan were adequate to house the garrison stationed at Fort Washington. The commanding officers--Captain George Nauman (October 10, 1848-October 28, 1850) and Captain John B. Scott (December 12, 1850-October 10, 1853)--would have resided in the commanding officer's quarters opposite the main gate. The company officers and the assistant surgeon would have been housed in the officers' quarters inside the fort.

Because the garrison was small, the men should have been billeted comfortably in the enlisted men's barracks. The squadrooms, designed to sleep sixty men, were sufficient for the troops of the 1st and 4th

United States Artillery stationed at Fort Washington from 1848 through 1853. While the upper floor provided sleeping quarters, one-half of the lower floor served as both kitchen and mess room and the other half as a hospital.

1861-1865: Preparations for civil war in the months immediately preceding the formal call to arms, in April 1861, created an urgency at Fort Washington that had not existed before. The war brought new troops in greater numbers to the post and with them a large turnover in the officer corps. Troops moved in and out of Fort Washington with some frequency during these years.

The secession of South Carolina and the seizure of Fort Moultrie, Castle Pinckney, and the Charleston Arsenal in December 1860 showed the vulnerability of federal fortifications in the southern states. This was again demonstrated in January 1861 when five other southern states seceded from the Union and began to take over the forts and arsenals lying within their boundaries. Fort Washington faced these same dangers; it was in a state with a large slave population and a large secessionist following, and it was an obvious target since it provided the only defense of the national capital.

Whether there was a real danger or whether he was responding to the rumors which were prevalent, Ordnance-Sergeant Cameron asked that troops be sent to man Fort Washington.[30] In response to Cameron's request and to events in the South, a detachment was sent to the post on January 6, 1861. Captain Algernon S. Taylor and forty United States Marines were dispatched to Fort Washington from the Navy Yard in the city of Washington, to hold the fort until an artillery unit could be sent.[31]

When Captain Taylor and the Marines arrived, the fort was ill-prepared to protect itself, let alone the nation's capital. On January 16, Captain Taylor pointed out the danger to his commanding officer, Colonel John Harris:[32]

> I presume that the object of the Government garrisoning this post at this time is to hold and retain possession of it in case of its being attacked. I therefore feel, in consequence of its defenseless and pregnable position, to request a re-enforcement. It is the opinion of Lieutenant [G.W.C.] Lee, of the Engineers, who is now here professionally, that 150 tolerably organized men could enter the place agains the force now here.

He also noted that while Lieutenant Lee was preparing some of the embrasures to mount the flanking howitzers, he had insufficient men to protect all points of entry into the fort. Additional troops were required at Fort Washington, particularly since the Marines had been assigned to the post for only fifteen days--until January 19.[33] When replacements were not immediately available, however, the Marines were kept at the post.

On January 25, 1861, 1st Lieutenant Delavan D. Perkins, 4th United States Artillery, and fifty recruits left Fort Columbus, New York, bound for Fort Washington.[34] Lieutenant Perkins and his men arrived at the post on January 26 and relieved Captain Taylor and the Marines.

The Company of Recruits would have been quartered in the enlisted men's barracks and Lieutenant Perkins may have taken over the commanding officer's quarters. Lieutenant Charles A. Reynolds, 9th United States Infantry, who accompanied Perkins, and 1st Lieutenant Thomas B. Echline, 7th United States Infantry, who arrived on the 31st, would have shared the officers' quarters.[35] The post chaplain,

Reverend Matthias Harris, of the Protestant Episcopal Church, and the surgeon, Dr. James Simmons, may also have shared these quarters when they arrived on post.[36]

There was a real concern about the safety of Fort Washington during these early months and Lieutenant Perkins was warned to "Guard vigilantly against surprise or violence which may be apprehended from lawless out breaks."[37] In addition to keeping a sharp watch for the enemy, Perkins began to put the fort in military order.

The post received additional support and a new commanding officer when Captain Joseph A. Haskin and Company D, 1st United States Artillery, arrived on April 15.[38] Lieutenant Perkins was then reassigned to the command of the Company of Recruits. Haskin's arrival with his troops occurred the day after the fall of Fort Sumter and President Abraham Lincoln's call to arms.

Among the first to respond to Lincoln's call were the Logan Guards of Lewistown, Pennsylvania, and the Washington Artillerists of Pottsville, Pennsylvania.[39] These two units, along with three other Pennsylvania volunteer companies--the Ringgold Light Artillery of Reading, the Allen Infantry of Allentown, and the National Light Infantry of Pottsville--reached Harrisburg on April 16-17. On the morning of the 18th they were mustered into service and sent to the city of Washington.[40]

In response to Captain Haskin's request for reinforcements, the Logan Guards and Washington Artillerists were sent to Fort Washington on April 30.[41] The day's events were noted by Sergeant Valentine Stichter of the Washington Artillerists:[42]

> Orders at 1 o'clock to proceed to Fort Washington; in half an hour all prepared for the march and on our way; 1.30 o'clock arrived at Navy Yard; boarded the steamer Philadelphia seized by the Government; passed Alexandria, Palmetto flag floating over the city; the dock was commanded by the rebels with two brass six-pounders; prepared for an attack with 32-pound shells on steamer; arrived at Fort Washington at 6.30 o'clock; packed in a small house with Logan Guards.

Quarters obviously were cramped at Fort Washington with the arrival of the two Pennsylvania volunteer companies. At the end of April the fort's complement included:[43]

4th United States Artillery Staff	:	1 officer	1 man
1st United States Artillery, Company D	:	1 officer	42 men
Company of Recruits	:	1 officer	45 men
Logan Guards	:	4 officers	83 men
Washington Artillerists	:	3 officers	120 men

Together they totaled 10 officers and 291 men for a post built with quarters for five officers and 60 men.

Where the officers were quartered is not known. With the arrival of the Pennsylvania companies the post officers were:[44]

Joseph A. Haskin	Captain	1st U.S. Artillery
James A. Simmons	Surgeon	Medical Department
John Selheimer	Captain	Logan Guards
James Wren	Captain	Washington Artillerists
Delevan D. Perkins	1st Lieutenant	4th U.S. Artillery, Co. E
John Edwards, Jr.	1st Lieutenant	3rd U.S. Artillery, Co. B
David A. Smith	1st Lieutenant	Washington Artillerists
Thomas M. Hulings	1st Lieutenant	Logan Guards
Robert W. Patton	2nd Lieutenant	Logan Guards
Francis R. Sterrett	3rd Lieutenant	Logan Guards
Philip Nagle	3rd Lieutenant	Washington Artillerists
Matthias Harris	Chaplain	Civilian

As noted in Stichter's diary, the two Pennsylvania companies were lodged together in a small house, not identifiable. These arrangements were temporary, however. On May 2, the Washington Artillerists "Prepared the quarters in the water battery. Put in floors and tables. . . . Moved to quarters in water battery."[45] Even this was not quite satisfactory and there was "Great dissatisfaction among the men."[46] Perhaps the alteration in the sleeping accommodations and the construction of an "upper tier" helped.[47] Their quarters may have been in a new building, the one later known as the storehouse, or they may have been an adaptation of the stables. While the Washington Artillerists were billeted in quarters in the water battery, the Logan Guards were billeted in quarters on the hill outside of the fort.[48]

In May 1861, there was a reorganization of the volunteer units serving in the Union army. The five Pennsylvania companies known as the "First Defenders," which included the Logan Guards and Washington Artillerists, were part of this reorganization. Because they had more men than permitted by Army Regulations, they were reformed into seven companies, and with the addition of three other companies, became the 25th Pennsylvania Volunteer Infantry. The Washington Artillerists became Company H, the Logan Guards became Company F, and a new company--Company E--was formed by taking fifty-four men from the Washington Artillerists and seventeen men from the Logan Guards.[49]

With this reorganization came a reshuffling of quarters ("Comp B moved to our old quarters on the hill.") and of officers.[50] In addition to the changes made with the volunteers, Lieutenant Perkins was transferred to Army Headquarters and Lieutenant Reynolds took his place as commander of the Company of Recruits. Surgeon Simmons was replaced by Dr. Samuel A. Storrer.[51]

The members of the 25th Regiment of Pennsylvania Volunteer Infantry had enlisted for ninety days from the date of their mustering in as Logan Guards or Washington Artillerists--April 18. Their enlistments were to expire on July 17, an event they looked forward to with some anticipation in the second week of July. When the 17th came and went with no sign of reinforcements or of transportation to take them away, the men became, in Captain Haskin's words, "very much dissatisfied."[52] The preparations for and the First Battle of Bull Run (First Manassas) had delayed their departure. Finally, on July 24, the steamer Philadelphia, the same ship that had brought them to Fort Washington, arrived to take them away. They departed at 7:30 that evening.

With the departure of the officers and men of the Pennsylvania Volunteers, the garrison was reduced to Company D, 1st United States Artillery, and the Company of Recruits. The officers' corps included Haskin, Reynolds, and Storrer, plus 2nd Lieutenant Lorenzo Thomas, Jr. During the period from April to December 21, 1861, when Company D was stationed at Fort Washington, 106 enlisted men served with the company--but not all at the same time.[54]

During the first year of the war, Fort Washington was deemed too important to leave undermanned for long. After the Union commanders had recovered from Bull Run and felt the danger of a Confederate push on the city of Washington had abated, they sent reinforcements to Fort Washington from lines closer to the city. On August 5, Company I, 37th New York Volunteers (75 men aggregate), were transferred from a camp near Alexandria, Virginia, to Fort Washington.[55] They were followed on August 10 by Company H, 37th New York Volunteers (81 men aggregate), who were transferred from guard duty at Long Bridge, city of Washington.[56]

The 37th New York Volunteers had been mustered in for two years of service on June 7, 1861. The officers of the companies posted at Fort Washington were:[57]

William T. Clark	Captain	Company I
Luke A. Harmon	Captain	Company H
George W. Baillet	1st Lieutenant	Company I
John R. McConnell	1st Lieutenant	Company H
Constant S. Trevitt	2nd Lieutenant	Company I
Patrick H. Jones	2nd Lieutenant	Company H

The 37th New York Volunteers, Company H and I, remained at Fort Washington until April 1862. During their stay they continued the effort to strengthen the fort's defenses. Additional cannon were mounted, trees were cut down, and an abatis was piled up to provide an extra measure of defense.

During the last quarter of 1861, Company D, 1st United States Artillery, was reinforced and reorganized.[58] First Lieutenant William M. Graham, 2nd Lieutenant Hardman P. Norris (both of Company D), and 2nd Lieutenant William L. Haskin joined the 1st United States Artillery at Fort Washington.[59] In October, the Company of Recruits (two officers and thirty-nine enlisted men) was assigned to the 1st Artillery.[60] This may have been in preparation for the transfer of the 1st Artillery to Key West, Florida, on December 21.[61] Colonel Charles S. Merchant, 4th United States Artillery, who had assumed command on December 17, was left in charge of the post then garrisoned by the 37th New York Volunteers.[62]

Fort Washington was made the regimental headquarters for the 4th United States Artillery in 1862. The regimental band (a band leader and eleven bandsmen) was re-assigned from Fort McHenry and arrived at Fort Washington on February 13, 1862.[63]

The next major troop realignment at Fort Washington came in April 1862 when the officers and men of Companies H and I, 37th New York Volunteer Infantry, left Fort Washington to rejoin their regiment at Fort Monroe.[64] On the 15th, the day they left, ninety-seven officers and men of the 9th New York Independent Battery of Light Artillery arrived to take their place. With the arrival of the 9th New York, the post's complement was 123 officers and men.[65]

The 9th New York Independent Battery was mustered into service as Company F in the DeKalb Regiment (41st New York Volunteers) on June 6, 1861. Their enlistment was for three years or the duration of the war, if shorter. Company F was redesignated the 9th New York Independent Battery and detached from the regiment on leaving New York. The 9th served its entire tour of duty in the defenses of Washington. It was involved in no engagements (four men died from disease) and the unit was mustered out on January 13, 1864.[66]

The 9th New York Independent Battery was a German-speaking outfit and the officer corps reflected the same background:[67]

Adelbert von Morozowicz	Captain
Ernest von Woyna	1st Lieutenant
George Kahlert	2nd Lieutenant
G.L. Goetz	2nd Lieutenant
Emil Schubert	1st Lieutenant (promoted Captain)

Language problems had prompted General Order 45 (July 19, 1861) which stated: "In the future no volunteer will be mustered into the service who is unable to speak the English language."[68] This directive was modified by General Order 51 (August 3, 1861) to permit the enrollment of regiments or companies of foreign nationality "in which men and officers speak the same tongue."[69] General Order 45 was re-

pealed five days later by General Order 53 (August 8, 1861) with the warning that volunteers should enlist under officers whose language they spoke and understood.[70] None of these directives helped the commander of a post who found himself in charge of a new unit in which neither the men nor the officers spoke English.

Even with these difficulties, the 9th New York remained at the post through 1862 and into 1863. The only change in the officer corps during this period was the replacement of the Surgeon, Dr. Storrer, by Dr. John H. Bayne.

The 9th New York remained in garrison at Fort Washington until March 6, 1863, when they were relieved and left for Fort Pennsylvania.[71] The same day the 16th Indiana Battery, Light Artillery, arrived with four officers and 111 men.[72]

The 16th Indiana was mustered into service at Indianapolis on March 24, 1862 for a three-year enlistment.[73] First Lieutenant Charles R. Deming (company commander), 1st Lieutenant Cladius C. Dutiel, 2nd Lieutenant Benjamin R. Livermore, and 2nd Lieutenant S.M. Wilson made up the officer corps.[74] The 16th Indiana remained at Fort Washington for a little more than a year with a complement that reached 125 in December 1863.[75] During these months a number of recruits arrived to replace those whose time had expired or who had left for other reasons.[76]

The garrison received some additional support when the Invalid Company, 4th United States Artillery, was assigned to Fort Washington in October 1863.[77] The Invalid Company was composed of disabled men who had been discharged from the hospital; they carried out noncombatant activities such as guard duty.[78] When they first arrived on post,

the Invalid Company consisted of sixteen men on regular duty, four on extra duty, and seven on sick call. The Invalid Company at Fort Washington fluctuated between twenty-seven and thirty-eight men during 1863.[79]

The officer corps at Fort Washington underwent several changes before the end of 1863. Deming was promoted to captain and Livermore was made a 1st lieutenant on May 1, 1863.[80] Second Lieutenant John S. Patton reported to the battery as a result of the vacancy these promotions created; he arrived in November.[81] A change of command also took place. On August 30, 1863, Colonel Charles S. Merchant was transferred and Captain Deming, of the 16th Indiana, was placed in charge.[82] Deming held command for about two weeks until Colonel Horace Brooks, 4th United States Artillery, arrived on September 10, 1863.[83]

On May 16, 1864, the 16th Indiana Battery was transferred and left the post.[84] Company A, 1st Maine Coast Guard, arrived on May 18 to serve as their replacement.[88] The 1st Maine Coast Guard had been mustered into service for three years on March 18, 1864 at Belfast, Maine.[86] Company A--three officers (Captain Charles Barker, 1st Lieutenant Charles A. Barker, and 2nd Lieutenant G.R. Hastings) and eighty-four men--were detached from the regiment and assigned to garrison Fort Washington.[87] Company A, 1st Maine Coast Guard, remained at Fort Washington for a year and a day. They left the post on May 19, 1865, and were mustered out of service on May 25, 1865.[88]

When the Maine Coast Guard left Fort Washington the war had ended and the volunteer army had begun the process of demobilization. The remainder of the year saw a succession of units passing through the fort on their way to being mustered out.

The unit that replaced Company A, 1st Maine Coast Guard, was the 1st Independent Ohio Battery.[89] The 1st Ohio Battery had participated in a number of skirmishes in West Virginia, in the Battle of Antietam, and in the Valley campaign.[90] In July 1864, the Battery's equipment was declared "unfit for further service" and it turned in its "delapidated guns and accoutrements." They were subsequently assigned to the Artillery Reserve Division at Harpers Ferry and, after the fall of Richmond, were assigned to the Department of Washington.

When the 1st Independent Ohio Battery reached Fort Washington in May 1865, the battery had five officers and 118 men on active duty, 13 on extra duty, and 8 on sick call; a total of 139 enlisted men.[91] The 1st Independent Ohio were just passing through, however; they stayed at Fort Washington for less than one month.

When Colonel Brooks learned that the Ohioans were to depart he reported that this would leave him with only a skeletal force at the post.[92] He would have two commissioned officers and twenty-seven men as part of the 4th United States Artillery Staff and Band, ten privates in the Invalid Company, thirty-four men attached to the post, one surgeon, and one chaplain. Of the forty-four enlisted men, Brooks noted that only one was fit for duty, the others were on sick call or on daily duty.

But Fort Washington was not to be left unmanned. When the 1st Independent Ohio Battery left the fort on June 18, 1865, Company G, 3rd United States Artillery, garrisoned the post.[93] The roster for June 1865 showed Company G with a strength of two officers (1st Lieutenant H.C. Cuyler, company commander, and 2nd Lieutenant James D. Burbank) and seventy-five enlisted men on active duty, seven on extra duty, and sixteen on sick call: a complement of one hundred men.[94] The

3rd Artillery also were just passing through and stayed less than a month. Their brief tour of duty at Fort Washington ended on July 10, 1865.[95]

Company G's replacement had arrived the day before they departed. On July 9, 1865, Company D, 1st Vermont Heavy Artillery, reported to Fort Washington. Company D was a composite unit made up of men waiting to be mustered out of service. Captain H.J. Nichols was the company commander with A.S. Fleury, H.D. Morrill, S.L. Dagget, and H.P. Corse as his lieutenants.[96] Captain Nichols led his company into the fort at a time when sickness and disease were prevalent along the Potomac. Of his ninety-two men, sixty-nine were fit for duty, seven were on extra duty, and sixteen were on sick call; 1st Lieutenant H.P. Corse died of apoplexy while at the post.[97]

The 1st Vermont Heavy Artillery's Company D stayed for a little more than a month, departing on August 12, 1865.[98] Their replacement, Company H, 1st Maine Heavy Artillery, arrived on the 11th.[99] The 1st Maine Regiment of Heavy Artillery had had quite a military career before arriving at Fort Washington.[100] The unit had lost more men killed and wounded than any other Union regiment. Frederick H. Dyer notes that the 1st Maine Regiment lost twenty-three officers and 400 men killed in action and another 260 men due to disease. A large number of these had fallen at Petersburg on June 18, 1864, where 635 men were killed and wounded out of a complement of 900. After the fighting had ended, the unit took part in the Grand Review in Washington on May 23, 1865; those men whose enlistments were to expire in August were then mustered out. The recruits and officers recently promoted from the 3rd, 4th, 17th, and 19th Maine Regiments were consolidated with the 1st Maine Regiment of Heavy Artillery and were posted to the forts around Washington.

The troops knew that they were marking time until they were mustered out. Horace Shaw's description of Company D's duty in the Washington defenses would have applied equally well to the other units which had passed through after April 1865:[101]

> Our duties here were the routine duties of the camp and the caring for and turning over to the Government of the immense mass of military property and stores which were no longer required. There was little of incident to record during our stay in this service. Most of the officers and men were anxious to get home to their families and friends. They were no longer inspired by a feeling of patriotism sufficient to make sacrifices without complaint. There were some desertions and some resignations by worthy officers.

Company H was fortunate; they, too, stayed for less than one month. Captain Hudson Saunders and 1st Lieutenant F.M. Paine led the men of the 1st Maine out of Fort Washington on September 9, 1865; they were mustered out of service on the 11th.[102]

After the departure of the 1st Maine Regiment of Heavy Artillery, Fort Washington was once again garrisoned by regular troops. By the fall of 1865, most of the batteries of the 4th United States Artillery had been dismounted and these units distributed among the coastal forts.[103] Companies C and E were assigned to Fort Washington and arrived on September 9 to replace the departing men from Maine.[104] Company E stayed on post until September 24, 1865, when they left for Fort Foote; Company C departed on November 17 for Fort Whipple.[105]

Companies C and E were replaced, in turn, by Company A, 4th United States Artillery, thus ending the revolving door policy at Fort Washington during the last months of 1865. Between May and December 1865, there had been an almost monthly exchange of garrison troops.

During these eight months, four volunteer units had come and gone and four companies of regular army units had made their appearance. As 1865 came to a close, life at Fort Washington began to revert to its prewar placidity.

1866-1872: The year 1866 began with a major alteration in the garrison at Fort Washington. On January 4, the 4th United States Artillery Field Staff and Band were transferred to Fort McHenry and Colonel Horace Brooks, who had been in command since September 10, 1863, left the post.[106] The garrison was reduced to Ordnance-Sergeant Cameron and Company A, 4th United States Artillery.

The command at Fort Washington changed five times during 1866.[107] When Colonel Horace Brooks departed, 1st Lieutenant Rufus King, Jr., 4th United States Artillery, assumed command. On February 9, 1st Lieutenant J.M. Stephenson, 4th United States Artillery, arrived on post and took over as the commanding officer. Where he was in command, Captain Evan Thomas and Lieutenants Rufus King and Howard B. Cushing were placed under arrest, court-martialed for absence without leave and suspended from rank and pay for one year dating from April 15. The command was transferred again on April 23 when 1st Lieutenant J.B. Campbell, 4th United States Artillery, arrived at Fort Washington and relieved Stephenson. Campbell retained command until July 23 when he, in turn, was relieved by 1st Lieutenant H.H. Huntington. The last change in command in 1866 took place in October when Captain Fred M. Follett and Company D, 4th United States Artillery, were transferred to Fort Washington; Follett took over on October 27.[108]

When Company D arrived from Reynolds Barracks, city of Washington, Captain Follett brought with him two officers (Arthur Morris of Company D and G.B. Rodney of Company I) and eighty enlisted men.[109]

Fort Washington's complement in October 1866 included the eighty men of Company D and seventy-two men of Company A.[110]

During 1867 there were several changes in the officer corps and the troops stationed at Fort Washington. The three suspended officers were returned to active duty: Captain Evan Thomas in January, Lieutenant King in April, and Lieutenant Cushing in May.[111] The post chaplain, John L. Elliott, who had served at the post since April 1864, was transferred on August 31, 1867; he died in Washington on March 12, 1868.[112] Company D left Fort Washington for Fort McHenry on August 29, 1867.[113] Their replacement, Company M, 4th United States Artillery, left Buffalo, New York, on the 29th and arrived on post on August 31, 1867. This realignment of troops also brought a new commanding officer, Captain John Mendenhall. The complement at the post in August 1867 was:

Company A:	3 officers, 48 men on active duty, 24 men on extra duty, 10 men sick, and 3 men under arrest
Company M:	3 officers, 59 men on active duty, 6 men on extra duty, 8 men sick, and 10 men under arrest
Casually at post:	1 extra duty man and 35 men under arrest

The officer corps consisted of:[114]

Captain John Mendenhall	Commanding Officer and CO	Company M
Captain Evan Thomas	CO	Company A
1st Lieutenant Rufus King, Jr.	Post Adjutant and Treasurer	Company A
1st Lieutenant J.N. Waite		Company M
2nd Lieutenant H.B. Cushing	Post Quartermaster and ACS	Company A
2nd Lieutenant William F. Stewart		Company M
John L. Elliott	Post Chaplain	
T.H. Hill	Acting Assistant Surgeon	

There was a shuffling of officers in and out of the post during the rest of 1867 and through 1868. The next major change in the officer corps came with the replacement of Captain John Mendenhall as commanding officer. On June 12, 1868, Major Albion P. Howe, 4th United States Artillery, assumed command at Fort Washington. Howe remained in command until Fort Washington was abandoned in 1872.[115]

Although there was some movement of officers and men, the complement at the fort remained fairly stable during 1869 and 1870. In January 1869 the garrison included:[116]

	Officers	Active Duty	Extra Duty	Sick	Arrest	Total
General Staff	2	3				5
Company A	4	40	16	4	6	70
Company M	4	45	10	3	1	63

In January 1870, the garrison was:[117]

	Officers	Active Duty	Extra Duty	Sick	Arrest	Total
Company A	1	40	11	6	2	60
Company M	3	17	10	1	1	32

Companies A and M, 4th United States Artillery, remained on duty at Fort Washington until July 1870. On July 29, both companies were transferred to Raleigh, North Carolina. Company A did not return to the post but Company M was sent back to Fort Washington in September.[118]

In January 1871, Major Howe had two lieutenants and fifty-seven men.[119] This complement remained fairly constant through 1871 and 1872. In March 1871, there were fifty-one men at Fort Washington; in January 1872, fifty-eight men.[120]

Fort Washington had more than enough quarters for the men stationed on post after 1866. Company M had been housed in the new quarters outside of the old fort when Company A was still garrisoned there. Company M may have kept these quarters until they left in 1872; the old enlisted men's quarters would have been unused. The officers had new quarters behind the commanding officer's quarters. Because these were in poor condition by 1872, some of the officers may have been billeted inside the fort in the old officers' quarters.

A flurry of activity preceded the abandonment of Fort Washington. On June 18, 1872, Company F, stationed at Fort Foote, and Company M changed posts.[121] Company M boarded the steamer Alice at 2:45 p.m. and sailed up the river to Fort Foote, arriving at 4 p.m. The troops disembarked and Company F marched on board. By the time the exchange had taken place it was late at night; Alice pulled out at 11 p.m. and arrived at Digges Point at midnight. Company F made Fort Washington their home for only a short time. On September 16, 1872, they left the post, which was then withdrawn from active service and turned over to the Corps of Engineers.[122]

Footnotes: The Garrison

1. Captain Fred A. Smith to Colonel Joseph G. Totten, September 24, 1841, RG 77, Entry 13, Office of the Chief of Engineers, Letters Received, Volume 6, NA.

2. Ibid.

3. Ibid.

4. Captain Fred A. Smith to Colonel Joseph G. Totten, September 30, 1845, ibid., Volume 7.

5. The report on the clerk's activities is detailed in Smith to Totten, October 22, 1843, ibid.

6. War Department, Revised Army Regulations for the Army of the United States, 1861 (Philadelphia: J.B. Lippincott, 1861), p. 24. (Hereafter cited as Rev. Army Regs., 1861.)

7. Captain Henry A. Huntington to Colonel Joseph H. Taylor, September 7, 1866, RG 393 (Old Book 437), pp. 251-52, NA; Sergeant Joseph Cameron to Major General Thomas S. Jesup, December 7, 1841, QM Corr. File. Cameron was born in Henry County, Virginia on April 19, 1790, and died at Fort Washington on March 22, 1873.

8. Rev. Army Regs., 1861, p. 25.

9. Ibid., p. 26.

10. Ibid., pp. 25-27.

11. Ibid., p. 27.

12. Ibid., p. 26.

13. Ibid.

14. Sergeant Joseph Cameron to Major General Thomas S. Jesup, December 7, 1841, QM Corr. File.

15. Secretary of War, Annual Report, 1849, p. 217.

16. Secretary of War, Annual Report, 1848, pp. 178-79.

17. Fort Washington Post Return, October 1848, Microfilm 617, Reel 1383, NA. (Hereafter cited as FW Post Returns.)

18. Ibid.

19. Commissioned Officers Present and Absent, FW Post Returns. (Hereafter cited as Commissioned Officers.) See also March 1849. In September 1849, Lieutenant Jefferson C. Davis took over the duties of Acting Assistant Quartermaster and Acting Commissary of Supplies.

20. FW Post Returns, September 1849.

21. Ibid., October 1849. Seth Williams was made ACS and AAQM; he left the post on September 5, 1850.

22. FW Post Returns, October 1850.

23. Ibid., December 1850.

24. Ibid.

25. Commissioned Officers, December 1850.

26. FW Post Returns, October 1850; Commissioned Officers, January 1850.

27. FW Post Returns, November 1852.

28. Ibid.; Commissioned Officers, February 1853 and September 1853. In November, the company complement was two officers and 47 men on active duty at the post. The officer corps of Scott, Willcox and Nimmo remained the same until 1853 when 1st Lieutenant James Holmes (February 3) and 2nd Lieutenant Richard B. Duryea (September 30) arrived.

29. FW Post Returns, October 1853.

30. Lieutenant M.D. McAlester, January 9, 1861, "Measures for the Defense and Inspection Trip," (M-3731), Fort Washington Research File.

31. Secretary of War, Annual Report, 1861, p. 99; Captain Joseph A. Haskin to J.F.K. Mansfield, Commissary Department, May 3, 1861, RG 393, Entry 1329, Letters Sent, 1861-66, NA.

32. Captain Algernon S. Taylor to Colonel John Harris, January 16, 1861, The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies (Washington: Government Printing Office, 1897), Ser. I, Vol. LI (pt. 1), p. 313. (OR)

33. Colonel John Harris to Isaac Toucey, Secretary of the Navy, January 18, 1861, ibid. See also, Lieutenant G.W. Custis Lee to General Joseph Totten, April 25, 1861, (L-1783), Fort Washington Research File.

34. FW Post Returns, January 1861.

35. Commissioned Officers, January 1861.

36. Ibid., and February 1861.

37. FW Post Returns, January 1861.

38. Commissioned Officers, April 1861.

39. The history of the "First Defenders" is detailed in Thompson, First Defenders; Willis R. Copeland, The Logan Guards of Lewistown, Pennsylvania (Lewiston, Pennsylvania: Mifflin County Historical Society, 1962); Graville Fenald, The Story of the First Defenders (Washington, D.C.: Clarence E. Davis, 1892).

40. Thompson, First Defenders, pp. 12-14, Bates, History of Pennsylvania Volunteers, pp. 5-7.

41. Bates, History of Pennsylvania Volunteers, pp. 7-8; Thompson, First Defenders, pp. 19-20; Captain Joseph A. Haskin to Captain Thomas Talbot, RG 393, Entry 1329, Letters Sent 1861-66. Haskin noted the need for men to remove the trees that had grown up around the fort. Talbot sent an initial rejection (April 23, 1861), RG 393, Entry 1329, Letters Sent, 1861-66, NA.

42. Thompson, First Defenders, p. 102. Valentine Stichter's diary is on pp. 101-11.

43. FW Post Returns, April 1861.

44. Commissioned Officers, April 1861.

45. Thompson, First Defenders, p. 102.

46. Ibid.

47. Ibid.

48. Copeland, First Defenders, p. 32.

49. Ibid., p. 21; General Joseph F.K. Mansfield to Captain Joseph A. Haskin, June 3, 1861, RG 393, Entry 1329, Letters Received, 1861-65, NA.

50. Ibid., p. 105.

51. Commissioned Officers, April 1861.

52. Captain Joseph A. Haskin to Captain Thomas Talbot, July 21, 1861, RG 393, Entry 1329, Letters Sent, 1861-66, NA.

53. Thompson, First Defenders, p. 110; FW Post Returns, July 1861.

54. Regimental Description Book, 1st United States Artillery, Cos. A-F, RG 391, Entry 21, 1851-64, NA.

55. FW Post Returns, August 1861.

56. Ibid.

57. Commissioned Officers, August 1861.

58. FW Post Returns, October 1861.

59. Commissioned Officers, September 1861.

60. Post Order 69; FW Post Returns, October 1861.

61. Ibid., December 1861.

62. Commissioned Officers, December 1861.

63. FW Post Returns, February 1862.

64. Ibid., April 1862.

65. Ibid., June 1862.

66. Frederick Dyer, A Compendium of the War of the Rebellion (New York: J. Thomas Yoseloff, 1959), III, p. 1398.

67. Commissioned Officers, April-May 1862, January 1863.

68. General Orders: 1861 (1-111).

69. Ibid., n.p.

70. Ibid., n.p.

71. FW Post Returns, March 1863.

72. Ibid.

73. Report of the Adjutant General of the State of Indiana (Indianapolis: Alexander H. Conner, 1869), p. 427.

74. Commissioned Officers, March 1863.

75. FW Post Returns, December 1863.

76. Report of the Adjutant General of...Indiana, pp. 746-51.

77. FW Post Returns, October 1863.

78. Stewart Brooks, Civil War Medicine (Springfield, Illinois: Charles C. Thomas, 1966). See also 1st Lieutenant Edwin Seely to ?, March 18, 1865, Post Orders: Letters Sent, 1865-72; and OR, Series III, Vol. III, p. 583, 691-92. It was discontinued in June 1863.

79. FW Post Returns, December 1863.

80. Report of the Adjutant General of...Indiana, p. 427.

81. Commissioned Officers, November 1863.

82. Ibid., August 1863.

83. Ibid., September 1863.

84. FW Post Returns, May 1864. They subsequently took part in the repulse of Jubal A. Early's attack on July 11-12, 1864 (Dyer, Compendium, II, p. 116).

85. FW Post Returns, May 1864.

86. William E.S. Whitman and Charles S. True, Maine in the War for the Union: A History of the Part Borne by Maine Troops (Lewiston: Nelson Dingley, Jr. & Co., 1865), p. 596.

87. FW Post Returns, May 1864; Commissioned Officers, May 1864.

88. FW Post Returns, May 1865; Maine in the War, p. 596.

89. FW Post Returns, May 1865.

90. Whitelaw Reid, Ohio in the War: Her Statesmen, Her Generals, and Soldiers (Cincinnati: Moore, Wilstack & Baldwin, 1868), pp. 828-29; Dyer, Compendium, III, p. 1487.

91. FW Post Returns, May 1865.

92. Colonel Horace Brooks to Captain R. Chandler, AAG, June 16, 1865, RG 393, Entry 1329, Letters Sent, 1861-66, NA.

93. FW Post Returns, June 1865.

94. Ibid.

95. Ibid., July 1865.

96. Commissioned Officers, July 1865.

97. FW Post Returns, July 1865; Commissioned Officers, July 1865.

98. FW Post Returns, August 1865.

99. Ibid.; Commissioned Officers, August 1865.

100. Dyer, Compendium, III, p. 1216.

101. Horace H. Shaw, The First Maine Heavy Artillery, 1862-1865 (Portland, Maine: n.p., 1903), p. 200.

102. Ibid., p. 201.

103. Ibid.; Dyer, Compendium, III, p. 1216; Theodore F. Rodenbaugh and William L. Haskin, The Army of the United States: Historical Sketches of Staff and Line with Portraits of Generals-In-Chief (New York: Maynard & Co., 1896), p. 372.

104. FW Post Returns, September 1865.

105. Ibid. See also November 1865.

106. FW Post Returns, January 1866; Commissioned Officers, January 1866.

107. Commissioned Officers, March, April, July, and October 1866.

108. Ibid., January and February 1867.

109. Ibid., October 1866.

110. FW Post Returns, October 1866.

111. Commissioned Officers, January, April, and May 1867.

112. Ibid., April 1864, June 1867, and March 1868.

113. FW Post Returns, August 1867.

114. Commissioned Officers, August 1867.

115. Ibid., June 1868, September 1872.

116. FW Post Returns, January 1869.

117. FW Post Returns, January 1870.

118. FW Post Returns, July 1870, September 1870.

119. FW Post Returns, January 1871.

120. FW Post Returns, March 1871.

121. FW Post Returns, July 1872.

122. FW Post Returns, September 1872. There is a question whether or not Joseph Cameron remained at Fort Washington as the Ordnance-Sergeant. Edward Kelly is listed in an 1870 Post Return as the Ordnance-Sergeant at Fort Washington. Joseph Cameron was still on post however. He had re-enlisted in 1870 at age 76; he died at Fort Washington on March 22, 1873.

III: HOUSING THE GARRISON

Nineteenth-century forts were designed to be defensible and self-sustaining until the enemy gave up and retired from the attack or until reinforcements reached the fort. Whether manned by local militia or a permanent (or semi-permanent) garrison, shelter and support facilities had to be provided. These were some of the factors which had to be considered in planning the buildings at Fort Washington.

Until the Civil War, post life at Fort Washington was centered within the fort walls and the ravelin. Outside of these defensive works there were only three structures--the commanding officer's house, a frame dwelling for a junior officer, and a non-commissioned officer's house.[1] The original plan was to house the garrison in two structures within the fort. One was a two-story enlisted men's barracks to house sixty men. The other was the company officers' quarters, designed to house four officers. The fort walls also enclosed two wells, four cisterns to catch rain water, two magazines, and a guardroom on either side of the main entry into the fort. (One of these rooms was listed as an "Office" on the 1821 plan but as a "Guard room" on that drawn in 1823.) The casemates were designed to mount cannon, with the exception of the two casemates behind one of the guardrooms, which were designated in 1823 as "Dungeon." The ravelin in the same plan enclosed a magazine, a smith's forge, a stable, and two guardrooms, in addition to emplacements for guns. Later additions to the gatehouse and the construction of a shot furnace did not change the focus of life at Fort Washington.

During the 1860s, the number of buildings at the post increased because of the impact of war and the requirements of a larger garrison. A commissary storehouse and a general storehouse were built inside

the fort. By 1870 the ravelin contained a quartermaster's storehouse and saddler's shop, in addition to the buildings completed under the original fort plan. A boathouse was erected on the wharf and an additional guardhouse was constructed nearby.

During the latter part of the Civil War, the post expanded beyond the defensive walls of the fort and the ravelin. To the north and northeast of the commanding officer's quarters a complex of buildings was erected: a new barracks for enlisted men, three double houses for officers' quarters, a chapel (which also served as a schoolhouse), laundresses' quarters, a hospital, hospital steward's quarters, and a post bakery (see Illustration 4). After the war a larger part of daily life was conducted outside of the fort. In reviewing the post life at Fort Washington, it is not feasible to isolate the activities and use of buildings in the fort proper from the structures and activities in the ravelin and, after 1863, with those to the north of the fort. The uses to which buildings and individual rooms were put varied not only with the number of men in the garrison but also with the availability of new structures.

While all of the structures at Fort Washington will be briefly reviewed to provide background information and perspective, the structures which are the focus of this report will be discussed first and in greater detail.

Structures at Fort Washington During the Period 1840-1872

Fort:

- Gatehouse (including Guard Rooms, Post Commander's Office, and Adjutant's Office)
- Casemates
- Officers' Quarters
- Enlisted Men's Quarters
- Powder Magazines
- Shot Furnace
- Commissary Storehouse
- Commissary Store Room

Ravelin:	Stable Quartermaster's Storehouse Magazine Blacksmith's Shop Shot Furnace Saddler's Shop
Wharf:	Boathouse Guardhouse Lighthouse
East:	Bakehouse Non-commissioned Officers' House/Post Office
Northeast:	Commanding Officer's Quarters Officers' Quarters Hospital Enlisted Men's Quarters Laundresses Quarters Chapel/Schoolhouse Hospital Steward's Quarters

Fort: Gatehouse

The original plan for Fort Washington included a one-story structure at the main entrance, a gatehouse consisting of an arched passageway with massive double doors and a single room on either side of the passage.[2] These rooms were about 16 feet square; each had a fireplace, two windows facing the parade to the south, and a door opening on the passage; there was a storeroom in the gable space above each (Illustration 5). Off the west room were two prison cells built into the wall in casemate fashion. Later, probably in the 1840s, a proper second story was added to each wing.

From the outset, the ground-floor rooms in the gatehouse were used for different purposes. Captain Maurice's 1821 plan of the fort (Illustration 2) called the east room an office; the west room was designated the "Main guard room" and had two "Arched Vaults" opening off of it. Maurice's 1823 plan (Illustration 3) called both rooms "Guard

rooms" and the arched vaults "Dungeons." The commanding officer's office in 1828 was located in the enlisted men's quarters, but by 1837 one room (probably the eastern one) in the gatehouse was again being used as an office, while the other remained a "Guard House":[3]

> There are two rooms, one on each side of the Main Gate of Fort Washington, one is the Office & the other the Guard House.... The Guard House is so much injured in the plastering & the wood work that it cannot be used without repairs and a new roof.... They are about 20 by 20 feet--with storerooms above each, which are totally useless in consequence of the leaky roof.

During the fort renovations in 1847 both rooms were again referred to as guardrooms.[4]

It is clear that the west room, with its barred windows and adjoining cells, was the "Guard House" during most of the fort's existence. By the late 1860s, however, it was inadequate to handle the function. In 1867 and 1868 Fort Washington was being used as "a place of confinement for prisoners sentenced by Court Martial."[5] As a result, prisoners were "obliged to be confined in one small casemate and as there are about twenty prisoners at present in confinement here it makes the quarters very crowded."[6]

Crowding was not the only problem. After an inspection in May 1868, Assistant Surgeon Alfred Delaney reported that the "Guard House and the Cells" were damp and in "filthy condition."[7] The officer-of-the-day denied the latter charge but agreed that the cells were damp.[8]

Inadequate ventilation was an even more serious problem, serious enough to cause the abandonment of the gatehouse cells about this

time. In 1870 the United States Surgeon General's office reported on conditions at Fort Washington:[9]

> The only arrangement for a guard-house was at the main sally-port, where there was one room, with two cells attached, but this had to be abandoned on account of its want of ventilation. A casemate is now used for this purpose, but it is poorly ventilated and very damp; the old building on the wharf, which was for a time used for this purpose, was abandoned. A guard-house is much needed.

Evidently none was built, however, and the old gatehouse cells may actually have been back in use in 1872.[10]

While it is clear that the west room or wing of the gatehouse was used all or most of the time from 1821 to 1872 as a "guardhouse" with cells, the use of the room across the passage is less certain. In 1821 and 1837 it was described as an "office," presumably the post commander's or the post adjutant's. In 1823 and 1847 it was called a "guardroom." In 1862 it (or the west room) may have housed the post telegraph office; Post Order 24 (March 24, 1862) directed that "the room under the Adjutant's Office is assigned to the telegraph operators as an office."[11] Since there is no other reference pin-pointing the location of the Adjutant's Office at this or any other time, the association with the gatehouse is conjectural. In this report, therefore, the room is treated as a "guardroom."

The term "guardroom" covers two related but distinguishable functions in American military usage. One is the housing and guarding of prisoners; the other, the housing of the post's guard.[12] At many permanent fortifications both functions were associated with the main gate, as at Fort Washington, although often arrangements were more sophisticated, with the common prison room separated from the cells

and the guard and officer-of-the-day in separate rooms.[13] At Fort Washington cells and prison room were together and there seems to have been no provision of a separate office for the duty officer. One can speculate that he occupied a partitioned-off portion of the guardroom or shared one of the rooms above, but there is no substantiating evidence.

There is no hard evidence for the use of the upper story rooms, added after 1839, replacing the previously mentioned "storerooms above" that were "totally useless in consequence of the leaky roof."[14] For their possible use as office space after 1848, see the following sections: Post Commander's Office and Post Adjutant's Office.

Fort: Post Commander's Office

The commanding officer was responsible for every aspect of post life and oversaw the daily operations of his command, assisted by junior officers.[15]

He was responsible for the condition of the fort, including the ordnance and buildings. As part of this, he made regular inspections of the post, paying particular attention to the hospital, the bakery, and the barracks. If he found anything amiss he could order the necessary repairs or modifications, with an eye to costs, of course.

The commanding officer was responsible for the troops in his command. He provided for their training, daily activities, and general well-being. As required, he granted leaves of absence and recommended disability retirements. He also ordered out squads to capture deserters and advertised for their return. He was to assure compliance with army regulations and all special and general orders; when these

were disobeyed, he convened a court-martial and saw to the execution of the court's findings.

The commanding officer was responsible for ordering and disbursing subsistence supplies, quartermaster stores, and ordnance stores. And, last but by no means least by army standards, he was responsible for reviewing and signing the numerous reports required of company and post commanders, from daily morning reports to yearly inventories of ordnance stores.

The post commander had an office of his own. Generally, this was adjacent to the office of his chief assistant, the post adjutant. The adjutant carried out much of the commanding officer's clerical work and acted as his executive secretary. Because the commanding officer needed some privacy, the adjutant screened all personnel requesting to see the post commander. And, to prevent constant interruptions, the commanding officer had a regularly scheduled period for his subordinates to report to him. In 1862, post commander Colonel Charles Merchant directed that "Company officers will transact business with the commanding officer between 9 & 10 AM.."[16]

The location of the post commander's office at Fort Washington can be documented only for 1828, when it was in the enlisted men's barracks.[17] Before and after that date, plans of the fort show an "office" alternating with a "guard room" in the east room of the gatehouse.[18] In 1862 there were reported to be two "public offices" on the post: the Acting Assistant Quartermaster's and "the Office of the Commanding Officer, who uses the same likewise as Commander of the fourth Regt. of Artillery."[19] No location was given for either office. A reference to the commanding officer's office in 1870 tells us only that there was a room over it.[20] Finally, a c. 1871 drawing of the fort

(Illustration 4) located the "C.O. Office" on the east side of the gatehouse without specifying which floor.

Considering only the buildings within the fort, three offered the kind of space the commanding officer needed: the barracks, the officer's quarters, and the gatehouse. Particularly during the Civil War, space was at a premium in the barracks and officers' quarters, so it is a reasonable assumption, though unprovable, that the commandant's office was then in the gatehouse. If so, it was probably in the upper room of the east wing, with the post adjutant occupying the corresponding room on the west.[21] This arrangement would have put both offices out of the main stream of traffic entering and leaving the fort, yet reasonably accessible.

Fort: Post Adjutant's Office

The commanding officer's principal assistant was the post adjutant, who was selected from among the subalterns at the post. The adjutant, with his assistant--an orderly or first sergeant--was responsible for a variety of post activities, including the organization of parades, reviews, and inspections at the post, and of work, picket, and guard details.[22]

The adjutant also prepared returns, reports, and summaries of court-martials for the review and signature of the commanding officer. He put in military form the orders which the commanding officer wished to have issued. The adjutant also handled all correspondence and communications between the commanding officer and his subalterns, and he kept all of the regimental and company books and papers.[23]

The amount of paperwork was tremendous. Among the 21 reports required of company commanders were:

Type	When Required
TO ADJUTANT-GENERAL:	
--Muster Roll of Company	Every two weeks
--Inventory of Effects of Deceased Soldiers	Immediately
--Final Statements of Deceased Soldiers	Immediately
TO QUARTERMASTER GENERAL:	
--Duplicate Returns of Clothing, Camp, and Garrison Equipage, and Quartermaster's Property--one with and one without vouchers	Quarterly
TO CHIEF OF ORDNANCE:	
--Returns of Ordnance and Ordnance Stores	Quarterly
--Certificates of Inventory on Return of Ordnance and Ordnance Stores	Yearly--in June
--Report of Damaged Arms	Bi-monthly
TO REGIMENTAL HEAD-QUARTERS:	
--Descriptive List of Men Joining	Quarterly
--Return of Deceased Soldiers	Quarterly
--Return of Company	Quarterly
--Transcript of Orders making temporary appointments of Non-commissioned Officers, ... at Posts not Regimental Head-quarters	Immediately
--Inventory of Effects of Deceased Soldiers	Immediately
--Final Statement of Deceased Soldiers	Immediately
--Return of Blanks	Quarterly
TO POST ADJUTANT:	
--Morning Report of Company	Daily before 8 A.M.
--Monthly Return of Company	Monthly
--Company Council Book	Quarterly

All of these would have been handled through the adjutant's office.[24]

The adjutant wrote his reports and kept his records in his own office, which was usually adjacent to or near that of the commanding officer. During the Civil War, the adjutant of Fort Washington is assumed to have been in the west room on the second floor of the gatehouse, over the guardhouse or, in 1862 at least, the telegraph office (see previous section).

Fort: Casemates

The casemates at Fort Washington were vaulted brick rooms, fourteen feet across by twenty-four feet deep.[25] Each casemate had an opening or embrasure in the outer wall through which cannon could fire. As designed, Fort Washington was to have cannon mounted in twenty-six casemate openings. Of these, only six were finally mounted, the caponniere casemate and northeast and southeast bastion casemates. All were for flank defense.[26]

By the 1840s, the idea of mounting heavy artillery in the casemates, except for flank defense, had been given up at Fort Washington. This may have been for a functional reason. Although casemates provided better protection for the artillery and artillerists, inadequate ventilation could cause the smoke from the black powder to obscure the vision of the artillerists and foul the air.[27] The effectiveness of casemates depended in large part on an efficient ventilation system. This was one thing that the casemates at Fort Washington did not have; throughout the fort's active life, there were constant complaints about the poor air circulation and the dampness in these areas.

During the renovations completed in the 1840s, Fort Washington's casemates were paved with brick and prepared for use as storerooms.[28] When the fort was garrisoned, some of the casemates housee ordnance stores, commissary stores, and quartermaster stores. The casemates were used as storerooms during the Civil War even though dampness and heat caused losses in the food stores through spoilage and also caused damage to the quartermaster supplies.[29] Because of these problems, wooden buildings were built during the 1860s to store quartermaster and commissary supplies.[30]

The casemates at Fort Washington were used for a multitude of other purposes in addition to storage. These included a sutler's quarters or store, at least until 1862 when the sutler was ordered to vacate the premises.[31]

Casemates also served as a hospital. On September 30, 1862, Colonel Charles Merchant, commanding officer, wrote to Surgeon-General William A. Hammond: "We have no hospital at the post for our sick, except Casemates which are considered damp and unhealthy."[32] A hospital was built outside of the fort in 1863; casemates would not have been used as a medical facility after this time.[33]

Until the laundresses' quarters were constructed in 1868 some of the company laundresses were billeted in the casemates. Some casemates were used for this purpose as late as 1865.[34]

Colonel Merchant considered using casemates at Fort Washington for prisoners during the Civil War but he thought this impractical because of their dampness and because "they can be easily mined in the direction of the Dry Ditch."[35] By 1867, however, deterioration of other buildings used to house prisoners had forced the commander to put some prisoners in casemates:

> ... as the number of general prisoners is increasing so that more room for their accommodation will soon be absolutely necessary, the present Bake House may be used to put them in, it being in close proximity to the other Case Mates occupied by them....

Casemates were still serving as prisons in 1870.[36]

In 1866, and evidently for some time before, the post bakery was in a casemate. "The room has leaked for a long time," reported 1st Lieu-

tenant J.B. Campbell, "and is rapidly getting worse."[37] A year later it was still leaking badly and the space was being considered for use as a prison cell.[38] The new post bakery, outside the walls, was opened in 1868.[39]

The southeast casemate is the most likely one to have housed the bakery. Its leaky roof is one clue. As the present staff have pointed out,

> prior to a 1977 project that installed a moisture barrier in the terreplein above the room, the casemate leaked continually. It was one of only two casemates in the fort that leaked badly.[40]

In addition, while the two fireplaces with cranes are shallow, the interiors of the chimneys show signs of heavy use. The attachment of a cook stove--or bake oven--might explain this condition. Photographs of the east wall of the southeast casemate, taken before restoration, show a roundish outline which, with a little imagination, might suggest a bake oven.

More telling is the testimony of Mrs. Henry Blunt of Bethesda, Maryland, who, as the daughter of the post surgeon, lived at Fort Washington from 1929 to 1943. Mrs. Blunt recalled:[41]

> going into the casemate then and said that she clearly remembered "roundish" brick structures "like ovens" jutting out from the wall. She also said that, at that time, anyone on post who referred to that casemate always called it "the old bakery" or the old bakehouse.

Possible use of the southeast casemate at some time as a kitchen has also been suggested.

The 1958 archeological investigation uncovered a number of domestic animal bones indicating that butchering may have taken place in the southeast casemate. Archeologist Powell wrote that "the number of these bones, combined with the presence of two fireplaces in the room, may indicate the use of the structure as a kitchen during some stage of its existence."[42] Powell went on to caution about the interpretation of this room as a kitchen without further evidence. None has been found during the research for this report. In addition, as the staff at Fort Washington point out, it is unlikely that the military command would have tolerated an accumulation of garbage anywhere on the post and particularly in an area where food was being prepared. The accumulation of bones may have been deposited after the fort was abandoned.

Fort: Officers' Quarters (Illustration 6)

Housing was provided for officers in the United States Army in accordance with prescribed regulations. According to the Revised Army Regulations for the Army (1861), these included:

> 1067. When barracks and quarters are to be occupied, they will be allotted by the quartermaster at the station, under the control of the commanding officer.
>
> 1068. The number of rooms and amount of fuel for officers and men are as follows:

	Quarters	Kitchen
A Brigadier-General or Colonel	4	1
A Lieutenant-Colonel or Major	3	1
A Captain or Chaplain	2	1
Lieutenant	1	1

> 1071. No officer shall occupy more than his proper quarters, except by order of the commanding officer when there is an excess of quarters at the station; . . . But the amount of quarters shall be

> reduced pro rata by the commanding officer when the number of officers and troops make it necessary. . . .
>
> 1072. A mess-room, and fuel for it, are allowed only when a majority of the officers of a post or regiment unite in mess; never to be less than three officers, nor to any who live in hotels or boarding-houses. Fuel for a mess-room shall not be used elsewhere, or for any other purpose.
>
> 1076. In allotting quarters, officers shall have choice according to rank, but the commanding officer may direct the officers to be stationed convenient to their troops.
>
> 1077. An officer may select quarters occupied by a junior; but, having made his choice, he must abide by it, and shall not again at the post displace a junior, unless himself displaced by a senior.
>
> 1078. The set of rooms to each quarters will be assigned by the quartermaster, under the control of the commanding officer; attics not counted as rooms.
>
> 1079. Officers cannot choose rooms in different sets of quarters.
>
> 1089. Furniture will be provided for officers' quarters when special appropriations for that purpose are made. Sales to officers of materials for furniture may be made at cost, at posts where they cannot be otherwise obtained.

In summary, the army provided quarters for its officers at posts like Fort Washington. The allotment of rooms was defined by Army Regulations and depended, in large part, on the rank of the officer and the availability of rooms. While some provision was made for furniture, it was not necessarily mandated.[43]

When Fort Washington was built, a house outside the fort was provided for the commanding officer and a separate building inside the fort was constructed to house four junior officers. The officers' quarters was a brick, two-story structure with a wood (later slate) roof and a piazza running the length of the front of the building. It was in the northeast corner of the fort. Started in 1816, and finished in 1824, the officers' quarters was 82 feet wide by 25 feet deep. The building was divided into two equal sections, each with two apartments and a basement kitchen. Each section had a central hallway and three rooms (two large and one small) on each floor (Illustration 6).[44]

The rooms were plastered and the flooring was pine. Each of the large rooms contained a fireplace. There were 32 windows in the east and west walls. Window "blinds" were provided for each of these windows. These are believed to have been exterior blinds or shutters because the hardware for the "blinds" included 64 pairs of hinges and 32 fasteners, and because they were painted green.[45] Illustration 6 does show exterior shutters with horizontal slats. This would correspond with the 8/4 wood purchased for "Blinds for Quarters."[46]

The rooms were whitewashed and the trim painted during the major repair and maintenance program of 1846-1848, when the post was not garrisoned and one room of this building was being used as an office.[47]

Materials used in the painting of the officers' quarters between October and December 1846 included:[48]

1 gal. Boiled oil
1 gal. Japan varnish
3 kegs extra lead
1 gal. Spts. turpentine
5 lbs. Spar whiting
5 lbs. Yellow ochre
2 kegs White lead

The quarters were listed as being in bad condition by 1851 with a leaky roof, yellowed plaster, and rotten wood.[49] The officers' quarters required additional repairs when the post was again garrisoned in 1861.

The officers' quarters at Fort Washington was designed to house four officers--with two rooms for each.[50] Beginning in 1828, when Company F, 1st United States Artillery, was stationed at the post, the officers were quartered there.[51] In 1834, Lieutenant Mackay and Lieutenant Chalmers lived in one-half of the officers' quarters and shared a kitchen; Assistant Surgeon Bryant and his family lived in the other half of the structure.[52] During the 1840s, one room was used as an office for the engineer in charge of the work on the fort.[53] When the post was re-garrisoned the lieutenants and surgeons of Companies F and H, 1st United States Artillery would have shared these quarters.

Beginning in 1861, Fort Washington had a full complement of troops that exceeded the limits of housing in the fort. In April, eleven officers were stationed at Fort Washington with the regular army, the Washington Artillerists, and the Logan Guards. Housing continued to be a problem throughout the war. In April 1864, while the 16th Indiana Battery was stationed there, post commander Horace Brooks issued Post Order 27, stating that "Until there is an increase in the quarters for Officers at this Post no rooms will be assigned to the Chaplain, as quarters.[54] This was in response to the arrival of the Reverend J.L. Eliot. Eliot was permitted, however, to "temporarily occupy vacant quarters."

There is no documentation on who was assigned what room or rooms in the officers' quarters during the Civil War. The records do indi-

cate, however, that the building was fully occupied and that the chaplain was billeted there from time to time. The location of the dumb waiter in the north wall of the kitchen is one indication of room use. The north room on the first floor must have served as the officers' mess with food transported from the basement kitchen by the use of the dumb waiter.

The lack of adequate housing continued after the war. In 1867, the officers of Companies A and M, 4th United States Artillery, held a meeting to review the need for quarters at the post. Post commander Captain John Mendenhall reported that Chaplain Eliot occupied one attic room for his quarters, one lieutenant occupied another attic room, and two lieutenants occupied one room together.[55] The construction of additional quarters outside of the fort walls relieved some of the strain, but the old officers' quarters remained in use until 1872.[56]

Fort: Enlisted Men's Quarters (Illustrations 6-10)

The enlisted men's barracks was a brick, two-story structure in the southeastern section of the fort with a shingle (later slate) roof and a piazza across the front. It was 82 feet wide by 25 feet deep and was designed to house 60 men. In 1821, when it was built, a company of artillery numbered 55 men. It was similar in outward appearance to the officers' quarters but, as originally built, it was divided by a masonry wall (with fireplaces at each end) into two equal sections; each section was 40 feet by 22 feet. These sections could be divided by partitions into smaller sections.[57]

When the fort was first garrisoned in the 1830s, one-half of the enlisted men's barracks was used to house the troops; the other half was used as an office by the commanding officer and as a hospital.[58]

From 1840 through 1848 the fort was not garrisoned and the barracks was not needed to house the men. During this period, or at least a part of it, the garret of the enlisted men's barracks was used as a storehouse for "clothing, camp and garrison equipment."[59] Laborers working on the renovations of the fort may have occupied some of the rooms.

In October 1848, men from Companies F and H, 1st United States Artillery, were sent to the post.[60] The 49 non-commissioned officers, musicians, and enlisted men easily could have been accommodated in the barracks. In 1850, the 1st United States Artillery was withdrawn from Fort Washington and detachments from Companies F and H, 4th United States Artillery, manned the post.[61] Once again, the 40 officers and enlisted men sent to the post were adequately housed in the quarters at Fort Washington. This was true even after an additional detachment of 17 men from Company F was sent to the fort in January 1851.[62]

From 1848 through 1853, then, the enlisted men's barracks at Fort Washington was sufficient to house the enlisted men of the garrison. During these years the upper floor provided sleeping quarters; one half of the first floor served as both a kitchen and mess hall while the other half served as a hospital.[63] Between 1853 and 1860 Fort Washington was not garrisoned and the enlisted men's barracks was no longer in use.

The Civil War brought more troops to the post than the quarters could comfortably house. In 1861, with Company D, 1st United States Artillery, the Company of Recruits, the Logan Guards, and the Washington Artillerists, Fort Washington had 280 enlisted men; the barracks was designed to house sixty. The same holds true throughout the war: 117

enlisted men were on post in June 1862; 272 enlisted men were there in March 1863; 146 enlisted men were on post in May 1864; and 142 enlisted men were at Fort Washington in July 1865.[64] Other buildings (or tents) were used to relieve this overcrowding, but the brick enlisted men's barracks must have been filled.[65]

Who stayed in the barracks in the fort and who was housed elsewhere is not known. When the regulars were stationed at the post they may have had first choice. It seems likely that the staff and band of the 4th United States Artillery were housed here. The Invalid Corps of the 4th United States Artillery was quartered in the garret of the enlisted men's barracks in December 1863; they shared the barracks with the band in 1865.[66] There is no mention of the arrangement of the rooms or specific room use during these years.

After the war ended, only regular army units were stationed at the fort. The men of Company A, 4th United States Artillery, occupied the enlisted men's barracks during their tour at Fort Washington, but they had to share the first floor kitchen and mess with the men of Company M.[67] After 1867, when a new enlisted men's barracks was built outside the fort, Company A had the old barracks to themselves and the barracks remained in use until the post was abandoned in 1872.[68]

In April 1868, the second floor of the old barracks was divided into four squadrooms, each 22 feet by 19½ feet. Each room was occupied as follows: Room No. 1--18 men; Room No. 2--12 men; Room No. 3--12 men; and, Room No. 4--16 men.[69] Two years later the Surgeon-General reported that the upstairs "is divided in two rooms for dormitories."[70] The ground floor had been divided into three sections for a kitchen, a mess room, and an additional sleeping room.

Overcrowding, noise, and poor ventilation were chronic problems at Fort Washington. One of the most frequent complaints made about barracks by army surgeons was that ventilation was poor or nonexistent. In 1868, Assistant Surgeon Alfred Delaney wrote that the sqadroom at Fort Washington for Company A, Fourth U.S. Artillery, had 3861 cubic feet from which he deducted "108 cubic feet occupied by the chimney" and "100 cubic feet by the bunks." This left little room for the 12 to 18 men quartered in each room.[71] Delaney mentions no other furniture in the room.

Dr. John Billings noted the same poor conditions in 1870. He described the barracks as "without means for proper ventilation." This was because the "building stands close to the eastern parapet, and the lower story is badly ventilated and always damp; the air space per man is 360 cubic feet."[72] Dr. Billings went on to recommend 600 cubic feet of air per man north of the 36th latitude and 800 cubic feet of air at posts south of it.[73]

Overcrowding was another problem. According to Army Regulations, the amount of floor space was to be:[74]

> To every six non-commissioned officers, musicians and privates, servants and washerwomen, 225 square feet of room north of 38° N, and 256 square feet south of that latitude.

In 1868, the squad rooms of Company A allotted only 214 square feet of space for six men in two of the rooms and 143 square feet of space in one of the other rooms.

Other Structures (not to be furnished)

The gatehouse (main sally-port), the officers' quarters, and the enlisted men's quarters, along with the ordnance and flagstaff, are the

main concern of this furnishings report. The other structures at Fort Washington are important, however, in considering the activities that went on at Fort Washington during the period 1840-1872. They will be surveyed here briefly.

Fort: Magazines

The magazines in the fort were built in 1816.[75] One was in the northeast bastion; the other was in the southeast bastion of the fort. They were vaulted brick structures with one door, were waterproof, and were repaired during the renovations of the 1840s. When the fort was re-occupied in 1861 they were found to be in good condition and in a dry state. The ordnance stores for the artillery and soldiers' arms were kept here.

Fort: Shot Furnace

The Instruction for Heavy Artillery (1863) considered a shot furnace a basic element of seacoast forts as a defense against sailing ships. They were simple to use:[76]

> Furnaces for heating shot are erected at the forts on the sea-coast. These furnaces hold sixty or more shot. The shot being placed, and the furnace cold, it requires one hour and fifteen minutes to heat them to a red heat; but after the furnace is once heated, a 24-pounder shot is brought to a red heat in twenty-five minutes; the 32-pounder and 42-pounder shot require a few minutes longer. Three men are required to attend the furnace; one takes out the hot shot and places them on the stand to be scraped; another scrapes them and puts them in the ladle; and the third supplies cold shot and fuel.

The shot furnace within the fort walls at Fort Washington was constructed during the 1840s on the parade near the southwest demi-bastion.[77] It was never used.

Fort: Commissary Storehouse (Illustration 11)

The commissary's storehouse was off the parade to the north of the shot furnace, near the southwest demi-bastion.[78] It was a rough board and batten structure roofed with wooden shingles. The storehouse was 37 feet by 22 feet and was partitioned into four rooms. It may have been built during the spate of construction which took place in 1867 to provide better storage for supplies being spoiled in the casemate storehouses.

Fort: Commissary Store Room (Illustration 12)

This building also was known as the School Room and Flour Store Room. It was on the parade at right angles to the commissary storehouse.[79] The store room was a wooden board and batten one-story building partitioned into two rooms. Its overall length was 70 feet and it was 24 feet wide. The smaller of the two rooms was 24 by 24 feet. It had a ridge vent running the length of the roof which would have provided ventilation to keep the flour from spoiling. One room presumably was in use as a schoolroom in 1871.

Ravelin: Stable (Illustration 13)

The stable was included in the original plan.[80] It was a story and a half brick building with a slate roof and had later additions of rough boards. It was 44 feet by 31 feet and held stalls for six horses.[81] It had a feed bin at one end and a loft overhead. In 1870, the stable was described as well constructed of brick.[82] During the next year two wooden additions were added: one on the back with stalls for eight horses and another, a story and a half addition at one end of the brick stable, which may have been used to store hay.[83]

Ravelin: Quartermaster Storehouse (Illustration 14)

The storehouse was a one-story rough board and batten building next to the stable on the left flank of the ravelin.[84] It was divided into six rooms, each with a doorway, had thirteen windows, and three chimneys.[85] This may have been the building in which the barbette carriages were stored before the war. It also may have been the building converted into an enlisted men's barracks in early 1861. On May 12, 1872, a fire broke out near one of the storehouse chimneys and the building was destroyed within thirty minutes.[86] The fire also spread to the stable just described.

Ravelin: Magazine

The ravelin magazine was to store ordnance supplies for the water battery. According to the profiles on Maurice's plan of 1821, it appears to be the same size and shape as those in the fort.

Ravelin: Blacksmith's Shop (Illustration 6)

The blacksmith's shop was included in the original plans for Fort Washington.[87] It was a small one-story building with double doors at one end, a forge on the opposite wall, and two windows on each side. If it conformed to the other buildings designed and built in 1816, the blacksmith's shop would have been a brick building with a slate roof.

Ravelin: Shot Furnace

The shot furnace in the ravelin was constructed in 1842. See comments on the shot furnace in the main fort (p. 70, above).

There is no description or drawing of the saddler's shop.[88] Nor are there any for the boathouse, lighthouse, and guardhouse which were on

the wharf, although they do appear in contemporary prints, whose accuracy cannot be vouched for (Illustrations 24 and 25).

Buildings Outside the Fort to the East and Northeast

The cluster of buildings to the east and northeast of the fort represented the growth out of the old fort, most of which took place in the latter years of the Civil War and in the post-war years. Of the group of buildings in this area in 1872, only two, the commanding officer's quarters and noncommissioned officers' quarters, were completed during the first phase of construction.

East: Bakehouse

The bakehouse was on the road leading from the wharf to the main gate. It was constructed in 1867 to replace the bakehouse in the fort casemate. In 1870, the new bakehouse was considered a "well constructed oven of the best pressed brick."[89]

East: Post Office/Noncommissioned Officers' Quarters

Up the hill from the bakehouse stood what was called the noncommissioned officers' quarters on the earlier maps and the post office on the c. 1871 map (Illustrations 2, 3, 4). This was the residence of Ordnance-Sergeant Joseph Cameron. He had been at the post since 1835 and was appointed postmaster in 1835, 1852, and in 1861; he still had his postmaster's commission in 1872.[90]

Northeast: Commanding Officer's Quarters (Illustrations 6, 15)

This was a well constructed two-story brick building with a slate-covered gable roof. It measured 82 feet by 25 feet. Built on the side of a hill opposite the main gate, it gave the appearance of a one-story building from the north and revealed its full height only

on the south side. There was a good deal of effort put into maintaining the house during the 1840s and again in the 1860s. While there were a few internal changes which are evident when comparing the drawings made in 1834 with those made in 1871, the basic architecture remained unchanged.[91] The commanding officer of the post and his family lived here.

Northeast: Officers' Quarters (Illustration 16)

To ease the shortage of housing for the officers, three double dwellings, each to house two officers, were built in 1867 and 1868. They were arranged in an east-west line behind the commanding officer's quarters. Each house was a story and a half wooden building, 44 feet by 32 feet, with horizontal weather boarding and a gable roof. Two of the cottages had two rooms and a small kitchen on the ground floor, with a low attic above. The third cottage was smaller and did not have a kitchen until the officers added one in the basement. They were considered badly constructed and leaky by 1870.[92]

Northeast: Hospital (Illustrations 17, 18)

Fort Washington was considered an unhealthy post and the need for an adequate medical facility quickly became evident. When the fort was first garrisoned part of one-half of the enlisted men's barracks was used as a hospital.[93] Shortly after the Civil War began, the arrival of increasing numbers of soldiers created the need for a separate facility. In September 1862, Colonel Charles Merchant wrote: "We have no hospital at this post for our sick, except Casemates, which are considered damp and unhealthy." Merchant's request for a hospital to house 25 to 100 men was granted the following year.[94]

The hospital built in 1863 remained in service until 1871. It was a wooden building covered with one-half inch thick weather boarding and

a gabled roof. The hospital was 192 feet by 24 feet and enclosed two wards separated by sliding doors with beds for sixteen patients. By 1870, it was considered badly arranged and incomplete: the dispensary and office were too small, there was no store room, the bathroom was never finished, and the tongue and groove construction was a haven for bedbugs. In addition, it was impossible to plaster, difficult to heat, and threatened by erosion of the earth beneath the building.[95]

A new hospital 82 feet by 24 feet, was planned and built in 1872. This was a wooden frame building with horizontal weather boarding and a gable roof. A ridge vent ran the length of the shingle roof. The 1872 hospital had two small attendants' rooms at one end and a bathroom and dispensary at the other end. The building was divided into three wards with a total of 24 beds. A small kitchen was separated from the hospital by a covered passage. A dead house and privy completed the medical complex.[96]

Northeast: Enlisted Men's Barracks (Illustration 19)

To relieve overcrowding in the fort, a new two-story wooden barracks was built in 1867. The new barracks measured 162 feet by 24 feet, had wide piazzas on both sides, and was designed to house 100 men. The second story was originally a single room, later divided near the middle into two squadrooms; the lower floor contained a kitchen, mess room, wash room, store room, and company offices. The walls and ceiling on the first floor were plastered but only the walls were plastered on the second floor. Company M, Fourth Artillery, was housed here from 1867 until it left the post.[97]

Northeast: Laundresses' Quarters (Illustrations 20, 21)

To provide adequate housing for the company laundresses living in the casemates and elsewhere about the post, a new building was completed

for them in 1868. The laundresses' quarters measured 103 feet by 17 feet and was covered with one-third inch weather boarding. It was planned to house eight laundresses and was divided into eight rooms, each nineteen feet by twelve and one-half feet. The building was described as being in good condition in 1870.[98]

Northeast: Chapel and Schoolhouse

In 1866, the chapel was described as being thirty feety by fifty feet with a felt and tar roof. It was next to the enlisted men's barracks and both the building and roof were considered to be in poor condition.[99] The chapel/schoolhouse still stood in 1870 but was unused as either a chapel or schoolhouse, "there being neither chaplain or teacher." The last post chaplain had died in 1868.[100]

Northeast: Hospital Steward's Quarters

This was a small wooden building, thirty feet by sixteen feet, near the hospital.[101]

These were the buildings occupied by the garrison at Fort Washington from 1840 through 1872.

Footnotes: Housing the Garrison

1. Maurice, "Plan of Fort Washington" (1821) and Maurice, "Fort Washington, 1823"; Captain Fred A. Smith to Colonel Joseph G. Totten, September 30, 1845, RG 77, Entry 13, Office of the Chief Engineer, Letters Received, Volume 7; Samuel Cooper to Totten, September 30, 1847, ibid., Volume 8, NA.

A survey done by Lieutenant Turnbull in 1831 (copied in 1834 by Lieutenant Waller Barry) indicates a residence for Lieutenant Barry northeast of the commanding officer's house. This structure does not appear on other maps.

2. Maurice, "Plan of Fort Washington" (1821); Maurice, "Fort Washington, 1823"; Major H. Saunders to Major T. Cross, November 3, 1837, RG 93, Office of the Quartermaster General, Consolidated Correspondence File, Box 1217, NA. (Hereafter cited as QM Corr. File).

3. Major H. Saunders to Major T. Cross, November 3, 1837, QM Corr. File.

4. See, for example, B-3260 (November 12, 1846), B-3300 (December 10, 1846), B-2131 (n.d.), in Account No. 4226, Captain Fred A. Smith, Office of the 3rd Auditor, 4th Quarter, 1846, NA; also, Annual Report of the Secretary of War for 1847, p. 609.

5. Captain Fred M. Follett to Colonel Joseph H. Taylor, Acting Adjutant General, Department of Washington, July 1, 1867, Fort Washington Post Orders, NA. (Hereafter cited as FW-PO): Letters Sent, 1865-72, p. 16. Also ibid., Captain John Mendenhall to Taylor, September 15, 1868, p. 76.

6. Captain Fred M. Follett to Colonel Joseph H. Taylor, July 1, 1867, FW-PO: Letters Sent, 1865-72, p. 16.

7. Same to same, July 8, 1867, ibid.; Assistant Surgeon Alfred Delaney to Lieutenant John Simpson, May 28, 1868, RG 393, Entry 1331, Register of Letters Sent, 1867-72, p. 81, NA.

8. Lieutenant John M. Waite to Lieutenant John Simpson, May 28, 1868, ibid., p. 437.

9. War Department, United States Surgeon General's Office, Circular No. 4: A Report on Barracks and Hospitals with Decriptions of Military Posts (Washington, D.C.: Government Printing Office, 1870), p. 70. (Hereafter cited as Circular No. 4).

10. General Order 31 (July 26, 1872), FW-PO: Volume 1446, General Orders, 1872, NA.

11. Post Order 24 (March 24, 1862), RG 393, Entry 1332, General, Special and Post Orders, 1861-65, NA.

12. There is little contemporary information on the arrangement or use of guardhouses. Sally Ketcham has summarized her findings in "Historic Furnishing Report: The Guardhouse: Fort Scott National Historic Site" (Omaha, Nebraska: National Park Service, 1977), see particularly pp. 18-45, 61-68; David Clary also summarizes our general knowledge in his report, "These Relics of Barbarism: A History of Furniture in Barracks, Hospitals and Guardhouses of the United States Army, 1800-1880" (Harpers Ferry, West Virginia: National Park Service, 1982), see pp. 82, 149, 235-37, 270-71, and 288-90.

13. Clary, "History of Furniture," p. 270; Ketcham, "The Guardhouse, Fort Scott."

14. RG 393, Entry 1332, General, Special and Post Orders, 1861-65, NA.

15. The following duties have been extracted from Rev. Army Regs., 1861.

16. Post Order 2 (June 12, 1862), RG 393, Entry 1332, General, Special and Post Orders, 1861-65, NA.

17. Brigadier General Thomas S. Jesup to Quartermaster General, January 23, 1828, QM Corr. File.

18. Illustrations 2 (1821) and 3 (1823); Major H. Saunders to Major T. Cross, November 3, 1837, QM Consol. Corr. File.

19. 1st Lieutenant von Moyna to Brigadier General Meigs, Quartermaster General, September 17, 1862, FW-PO: Letters Sent by AAQM, 1862-66, NA.

20. "The Post Council respectfully recommends that the Post Papers [newspapers] be kept on file in the room over the Commanding Officer's Office...," Special Order 89 (July 29, 1870), RG 393, Entry 1336, Proceedings of the Post Council, pp. 200-01, NA.

21. Post Order 24 (March 24, 1862), RG 393, Entry 1332, General, Special and Post Orders, 1861-65, NA, places the adjutant above a telegraph office which could have been a very temporary use of either room on the first floor of the gatehouse.

22. Rev. Army Regs., 1861, pp. 51-53, 55, 58, 75.

23. Ibid., pp. 41, 49, 66, 68.

24. Kautz, Company Clerk, pp. 136-37.

25. Maurice, "Fort Washington, 1823."

26. "Sheet No. 1, Fort Washington, Md., Armament Sketch, December 31, 1902, To accompany Lieut. Col. Allen's Letter of Januarmy 22, 1903." (Hereafter cited as Armament Sketch.) See Illustration 27.

27. Robinson, American Forts, p. 74.

28. Secretary of War, Annual Report, 1845, p. 252; Smith to Totten, September 30, 1845, RG 77, Entry 13, Letters Received, Volume 7, NA.

29. Post Order 60 (September 7, 1861), General, Special and Post Orders, RG 393, Entry 1332, Board of Inquiry into spoiled ham and bacon stored in the casemate storerooms, NA; Colonel Charles Merchant to Colonel William Hoffman, 3rd Infantry, Commissary General of Prisoners, December 2, 1863, RG 393, Entry 1329, Letters Sent, 1861-65, p. 116, NA; Colonel Horace Brooks to General Joseph H. Taylor, Adjutant General, Department of Washington, January 5, 1865, RG 393, Entry 1329, Letters Sent, 1861-66, NA.

30. RG 77, Misc. Fort Files: Fort Washington, Maryland, No. 6: "A General Plan of Q.M. Store house," NA.

31. First Lieutenant J.B. Campbell to Colonel Joseph H. Taylor, July 19, 1866, RG 393, Entry 1329, Letters Sent, 1861-66, pp. 240-41, NA.

32. RG 393, Entry 1329 (Old Book 437), Letters Sent, 1861-66, p. 67, NA.

33. RG 77, NA.

34. Colonel Horace Brooks to Colonel Joseph H. Taylor, RG 393, Entry 1329, Letters Sent, 1861-66, p. 158, NA; RG 77, Misc. Fort File: Fort Washington, Maryland: No. 14 "Laundresses Quarters," NA.

35. Colonel Charles S. Merchant to Colonel William Hoffman, December 2, 1863, RG 393, Entry 1329 (Old Book 437), Letters Sent, 1861-66, NA.

36. Captain John Mendenhall to Brigadier General A.C. McFerran, October 21, 1867, RG 393, Entry 1331, Register of Letters Sent, 1867-72, NA; Circular No. 4 (1870).

37. First Lieutenant J.B. Campbell to Colonel Joseph H. Taylor, July 19, 1866, RG 393, Entry 1329 (Old Book 437), Letters Sent, 1861-66, NA.

38. Captain John Mendenhall to Brigadier General A.C. McFerran, Chief Quartermaster, Department of Washington, December 10, 1867, FW-PO, Letters Sent, 1865-72, p. 30, NA; RG 77, Misc. Fort File: Fort Washington, Maryland, No. 16, "Ground Plan of Fort Washington," n.d. (c. 1871), NA.

39. Powell, "Archeological Investigations," p. 8.

40. Memorandum: Superintendent, National Capital Parks-East, to Chief, Division of Interpretation, Recreation and Visitor Services, National Capital Region, November 9, 1982.

41. Ibid.

42. Powell, "Archeological," p. 8.

43. Rev. Army Regs., 1861, passim.

44. See Lieutenant Waller Barry, "Barracks &c Fort Washington Md" (Illustration 6) which includes a floor plan and elevation of the officers' quarters, RG 77, Misc. Fort Files: Fort Washington, Maryland, No. 22. A similar but less finished plan, dated January 31, 1840, is in RG 79, NCP 117.8-22, NA. See also Circular No. 4, p. 70.

45. "Historical Orientation Report: Officers' Quarters, Fort Washington Maryland" (National Park Service: History Section, May 29, 1958), p. 18.

46. James Green Pass Book, in ibid., Appendix B, p. 5.

47. Ibid., Appendix B, p. 1. See also Captain F.A. Smith to Colonel Joseph G. Totten, September 30, 1845, QM Corr. File; Cooper to Totten, September 30, 1847 and letters of February 1, 1847, July 8, 1847, January 1848, February 1, 1848, March 7, 1848, and July 6, 1848.

48. C-2427 and C-2436, RG 77, Chief of Engineers, Letters Received.

49. George Hazzard to Major General Thomas S. Jesup, March 24, 1851, RG 92, QM Consol. Corr., Box 1217.

50. Circular No. 4 (1870), p. 70.

51. Report of General Thomas S. Jesup on Fort Washington, January 23, 1828; RG 92, QM Consol. Corr., Box 1217, NA.

52. Lieutenant S.B. Dusenberry to Maj. Gen. Thomas S. Jesup, May 26, 1834, RG 92, QM Consol. Corr., Box 1217, NA; Dusenberry to Jesup, June 17, 1834, ibid.

53. "Historical Orientation Report."

54. April 4, 1864, RG 393, Entry 1332, General, Special and Post Orders, 1861-1865, NA.

55. Captain John Mendenhall to Colonel Joseph H. Taylor, AAG, n.d. [October 10, 1867], RG 393, Entry 1331, Register of Letters, 1867-72, NA.

56. Circular No. 4 (1870), p. 70; see Illustration 4.

57. For a general description, see Illustrations 2 and 6; Circular No. 4, p. 69; War Department, Outline Description of U.S. Military Posts and Stations in the Year 1871. (Washington, D.C.: Government Printing Office, 1871), p. 167; War Department, Outline Description of the Posts and Stations of Troops in the Geographical Division and Departments of the United States (Washington, D.C.: Government Printing Office, 1872), p. 20.

58. Brigadier General Thomas S. Jesup to Quartermaster General, January 23, 1828, QM Corr. File.

59. Sergeant Joseph Cameron to Brigadier General Thomas S. Jesup, December 7, 1841, QM Corr. Fiel.

60. FW Post Returns, October 1848, NA.

61. Ibid., September 1849, October 1850, December 1850.

62. Ibid., January 1851.

63. Ibid., November 1852, October 1853.

64. Ibid., April 1861, June 1862, March 1863, May 1864, July 1865, NA.

65. Heber S. Thompson, The First Defenders (n.p.: 1910), p. 105.

66. Colonel Charles Merchant to Colonel William Hoffman, December 2, 1863, RG 393, Entry 1329, Letters Sent, 1861-65, p. 116, NA; Merchant to Colonel Joseph H. Taylor, March 29, 1865, ibid.

67. Captain John Mendenhall to Colonel Joseph H. Taylor, April 16, 1868, FW-PO: Letters Sent, 1865-72, p. 46, NA.

68. Ibid. See Illustrations 9-10.

69. Alfred Delaney, Assistant Surgeon, U.S. Army, April 16, 1868, RG 393, Entry 1331, Register of Letters, 1867-72, NA.

70. Circular No. 4, p. 70.

71. April 16, 1868, RG 393, Entry 1331, Register of Letters, 1868-72, pp. 80-84, NA.

72. Circular No. 4 (1870), p. 70.

73. Ibid., pp. vi-xiv.

74. Rev. Army Regs., 1861, p. 160.

75. For location and dimensions, see Maurice, "Plan of Fort Washington" (1821and 1823, Illustrations 2 and 3).

76. See p. 94. For more information on the archeological remains of the shot furnace at Fort Washington, see references in McGarry, op. cit.

77. "Ground Plan of Fort Washington" (Illustration 4).

78. Ibid.

79. Ibid.

80. Maurice, "Fort Washington, 1823"; Maurice, "Plan of Fort Washington" (1821): Barry, "Barracks &c Fort Washington"; "Ground Plan of Fort Washington" (Illustrations 2, 3, 4, 6).

81. "Stable," Misc. Fort File: Fort Washington, Maryland, RG 77, No. 5 NA (Illustration 13).

82. Circular No. 4, p. 71.

83. Outline Description of Military Posts, 1871, p. 167; "Stable."

84. "Ground Plan of Fort Washington" (Illustration 4).

85. "A Ground Plan of the QM Store house," Misc. Fort File: Fort Washington, Maryland, RG 77, No. 6, NA (Illustration 14).

86. Major Albion P. Howe to Major Chauncey McKeever, May 13, 1872, op. cit.

87. Maurice, "Plan of Fort Washington, 1821"; Maurice, "Fort Washington" (1823); "Barracks &c Fort Washington" (Illustrations 2, 3, 6).

88. "Ground Plan of Fort Washington" (Illustration 4).

89. Ibid., Captain John Mendenhall to Brigadier General A.C. McFerran, October 21, 1867, RG 393, Entry 1331, Register of Letters Sent, 1867-72, p. 256; same to same, December 10, 1867, ibid., p. 30, NA; Circular No. 4, p. 71.

90. First Lieutenant Henry A. Huntington to Colonel Joseph H. Taylor, Assistant Adjutant General, Department of Washington, September 7, 1866, RG 393, Entry 1329 (Old Book 437), pp. 251-52, NA.

91. Barry, "Barracks &c Fort Washington" (Illustration 6); "Commanding Officers' Quarters," Misc. Fort File: Fort Washington, Maryland, RG 77, No. 8 NA (Illustration 15).

92. "Ground Plan of Fort Washington" (Illustration 4); "Officers' Quarters," Misc. Fort File: Fort Washington, Maryland, RG 77, No. 9, NA (Illustration 16); Circular No. 4, p. 70.

93. Captain Thomas Charles to Brigadier General Thomas S. Jesup, Quartermaster General, January 23, 1828, QM Corr. File. See also same to same, February 19, 1827, ibid.

94. Colonel Charles S. Merchant to Surgeon General William A. Hammond, September 30, 1862, RG 393, Entry 1329 (Old Book 437), Letters Sent, 1861-66, p. 67, NA; "Hospital," Misc. Fort File: Fort Washington, Maryland, No. 15, NA (Illustration 17).

95. Circular No. 4, p. 70; Outline Description of Posts and Stations, 1872, p. 20.

96. "USQM--Hospital" (Illustration 18).

97. Misc. Fort File: Fort Washington, Maryland, Nos. 12, 13; Circular No. 4, p. 70; Outline Description of Military Posts, 1871, p. 167; Outline Description of Posts and Stations, 1872, p. 20.

98. Misc. Fort File: Fort Washington, Maryland, Nos. 14, 19, NA; Circular No. 4, p. 70; Outline Descriptions of Military Posts, 1871, p. 167.

99. Colonel Charles S. Merchant to Colonel Joseph H. Taylor, July 22, 1866, RG 393, Entry 1329, Letters Sent, 1861-66, p. 242, NA; same to same, July 19, 1866, ibid., p. 242.

100. Circular No. 4, p. 71; Captain John Mendenhall to Colonel Joseph H. Taylor, May 14, 1868, FW-PO: Letters Sent, 1865-72, p. 46.

101. Outline Descriptions of Military Posts, 1871, p. 167. See also, Colonel Charles S. Merchant to Colonel Joseph H. Taylor, July 22, 1866, FW-PO, Letters Sent, 1865-72.

EVIDENCE OF ORIGINAL FURNISHINGS, 1840-1872

IV: FLAGSTAFF AND FLAGS

> The parade ground has been defined as a cultural unit based on its physical appearance and function in the military establishment. Its central position in the fort reflects its central position in military life. Group activities are performed there such as marching, drilling, award ceremonies, changes in command, retirements, etc. The parade is the focus of the group's identity....[1]

If the parade held the central position in the fort, the flagstaff was the focal point of the parade ground, a rallying point for the group activities mentioned above. Post Order 30 (August 18, 1866), for example, directed that "the troops will be fully armed and equipped in front of the flag staff at 8 o'clock A.M."[2]

The flag itself was a central feature in ceremonial events. Deaths of men stationed at the fort were marked by flying the flag at half-staff. In 1861, Valentine Stichter, of the Washington Artillerists, noted the firing of "11 guns for death of sergeant. Flag at half-mast at fort."[3] The flag also was flown at half-staff to mark the deaths of public figures like President Lincoln and Secretary of War Stanton.

The flagstaff on the 1823 "Plan of Fort Washington" (Illustration 3) is shown opposite the center of the curtain of the northwest front of the fort. The 1848 flagstaff was in the same area.[4]

The precise location of the flagstaff at Fort Washington has been determined by the historical and archeological investigations carried

out by Benjamin B. Powell and Thomas McGarry; see Illustration 22, "Archeological Base Map for the 1978-1982 Fort Washington Restoration." According to Powell:[5]

> The flag pole which was first constructed in June 1823 was located in front of the ramp leading to the rear Curtain and the stairway to the Redan . . . . In 1848 Lt. Jeremy F. Gilmer, the Engineer at Fort Washington, suggested that the flag staff which was to be removed from the Capitol dome would make an excellent staff for Fort Washington.

The Capitol flagstaff was removed and re-erected at Fort Washington. It was in the same general area as the flagstaff of 1823. An archeological investigation located the foundation:[6]

> The foundation, which appears to be solid mortar with no brick or stone included, is 12 feet long (north-south) by 11.6 feet wide (east-west), thus closely approximating the documented 12 feet square size of the 1848 flag base . . . . A little south of center of the mortar mass is a 3.4 feet square hole, and centered in this hole is a circular post hole of dark earth indicating the position occupied by the wooden flag staff. This hole has a diameter of two feet.

McClure's research and Powell's archeological work also determined the dimensions of the flagstaffs.[7] The 1823 staff was 71 feet long (19 inches at the bottom and 15½ inches at the top) and was cut from yellow pine. It also had a 44-inch spar. The flagstaff removed from the Capitol in 1848 and erected at Fort Washington was 95 feet in length, with a bottom diameter of two feet. Illustrations 24 and 25 may show either the 1823 or 1848 flagstaff; their dates and accuracy are uncertain. Illustration 23, from a pre-1848 view, shows three poles on the roof and dome of the Capitol, one of which may be the one reused at Fort Washington.

The flagstaff erected in 1848 was still in place in 1862 though in need of repair. On September 8, 1st Lieutenant Ernest von Woyna wrote to Captain C. Hartz, AQMG:[8]

> pieces of Pine timber 16 in x 16 in--16 feet long and 4 pieces same 10 feet Long have not yet reached this post. ... this material is required for repairing and staying the flag staff which is now standing in a very critical position.

Evidently the timber did arrive and the repairs were made, for the flag continued to fly over Fort Washington during the Civil War and for almost 40 years after, although there were difficulties from time to time. In March 1868, the pulley works were out of order and the flag could not be raised or lowered for two weeks. They finally got "a prisoner to climb the pole for which he asks that the part of his sentence relating to shaving his head be remitted."[9] The 1848 flagstaff was used until December 10, 1902, when, according to an article in the Washington Evening Star, the flag was raised on its new steel flagstaff, with "the music playing, troops drawn up in line with presented arms and a salute being fired from the guns of the fort."[10]

The flags flown at Fort Washington would have been the standard Army issue. According to the Army Regulations of 1861:[11]

> The garrison flag is the national flag. It is made of bunting, thirty-six feet fly, and twenty feet hoist, in thirteen horizontal stripes of equal breadth, alternately red and white, beginning with the red. In the upper quarter, next the staff, is the Union, composed of a number of white stars, equal to the number of States, on a blue field, one-third the length of the flag, extending to the lower edge of the fourth red stripe from the top.

The specifications for garrison flags in 1876 required that the heading be stout eight-ounce cotton duck, seven inches wide doubled to the flag, making it three and one-half inches wide when completed, with two inch webbing through it extending the entire width of the flag. A triangular stay piece, twelve inches horizontal and ten inches on the vertical side, was to be sewn into each corner of the heading. A galvanized staple and ring were to be positioned at each end of the flag heading with five copper rivets. The lower edge of the flag was to be trimmed in three thicknesses with three rows of sewing.[12]

The storm flag, according to the 1861 Army Regulations, was to be twenty feet by ten feet.[13]

There is good evidence on the use of storm and garrison flags at Fort Washington. On April 23, 1861, shortly after the 1st United States Artillery arrived, Captain Joseph Haskin wrote to Captain Thomas Talbot, AAG, that the storm flag he had requested had not arrived.[14] It did arrive, however, before the year was out. An 1861 inventory listed both a garrison and a storm flag.[15] A May 1865 inventory listed four sets of garrison flag halyards, four storm flags, and one garrison flag.[16] In 1866, they had 75 yards of 1½-inch diameter mast rope in stock.[17]

To summarize, the flagstaff at Fort Washington from 1840 to 1872 was on the parade ground near the center of the northwest front. From 1848 on it was two feet in diameter at the bottom and 95 feet high. The post was furnished with garrison and storm flags which would have been the appropriate army issue. The halyards were 1½ inches in diameter.

Footnotes: The Flagstaff and Flags

1. McGarry, "Archeological," p. 76.

2. RG 393, Entry 1333, Gen., Sp., and Post Orders, 1865-67, NA.

3. May 28, 1861, in Thompson, First Defenders, p. 104.

4. Powell, "Archeological," p. 6.

5. Ibid., p. 1, Attachment No. 3; see reference in Annual Report of the Secretary of War, 1848, p. 260.

6. Powell, "Archeological," pp. 6-7. This report has a number of illustrations of the excavations and a plot plan.

7. Ibid, pp. 1-2, 6-7. For distinct views of the flagstaff at Fort Washington, see Illustrations 24 and 25; for a view of another Civil War flagstaff, see Illustration 26.

8. RG 393, Post Orders: Letters Sent by the Assistant Quartermaster, 1862-66, NA.

9. Captain John Mendenhall to Colonel Joseph H. Taylor, March 14, 1868, FW-PO: Letters Sent, 1865-72, pp. 45-46, NA.

10. Washington Evening Star, December 12, 1902, p. 17.

11. Rev. Army Regs., 1861, p. 475.

12. Adopted May 31, 1876. RG 92, Entry 1341, NA.

13. Rev. Army Regs., 1861, p. 475.

14. RG 393, Entry 1329, Letters Sent, 1861-65, NA.

15. Ibid., p. 22.

16. Second Lieutenant Erwin Seeley, May 31, 1865, Monthly Returns of Quartermaster Stores, 1861-73, RG 92, Entry 1203, Box No. 1, NA. (Hereafter cited as Seeley, "Inventory.")

17. RG 393, Post Orders: Letters Sent by the Assistant Quartermaster, 1862-66, p. 73, NA.

V: ORDNANCE AT FORT WASHINGTON, 1840-1872

Fort Washington was built to protect the Potomac River approach to the city of Washington. Its parapets and casemates provided mountings for the artillery and protection for the garrison and ordnance. While the masonry and earthworks were essential, it was the ordnance that justified Fort Washington's existence.

Between 1824 and 1842, Fort Washington was lightly armed, mounting only four iron 6-pounders on field carriages. These guns may have been suitable for artillery practice or to protect the fort's sally port, but they would not have provided the firepower required to defend the city. The ordnance stores required for these guns were limited. The returns at Fort Washington for the second quarter of 1839 listed:[1]

4	6-pounder field guns
4	6-pounder field carriages
16	6-pounder rammers and sponges
4	sponge buckets
4	linstocks
8	portfire stocks
6	portfire cases
4	gunner's belts
8	gunner's haversacks
4	tube pouches
513	priming tubes
1024	6-pound shot
471	pounds cannon powder
331	6-pound cartridge bags
4	thumbstalls

Part of the reason for Fort Washington's limited armament was its unfinished state. When Captain Armistead and Lieutenant Maurice completed the initial construction of the fort in 1824, work on the gun platforms had not begun. In 1840, Fort Washington still was considered to be in poor condition "in consequence of its unfinished state."[2]

The installation of gun platforms suitable for heavy artillery was one of the renovations that Captain Smith was ordered to undertake in 1841 when the Secretary of War directed that Fort Washington receive an allotment from the 417 heavy cannon and 440 gun carriages to be distributed among America's coastal fortifications.[3] Captain Smith was to build platforms for barbette carriages to mount the thirty 24-pounders allocated to Fort Washington.

Barbette carriages were designed to mount a gun which fired over the wall or parapet (en barbette) rather than through an opening (embrasure) in the parapet. The barbette carriage pivoted on an iron pintle mounted under the axis of the carriage; the trail of the carriage was mounted on a wheel or wheels which rode on a traverse circle of stone or iron, a system designed to aid the artillerists in turning the gun over the arc of fire. The barbette carriages at Fort Washington were concentrated on the terreplein of the flanks and curtain facing the river; only a few were mounted to defend against a land attack.

Smith requested the pintles, plates, and blocks required to construct the platforms in March 1841.[4] By June he had a supply in stock and work on the platforms continued throughout the year; all but five were reported ready to receive their guns by the end of 1841.[5] Work on the platforms for the thirty 24-pounders continued during the early months of 1842, and in March, Smith mounted the first heavy artillery at Fort Washington.[6] In 1844, he had the pintles of the barbette carriages strengthened; in 1845, the battery over the gateway was completed and six permanent pintles and traverse arcs were laid.[7] Work on the flank casemates began in 1847 and in September Smith wrote that "The Embrasure of the flank casemates have been altered for carronades, the traverse stone laid, and the iron rails pro-

cured."[8] The Secretary of War could finally report in 1847 that Fort Washington was in condition for defense.[9]

The return of ordnance stores at Fort Washington for the first quarter of 1844 reflected the increase in armament:[10]

30	24-pounder iron cannon, old pattern
4	6-pounder field guns
16	6-pounder rammers and sponges
60	24-pounder rammers and sponges
10	24-pounder ladles
10	24-pounder worms
4	sponge buckets
60	budge buckets
30	pass boxes
64	linstocks
38	portfire stocks
6	portfire cases
4	gunner's belts
18	gunner's haversacks
34	tube pouches
60	priming wires
32	bricoles
50	priming horns
53	24-pound shot
1073	6-pound shot
208	pounds of cannon powder
331	6-pound cartridge bags
34	24-pound cartridge bags
216	musket balls and cartridges

Although there were no barbette carriages listed in this quarter's return, thirty 24-pounder barbette carriages were listed in the returns for the first quarter of 1842 and 1843; they were inadvertently listed as 32-pounder carriages in the 1850 return.[11]

When Captain George A. Nauman and Company F, 1st United States Artillery, entered Fort Washington in October 1848, the post was better armed than it had ever been before. Nauman's return of ordnance for

the first quarter of 1850 was similar to that given above.[12] The quantities listed for guns, rammers, sponges, ladles, portfire stocks and cases, powder, and shot remained much the same. There were some additions: a 6-pounder worm, 17 tompions, 64 sponge covers, and some priming wires. The number of 6-pounder field carriages had decreased to two. The largest increase in ordnance stores was in small-arms ammunition; the post now had 5,879 musket balls and cartridges, 4,896 blank cartridges, and 1,942 percussion caps. Evidently, in compliance with General Order 8 (February 7, 1849), the fort's defenders were armed with percussion lock muskets rather than flintlock muskets.[13]

Because of the susceptibility of wooden carriages to decay, the mounted cannon often were placed under tarpaulins or penthouses. In 1842, Captain Smith had written to Chief Engineer Totten concerning the need for them at Fort Washington:[14]

> No tarpaulins or Penthouses have been sent to cover the 30 twenty four pounder guns, now at Fort Washington, when mounted.

He requested that they be requisitioned.

Only a few cannon were kept mounted during peacetime; most of the tubes were laid on skids and the carriages were placed in well-ventilated storehouses. According to the Ordnance Manual:[15]

> Cannon should be placed together, according to kind and calibre, on skids of stone, iron, or wood, laid on hard ground, well rammed and covered with a layer of cinders, or of some other material to prevent vegetation.
>
> Guns and long howitzers.--The pieces should rest on the skids in front of the base-ring and in rear

> of the astragal; the axis inclined at an angle of 4 or 5 degrees with the horizon, the muzzle lowest; the trunnions touching each other; or, if space be wanting for that arrangement, the trunnions of one piece may rest on the adjoining piece . . . ; the muzzle closed with a tompion or a plug of dry wood, well saturated with oil or grease; the vent down, stopped with a greased wooden plug, or with putty or tallow.
>
> Short howitzers and mortars.--On thick planks, standing on their muzzles, the trunnions touching, the vents stopped.

All the tubes were dismounted when a post was not garrisoned.[16]

Between October 1853 and January 1861, when Fort Washington was not manned and was all but abandoned, the fort's guns were dismounted and the barbette carriages were placed in a storehouse in the ravelin. This was the state of the fort's defenses when Lieutenant Miles D. McAlester inspected the post on January 9, 1861, as the threat of civil war loomed. McAlester also found the four 6-pounders in "doubtful condition" and he condemned the two remaining 6-pounder field carriages. There was a sling cart available, however, to transport the cannon and two yoke of oxen which could haul both cannon and carriages to the fort.[17]

In late January 1861, troops were sent to the fort and re-mounting of the guns began. As late as April, the commandant felt that the troops and armament on hand were too small for defense and that "All the guns are very old and I think nearly worthless."[18] At that time he had only 375 24-pound balls and no shells.[19] Sergeant Valentine Stichter noted the progress made in May:[20]

> May 1 Mounted guns on water battery.

May 8	Received 6 large guns, 24-pounders; lot of grape and canister shot, balls, etc. . . . . Twenty head cattle engaged in hauling up cannon and mounting same.
May 9	Received five 8- and 10-inch colombiads for shell. Lot bombs, ammunition.
May 11	Hauled up 32-pounders on foot . . . .

Despite all the progress, there may have been as much propaganda as truth in the Democratic National Intelligencer article of May 28, 1861, that stated:[21]

> Commandant Maj. Joseph A. Haskin has strengthened his position. The 32-pounders are all mounted, furnaces for heating shot are in "apple-pie" order, magazines are full, hand grenades are ready for use at a moment's notice, bombs are lying around loose and the artillerists sleep nightly beneath their guns.

During the first five months of 1861 the situation had changed dramatically, however, and for a brief moment Fort Washington was at the center of Union military activity.

Ordnance supplies continued to arrive and requests for more were sent in by Fort Washington's commanders during the remainder of 1861. In July, 50 barrels of powder arrived; in August, Haskin requested 15,000 musket cartridges (.58 caliber) with percussion caps, 300 wooden fuses for 8-inch shells, 200 24-pound shells for coehorn mortars, 250 15-second fuses for 24-pounder shells, and 50 8-inch canisters.[22] In September, he requested a "24 pdr. howitzer to mount over the Sally port on the most Commanding part of this work." Haskin added that "If sea coast howitzers and carriages cannot be sent for the other traverses" he thought he could make do with two 8-inch siege howitzers fitted to 24-pounder barbette carriages.[23]

Some of these requests were filled, others were not. The returns for 1861 indicate that not only were new cannon being sent to Fort Washington but also that the old iron 6-pounders were withdrawn:[24]

	Heavy Artillery	Field Artillery	Mountain Howitzers	Total
January	29	4		33
February-April	35	4		39
May	46	4	2	52
August	46		2	48

The Consolidated Morning Report for November 28, 1861, gives a breakdown of the armament on hand at the end of the year:[25]

Heavy Artillery:	5	32-pounders
	6	8-inch seacoast howitzers
	25	24-pounder guns, mounted
	6	24-pounder howitzers, flank casemate
	1	8-inch siege howitzer
	2	coehorn mortars
Field Artillery:	1	12-pounder brass howitzer
Mountain Howitzers:	2	

Preparations for defense continued during 1862. Colonel Charles Merchant, post commander, wrote on January 1 asking for a sling cart and chain to mount some of the pieces which had arrived at the fort.[26] The sling cart that had been at the fort in 1861 must have broken down or been shipped elsewhere. Although Merchant returned the borrowed cart to the Washington Arsenal on the eighteenth, he may have had to ask for it again: in July, twelve 24-pounders arrived at Fort Washington.[27] A sling cart is listed in a return of ordnance supplies at Fort Washington in June 1863.[28]

The increase in armament at the fort during 1862 can be traced in the Consolidated Morning Reports for January and June and in the Summary Statement of Ordnance for September:[29]

		Jan.	June	Sept.
Bronze:				
6-pounder, Model 1840, '41	3.67 bore			4
12-pounder, Mountain Howitzer	4.62 bore	2	2	2
12-pounder, Field Howitzer		1	1	1
Iron:				
24-pounder gun, Model 1819, '39	5.82 bore	26	26	41
32-pounder gun, Model 1829, '41	6.4 bore	5	17	17
24-pounder howitzer, flank defense		6	6	6
8-inch siege mortar, Model 1841		1	1	1
8-inch seacoast howitzer, Model 1841		6	6	6
Bronze:				
24-pounder Coehorn mortar	5.82 bore	2	2	2
TOTAL:		49	61	80

In September 1862, these pieces were mounted on the following carriages:

I. Field:

For 6-pounders, 3-inch, 10-pounders, 12-pounders field howitzers	2
For light 12-pounder gun and 24-pounder howitzer	1
For 12-pounder prairie	2
For 24-pounder and 8-inch siege howitzer, carriage and limber	1

II. Garrison and Sea Coast Carriages:

For 24-pounder barbette carriage and chassis	42
For 32-pounder and 8-inch sea coast carriage and chassis	23

III. Casemate:

For 24-pounder carriage and chassis	6

IV. Mortar Beds:

For 24-pounder Coehorn	2

The artillery on hand at Fort Washington in September 1862 represented the fort's full complement for the duration of the war. Between September 1862 and April 1866, Fort Washington had eighty pieces of artillery--primarily 24- and 32-pounders.

We do not know the placement of every one of these pieces, but we can position some of them. This is due, in part, to General Order 42 (February 2, 1864) which stated:[30]

> The fixed armament, consisting of the heavy guns and those the positions of which are prescribed, will be numbered in a regular series, commencing with the first gun on the right of the entrance of the main gate.

A drawing, "Sheet No. 1/Fort Washington, Md./Armament Sketch/December 31, 1902" (Illustration 27), is based on this order and gives a numbered plan of all the gun emplacements in Fort Washington (but not those in the old ravelin).[31] According to this sketch, the arrangement of the artillery in Fort Washington was:

Northwest demi-bastion:

Right Flank:	1 24-pounder gun
	2 8-inch seacoast howitzers
Left Face:	5 24-pounder guns
Left Shoulder:	1 8-inch seacoast howitzer
Left Flank:	2 24-pounder guns
West Curtain:	5 24-pounder guns

Southwest demi-bastion:

Right Flank:	1	24-pounder gun
	1	32-pounder gun
Right Shoulder:	1	8-inch seacoast howitzer
Right Face:	4	32-pounder guns
	1	24-pounder gun
Salient:	1	24-pounder gun
Right Flank:	1	24-pounder gun

Southeast bastion:

Right Flank:	2	24-pounder guns
Right Face:	2	24-pounder guns
Left Face:	1	24-pounder gun
Left Shoulder:	1	24-pounder gun

East Curtain:	2	24-pounder guns
Caponniere:	2	24-pounder guns
Casemate:	4	24-pounder flank defense howitzers

Northeast bastion:

Right Shoulder:	1	24-pounder gun
Right Face:	2	24-pounder guns
Salient:	1	8-inch seacoast howitzer
Left Face:	2	24-pounder guns
Left Shoulder:	1	24-pounder gun
Right Flank:	1	24-pounder gun
Casemate:	2	24-pounder flank defense howitzers

This provides a precise location for all of the 24-pounder guns, five of the seventeen 32-pounder guns, five of the six 8-inch seacoast howitzers, and all six of the 24-pounder flank defense howitzers.

There are several points to consider in reviewing the placement of these guns. Only the flank casemates in the caponniere and the northeast bastion were armed; the casemates in the demi-bastions and the southeast bastion had no artillery mounted in them.[32] One of the 8-inch seacoast howitzers was placed to command the hills to the

northeast of the fort. And, it is curious to note the absence of a gun over the sally port despite Haskin's request for one there.

The disposition of the remaining 30 pieces is uncertain. One might assume that the two 24-pounder Coehorn mortars and the 8-inch siege mortar were placed in the mortar battery off the right flank. However, the archeological investigations undertaken by McGarry in 1977-1978 are inconclusive. Although he found no evidence that the mortars were in place in this battery, the Coehorns, relatively lightweight and designed for easy movement, may have been moved about the fort. Still, according to the post's ordnance returns, several mortars were mounted and, according to the 1868 practice schedules, the mortars were in place and were in service:[33]

July 27, 1868	--	Co. A to drill on mortar battery Co. M to drill on siege battery
October 5, 1868	--	Battery M, 4th Artillery to drill on mortars Battery A, 4th Artillery to drill on field battery

Whether this took place in the mortar battery, in the fort, or in the ravelin is uncertain. Discounting the mortars, this might place one 8-inch seacoast howitzer and twelve 32-poundrs in the ravelin as a water battery. The four 6-pounders and two mountain howitzers, being on field carriages, could have been kept on the parade or in the ravelin.

There was a large and varied array of ordnance stores used in conjunction with this artillery or with other elements of the fort's defenses. The "Summary Statement of Ordnance and Ordnance Stores on hand, etc." at Fort Washington for June 30, 1864, provides a good indication of what was kept in stock during the Civil War. This list is given in its entirety:[34]

CLASS I

4	6-pounder guns, models 1840, '41	3.67 bore
2	12-pounder mountain howitzers	4.62 bore
1	12-pounder field howitzer	4.62 bore
41	24-pounder guns, model 1819, '39	5.82 bore
17	32-pounder guns, model 1829, '41	6.4 bore
6	24-pounder howitzers, flank defense	5.82 bore
1	8-inch siege mortar, model 1841	
6	8-inch seacoast howitzers, model 1841	
2	24-pounder Coehorn mortars	5.82 bore

CLASS II ARTILLERY CARRIAGES

Gun Carriages (field)

1 for 6-pounder guns & 12-pounder howitzers with limbers complete
2 for 12-pounder prairie, with limbers, complete
1 for 24-pounder & 8-inch siege howitzer, carriage & limber

Barbette (wood)

39 24-pounder carriages & chassis, wood
23 32-pounder gun & 8-inch seacoast howitzer carriages & chassis, wood
6 24-pounder howitzer carriages, flank defense, wood

Mortar Beds (iron)

2 24-pounder Coehorn (wood)

CLASS III ARTILLERY IMPLEMENTS & EQUIPMENT

67 Breech sights
15 Baskets for mortar implements
2 Buckets, sponge, iron, for field guns
74 Buckets, sponge, wood, garrison guns
2 Buckets, tar, iron, for field guns
107 Budge barrels
134 Chocks, assorted
12 Fuze cutters
1 Fuze extractor
2 Fuze gimlets
26 Fuze mallets
7 Fuze saws

26 Fuze setters, brass
6 Fuze wrenches
28 Gunner's haversacks
4 Gunner's levels or "perpendicular"
2 Gunner's pincers
11 Gunner's punches
79 Gunner's gimlets, siege & garrison guns
1 Gunner's quadrant, brass
14 Gunner's quadrant, wood
2 Gunner's sleeves
476 Handspikes, maneuvering, wood, for barbette carriages
6 Handspikes, roller, iron, for casemate carriages
8 Handspikes, shod, wood, for barbette carriages
2 Handspikes, trail, wood, for field guns

Ladles & Staves

14 24-pounder siege or garrison gun
6 32-pounder sea-coast gun
4 Ladles for hot shot

Lanterns

6 Lanterns, common
24 Lanterns, globe
6 Lanterns, magazine
146 Lanyards for friction primers
4 Lead aprons & straps
86 Linstocks
13 Loading tongs
2 Mauls

61 Pass boxes
2 Plummets
4 Pointing stakes or wires
2 Pointing cords
2 Portfire cases
2 Portfire shears or cutters
31 Portfire stocks
2 Powder funnels, copper
8 Powder measures
32 Priming wires
8 Priming wires, field
138 Priming wires, siege & garrison

Rammers & Staves

81 24-pounder siege or garrison gun
34 32-pounder sea-coast gun
11 8-inch columbiad & Rodman gun
4 Shell hooks
2 Scrapers for mortars
2 Spatulas

Sponge Covers

4 Sponge covers for 12-pounder mountain howitzer
3 Sponge covers for 6-pounder field, 6-pounder James, 12-pounder Wiard, & 20-pounder Parrott guns, 12-pounder howitzers, 8- & 10-inch siege mortars
14 Sponge covers for 12-pounder siege or garrison guns, 24-pounder field (flank defense) howitzers, 32-pounder field & 8-inch siege howitzers, 8-, 10-, 12- & 13-inch siege & seacoast mortars
48 Sponge covers for 24-pounder siege or garrison guns
43 Sponge covers for 32-pounder seacoast gun, 8-inch seacoast howitzer, 8-inch columbiad chambered & 100-pounder Parrott gun

Sponges & Rammers

18 6-pounder field guns & 12-pounder howitzer
4 12-pounder mountain howitzer
12 24-pounder howitzer (flank defense)
2 8-inch siege howitzers

Sponges & Staves

85 24-pounder siege or garrison gun
34 32-pounder seacoast & 100-pounder Parrott gun
12 8-inch columbiad chambered & 8-inch seacoast howitzer
153 Thumbstalls

Tompions

7 for 6-pounder smooth, 12-pounder Wiard & 20-pounder Parrott guns, 3.67
3 for 12-pounder James gun, 12-pounder field gun & howitzer, 4.62
46 for 24-pounder gun or howitzer, 5.82

17 for 32-pounder gun or howitzer, and 100-pounder Parrott gun, 6.4
7 for columbiad, 200-pounder Parrott gun, mortar & howitzer, 10

134 Tube pouches
68 Vent covers
23 Vent punches
2 Worms & staves, field guns

CLASS IV ARTILLERY PROJECTILES, FULLY & PARTIALLY PREPARED FOR SERVICE

Shot for Smoothbore Guns

3 6-pounder field gun, 3.67 bore
2640 24-pounder siege or garrison gun, 5.82 bore
1166 32-pounder seacoast gun, 6.4 bore

Shell

690 24-pounder siege or garrison gun & field howitizer, 5.82

Shells--Smoothbore Guns

40 12-pounder field howitzer, 4.62 bore, strapped & fixed
536 8-inch columbiad, Rodman gun & seacoast howitzer, strapped

Spherical Case Shot

270 6-pounder field gun, 3.67 bore, strapped & fixed
20 12-pounder field howitzer, 4.62 bore, strapped & fixed
190 24-pounder seacoast gun, 5.82 bore, strapped & fixed
180 32-pounder seacoast gun, 6.4 bore, strapped & fixed
40 12-pounder field howitzer, 4.62 bore, filled & fixed
199 12-pounder mountain howitzer, 4.62 bore, filled & fixed
738 24-pounder siege or garrison gun, 5.82 bore, filled
127 32-pounder seacoast gun, 6.4 bore, filled
105 8-inch siege howitzer, filled

Grape, Stands of

304 24-pounder siege or garrison gun, 5.82 bore
205 32-pounder seacoast gun, 6.4 bore
20 8-inch columbiad & Rodman gun
36 10-inch columbiad & Rodman gun

Hand Grenades (Ketchum)

181 Hand Grenades, 1-pounder
334 Hand Grenades, 3-pounder
326 Hand Grenades, 5-pounder

CLASS VIII AMMUNITION FOR SMALL-ARMS, POWDER & ARTICLES FOR ARTILLERY

600 24-pounder flank defense howitzer
100 12-pounder siege or garrison gun & 8-inch siege howitzer
171 32-pounder seacoast gun

Cartridges for Small-Arms (for rifle-muskets)

12,317 Musket, elongated ball (.577 & .58 cal.) Diam. of ball .574
2,702 Pistol cartridges, army cal. .44

Fuzes (Metallic)

218 Fuzes, paper, asst.
650 Fuzes, wood, asst.

Powder

16,949 Powder, cannon, pounds
1,880 Powder, musket & rifle, pounds

Miscellaneous Articles

5 Fire balls, asst.
10,276 Friction tubes or primers
20 Light balls
16½ Match, quick, pounds
130 Match, slow, yards
11,755 Percussion caps, regulation
97 Portfires
548 Wads, grommet

CLASS IX ARTILLERY MACHINES, ARTICLES FOR MECHANICAL MANEUVERS & MISCELLANEOUS ARTICLES FOR ARMY USE

4	Blocks, whole
2	Gins, barbette
2	Gin falls, garrison
1	Gin sling
4	Handspikes
4	Handspikes, gin & maneuvering
61	Rollers, half
61	Rollers, short
1	Sling cart, large

CLASS X PARTS OF ANY ARTICLES INSERTED IN THE FOREGOING CLASSES

Cartridge Bags--Unfilled

87	12-pounder field gun, 24-pounder field & flank defense & 32-pounder field howitzer
3573	24-pounder siege or garrison gun
1503	32-pounder seacoast gun
597	8-inch seacoast howitzer
17	assorted

Part Second

Cloth, etc.

1	Cord, sash, piece
2	Twine, hemp (for binding), pounds
3	Marline, pounds

Iron, etc.

2	Tacks, copper (flat heads), pounds

Leather, Hides, Skins, etc.

15	Chalk, pounds
55	Brooms, corn, sweeping

Some of the ordnance supplies were kept in readiness near the guns: "a few stands of grape, canister, and solid shot . . . will be piled near the guns."[35] To protect this ordnance, "Platforms for projec-

tiles will be laid near the guns; for canisters, a couple of pieces of scantling for skids will answer. A water-shed, made by joining two boards together at the edges, should be placed over them.[36]

Most of the ordnance stores were kept in Fort Washington's magazines. There were numerous regulations governing their care and use, some of which were detailed in the Volunteer Force (1864):[37]

> 8. The magazines must be frequently aired in dry weather. For this purpose, the ventilators must be opened after 9 a.m., and must be closed, at latest, two hours before sunset. The ammunition for different classes of guns will be carefully assorted, and the shelves, boxes, or barrels, containing each kind, plainly marked . . . . Friction primers must be kept in the tin packing boxes, and carefully protected from moisture. . . . The supply of friction primers for each gun must be fifty per cent greater than the number of rounds of ammunition provided for it. A dozen primers will always be kept in the tube-pouches in use at each gun. Three lanyards will be provided for each gun, one of which will be kept in store; the other two in the tube-pouches. As soon as received, the hooks will be tested to see if they are sufficiently small to enter the eye of the primer, and yet strong enough for use.
>
> 10. There should be one lantern for every three or four guns, and two good globe lanterns for each magazine.
>
> 11. No person will be allowed to enter the magazine except on duty, and then every precaution against accidents will be taken. Lights must always be in glass lanterns, and carried only by the person in charge of the magazine. Swords, pistols, canes, spurs, &c., will not be admitted, no matter what may be the rank of the person carrying them. Socks or moccasins will be worn, if they can be procured; if they cannot, then all persons must enter with stocking-feet. No fire or smoking will be allowed in the vicinity when the doors or

ventilators are open. Too many precautions cannot possibly be taken to avoid the chances of an explosion.

A copy of this paragraph, legibly written, will be conspicuously posted near or on the doors of every magazine.

17. All injuries to the magazines or platforms of the guns will be promptly reported as soon as observed. . . .

20. The grass-covered or sodded portions of the parapets, traverses, magazines, &c., should be occasionally watered in dry weather, and the grass be closely cut.

22. The practice of building fires on the open parades, for cooking and other purposes, is prohibited, as it endangers the magazines.

Army Regulations stated:[38]

The magazine should be frequently examined to see that the powder is well preserved. It should be opened every other day when the air is dry and clear. Barrels of powder should be turned and rolled occasionally. Under ordinary circumstances, only a few cartridges should be filled . . . . Cartridge bags may be kept in the magazine ready for filling; also port-fire, fuzes, tubes, and primers. Stands of grape, canisters, and wads for barbette guns, should be kept in store with the implements. For casemate guns, wads may be hung in bundles, and grape and canisters placed near the guns.

The Ordnance Manual had specific recommendations on the arrangement of articles in the magazine or storehouses:[39]

Implements collected together according to kind and calibre, in a dry place, arranged on shelves or racks, in bundles or bunches, or in boxes, ac-

cording to their nature, with marks or labels showing the kind and number of the articles.

Sponges, rammers, ladles, and worms, complete, placed on pins in a vertical frame, or suspended vertically or horizontally, by racks or hooks, from the joists, supported so as not to bend. When in separate parts, the heads piled on shelves or on the floor, and the staves tied up in bundles, according to kind and calibre.

The woollen sponges should be preserved from moths by means of camphor, pepper, &c., or by being sealed up in strong paper bags.

Handspikes in square piles, heads and points alternating.

Leather equipments, hung on pins or hooks, in dry and cool rooms.

All wood painted, except tool-handles; iron either painted or oiled.

For powder barrels, the Ordnance Manual had very precise requirements:[40]

Each barrel is marked on both heads (in white oil-colors, the head painted black) with the number of the barrel, the name of the manufacturer, year of fabrication, and the kinds of powder,-- cannon, mortar, or musket--the mean initial velocity, and the pressure per square inch on the pressure piston. . . .

In the powder-magazines the barrels are generally placed on the sides, three tiers high, or four tiers, if necessary. Small skids should be placed on the floor and between the several tiers of barrels, in order to steady them, and chocks should be placed at intervals on the lower skid, to prevent the rolling of the barrels. The powder should be separated according to its kind, the place and date of fabrication, and the proof-

> range. Fixed ammunition, especially for cannon, should not be put in the same magazine with powder in barrels, if it can be avoided. . . .
>
> In a room 13 or 14 feet wide, the barrels may be arranged in a double row in the centre, two alleys 2½ feet wide, and 2 single rows 6 to 12 inches from the walls: in this way the marks of each barrel may be seen, and any barrel can be easily reached. In a room 12 feet wide, an equal number of barrels may be placed in two double rows, with a central alley of 3 feet, and 2 side alleys, next to the walls of about 10 inches each. There should be an unencumbered space of 6 or 8 feet at the door or doors of the magazine.

The magazines at Fort Washington are 11 feet 10 inches wide by 18 feet 5 inches deep, unlined. With 17 inches of ventilating space and one inch boards, the interior space is 8 feet 10 inches by 15 feet 5 inches. This would permit two rows of barrels along each side wall and a center aisle of three feet. Part of each magazine could have housed powder, in addition to the other ordnance supplies required for the guns in their vicinity.

Solid shot, grape, and canister shot were to be stored on the ground or in dry cellars:[41]

> Balls should be carefully lackered [sic] as soon as possible after they are received. The new 8-inch solid shot are painted red, . . . All spherical case shot are also painted red. Other projectiles are lackered black. . . .
>
> Balls are piled according to kind and calibre, under cover if practicable, in a place where there is a free circulation of air, to facilitate which the piles should be made narrow if the locality permits; the width of the bottom tier may be from 12 to 14 balls, according to calibre.

> Make the bottom of the pile with a tier of unserviceable balls buried about two-thirds of their diameter in the sand; this base may be made permanent: clean the base well and form the pile, putting the fuze-holes of shells downwards in the intervals, and not resting on the shells below. Each pile is marked with the number of serviceable balls it contains.
>
> Grape and canister shot should be oiled or lackered, put in piles, or in strong boxes, on the ground-floor, or in dry cellars,--each parcel marked with its kind, calibre, and number.

When the guns were put in service, there was a particular arrangement of the implements for each piece, spelled out in the following extracts from the 1863 Instructions for Heavy Artillery:[42]

For 24-pounder Coehorn mortar:

Handspikes:	One on each side of the bed, against the cheeks, leaning upon the maneuvering bolts. . . .
Haversacks:	Containing fuzes, and a pair of sleeves. Attached to the tompion, and lying upon the mortar.
Tube-pouch:	Containing the priming-wire, friction tubes, and the lanyard, wound in St. Andrew's cross upon its handle. Attached to the tompion, and lying upon the mortar.
Gunner's Pouch:	Containing the gunner's level, gimlet, vent-punch, and chalk. Attached to the tompion, and lying upon the mortar.
Quadrant: Plummet: Pointing-Cord: Scraper: Wiper: Shell-Hooks: Grummet-wad:	In a basket, between the cheeks of the mortar bed.

Tompion:	In the muzzle.
Quoin:	Under the mortar upon the bolster, its handle to the left.
Pointing Stakes: Maul: Broom:	With the basket.

For 32- and 24-pounder guns, 8-inch seacoast howitzers mounted on a Barbette Carriage:

Handspikes:	Two on each side of the carriage, leaning against the parapet, in line with the cannoneers.
Sponge/Rammer:	One yard behind the cannoneers of the right, the sponge uppermost, the sponge and rammer-heads turned from the parapet, inclined slightly from the piece, and supported upon a prop; or, when this cannot be done conveniently, placed against the wall, the sponge and rammer-heads nearest the piece.
Pass-box:	Against the parapet outside the pile of balls.
Tube-pouch:	Containing the friction tubes, and the lanyard, wound in St. Andrew's cross upon its handle. Suspended from the knob of the cascable [sic].
Gunner's Pouch:	Containing the gunner's level, breech sight, finger-stall, priming-wire, gimlet, vent-punch, chalk-line, and chalk. Suspended from the knob of the cascabel.
Chocks:	One on each side of the piece, at the foot of the parapet, inside the handspikes.
Vent-cover:	Covering the vent.
Tompion:	In the muzzle.

Broom:	Leaning against the parapet, outside of the pile of balls.
Budge-barrel:	Containing cartridges, at the safest and most convenient place in rear of the piece.

To the same battery there will be one worm, one ladle and one wrench.

The balls are regularly piled on the banquette, on the left of the piece.

The wads are placed between the parapet and the balls, partly resting on them.

For 24-pounder howitzer on a flank casemate carriage:

Roller Handspike:	Leaning against the scarp wall, behind No. 2.
Sponge and Rammer:	Leaning against the scarp wall, behind No. 1, the rammer-head upon the ground.
Haversack:	Suspended from the knob of the cascabel.
Tube-pouch:	Containing the finger-stall, priming wire, friction tubes, and the lanyard wound in St. Andrew's cross upon its handle. Suspended from the knob of the cascabel.
Vent-cover:	Covering the vent.
Tompion:	In the muzzle.
Broom:	On the left of the piece.
Budge-barrel:	Containing cartridges, at the safest and most convenient place in rear of the piece.

The Ordnance Manual lists the following implements and equipment:[43]

For each gun:

2 Rammers--1 spare
2 Sponges--1 spare
1 Worm
1 Ladle to 6 pieces
1 Gunner's perpendicular, to 6 pcs.
1 Pass box
1 Budge-barrel
2 Tube-pouches
2 Thumb-stalls--1 spare
2 Priming-wires--1 spare
1 Gunner's gimlet
1 Vent-punch, to 3 pieces
1 Breech-sight
1 Vent-cover
2 Lanyards for friction-primers
1 Water-bucket
1 Tompion
1 Chalk-line and chalk
1 Broom
1 Wrench to 6 pieces

For each howitzer; the same as a gun, omitting pass-box, and adding:

1 Haversack
1 Fuze-setter
1 Fuze-mallet
1 Fuze-extractor, to 6 pieces
1 Quadrant

For each mortar:

1 sponge and rammer
6 Handspikes--4 shod
1 Haversack
1 Tube pouch
2 Priming wires
1 Vent-punch, to 3 pieces
1 Gunner's gimlet
1 Quadrant
1 Plummet
2 Pointing-stakes
2 Quoins
1 Tompion

2 Lanyards for friction-primers
1 Pair shell-hooks
1 Scraper
1 Spatula
1 Pair gunner's sleeves
1 Wiper
1 Fuze-setter
1 Mallet
1 Fuze-saw
1 Fuze extractor, to 6 pieces
1 Basket
1 Broom
1 Tarpaulin

For each 24-pdr. howitzer for flank defense:

2 Rammers and sponges--1 spare
2 Sponge covers--1 spare
1 Roller-bar
2 Maneuvering-handspikes
1 Gunner's haversack
1 Budge-barrel
2 Tube-pouches
2 Thumb stalls--1 spare
2 Priming wires--1 spare
1 Gunner's gimlet
1 Breech sight
2 Lanyards for friction-primers
1 Water-bucket
1 Fuze-cutter
1 Vent-punch
1 Vent-cover
1 Tompion and strap
1 Broom

For each casemate-carriage:

2 truck-bars
2 chocks
1 broom

For each barbette carriage:

2 maneuvering-handspikes
1 tarpaulin

How these were used was detailed in the 1863 Instruction for Heavy Artillery, pp. 62-64.

There were further additions to Fort Washington's armament after the Civil War. In April 1866, the fort had the same complement of 80 pieces.[44] But in early May, three large 15-inch Rodman guns were delivered to the post.[45] Two additional Rodmans were added before 1868, and a sixth went to the fort in 1869, although they had some trouble with the latter and its carriage was deemed unserviceable.[46] Eighteen other guns were delivered to the fort between 1866 and 1872.[47] A few pieces were withdrawn as well. This ebb and flow of artillery in and out of Fort Washington during the period from 1863 to 1873 is recorded in the "Register of Cannon":[48]

	Delivered	Withdrawn
4 6-pounder guns	1863	1865
2 12-pounder mountain howitzers	1863	1873
1 12-pounder field howitzer	1863	1873
1 3-inch rifled gun, Model 1861	1868	1873
1 6-pounder, iron	1866	1871
6 8-inch columbiads, Model 1844, '49, '60 with chamber	1868	1872
5 15-inch Rodmans, Model 1861	1866	1868
6 15-inch Rodmans, Model 1861	1869	1873
6 24-pounder howitzers, flank defense	1864	1873
1 8-inch siege howitzer, Model 1841	1864	1873
6 8-inch seacoast howitzers, Model 1841	1864	1873
2 24-pounder Coehorns, 5-inch	1864	1873
1 10-inch siege Rodman, Model 1861	1868	1873
4 4½-inch siege guns, Model 1861	1868	1871
41 24-pounder guns, Model 1819-39	1864	1873
17 32-pounder guns, Model 1829-41	1864	1873

By this account the new additions were:

1 3-inch rifled gun	1868
1 6-pounder iron gun	1866

6	8-inch columbiads	1868
11	15-inch Rodmans	1866/1869
1	10-inch siege Rodman	1868
4	4½-inch siege guns	1868

Those withdrawn from the fort before the post was turned over to the engineers were:

4	6-pounder guns	1865
1	6-pounder iron gun	1871
4	4½-inch siege guns	1871

There is some question about whether or not all of these pieces were mounted. On July 8, 1867, Captain F.M. Follett wrote Colonel J.H. Taylor that "The Water Battery I have had policed and the guns mounted as far as possible [;] those not mounted will be policed [placed ?] together on skids."[49]

In October 1870, Post Commander Major A.P. Howe reported that the guns mounted at the post and bearing on the channel were:[50]

19	32-pounders
29	24-pounders
5	8-inch sea coast howitzers
1	13-inch mortar
1	8-inch mortar

Howe's list did not account for all of the guns; the Rodmans were most conspicuously absent. There are some other discrepancies between his list and the "Register of Cannon." Howe reported nineteen 32-pounders (seventeen are listed in all other reports) and he records a 13-inch mortar which does not appear in the other accounts. Still, these accounts indicate that peacetime procedures were in effect and the artillery was being dismounted.

In summary, the ordnance at Fort Washington changed significantly between 1840 and 1872. Before 1842, the fort's armament consisted of

four 6-pounder iron guns. The post received its first heavy artillery in 1842 but because of the intermittent garrisoning of the post not all of it was mounted. The artillery was dismounted and the carriages were placed in storage when the garrison withdrew in 1853. No heavy artillery was mounted at Fort Washington between October 1853 and 1860. Beginning in January 1861, the fort was re-garrisoned and the artillery was remounted. In the first two years of the Civil War the amount of ordnance at Fort Washington more than doubled. The fort reached its peak wartime complement of 80 pieces by 1862; these remained in place, without additions, until after the war. After the war ended, and before the garrison was again withdrawn, a number of heavy guns and rifled pieces were sent to the fort. These rifled guns represent the beginning of the modern era which made masonry forts, such as Fort Washington, obsolete.

This is true also for the shoulder-arms carried by the soldiers. Until the Secreary of War ordered that "all muskets with flintlocks be called in and replaced with percussion locks," the soldiers carried flintlocks.[51] By 1850, the troops at Fort Washington received the newer arms. During the Civil War, the garrison at Fort Washington was armed with the .577 and .58 caliber rifle-musket.[52] After the Civil War, the troops were issued new arms. According to Special Order 53 (December 12, 1867), Companies A and M, 4th United States Artillery, were furnished with breech-loading firearms and were ordered to turn in their muzzle-loading muskets.[53]

Footnotes: Ordnance at Fort Washington, 1840-1872

1. RG 156, Entry 100, Quarterly Ordnance Statements of Ordnance at Forts: Fort Washington, 2nd Quarter--1839, NA. Hereafter cited as "Quarterly Ordnance Statements."

2. Annual Report of the Secretary of War, 1840, p. 104.

3. Ibid., 1841, p. 82. Descriptions of the various artillery pieces, carriages, munitions, and related equipment used by the U.S. Army for coastal defense before and during the Civil War will be found in John Gibbon, The Artillerist's Manual (1863), and in two War Department publications: Instruction for Heavy Artillery (editions of 1851, 1860, 1863) and The Ordnance Manual for the Use of Officers of the United States Army (editions of 1841, 1861, 1862). For illustrations, see Alfred Mordecai, Artillery for the Land Service of the United States (Washington, 1848-49); photographs of these illustrations can be obtained through the Library, Harpers Ferry Center, National Park Service.

4. Captain Fred A. Smith to Colonel Joseph Totten, March 27, 1841, RG 77, Letters Received, 1828-66 (S-1658), NA.

5. Same to same, June 4, 1841, ibid., (S-1429); Annual Report of the Secretary of War, 1841, p. 102.

6. April 8, 1842 (S-1966), RG 77, Letters Received, 1828-66, NA.

7. Annual Report of the Secretary of War, 1844, p. 175; ibid., 1845, p. 252.

8. September 30, 1847 (C-2291), RG 77, Letters Received, 1828-66, NA.

9. Annual Report of the Secretary of War, 1847, p. 609.

10. RG 156, Entry 100, "Quarterly Ordnance Statements."

11. Ibid.

12. Ibid.

13. RG 393, General, Special and Post Orders, 1853-60, NA.

14. February 4, 1842 (S-1869), RG 77, Chief of Engineers, Letters Received, NA. The penthouse was "a covering of thin boards, framed together, to protect the wooden barbette-carriages from the weather." (Ordnance Manual, 1862, p. 67; see also p. 118 for description of the component parts and how to assemble them.)

15. Ordnance Manual, 1862, p. 33.

16. Ibid., pp. 33, 67.

17. "Measures for Defense & Inspection Trip," January 9, 1861 (NA-WD: M-3731), Fort Washington Research File.

18. Captain Joseph Haskin, April 20, 1861, RG 393, Entry 1329, Letters Sent, 1861-66, NA.

19. April 23, 1861, ibid.

20. Thompson, First Defenders, pp. 102-03.

21. Fort Washington Research File.

22. Captain Joseph Haskin to Captain Tallmadge, July 15, 1861, RG 393, Entry 1329, Letters Sent, 1861-66, NA; Haskin to General J.W. Riley, Chief of Ordnance, August 19, 1861, ibid.

23. Captain Joseph Haskin to Captain C.P. Kingsby, September 21, 1861, ibid.

24. RG 617, Reel 1383, Post Returns, NA.

25. Ibid.

26. Colonel Charles S. Merchant to Lt. Col. George D. Ramsey, January 1, 1862, RG 393, Entry 1329, Letters Sent, 1861-66, p. 34, NA.

27. Same to same, January 18, 1862, ibid., p. 35; same to General Montgomery C. Meigs, July 21, 1862, ibid.

28. RG 156, Book 64, 68, 79; "Quarterly Ordnance Statements," June 30, 1863.

29. RG 617, Reel 1383, Consolidated Morning Reports, January 14, 1862, June 20, 1862; RG 157, Entry 102, "Summary Statement of Ordnance and Ordnance Stores on Hand at the Forts of the United States," September 30, 1862, NA.

30. Volunteer Force (1864), p. 13.

31. Fort Washington Research File.

32. February 25, 1865. Colonel Charles S. Merchant to General Richard Delafield, Chief Engineer: "Of the 17 Casemate Embrasures unoccupied and wanting Traverses, 6 of them Should be for flank Defense," RG 393, Entry 1329, (Old Book 437), Letters Sent, 1861-66 NA.

33. General Order 14 (July 27, 1868), p. 131 and General Order 28 (October 5, 1868), p. 148, in RG 393, Entry 1334, General Orders, 1867-72, NA.

34. RG 157, Entry 102, NA.

35. General Order 42 (February 1864), in Volunteer Force (1864), p. 13.

36. Ibid., p. 14.

37. Ibid., pp. 14-15, 17-18.

38. Rev. Army Regs., 1861, p. 16.

39. Ordnance Manual (1862), pp. 140-41.

40. Ibid., pp. 244-46.

41. Ibid., p. 40.

42. U.S. War Department, Instruction for Heavy Artillery. Prepared by a Board of Officers for the Use of the Army of the United States (Washington, D.C.: Government Printing Office, 1863), pp. 28-29, 36-38, 42-43, 61.

43. Ordnance Manual (1862), pp. 370-71.

44. Colonel Charles S. Merchant to General A.B. Dyer, Chief of Ordnance, April 28, 1866, RG 393, Entry 1329, Letters Sent, 1861-66, NA.

45. Colonel Charles S. Merchant to J. McAlister, Inspector of Ordnance, May 15, 1866, ibid.

46. RG 156, Entry 113, "Register of Cannon," p. 127; FW-PO: Letters Sent: Mar.-June 1865-1872, pp. 95-97, 100, NA.

47. RG 156, Entry 113, "Register of Cannon," p. 127, NA.

48. Ibid.

49. FW-PO: Letters Sent, 1865-72, NA.

50. Major Albion P. Howe to AAG, October 21, 1870, FW-PO: Letters Sent, 1865-72, NA.

51. Order 8 (February 7, 1849), RG 393, General, Special and Post Orders, 1853-60, NA.

52. RG 156, Entry 109, Vol. 3, 4th Quarter--1863, 1st Quarter--1864, NA.

53. RG 393, Entry 1335, Special Orders, 1867-72, pp. 82-83, NA. See also Brevet Major John Roder to Commanding Officer, Fort Washington, November 5, 1867, RG 391, Entry 191, 1866-71, NA.

VI: GUARDHOUSE AND GUARDROOM

The spatial arrangements and furnishings for both the guardhouse and cells and the guardroom are covered in this section.[1]

Guardhouse (West Room of Gatehouse)

The importance of the guardhouse in the post life at Fort Washington is indicated by the original design and construction of the fort. While other rooms in the gatehouse were used for various purposes during the fort's history, there was one constant: the west room and cells on the first floor were consistently used as a guardhouse. Other areas of the fort--a main casemate or a building on the wharf--also at times housed prisoners, but the cells in the gatehouse appear to have been continuously used as prisons until 1868 and possibly through 1872.[2]

Prisoners with light sentences were customarily locked in a guardhouse room along with a number of other men undergoing punishment. The west room of the gatehouse served this purpose at Fort Washington. The room is 16 feet wide by 16 feet long. It has plastered walls, wooden floors, a fireplace, and two windows facing the parade ground.

Although prison walls generally were not plastered, the walls in this room are plastered on three sides; this may reflect the room's use as an office or guards' room at an earlier date. The north, or casemate, wall (with the prison cells) is not plastered; it is brick. All the walls were whitewashed.

There are four evenly spaced holes in the north wall between the cell doors. One pair is 13½ inches above the floor; the other pair is 36

inches above the floor. These may have been for iron rings to which shackles could be attached--a common feature in military prisons. No evidence of the rings or shackles remains, however, although a 24-pound ball and chain was found at the fort, possibly the one mentioned in an 1861 reference.[3]

The wooden floors are 1950s replacements. It is impossible to determine anything from those boards now in place.

Each window has wooden sash and glass panes; both had bars mounted into the outside sills, which have been cut off leaving only stubs remaining. The bars were round iron rods, three-quarters of an inch in diameter, quite different from the square bars found in the casemate windows. Fifty-eight pounds of three-quarters inch round iron rods were listed in the "Abstract of Purchases paid for at Fort Washington Md in the Quarter ending on the 31st of December 1861."[4] The westernmost window had seven bars, the window closer to the passageway had six. These bars help to confirm the use of this room as a prison, since the east room windows are unbarred.

While the movable sash and bars would have permitted the windows to be opened to provide ventilation in the prison room, there is some question whether the fireplace was used to provide heat for the prisoners. A guardhouse was kept as uncomfortable as possible and at many posts prison rooms were not heated. The inventory of furnishings in the possession of the guard at Fort Washington lists only one set of fireplace tools and one fireplace fender; these presumably would have been used in the guardroom rather than in the prison room.

The only contemporary information on guardhouses comes from the Surgeon General's reports, inspections by the medical staff, or chance

comments in correspondence. The general impression is that the prison room usually was all but unfurnished. A slop bucket or two, for human wastes, and the soldiers' blankets were the usual furnishings. In some prisons bed sacks were permitted and a few guardhouses had banquettes, or sleeping platforms, built around the walls. There is no evidence of the latter at Fort Washington and the small size and the layout of the room would seem to preclude their use.[5] The men evidently slept on the floor, wrapped in their blankets, if permitted by the post commander to take them into the jail, as they were at Fort Washington. By Post Order 90 (December 24, 1861) Private John Gardiner and Private F. Cook, Company D, 1st United States Artillery, were confined for desertion; each was given one flannel shirt, one pair of drawers, one pair of stockings, and one blanket.[6]

Cells

In addition to the prison room, each guardhouse typically had prison cells for the worst offenders--the violent, the recalcitrant, or the mentally disturbed.[7] The cells were sometimes classified as light (with a window) or dark (without window). This was the case at Fort Washington. On May 28, 1868, the officer-of-the-day, 1st Lieutenant John Waite, wrote that "The dark cell at Present is occupied by Private Davis of Company 'A' 4th Artillery and appears to me to present a healthy atmosphere although it is certainly damp."[8]

The two prison cells at Fort Washington were built into the outer walls and were entered by doors in the north wall of the west room. Both were brick, barrel-vaulted rooms. They were not plastered but they were whitewashed. Because of the dampness of the cells and the lack of ventilation, the whitewash "soon became discolored."[9]

The "dark cell," closest to the passageway, is 5 feet wide by 19 feet long. It has no outside window. The door into the cell is several

inches thick and is made of diagonal boards for strength. The window now in the cell door should be smaller, to serve only as an inspection port. Ventilation was supposed to be provided by a 7-inch by 8-inch pipe located over the door; it was designed so that light could not enter. This was supplemented by three 5-inch square vents set in the side walls.

The "light cell" is 10 feet wide by 19 feet long. It also has a 7-inch by 8-inch vent over the doorway and three 5-inch square vents in the inner wall. The light cell door is slightly larger than the dark cell door and has a barred window in it. In addition, the light cell has a small barred window (10 inches by 22 inches) to the west of the cell door; this window faces the river front. It has no glass in it. The light cell has two other interesting features on the back wall: a small, shallow fireplace and a round stove vent near the ceiling. Whether these were used for the benefit of prisoners is not known, although it seems unlikely.

As Lieutenant Waite wrote of Fort Washington in 1868, "the cells are not extremely comfortable in their furnishings. . . ."[10] At best they included slop buckets for wastes and a blanket, if the prisoner was fortunate. The rooms were purposely kept inhospitable so that the soldiers would not take lightly a stay in the guardhouse.

Guardroom (East Room of Gatehouse)

Both rooms on the first floor of the gatehouse at Fort Washington were identified as guardrooms at various periods of the fort's history (see section III). Since the west room housed prisoners, the east room housed the guard. It should be understood, and the interpretation should state, that the east room also was used at times as an office, either for the adjutant or the commanding officer (or pos-

sibly both), and that it (or the west room) may have been used briefly as the telegrapher's office.[11] If this room was used for an office, the guard would then have been housed in the west room and the prisoners in a casemate, or a building on the wharf.[12] Thus, for the east room, there are two possibilities for interpretation during the period 1861-1865. This report recommends that the east room on the first floor of the gatehouse be exhibited as a guardroom.

Guard duty was rotated among the men of each company. Each guard mount was on duty for twenty-four hours but this was divided into three reliefs. This meant that a soldier manned a post for two hours and was off station but on call for four hours. In cold or stormy weather the guard might be changed more frequently, being on duty one hour and on call for two.

The number of guards and the frequency with which a soldier had to stand guard duty depended on the size of the command and the danger of attack. For a short period, when Fort Washington was the capital's only protection, as many as 91 guards were posted around the fort.[13] The number of guards after this was generally much less. By October 1861 there were nine guards posted around the fort and only seven by December:[14]

October 24-25, 1861:	1 guard house	5 ramparts	3 demilune
December 31, 1861:	2 guard house 1 prisoners	3 ramparts	1 demilune

From April 10, 1862 through September 27, 1863, one sentry was posted at the privy gate, two on the ramparts, one on the rear casemate, one at the colonel's quarters, with others occasionally posted at the hospital and on the wharf.[15] Between March and June 1865, six guards were posted around the fort; five guards were on station until August

1865.[16] Since these figures represent one relief, the total guard mount would have been three times as large. Thus, on December 31, 1861, the guard mount would have consisted of twenty-one men, with seven on duty and fourteen off station but on call.

Although the men on guard were assigned to the duty for a twenty-four-hour period, and they had to spend their four-hour rest periods in the guardroom, there was little consideration for their comfort. The ten or twelve men of the guard during 1862-1865, awaiting their turn to man a station, would have shared a room a little less than sixteen feet square. Within this space they ate their meals and slept. Even when the men were resting they had to keep their uniform and accoutrements on (including their shoes), and had to have their weapons at hand for action at a moment's notice.[17]

Furnishings for the guardroom were few in number and simple in construction. An inventory in the guard's morning reports at Fort Washington for February 2, 1864, lists one clock, two lanterns, two bunks, two benches, one fireplace fender, and one set of fire irons.[18] This is an interesting inventory not only for what it lists, but also for what is missing. The morning report of February 2 does not mention a table or desk or any chairs; they are absent also from other morning reports which include an inventory of items in charge of the guard. It is possible that the benches doubled as tables--the soldiers sitting straddling the bench and using it as a table. They may also have sat on the edge of a bunk or on the floor to eat.

The lack of tables and chairs appears to be atypical. David Clary's review of guardhouses indicates their presence at most posts as does Sally Ketcham's research: the guardroom at Fort Laramie, for instance, had a rough board bed, a couple of chairs, and a desk.[19]

Because the first level of Fort Washington's gatehouse only had two rooms to serve three functions--prison room, guardroom, officer-of-the-day's room--perhaps the latter function was carried out in an upper room of the gatehouse. The adjutant's office could have housed the officer-of-the-day as well. A table or desk and chair there would not have been listed as guardroom property.

Although in many guardrooms the men slept on a "banquette" or wooden platform, the guardroom at Fort Washington had bunks.[20] In the 1860s, these would probably have been double barracks bunks, with gun racks attached, a common arrangement on barracks bunks.

The two benches which the guards had would have been a standard plank type, made at the post. There is no specific evidence of the style of bench used at Fort Washington, nor is there a description of the fireplace fender, fireplace tools, or the clock. In 1867, by General Order 8, the Post Council directed that the "Clock now in the Guard House at this Post be sold and a new one to be bought out of the Post Fund to replace it."[21] The following month, by General Order 28, the Council allocated about $17 for a "first Class Clock for the Use of the Guard House."[22]

There are several other likely items, besides the table and chairs, which are not mentioned in the inventories, possibly because they were fixed in place. If gun racks were not attached to the bunks, it is possible that there was a gun rack attached to the wall, presumably a wooden rack made on the post. Other likely fixtures are hooks or pegs to hang things on, and a wall shelf or shelves. These would have been useful for the lanterns and other small items used by the guards.

Although only lanterns were mentioned, candles would also have been present as the principal source of light. According to Army Regulations:[23]

> An issue (extra) of ten pounds of sperm candles, or twelve pounds of adamantine candles, or fifteen pounds of tallow candles per month, may be made to the principal guard of each camp or garrison, on the order of the commanding officer. . . .

In addition to furniture, the guard was accountable for certain tools. The 1864 inventory of articles in charge of the guard included:[24]

> one saw, one crosscut saw, two rakes, three splint brooms, two shovels, three long handled shovels, three spades, six picks, five axes, two axe helves and three crowbars.

These may have been used for fatigue duty or by the prisoners sentenced "to hard work on the road and wharf" or other labor.[25] They could have been stored in racks or on shelves, but more likely were stacked in a corner of the guardroom or storeroom.

The guardroom housed a few miscellaneous items as well. These included in 1865 four locks and a pair of handcuffs.[26] A ball and chain used for a prisoner "confined with 24 lb ball ten days" may have been kept in the guardroom when not in use.[27] Only the most troublesome prisoners, particularly those apt to run away, were sentenced to be confined with a ball and chain.

According to the morning reports, the guard was also responsible for the post flags. In 1864, the morning report listed two flags; on June 17, 1865, one garrison flag and one storm flag; the report for July 30, 1865, listed two storm flags but no garrison flag.[28]

Even with these scanty furnishings the guards' room at Fort Washington must have been a crowded and cluttered place during the 1860s. The accommodations were spare and uncomfortable, and because the duty shifted every twenty-four hours, there was little incentive to take care of the furniture or keep it clean.

Footnotes: Guardhouse and Guardroom

1. There is little contemporary information on the furnishings, arrangement or use of guardhouses. Sally Ketcham has summarized her findings in "Historic Furnishing Report: The Guardhouse: Fort Scott National Historic Site" (Omaha, Nebraska: National Park Service, 1977); see particularly pp. 18-45, 61-68. David Clary's unpublished report, "These Relics of Barbarism: A History of Furniture in Barracks, Hospitals and Guardhouses of the United States Army, 1800-1880" (Harpers Ferry, West Virginia: National Park Service, 1982) contains additional information; see pp. 82, 149, 235-37, 270-71 and 288-90.

2. Captain Fred Follett to Colonel Joseph H. Taylor, July 1, 1867, FW-PO: Letters Sent, 1865-72, p. 16, NA; Circular No. 4 (1870), p. 70.

3. February 2, 1864, RG 393, Entry 1337, Morning Reports, Vol. 4; June 17, 1865, July 30, 1865, ibid., Vol. 5, NA.

4. Abstract "A," 4th Quarter 1861, Captain Charles A. Reynolds, AQM, RG 92.

5. See references cited for Ketcham and Clary above.

6. RG 393, Entry 1332, General, Special, and Post Orders, 1861-65, NA.

7. Ketcham, "The Guardhouse," pp. 32-33; Clary, "History of Furniture," p. 290.

8. Lieutenant John Waite to Lieutenant John Simpson, 4th United States Artillery, Post Adjutant, RG 393, Entry 1331, Register of Letters Sent, 1867-72, NA.

9. Captain Fred Follett to Brevet Colonel Joseph H. Taylor, AAG, July 8, 1867, FW-PO: Letters Sent, 1865-72, NA.

10. Lieutenant John Waite to Lieutenant John Simpson, May 28, 1868, RG 393, Entry 1331, Register of Letters Sent, 1867-72, NA.

11. Post Order 24 (March 24, 1862), RG 393, Entry 1332, General, Special, and Post Orders, 1861-65, NA.

12. Circular No. 4 (1870).

13. Thompson, First Defenders, p. 103.

14. RG 393, Entry 1337, Morning Report, Vol. 4, NA.

15. Ibid.

16. Ibid., Vol. 5.

17. Meyers, Ten Years, p. 159.

18. February 2, 1864, RG 393, Entry 1337, Morning Reports, Vol. 4, NA.

19. Clary, "History of Furniture"; Ketcham, "The Guardhouse," p. 31.

20. Meyers, Ten Years, p. 159; Ketcham, "The Guardhouse," p. 32; February 2, 1864, RG 393, Entry 1337, Morning Reports, Vol. 4, NA.

21. February 27, 1867, RG 393, Entry 1336, Proc. of the Post Council, p. 94, NA.

22. June 29, 1867, ibid., p. 100.

23. Rev. Army Regs., 1861, p. 244.

24. February 2, 1864, RG 393, Entry 1337, Morning Reports, Vol. 4, NA.

25. Captain John Mendenhall to Colonel Joseph H. Taylor, September 15, 1868, FW-PO: Letters Sent, 1865-72, p. 76, NA.

26. January 8, 1865, RG 393, Entry 1337, Morning Reports, Vol. 4, NA.

27. November 23, 1861, RG 393, Entry 1337, Morning Reports, Vol. 2, NA.

28. February 2, 1864, RG 393, Entry 1337, Morning Reports, Vol. 4; June 17, 1865, July 30, 1865, ibid., Vol. 5, NA.

VII: POST COMMANDER'S OFFICE

The upper room on the east side of the gatehouse, the putative location of the post commander's office during the Civil War, measures 14 feet by 17½ feet; it has a single door opening on an exterior stairway, a window facing north and one to the east, and a fireplace in the east wall. The office was plastered and probably whitewashed, with painted trim.

Within this setting were placed the furnishings provided by army regulations. According to the Revised Army Regulations, 1861, the furniture allocated to an office included:[1]

> two common desks or tables,
> six common chairs,
> one pair common andirons, and
> shovel and tongs

All quartermaster department furniture was finished with a stain made from a mixture of burnt sienna and Vandyke brown diluted in water and applied with a sponge. The formula was darkened as wanted and oil was either mixed in or applied over the stain.[2]

The 1861 Regulations provided further that each office desk was to be furnished with:[3]

> one inkstand,
> one stamp,
> one paper folder,
> one sand-box,
> one wafer-box,

and up to four lead pencils per year. "Steel pens, with one holder to 12 pens," could be issued in place of quills.

According to General Order 85 (September 20, 1865):[4]

> To each office desk or table is allowed one inkstand, one paper folder, one ruler, one steel eraser, one piece of india rubber, one seal stamp, and as many lead pencils as may be necessary, not exceeding four per annum.

The commanding officer of a company was entitled, under this order, to the allowance of one office desk.

Army regulations also stipulated how much stationery was to be issued:[5]

	Commanding Officer of 2 companies	post with 1 company	Other officers
Writing paper (quires)	6	5	1½
Envelope paper (quires)	½	½	1/8
Quills (no.)	25	20	6
Wafers (ounces)	½	½	1/8
Sealing wax (ounces)	4	3	3
Ink Powder (paper)	1	1	½
Office tape (pieces)	1	1	½

There is evidence in the Auditor General's accounts, in the monthly returns of quartermaster stores, and in the letters sent by Fort Washington's Acting Assistant Quartermaster that these items were furnished to Fort Washington.

The monthly returns of quartermaster stores for the years 1850-1851, when Companies F and I, 4th United States Artillery, were at Fort Washington included, for example, the following items:[6]

6	chairs
2	desks
2	inkstands
2	pieces of India rubber
1	sand, blotting
2	reams of letter paper
7	quires of foolscap paper
5½	quires of envelopes
1	quire of blank forms
9 2/3	black ink powder
217	quills
9	pieces of tape
4	oz. wafers
9	oz. sealing wax

These supplies would have been sufficient to furnish two offices, assuming that the commanding officer and adjutant had only one desk apiece, rather than two, as provided for in the 1861 regulations.

During this period, the post also had 15 stoves, 9 fireplace fenders, and 3 pairs of andirons. This office was heated by an open fireplace, presumably fitted with andirons, tongs, and fender.[7]

The Statement of Quartermaster Stores, Clothing, and Camp Equipage submitted on May 31, 1865, by 2nd Lieutenant Erwin Seeley contains a number of items relating to the furnishings of the post commander's office (see Appendix D for a copy of Seeley's inventory). For furniture, Colonel Brooks could have chosen from among the listing of:

4	office desks
23	office chairs
9	fenders
3	shovels and tongs
3	fire tongs
22	heating stoves

His office or the adjutant's held the "Iron safe" also listed by Lieutenant Seeley. Note, however, that this listing does not include any shelves, bookcases, or coatracks.

Other desk and office supplies were available in 1865 at Fort Washington for the post commander's use, as well as for other officers like the post adjutant, quartermaster, commissary of supplies, ordnance officer, and medical officer:

Foolscap paper
Letter paper
Folioport paper
Envelope paper
Envelopes
2 and 3 quire blank books
Steel pens
Office tape
Inkstands
Tin paper cutters
Mucilage
Paper folder
Penholder
Common note paper
Arnold's fluid ink

A calendar and "Marine glasses" [binoculars or spyglasses] were also listed.

Letters sent by the Acting Assistant Quartermasters of Fort Washington (1865-1868) mentioned many of the items listed above and a few other items as well: carmine ink, blotting paper, a parallel ruler, and quills.[9] Post Commander Colonel Brooks may have received a new desk in August 1865. Of all the items mentioned above, the archeological investigation uncovered remains only of the inkwells.[10]

Footnotes: Post Commander's Office

1. Rev. Army Regs., 1861, p. 162.

2. Ketcham, "The Guardhouse," p. 29.

3. Rev. Army Regs., 1861, p. 167. A sand-box, or pounce box, was a small wood or metal box with a perforated lid. It was used to hold pounce. Pounce, a fine powder, sometimes made from cuttlebone, used to prevent ink from smearing when put over an erasure or on unsized paper.

A wafer was a thin disc of dried paste or adhesive used for sealing letters.

4. General Orders, 1872.

5. Rev. Army Regs., 1861, p. 167.

6. RG 92, Entry 1195, 1st, 3rd and 4th quarters, 1850; Entry 111, 1st and 4th quarters, 1851, NA.

7. 1st Lieutenant von Moyna to Brigadier General Meigs, September 11, 1862, FW-PO: Letters Sent by AAQM, 1862-66, NA.

8. Seeley, "Inventory."

9. FW-PO: Letters Sent by AAQM, 1862-66, NA.

10. McGarry, "Archeology," Vol. 2. See Class VI--Type 2--Fig. 38.

VIII: POST ADJUTANT'S OFFICE

The office of the post adjutant of Fort Washington during the Civil War is assumed to have been on the second floor of the west wing of the gatehouse. It was a mirror image of the commanding officer's office in the east wing, with a single door opening on an exterior stairway, two windows--one in the north wall, the other in the west wall--and a fireplace, which (rather than a stove) probably furnished the heat in this office as well as in the C.O.'s office.[1] In its dimensions, color scheme, and furnishings, this office would have been similar to the commanding officer's, though perhaps a little plainer in its furnishings. As with other army offices, the adjutant would have been permitted "two common desks or tables, six common chairs, one pair common andirons, and shovel and tongs."[2] These kinds of items were listed in Lieutenant Seeley's 1865 inventory of Fort Washington. Thus, the adjutant could have had a share of the 4 office desks, 23 office chairs, 9 fenders, 3 shovels and tongs, 3 fire tongs, and 22 heating stoves listed as being on post.[3] A notable omission from this list, particularly for the adjutant with all of his books, was any mention of book or wall shelves. These would have been useful for both the adjutant and the commanding officer; they may have been built in and thus not accountable property.

Another omission from the 1865 inventory was any mention of lighting devices--either lamps or candlesticks. Candles were certainly the principal source of light. Vouchers for Fort Washington from the 1840s include:[4]

August 15, 1845:	10 lbs candles @ 33 1/3¢	office lights	3.33
September 1, 1845:	6 Boxes matches	office	.18
November 3, 1845:	1 doz box matches	office	.36
	10 lbs sperm candles		3.33

The office supplies and stationery noted in the commanding officer's office would have been representative of the adjutant's furnishings as well. He, too, would have had paper, envelopes, blank books, steel pens and holders, inkstands, ink, office tape, glue, a paper cutter and paper folder, pencils, sealing wax, and a ruler.[5] While the commanding officer may have had the iron safe, the adjutant certainly kept the mail bag Seeley mentions.[6]

If the adjutant's office also served as the officer-of-the-day's office during the Civil War, one of the desks (or a table) could have served as his working space.

A dominant feature of the adjutant's office must have been the books and report forms the adjutant had to prepare and file for the post commander. According to General Order 13 (February 11, 1862), a six month's supply for a regiment was:[7]

1	Guard Report Book
1	Consolidated Morning Report Book
10	Company Morning Report Books
100	Consolidated Morning Reports
2	Lists of Rolls, Musters & etc.
6	Field & Staff Muster Rolls
18	Field and Staff Muster and Pay Rolls
60	Company Muster Rolls
180	Company Muster & Pay Rolls
12	Regimental Returns
60	Monthly Returns
20	Returns of Men Who Joined the Company
6	Quarterly Regimental Returns of Deceased Soldiers
30	Quarterly Company Returns of Deceased Soldiers
2	Annual Returns of Casualties
40	Descriptive Lists
100	Non-commissioned Officer's Warrants

Colonel Horace Brooks' list of books and blanks at Fort Washington, September 1863, is similar, but there were some omissions and a few additions:[8]

1	Regimental Morning Report Book
1	Index Book of Official Letters
144	Post Returns
18	Clothing, Camp & Garrison Equipage
450	Enlistments
120	Reenlistments
76	Tri monthly Reports for Department
112	" " " " "
26	Reports for Recruiting Party
100	Descriptive Lists
100	Muster & Descriptive Lists
240	Certificates of Disability
24	Recruiting Returns
50	Muster Rolls
52	Accounts Current, Recruiting
48	Muster Rolls, Field, Staff & Band
24	Monthly Department Returns (No. 30-32-34)
2	Inspection Reports
24	Clothing Receipt Rolls, No. 52
2	Price List of Clothing, Camp & Garrison Equipage
4	Quarterly Returns of Ordnance Stores "for Smal Arms," Setts

The format of the reports was prescribed in the Army Regulations as was the size and organization of the books.[9] Examples are:

Regimental General Orders & Regimental Orders Book:	144 ruled leaves and 4 blank fly leaves; paged & printed index; paper size: 10 1/4 broad x 15½ long
Regimental Descriptive Book:[10]	240 ruled and printed leaves; paged with a printed index and four unruled flyleaves; paper size: 10 1/4 broad x 15½ long

Regimental Letter Book:[11]	144 ruled leaves and 4 blank flyleaves; plain paper with faint lines; paper size: 10 1/4 broad x 15½ long
Regimental Index Book:[12]	96 ruled leaves and 4 unruled flyleaves; plain paper with faint lines; printed index; one letter to a leaf in front part; marbled sides; size: 10 1/4 broad x 15½ long

Footnotes: Post Adjutant's Office

1. First Lieutenant Ernest von Woyna to Brigadier General Montgomery Meigs, September 11, 1862, FW-PO: Letters Sent by AAQM, 1862-66, NA.

2. Rev. Army Regs., 1861, p. 162.

3. Seeley, "Inventory."

4. Fiscal Section, Office of the 3rd Auditor, Account N. 1502, 4th Quarter, 1845; Voucher No. 6 (November 5, 1845) and Account 4326, 2nd and 3rd Quarters, 1846; Voucher No. 15 (June 6, 1846), in Fort Washington Research File.

5. Rev. Army Regs., 1861, p. 167.

6. Seeley, "Inventory."

7. General Orders, 1862 (1-27).

8. December 23, 1864, RG 393, Entry 1329, Letters Sent, 1861-66, p. 153, NA.

9. RG 92, Entry 1341, pp. 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, NA.

10. The Descriptive Book contained "a list of the officers of the regiment, with their rank, and dates of appointment, and promotions; transfers, leaves of absence, and places and dates of birth." It also contained "the names of all enlisted soldiers, entered according to priority of enlistments, giving their description, the dates and periods of their enlistment; and, under the head of remarks, the cause of discharge, character, death, desertion, transfer, actions in which engaged, i.e.; in short, every thing relating to their military history." (Rev. Army Regs., 1861, p. 20).

11. This contained the commanding officer's correspondence relating to regimental subjects.

12. This was an index of letters required to be kept on file.

IX: OFFICERS' QUARTERS

There are few references to furnishings supplied specifically for officers' quarters at Fort Washington. Three Franklin stoves were purchased in January 1821 at $19.[1] This would have left one of the fireplaces without a Franklin stove; why is not known. In 1861 there were stoves in the officers' quarters.[2] There are no other indications in the post records of furnishings supplied to the officers by the quartermaster.

Presumably some furniture on Lieutenant Seeley's 1865 inventory (Appendix D) was in the officers' quarters. Seeley listed for the whole post 22 heating stoves, 14 single bunks, 20 tables, and 23 office chairs; some of each may have found their way into the officers' rooms.

There are no known diaries or letters from officers at Fort Washington to indicate what personal possessions they had. This would have depended on the officers' personal needs, interests, and resources, as suggested by the following examples not associated with Fort Washington.

Lieutenant Baird Snyder, 7th United States Cavalry, was stationed in Maryland and Virginia in 1862. Among his cash accounts were the following items:[3]

Bunk	$ 1.00
Stove and pipe	3.52
Flooring	4.00
Haversack	3.25
Gloves	2.00
Sash	11.00
Toothbrush	.50
Mirror	.50

Cap	2.25
Overcoat	9.00
Boots	9.00
Night cap	1.00
Rubber coat	8.00
Valise	6.50

Apparently Lieutenant Snyder was housed in a tent and being in the cavalry had to keep this belongings to a minimum--lieutenants serving in the field were restricted to eight pounds of baggage.

A somewhat earlier and more elaborate set of furnishings is revealed in the diary of 2nd Lieutenant Haskell C. Ewing, stationed at Fort Monroe in 1827 and Fort McHenry in 1828. When he moved to Fort Monroe on May 8, 1827, Lieutenant Ewing had his "trunk Mattress & Cot sent up by the Quartermaster." In the tent, where he was first quartered, there were two cot beds, three chairs, a large table, a looking glass and two trunks. The table had a covering, there was an oil lamp, and Ewing purchased an inkstand and some paper. On July 8, when he moved into permanent quarters, he had a sofa made, purchased a "piece of Carpet for a Rug," and hung mosquito netting. He enjoyed music and owned a flute, and he was an avid reader.[4]

By December 1827, Lieutenant Ewing was well furnished. He had:[5]

one cot
mattress
pillow
pocketbook
music
box for books
oil cloth
mosquito netting
sofa
stand lamp
table
inkstand

box of instruments
7 tumblers and 3 wine glasses
14 bottles of wine
decanter
flute
foils and mask
book shelves
46 books
Looking glass
Pitcher and basin
Hair brushes
Trunk
Rug
Andirons and tongs
Cardrack & pictures
Dirk
2 Chairs

While stationed at Fort McHenry in 1828, Lieutenant Ewing made a room by room description of his quarters and his furnishings. Quarters must have been ample at this time--this second lieutenant had four rooms. The arrangement of his furnishings follows:[6]

ROOM NO. 1:

1 mahogany table & shelf
2 chairs
window curtains
hearth rug
door carpet
2 pictures & diploma in gilt frame
inkstand and stationery
stand lamp
flute
2 tumblers
set of decanters
4 wine bottles
Camera Lucida
Card Rack
Unit cap
Sword & belt
Books:

Laws of United States	2 vols.
Paley Philosophy	1 vol.

	Bible (pocket)	1 vol.
	Purdons Digest	1 vol.
	Album	1 vol.
	Backes Manual Law	1 vol.
	Hist of England (abrgd)	1 vol.
	Illustrations of ?	1 vol.
	Hoggs Poems	2 vols.
	Historie de la Toilette	1 vol.
	Thomson's Seasons	1 vol.
	Life of Louis 14	3 vols.
	Goldsmith Poems	1 vol.
	Jacobs Law	1 vol.
	American Museum	1 vol.
	Delephine	3 vols.
	Letters from France	2 vols.
	Portfolio	1 vol.
	Westminster Magazine	2 vols.
	Select Plays	3 vols.
	Adele de Senavge	1 vol.
	Ordnance (mss)	1 vol.
	Documents War Dept	1 vol.
	History of the War	1 vol.
	Life Genl Jackson	1 vol.

ROOM NO. 2: Not furnished (drawing portfolio)

ROOM NO. 3:

Bedstead--straw bed and mattress
Blanket, sheets and coverlet
Table cover
2 Hair brushes
Curtain
Pitcher and basin
Tin cup
Razor, strap and brush
2 Locks and keys
Looking glass
Trunk straps & rope
Burke pocketbook

<u>Small Trunk</u>:
5 cotton sheets
2 pillow cases
3 linen shirts
3 summer vests

1 black socks
2 grey socks
3 summer vests
1 white silk socks
1 white silk gloves
2 handkerchiefs
2 black cravats
5 shirt collars
3 black socks
2 silk flags & dress silk hhds
2 pr suspenders
3 towels
2 pair black silk gloves

Large Trunk:
3 pair brown drilling pants
3 pair white drilling pants
1 pair linen drilling pants
2 sheets
2 flannel shirts
1 flannel vest
2 white wool socks
3 brown wool socks
1 neck cloth
1 mittens
1 black striped & worsted socks
1 dirk & watch
1 crepe black stockings
Instruments
Letters
Spectacles case

2 winter vests
1 cap pillow
2 blue coats
1 military frock
1 pair black, 1 blue, 1 grey, cloth pants
3 pair boots
2 pair pumps
1 overshoes
1 drab coat
1 plaid cloak

ROOM NO. 4:

Soap
Mathews comic medley
Old wool drawers
Lamp wicks
Stiff strip paper
20 bottles
oil cloth
wood

Lieutenant Ewing really lived in two of his four rooms, but these seem to have been very comfortably furnished, a reflection no doubt of peacetime conditions and a personal taste for comfort which Ewing could afford to indulge.

Contemporary photographs of Civil War camp scenes provide excellent illustrations of furnishings and personal possessions of officers. They show an interesting variety of personal belongings: folding and fixed chairs for sitting; tables for eating and writing; bunks, cots, blankets, coverlets, pillows, and sheets for sleeping; mugs, bottles, crocks, plates, and utensils for eating and drinking; basins, mirrors, buckets, and brushes for personal hygiene; candlesticks for lighting; magazines, books, and newspapers for reading; checkerboards, musical instruments, and playing cards for recreation; and, ambrotypes, tintypes, or daguerreotypes of wives, sweethearts, or children as reminders of home. For a selection of Civil War photographs showing officers in garrison or field quarters, see Illustrations 28-33.

There were a few items found in the archeological investigation at Fort Washington which may have been used by the officers. These include an octagonal ink bottle, a bottle of shoe polish, a bottle for ale or wine, and some prescription bottles.[7]

The kitchens in the officers' quarters were in the basement. They had plastered walls and ceilings, and brick floors. The north kitchen (the one selected for restoration) has two small windows facing west: and one in the east wall; the door is also located in the east wall. The south wall contains a small cupboard. The north wall has a bake oven, a fireplace, provision for firewood, and a dumbwaiter. The bakeoven was bricked in. A stove pipe (which still exists) was inserted in the chimney, which indicates the use of a cook stove in the officers' kitchen in addition to, or in place of, the fireplace.

At one point, it was recommended that the space under the center of the building be converted into an additional kitchen, "giving more room for the servants."[8] Perhaps a servant lived in a corner of the room.

The fireplace in the north kitchen contained a crane and three pot hooks. The fireplace crane is still at the post although in somewhat rough condition. It has a hook at one end indicating the use of pots with bail handles.

Although we do not have an inventory for the officers' kitchen at Fort Washington, there is evidence for the types of utensils and kitchenware which would have been found there. Among the items that were listed for use in kitchens at Fort Washington, probably in the enlisted men's mess but appropriate also for the officers' kitchen, were:[9]

1 meat saw
3 butcher's knives
1 butcher steel
1 tap borer
1 set liquid measures

Other items would have been necessary. The cups, plates, spoons, mess-pans, buckets, frying pans, cooking forks, and broom listed in the inventory of the Washington Artillerists, would have been needed in the officers' kitchen and mess as well.[10] The archeological investigations at Fort Washington uncovered fragments of a mason jar, a china plate, and an ironstone saucer, which may indicate types used by the officers.[11] The officers' kitchen also would have contained a variety of bags, barrels, crocks and tins for the bacon, beans, salt, vinegar, sugar, bread, coffee, beef, and pork which were issued as their rations.[12] The officers, of course, would have supplemented this fare with purchases from the sutler or from neighboring farmers (see Appendix E).

For contemporary illustrations of cooking utensils in military kitchens, see Illustrations 37, 41, 42. Similar utensils in domestic use are pictured in Harold Peterson, American Interiors, and in trade catalogs of the era.

Footnotes: Officers' Quarters

1. Fiscal Section, Report of the 3rd Auditor, Fort Washington: Account No. 9616, Abstract A, V-3, NA.

2. Thompson, First Defenders, p. 110.

3. Baird Snyder Mss Book, Pottsville, 1862, Historical Society of Schuylkill County; Rev. Army Regs., 1861, p. 163.

4. Haskell C. Ewing Diary, Marshall C. Ewing Papers, U.S. Army Military History Institute Collections, Carlisle, Pennsylvania; see especially entries for May 8, May 11, May 18, June 11, and July 8, 1827.

5. Ibid., December 1827.

6. Ibid., 1828.

7. McGarry, "Archeological," Vol. II, Class VII--Type 18 --Figs. 61-62; Class IV--Type 1--Fig. 27.

8. Lieutenant S.B. Dusenberry to Major General Thomas S. Jesup, May 26, 1834, RG 92. QM Consol. Corr., Box 1217, NA.

9. RG 393, FW-PO: Letters Sent by AAQM, 1862-67, pp. 68, 77, NA.

10. Company Records, Washington Artillerists, Historical Society of Schuylkill County, April 19, 1861.

11. McGarry, "Archeological," Vol. II, Hard Paste Earthenware, Fig. 122 and Fig. 153.

12. Company Records, Washington Artillerists, Historical Society of Schuylkill County, May 1, 4, 9, 10, 11, 16.

X: ENLISTED MEN'S BARRACKS

The enlisted men's barracks was a substantial two-story brick building with a shingle, later a slate roof, and a piazza across the front. The building was 82 feet wide by 25 feet deep and was designed to house 60 men. As originally built, the barracks was divided by a masonry wall (with fireplaces at each end) into two equal sections. These sections could be subdivided by partitions.[1]

Although the interior room arrangements were altered from time to time, from 1849 at least to 1868 the second floor of the barrack was divided into four squadrooms, each 22 feet by 19½ feet. The rooms were occupied (1868) as follows: Room No. 1--18 men; Room No. 2--12 men; Room No. 3--12 men; Room No. 4--16 men.[2] The partitions were evidently removed shortly after this, for in 1870 the second floor was described as "two rooms for dormitories."[3] The first floor (1840-1870) was divided into three sections: kitchen, mess room, and additional sleeping quarters (Illustration 8).

Squadrooms

In 1868, it was noted that the enlisted men's barracks had a "medium size fire place" in each room; stoves were not mentioned.[4] In 1846 cranes were installed in the fireplaces used for cooking and in 1851 Major Scott ordered "sheet iron fenders, and andirons placed in every fire place in the men's barracks rooms" as a fire protection measure.[5]

Although the use of coal or wood stoves rather than open fireplaces to heat barracks and other military structures was encouraged from the 1830s on, the evidence suggests that the barracks at Fort Washington were heated in the old way at least until 1868, the 22 heating stoves on post in 1865 nothwithstanding.[6] However, reference in 1864

to "4 sheet iron chimneys 6 feet long for repairing Company Quarters" could mean that there were stove connections in the four squadrooms.[7] The new barracks erected in 1868 were furnished with heating stoves.[8]

Candles were the only generally authorized lighting in army barracks until 1862. They were issued to the men as part of their rations and were considered part of the men's subsistence rather than part of their furnishings. Between 1812 and 1861 the army issued only tallow candles, soft candles made from animal products. In 1861, the issue was "one pound of sperm candles, or one and one-fourth pound of adamantine candles, or one and one-half pound of tallow candles" to 100 rations.[9] Made, in part, from the spermaceti of sperm whales, sperm candles were harder and burned brighter but were more expensive than tallow. Adamantine candles were hard candles made from white paraffin. At Fort Washington candles provided the lighting in the barracks at least through 1870.[10]

To supplement the meagre lighting provided with their rations, the soldiers could purchase additional candles from the sutler (see Appendix E). When the men used all their candles and ran out of money, they sometimes improvised. John Billings, in Hardtack and Coffee, describes one home-made light:[11]

> Whenever candles failed, slush lamps were brought into use. These I have seen made by filling a sardine box with cookhouse grease, and inserting a piece of rag in one corner for a wick. The whole was then suspended from the ridgepole of the hut by a wire.

Because of the fear of fire, lamps burning volatile oils--including kerosene (coal-oil)--were prohibited. Such lamps were purchased at many posts, but their use at Fort Washington is not documented.[12]

Candlesticks were not furnished to the men. Clary surmises that candles would have been set in home-made wooden holders, placed on wood blocks and set in their own drippings, or mounted in empty bottles.[13]

The furnishings in the enlisted men's barracks would have varied very little from 1840 through 1865, except when one of the first floor rooms was being used as a hospital. The upstairs barracks rooms were used throughout as squadrooms or dormitories; the downstairs rooms housed the kitchen and mess, additional sleeping quarters, and from 1848 to 1853 a one-room hospital.

Furnishings in the barracks were few in number and plain, low cost and durability being of more concern to the government than comfort. Army regulations mentioned only that "bunks, benches, and tables" were provided "for soldiers' barracks and hospitals."[14]

The enlisted men's barracks at Fort Washington were furnished with wooden bunks until 1866. There were 23 of them (size unknown) in 1850, when there were 62 enlisted men on the post. By 1865, when there were about 150 men, Lt. Seeley's inventory of post property lists 47 bunks, of which 33 were double and 14 single.[15] Assuming the double bunks to have been two-tiered, they would have accommodated 132 men, while the singles would have accommodated 28 or 14, depending on whether they were two-tiered or not. The bedsacks on hand at the same time would have accommodated 155 men. Single iron bedsteads (75) replaced the wooden bunks at Fort Washington in June 1866.[16]

Wooden bunks generally were built on post by carpenters, often men drawn from the ranks for extra duty. They were made of sawn lumber with heavy corner posts and slats running parallel to the side rails.

Because they had to be easily dismantled--for weekly cleaning--the bunks were put together with mortise and tenon joints. Some bunks were left unpainted; others were whitewashed or shellacked, partly in an effort to control vermin. One other bit of painting on the bunk was the soldier's name; army regulations required that the "name of each soldier will be labeled on his bunk. . . ."[17] General Order 1 (January 2, 1862) required both "the name and no. of each man" to be placed on the bunk.[18]

Pairs of shelves were often mounted on each end of the bunk. These were for the soldiers' gear. According to Army Regulations:[19]

> The knapsack of each man will be placed on the lower shelf of his bunk, at its foot, packed with his effects, and ready to be slung; the great-coat on the same shelf, rolled and strapped; the coat, folded inside out, and placed under the knapsack; the cap on the second or upper shelf; and the boots well cleaned.

Not all bunks were made with attached shelves. In some barracks a wall-mounted shelf was built around the room.

Some bunks had arms racks attached to one end of the bunk. The stocks sat on a lower shelf even with the first, or lower tier, and a rack or bar, at the level of the upper bunk, held the barrel in place. Army Regulations provided:[20]

> The arms will be placed in the arm-racks, the stoppers in the muzzles, the cocks let down, and the bayonets in their scabbards; the accoutrements suspended over the arms, and the swords hung up by the belts on pegs.

In other cases, arms were placed in separate racks against the foot of the bunk or against a wall.

For examples of wooden bunks of the period, see Illustrations 43-48.

The bedding furnished the men in garrison consisted of blankets and a bed sack filled with straw.[21] They were not provided with sheets or pillows (pillows for men in barracks were first authorized in 1875). As Augustus Meyers described it:[22]

> The beds consisted of a bedsack stuffed with straw, which was rolled up in the day time, and a pair of blankets, neatly folded, laid on top. There were no sheets nor pillows for the boys--the corporal was the only one who enjoyed these luxuries, and he had provided them himself. The boys slept on the bedticks and covered themselves with their blankets when it was cold, or used one of the blankets to lie on when it was warm enough, folding up a jacket or some other piece of clothing as a substitute for a pillow.

This was similar to what Dr. Billings found in his review of army posts in 1870:[23]

> No sheets or pillows are furnished, and the men come into direct contact with the blankets, and use their greatcoats for pillows. The blankets are seldom washed, although they are aired and beaten occasionally.

While the army provided the men with little in the way of bedding, it was careful to specify the type and quality of the goods furnished to the men. In 1839, the "Infantry bedsack, double" was specified as having:[24]

4 1/4	yards 7-8 drilling
4 1/4	yards 3-4 drilling
3	skeins of thread
1	yard of binding.

This would have made a bedsack (taking into consideration trim loss) about 72 inches by 52 inches when filled. By the 1860s, bedsacks of two different weights of material proved impractical and the new specifications were:[25]

> Bedsacks: cotton or linen drilling, of good quality, weighing 4 ounces to the yard; doubled bed sacks 72 inches long and 48 inches broad, the single bed sacks to have the same length but only 42 inches broad, each to have an opening in center 18 inches long to be tied together with 4 strings of tape each 3/4 of an inch wide and nine (9) inches long. The end pieces to be six (6) inches wide.

A post-Civil War specification required cotton or linen drilling or 7-ounce cotton duck and all double seams with openings button-hole stitched at the ends.[26]

The amount of bedding straw was also carefully prescribed by Army Regulations. By the 1860s the allowance was "in barracks, twelve pounds of straw per month for bedding will be allowed to each man, servant, and company woman.[27] Earlier, soldiers had been permitted eight additional pounds of straw after 16 days to freshen their bed; this was not specified in the 1860s.

The soldier's bed covering was a standard issue army blanket. Until the 1840s, the regulation army blanket was six and one-half feet in length and five and one-half feet wide, woven of wool and weighing four pounds. It was white, with "U.S." in blue in the center and a blue stripe at each end.[28] By 1861, the army blanket was[29]

> woolen, gray, with letters U.S. in black four inches long, in the centre; to be seven feet long and five and a half feet wide, and to weigh five pounds.

This remained the standard army blanket (which included three-inch black end stripes, not mentioned in the regulations) until 1876.[30] In 1861, soldiers were issued one blanket on their enlistment and a second blanket in the third year of their enlistment.[31] In 1871, the issue was changed to two woolen blankets in the first year and one the third year of the enlistment.[32]

In addition to the bunks, squadrooms sometimes contained a few other furnishings. Augustus Meyers wrote of his accommodations:[33]

> A wide space around the room above the beds provided space for knapsacks, extra shoes, drums, fifes, and other objects, and on hooks under the shelf were hung the overcoats. . . . A few wooden benches and a chair for the corporal in charge; this, with a water pail and a tin cup on a shelf behind the door, completed the furniture of the room.

Boxes and benches are occasionally mentioned in other barracks' descriptions, as are fire buckets and fire ladders; none of these figure in the sparse references to the barracks at Fort Washington. By 1870, however, the enlisted men had received double lockers and gun racks, along with their iron bedsteads.[34]

Mess Room

The soldiers ate their meals in a room designated as the mess room, which sometimes served as both kitchen and dining hall.[35] The basic furniture in a mess room consisted of benches and tables. Augustus Meyers wrote:[36]

> I was directed to follow, and found the mess room large enough to hold the entire company of boys at one sitting. There were long pine tables and benches without backs, all scrubbed clean.

The number and size of the tables and benches was determined by the size of the mess room. There were no standard specifications. Clary estimates that tables were seldom more than four and one-half feet long and two feet wide, dimensions which would have permitted six men to sit at a table.[37] The benches would have been of a corresponding height and length. Both tables and benches would have been built on post to match the style and cost specified by the commanding officer and the quartermaster. See Illustrations 34-36 for photographs of Civil War mess furnishings.

In 1850, Fort Washington reported eight tables and sixteen benches.[38] If Clary's estimate of six men to a table is correct, this would have permitted a sitting of 48 men at one time. This would not have been sufficient to seat the 65 men of Companies F and H, 1st United States Artillery, in January 1849. It would, however, have been sufficient for the men of the 4th United States Artillery stationed there in December 1850 (36 men) and in July 1851 (42 men).[39] It is possible, of course, that the tables were a little longer, perhaps six feet, seating eight men.

In 1865, the inventory of furnishings at Fort Washington showed a total of twenty-two tables and twenty-four benches.[40] Not all of these would have been in the enlisted men's mess room.

The mess room equipment included both the cooking and the eating utensils. For field service, the soldiers were issued "one tin plate, one tin cup, one knife, fork, and spoon, to each man."[41] There was no general issue of tableware until the 1880s.[42] The men of the Washington Artillerists had issued to them 98 tin cups, 126 plates, and 126 spoons.[43] Soldiers at permanent garrisons could buy company tableware with company funds, and they may have done so in later years at Fort Washington.

According to regulations, "Cooking utensils and table equipage will be cleaned and arranged in closets or recesses . . . .[44] There should have been a cupboard or set of shelves in the mess room, in addition to the tables and benches.

Kitchen

Although it was a commonplace that an army traveled on its stomach, the army's oversight of the soldier's diet and the preparation of his food often left much to be desired. Regulations concerning the preparation of food were brief and there was no training provided for the army's cooks. The food was bulky, monotonous, and not always nutritious.

The soldier's mess was prepared by the privates in the company. According to Army Regulations, this duty was rotated among the men, "each taking his tour."[45] This meant that the quality of the meals and the care with which they were prepared could vary dramatically. According to Ketcham, two men per company were assigned as cooks for a two-week tour of duty. If, however, a cook proved capable and he was willing to stay in the kitchen, he could be kept on as the company cook and relieved of other duties.[46] The Washington Artillerists had three men detailed as cooks in April 1861; perhaps this was because they were an overstrength company.[47]

The cooks provided the troops with three meals a day: "Peas on a Trencher" (breakfast), shortly after the men awoke; "Roast Beef" (dinner), around noon; and supper, shortly after retreat.[48] In addition, the cooks were required to clean their cooking utensils; other men were detailed to clean the serving utensils and pans and to keep the furniture in the mess room in order.[49]

A non-commissioned officer was placed in charge of the kitchen. He was to make sure that no one was "allowed to visit or remain in the kitchens, except such as may come on duty, or be occupied as cooks.[50] At the highest levels of military command, the preparation of the soldiers' food was considered to be "of the utmost importance--not to be neglected."[51] Company officers were directed to make daily inspections of the kitchens and the food preparation, and the post commander was to make regular inspections of the kitchen and mess.[52]

Despite this concern, there were no army cook manuals before the 1870s and few instructions to guide the men in the preparation of the meals. The 1861 Revised Army Regulations offered some rather general rules:[53]

> The bread must be thoroughly baked, and not eaten until it is cold. The soup must be boiled at least five hours, and the vegetables always cooked sufficiently to be perfectly soft and digestible.

Bread and soup were the mainstays of the army diet, along with pork and beef (salt or fresh), beans, rice, coffee, sugar, vinegar, salt, vegetables (fresh or dessicated), and sometimes tea.

The mess room in the enlisted men's barracks also housed the company kitchen at different periods of the fort's history. It is likely that it was furnished with a stove at an early date. During the first quarter of 1850, the post received four assorted stoves; 23 stoves arrived during the third quarter, and 15 more during the fourth quarter.[54] Seventeen cooking stoves and twenty-two heating stoves were listed in 1865.[55] See Illustration 37 for an array of army cook stoves of this era.

By 1870, it was reported, "The kitchens in both barracks are well furnished, have large and very fine cooking stoves, and well selected mess furniture. . . ."[56]

In addition to the stove, a table or tables, a chair or two, shelves, and a cupboard were common kitchen furnishings, as were hooks on which to hang meat and pegs for the kitchen utensils.[57]

The kitchen contained the company's cooking and cleaning utensils. Those listed for the Washington Artillerists (1861) included:

8 mess pans
1 cauldron & furnace
1 butcher knife and fork
6 buckets
1 meatsaw
8 frying pans
4 brooms.

They also had a vinegar jug, round iron boiler, tin boiler, and tin coffee pot.[58] See Illustrations 38-40.

By army regulations, the men also were to be supplied with iron kettles (two per 15 men) and mess pans (five per 15 men).[59] The camp kettle was to be[60]

> made of the best American sheet iron and in the best manner as to workmanship. Seams neatly and tightly closed, the camp kettle having a well sized smooth and perfectly round base. Camp kettle in height 11-½" in dia. 12" 17 lbs. 12 oz.

The round bottom, although more durable, required bail handles or trivets when in use.

The dimensions of camp kettles changed little over the years. In 1875, the specifications called for a nest of three kettles, made one

to fit inside the other. They were to be made of American sheet iron as follows:

No. 1. 12 inches in diameter by 11 3/4 inches deep; to hold 4½ gallons.

No. 2. 10½ inches in diameter by 11 ½ inches deep; to hold 3½ gallons.

No. 3. 8½ inches in diameter by 11¼ inches deep; to hold 2½ gallons.

Each was to have an iron wire bail, 5/16 inches in diameter, and a rim formed over a heavy iron wire. The weight of the three kettles was 17 to 17½ pounds.[61]

Cast-iron pots with a capacity of six gallons weighed 35 to 37 pounds and had an outside rim diameter of 15 3/8 inches and an inside depth of 11½ inches. They had three 3½-inch legs cast on the bottom and lugs for the bail on opposite sides of the rim.[62]

The mess pans were tin dishes for serving food on the mess tables. They were 8½ inches in diameter at the bottom and 11½ inches in diameter at the top with a rim turned over a stout wire.[63]

Food items came in bulk shipped and stored in barrels, boxes, crocks, and tins (see Illustrations 41-42). Army regulations provided specifications for the size of boxes and the quantities they should hold. There also were specific recommendations for certain items:[64]

> A convenient package for bacon is made 16 inches high, 16 inches wide, and 26 inches long (the three dimensions being inside measures). Make of 1¼-inch material, plain on the inside, tongue, groove, and strap with iron.

The care of certain items also was recommended: "Paint vinegar-kegs to prevent evaporation and to fill worm holes; cap the bungs with tin."[65]

Sacks of coffee, sugar, rice, and beans; boxes of hardtack and bacon; barrels of salt beef and flour; kegs of vinegar, and bottles of miscellaneous liquids, all would have been found in the kitchen. Even though stores were drawn daily, as indicated by the following stores issued to the Washington Artillerists, the quantities indicate that there must have been some containers in the kitchen:

[1861]

May 1	270 lbs Bacon
	14 3/8 lbs Beans
	16 lbs Rice
	120 loaves Bread
	36 lbs Coffee
	14 lbs 6 oz Soap
	54 lbs Sugar
	3½ gal Vinegar
	4 lbs 8 oz Candles
	7 qts 1 pt Salt
May 4	2 bbl 95 lbs 12 oz Mess Pork
	132 lbs Bacon
	847 loaves Bread
	1 bush 1 qt Beans
	42 lbs Rice
	84 lbs 10 oz Coffee
	126 lbs 15 oz. Sugar
	10 lbs 9 oz. Candles
	33 lbs 14 oz. Soap
	16 qts 7 gills Salt
May 9	150 lbs Beef
May 10	153 lbs Beef

May 11	24 qts Beans
	30 lbs Rice
	48 lbs Coffee
	90 lbs Sugar
	12 qts Salt
	24 lbs Soap
	7 lbs oz Candles
	90 lbs Pork
	5½ gal. Vinegar[66]

Non-commissioned Officers' Room

The use of the upstairs rooms as squadrooms, or sleeping quarters, and one-half of the downstairs for a kitchen and mess room is verified by Fort Washington's post records. The other ground floor room was used for a variety of purposes at different periods of the post's history. In 1828 the post commander shared the space with the post hospital. During the 1840s and 1850s one downstairs room was used as a hospital. In 1868, a room on the first floor was listed as additional sleeping quarters.

One possibility is that this room was used as quarters for non-commissioned officers. This seems plausible because the only building identified at the post through the Civil War for the housing of non-commissioned officers was occupied by Ordnance-Sergeant Cameron. The other non-coms at the post would have bunked together in the same barracks with their company. If so, their room or rooms would have been equipped with single bunks and bedsacks.[67] An arms rack, and shelves and pegs for equipment would have been required, and possibly washstands.[68] The sergeants may have had personal trunks or chests as well.

A table on which to write and a chair or two must have been available. One of the non-commissioned officers, "selected on account of

his penmanship and capacity for keeping the records and making the reports and returns required from the company," served as the company clerk.

See Appendix F for a complete list of the books, papers and returns the clerk had to prepare, and Appendix G for examples of the forms used. This work would have required a desk with filing compartments or a writing table and set of shelves (as in Illustrations 31-33). At Fort Ellsworth, Virginia, the non-commissioned officers had a "room parted off in one end for a sort of recreation room & to study & also to write in. . . ."[70] No such arrangement is documented at Fort Washington.

Footnotes: Enlisted Men's Barracks

1. See plan and elevation of the second floor of the enlisted men's barracks in Barry's 1834 drawing; "Barracks &c Fort Washington" (Illustration 6), and description in Circular No. 4 (1870), p. 70, and Outline Description of Military Posts, 1871, p. 157.

2. Illustration 8: "Elevation & Plans of Soldiers' Barracks, Fort Washington" (1849); Alfred Delaney, Assistant Surgeon, U.S. Army, April 16, 1868, RG 393, Entry 1331, Register of Letters, 1867-72, NA.

3. Circular No. 4 (1870), p. 70.

4. Alfred Delaney, Assistant Surgeon, April 16, 1868, RG 393, Entry 1331, Register of Letters, 1867-72, pp. 80-84, NA.

5. Major John B. Scott to Brigadier General Thomas S. Jesup, January 29, 1851, RG 93, QM Consol. Corr. File, Box 1217, NA.

6. Clary, "History of Furniture," pp. 48-49, 209; Seeley, "Inventory"; Rev. Army Regs., 1861, p. 159.

7. December 17, 1864, FW-PO: Letters Sent by AAQM, 1862-67, NA.

8. Ibid., September 25, 1865 (p. 67), November 13, 1866 (p. 76), January 15, 1867 (p. 78), February 1, 1868 (p. 88).

9. Rev. Army Regs., 1861, p. 243.

10. Circular No. 4 (1870), p. 70.

11. Billings, Hardtack and Coffee, p. 73.

12. Clary, "History of Furniture," pp. 122-26.

13. Clary, "History of Furniture," p. 205.

14. Rev. Army Regs., 1861, p. 162.

15. RG 92, Entry 1195; Seeley, "Inventory"; FW Post Returns, May 1865, July 1865, NA.

16. RG 393, Entry 1329, NA; RG 393, Post Orders: Letters Sent by AAQM, 1862-67, p. 72, NA; Circular No. 4 (1870), p. 70.

17. Rev. Army Regs., 1861, p. 21.

18. RG 393, Entry 1332, General, Special and Post Orders, 1861-65, NA.

19. Rev. Army Regs., 1861, p. 21.

20. Ibid.

21. Ibid., pp. 166, 169-70.

22. Meyers, Ten Years, pp. 2-3.

23. Circular No. 4 (1870), p. xviii.

24. Clary, "History of Furniture," pp. 188-89.

25. Ibid., p. 190.

26. RG 92, Entry 1341, p. 2, NA.

27. Rev. Army Regs., 1861, p. 166.

28. Clary, "History of Furniture," pp. 196-97.

29. Rev. Army Regs., 1861, p. 488.

30. RG 92, Entry 1341, p. 5, NA; Clary, "History of Furniture," pp. 197-98.

31. Rev. Army Regs., 1861, p. 170.

32. Special Order 9 (February 8, 1871), General Orders (1871).

33. Meyers, Ten Years, pp. 2-3.

34. Circular No. 4 (1870), p. 70; Clary, "History of Furniture," p. 221.

35. Captain John Mendenhall to Colonel Joseph Taylor, April 16, 1868; FW-PO: Letters Sent, 1865-72, NA.

36. Meyers, Ten Years, pp. 2-3.

37. Ibid., p. 731.

38. RG 92, Entry 1195.

39. FW Post Returns, January 1849, December 1850, July 1851, NA.

40. Seeley, "Inventory."

41. Ibid., p. 23.

42. Clary, "History of Furniture," p. 262.

43. Roll Book, Washington Artillerists, Historical Society of Schuylkill County.

44. Rev. Army Regs., 1861, p. 21.

45. Ibid., p. 23.

46. Sally Ketcham, "The Dragoon Barracks: Fort Scott, Kansas," (Omaha, Nebraska, 1978), p. 46.

47. April 20, 1861. Company Records, Washington Artillerists, Historical Society of Schuylkill County.

48. Post Order 27 (May 21, 1861) and Post Order 55 (November 20, 1863), RG 393, Entry 1332, General, Special and Post Orders, 1861-65, NA.

49. Rev. Army Regs., 1861, p. 23.

50. Ibid., p. 23.

51. Ibid.

52. Ibid.

53. Ibid.

54. RG 92, Entry 1195.

55. Seeley, "Inventory."

56. Circular No.4 (1870), p. 70.

57. This accords with David Clary's findings; see p. 261.

58. Company Accounts and Roll Book, Washington Artillerists, Historical Society of Schuylkill County.

59. Rev. Army Regs., 1861, p. 169.

60. Quoted in Clary, "History of Furniture," p. 212.

61. RG 92, Entry 1341, QMG Misc. Specifications, March 2, 1875, p. 147, NA.

62. Ibid.

63. Clary, "History of Furniture," p. 719.

64. Rev. Army Regs., 1861, p. 277.

65. Ibid.

66. Company Records, Washington Artillerists, Historical Society of Schuylkill County.

67. Seeley, "Inventory."

68. Ketcham, "The Dragoon Barracks," p. 43.

69. Kautz, The Company Clerk, pp. 9-11.

70. Henry Hoyt to William C. Hoyt, February 5, 1864, Civil War Misc., Henry Hoyt Letters, U.S. Army Military History Institute Collection, Carlisle, Pa.

XI: POST BAKERY

The evidence for use of the southeast casemate as a bakery is discussed in section III, pp. 60-61.

The optimal arrangement and furnishings of a Civil War period bakery are detailed in an 1864 army booklet, Bread and Bread Making (see Appendix H). According to this guide a foreman was responsible for heating the ovens, overseeing the preparation of the dough, and baking the bread. When the foreman was not there, one of the bakers oversaw these operations. The bakers were to sift the flour, mix the dough and grease the pans. According to the army manual, the foreman --not the bakers--was to place the dough in the oven and remove the bread after it was baked. At a post such as Fort Washington, one of the bakers probably carried out both duties. The manual also recommended the employment of an experienced stock yeast maker to prepare the fermentation yeast. This, too, was undoubtedly carried out by the regular baking staff at Fort Washington.

In addition to sections on the bread making process, the selection of fuel, and the organization of working parties, the booklet provides detailed specifications on the dimensions of the bakehouse utensils and furnishings. These were used in two rooms: the yeast room and the bakery proper.

A central feature of the bakery was the oven. It was recommended that a single oven be nine feet four inches wide, twelve feet long, and six feet eight inches high. The front wall was to be twenty-seven inches thick and the back and side walls were to be eighteen inches thick. The hearth was to be set three feet four inches above the floor and the oven was to have a cast-iron door two feet wide by

fourteen inches high. These were the recommendations for one oven; specifications also were given for multiple ovens. The dimension of ovens varied in actual construction according to the space available.

In addition to the ovens, the ideal bakery contained:

70 bake pans
1 rake
1 table
2 peels
1 trough
2 scrapers
1 sieve
1 scale
2 shovels
1 scrub brush
2 brooms
1 hatchet
1 axe
1 wood saw
1 counter brush
1 80 gallon cauldron
4 buckets

The yeast room was to contain the following utensils:

2 80 gallon cauldrons
2 buckets
1 yeast tub
1 shovel
2 sieves
2 strainers
2 dippers
2 scrub brushes
2 brooms
1 hatchet
1 scoop
1 stock yeast barrel
3 ferment brushes.

For detailed specifications on these baking and yeast-making implements and accessories, see Bread and Bread Making, pp. 38-39 (Appendix H).

These recommendations represent what the army considered good practice. There is no way of knowing how close to the ideal the Fort Washington bakery came.

RECOMMENDED FURNISHINGS

INTRODUCTION

The first two sections of this report provide an analysis of the historic occupancy and evidence of original furnishings for selected structures at Fort Washington for the years 1840-1872. Post life at the Fort during this period can be divided into three eras.

> 1840-1860: These were the years of construction and renovation, years of intermittent military activity with extended periods when the post was not garrisoned. Only three cannon were mounted between 1842 and 1853; all were dismounted between 1853 and 1861.
>
> 1861-1865: The Civil War was a period of activity at Fort Washington. The fort was brought up to full strength, and it was garrisoned, mainly with volunteer units, continuously throughout the war. The existing artillery was remounted and additional ordnance was sent to the post. Garrison life centered in the fort and ravelin.
>
> 1866-1872: After the Civil War, Fort Washington was garrisoned by regular army units. Larger ordnance and rifled guns were added. Several more buildings were constructed outside the fort walls.

Although each of these periods was reviewed in the preceding sections, it was recommended in a preliminary report (January 1982) that the restoration and refurnishing of Fort Washington focus on the Civil War years, 1861-1865. This recommendation was approved by the Site and National Capital Region of the National Park Service. This section will, therefore, concentrate on those years.

The Civil War years were selected because:

(1) - of their prime historical significance as the only years (except for 1814) when Fort Washington was prominent nationally;

(2) - post life at Fort Washington during these years was representative of garrison life along the eastern seaboard;

(3) - there was stability in the quantity and type of ordnance mounted at the post;

(4) - the post was continuously occupied during these years;

(5) - the greater part of post life was still centered within the fort walls;

(6) - there is better local and comparative evidence on the furnishings and ordnance for these years.

Within the 1861-1865 furnishing period, a room, a building, or an area may reflect an even narrower time span. This is necessary because of the frequent movement of troops in and out of the fort and because of other changes which occurred during these years. (For example, the number of states in the Union would affect the number of stars on the flag.) However, every room and building need not represent the same year or years, as long as it falls within the 1861-1865 time span.

While the returns and inventories from Fort Washington provide a general indication of what was in the fort, there are no room-by-room inventories. There is no photographic record of the post or post life at Fort Washington during the nineteenth century; a proscription against taking photographs of Fort Washington was extended into the twentieth century. Further, none of the furniture remains. What is recommended here is based on an analysis of the foregoing "Evidence

of Original Furnishings," interpreting local evidence in terms of nineteenth-century military practice.

The recommended furnishings are based on the premise that Fort Washington's interpretive purpose is to represent garrison life along the eastern seaboard in the 1860s. It is the everyday life of the soldier, rather than a specific historical event, which is the focus. The areas chosen and the objects in them have been selected and placed so that each room or area will make an interpretive statement illustrating a typical aspect of nineteenth-century military life. This generalized structure is supported by the data we have on Fort Washington, studies of other forts, contemporary photographs, and army regulations.

XII: FLAGSTAFF AND FLAGS

Flagstaff: Location

The original flagstaff and its 1848 replacement were located on the parade ground in front of the ramp leading to the rear curtain; the position is shown on Captain T.W. Maurice's map, "Fort Washington on the Potomac, November 1823" (Illustration 3) and on "Archeological Base Map for the 1978-1982 Fort Washington Restoration" (Illustration 22). Although creation of the new flagstaff on the original site will entail destruction of the remains of the 1848 base, this course is recommended by the Chief Anthropologist, National Park Service.[1]

Flagstaff: Base

The design of the flagstaff base should follow Powell's findings.[2] He uncovered "a badly deteriorating lime-mortar foundation" with no brick or stone. It is 12 feet long (north-south) by 11.6 feet wide (east-west) which approximates the recorded 12 feet square base of the 1848 flagstaff base. A little south of center of this mass is a 3.4 square feet hole; centered within this hole is a two feet diameter circular post hole indicating the size and position of the wooden flagpole.

Powell recommended "the construction of a 12 feet square concrete base of conventional military design on the spot now occupied by the historic remains."[3]

Flagstaff: Specifications

The flagstaff should be similar to the one erected in 1848, of white pine or yellow heart pine, 95 feet long with a base diameter of two feet, tapering slightly toward the top.

The pulleys and fastenings should accommodate a one-and-one-half inch diameter halyard.

Flag

At the outbreak of the Civil War, the American flag had 33 stars. An additional star was added on July 4, 1861, after Kansas was admitted to the Union. A thirty-fifth star was added on July 4, 1863, when West Virginia came into the Union. One historian notes, however, that, "pressed by the demands of war, most northern troops did not receive the flag with thirty-five stars and continued to carry the older banner."[4]

It is recommended that the fort be supplied with two garrison and two storm flags. One set should have 34 stars indicating the period from July 4, 1861, through July 3, 1863; the other set should have 35 stars for the period July 4, 1863, through July 4, 1865.

The garrison flag should be of bunting, 36 feet fly by 20 feet hoist, with thirteen equal horizontal stripes, alternating red and white, beginning with the red. In the upper left quarter is the union composed of a number of five point stars, equal to the number of states. These are on a blue field, one-third the length of the flag, extending to the lower edge on the fourth red stripe from the top.[5] The 34-star flag may have five horizontal lines arranged as follows: 7-7-6-7-7. The 35-star flag may have five horizontal rows of seven stars each.

The heading should be eight ounce cotton duck, seven inches wide and doubled to the flag, making it three and one-half inches wide, with two inch webbing through it extending the width of the flag. A triangular stay piece, 12 inches horizontal and 10 inches vertical,

should be sewn into each corner of the heading. A galvanized staple and ring should be positioned at each end of the flag heading and secured with five copper rivets. The lower edge of the flag should be trimmed in three thicknesses with three rows of sewing.[6]

The storm flag should be twenty feet fly by ten feet hoist with the arrangements similar to the garrison flag but in proportion to this size.[7]

Footnotes: Flagstaff and Flags

1. Associate Director, Cultural Resources, National Park Service, to Manager, Harpers Ferry Center, July 26, 1983. A concurring opinion was voiced by the Regional Director, National Capital Region by memorandum to Manager, Harpers Ferry Center, September 26, 1983.

2. Powell, "Archeological Investigations, 'Old Fort Area, Fort Washington, Maryland, May 12-13, 1958," p. 6.

3. Ibid., p. 11.

4. David Eggenberger, Flags of the U.S.A. (New York: Thomas Y. Crowell, 1959), p. 144.

5. Rev. Army Regs., 1861, p. 475.

6. RG 92, Entry 1341, May 31, 1876.

7. Rev. Army Regs., 1861, p. 475.

XIII: ORDNANCE

Fort Washington had its full wartime complement of artillery by 1862. Between September 1862 and April 1866, the post mounted 80 pieces of ordnance.[1] As indicated in section V, the placement of most of these pieces is detailed on "Sheet No. 1 Fort Washington Armament Sketch, December 31, 1902" (Illustration 27).

Because of costs, it is not practicable to mount the entire wartime complement of 80 pieces. It is desirable, however, to have enough to demonstrate the types of artillery mounted at Fort Washington and their placement.

The following ordnance is recommended for mounting at Fort Washington:

ONE 32-POUNDER GUN, Model 1829, '41, mounted on barbette carriages

ONE 24-POUNDER GUN, Model 1819, '39, mounted on carriage

ONE 24-POUNDER HOWITZER, flank casemate, mounted on wooden casemate carriage

The pieces recommended for mounting at Fort Washington should be positioned as follows (the numbers in parentheses are keyed to the 1902 Armament Sketch):

24-POUNDER HOWITZER, flank defense	(62)
24-POUNDER GUN, Model 1819, '39	(11)
32-POUNDER GUN, Model 1829, '41	(27)

One 24-pounder howitzer, flank defense (62), should be mounted on a casemate carriage suitable for demonstration loading and unloading, but should not be used for demonstration firings.

Of the pieces recommended for mounting at Fort Washington, the following are available on site:

ONE 24-POUNDER GUN, original, with reproduction barbette carriage

ONE 24-POUNDER HOWITZER, original, flank defense

Those which need to be acquired are:

ONE 32-POUNDER GUN and BARBETTE CARRIAGE

ONE WOODEN CASEMATE CARRIAGE (for 24-pounder howitzers, flank defense)

Several pieces now at Fort Washington should be removed to other posts or put in storage:

ONE 10-INCH SEACOAST MORTAR, original

THREE 30-POUNDER PARROTT GUNS, reproduction

TWO 24-POUNDER HOWITZERS, original, flank casemate. These could be stored on the parade at Fort Washington for later use.

ONE 12-POUNDER FIELD GUN, Model 1857

FOUR 24-POUNDER GUNS, reproduction

ONE 12-POUNDER FIELD HOWITZER, reproduction

ONE 24-POUNDER HOWITZER, original, flank defense

ONE 24-POUNDER COEHORN MORTAR, original

Implements and Equipment

A complete set of artillery implements and equipment should be provided for use with the demonstration pieces. To save funds, items which may be used by several pieces should not be duplicated. Those which should be acquired are detailed below. All of the items were listed in the "Summary Statement of Ordnance and Ordnance Stores on Hand at Fort Washington, June 30, 1863." For descriptions see Gibbon's The Artillerist's Manual, Instruction for Heavy Artillery, The Ordnance Manual, and the appropriate plates from Mordecai, Artillery (1849). Those marked with an asterisk are available in the Site collection.

For the 24-pounder gun:

TWO RAMMERS
TWO SPONGES
TWO SPONGE COVERS
ONE WORM
ONE LADLE
TWO PRIMING WIRES
ONE GUNNER'S GIMLET
ONE GUNNER'S PINCERS
ONE VENT PUNCH
TWO LANYARDS FOR FRICTION PRIMERS
TWO THUMB-STALLS
TWO TUBE-POUCHES
ONE GUNNER'S PERPENDICULAR
ONE BREECH SIGHT
ONE BUDGE BARREL
ONE PASS-BOX
TWO VENT COVERS
TWO TOMPIONS
TWO TARPAULINS
ONE WATER BUCKET
ONE CHALK LINE and CHALK
ONE BROOM, hickory or birch
ONE WRENCH
TWO MANEUVERING HANDSPIKES

The implements and equipment should be arranged according to the descriptions in the Instruction for Heavy Artillery; see pages 114-116 above. These can be put on display only when staff is available or during demonstrations.

When not in use, the implements and equipment should be stored in a magazine. The north magazine, near the gatehouse, should be used for this purpose. The equipment should be stored according to the instructions given in the Ordnance Manual; see pages 111-112 above.

The magazine could be outfitted at little cost and add another dimension to the interpretation of Fort Washington.

Footnotes: Ordnance

1. RG 617, Reel 1383, Consolidated Morning Report, January 14, 1862, June 20, 1862; RG 157, Entry 102, "Summary Statement of Ordnance and Ordnance Stores on Hand at the Forts of the United States," September 30, 1862, NA.

XIV: GUARDHOUSE AND CELLS

The guardhouse and prison cells in the west wing of the gatehouse at Fort Washington will focus attention on military discipline and justice during the middle decades of the nineteenth century.[1]

Since the guardhouse and the adjoining cells were equally bare of all but the most rudimentary furnishings, it is recommended that only the cells be furnished and that the guardhouse room be used for an exhibit on military discipline.

Guardhouse

Whether this room is used to house an exhibit or is refurnished as a guardhouse, the furnishings now in the room--the table, cupboard, and shells--should be removed.

Similarly, no matter what the room's use, the physical features require some attention. An historical architect should review flooring, windows, and walls to determine, if possible, original finishes. The following are suggested as minimum requirements.

WALLS. All the walls should be whitewashed. The moldings should be painted as physical evidence indicates.

The unplastered north wall has two rows of evenly spaced holes, one 13½ inches above the flooring and the other 36 inches above the flooring. These may have held rings for shackles. This should be investigated. If appropriate, the pins, rings and shackles (reproductions) should be repositioned.

FLOORS. The floors should not be stained and there should be no floor covering.

WINDOWS. The missing window bars should be replaced, using round iron rods, three-quarters of an inch in diameter. The westernmost window should have seven bars; the window nearest to the passageway should have six. There should be no window hangings.

FIREPLACE. The fireplace should be bare, with no fireplace tools, andirons, or wood.

Recommended Furnishings (optional)

Although exhibit use is recommended for this room, refurnishing is an alternative. If the room is furnished as a guardhouse, it should contain the following (fuller descriptions of these items are given in the following section on the prison cells). All furnishings should be c. 1860-65 style unless otherwise indicated.

Object: THREE ARMY BLANKETS, folded (reproductions)

Location: along the south wall

Object: WATER BUCKET, wooden

Location: southeast corner

Object: GOURD DIPPER

Location: attached to water bucket

Object: 24-POUND BALL AND CHAIN WITH SHACKLE

Location: north wall between the cell doors. To be used here or in "light cell."

Prison Cells

Both cells should be studied by an historical architect. Among the items which should be considered are:

Dark Cell:

The door should be re-worked, or a new one installed, with a smaller window than the one currently in place, to serve as a peephole or inspection port, with a cover.

The flooring should be checked and any missing bricks replaced.

The walls should be whitewashed.

Light Cell:

The floor should be checked and any missing bricks replaced.

The walls should be whitewashed.

The door should be repainted.

The electrical conduits should be removed or made less conspicuous and the brickwork repaired.

The furniture now in the cells should be removed.

Recommended Furnishings (c. 1860-65)

As in the guardhouse, prisoners confined in the cells at Fort Washington were permitted one set of clothes and their army blanket.[1] Each cell should contain the following:

Object: TWO ARMY BLANKETS (reproduction)

Location: center of west wall, folded

Blankets are to be of pure, long staple wool, dyed gray, seven feet long and five feet, six inches wide, weighing five pounds. The letters "U.S." should be either woven or stamped in the center of the blanket in dark blue letters four inches long, and there should be dark blue stripes at either end, about three inches wide.

Object: TWO WATER BUCKETS, wooden

Location: southeast corner

Nineteenth-century water buckets were made in a variety of forms and sizes. Those used about the fort would not all have been the same. For the prison cells, a bucket with two staves raised above the others and pierced to receive a rope handle is recommended.

Object: TWO LADLES, GOURD

Location: on the bucket

Object: TWO SLOP BUCKETS

Location: northwest corner

This should be wooden, with metal hoops and an iron bail handle. It should have a board placed across the top.

Object: 24-POUND BALL AND CHAIN WITH SHACKLE (optional)

Location: west center of light cell

There is a 24-pound ball and chain (without shackle) in the collections at the post. This can be used either in the cell or in the guardhouse.

Because of the dampness of the cells, an historic condition, the blankets and buckets should be checked for mold and rotated on a regular basis.

Footnote: Guardhouse and Cells

1. Post Order 90 (December 24, 1861), RG 393, Entry 1332, General, Special, and Post Orders, 1861-65, NA.

XV: GUARDROOM

The east room of the gatehouse will be interpreted as the guardroom, to illustrate the importance of sentry duty in garrison life.

After the initial threat of attack ended, Fort Washington usually mounted five or six guards. Because the guards were relieved every four hours, a guard force of fifteen or eighteen men was mounted. Five or six men were on station; the remainder were off station but on duty in the guardroom.[1]

The guardroom at Fort Washington will be furnished to the period 1864-1865, with a suggested guard mount of eighteen men--six on station and twelve on call in the guardroom.

The Morning Report for February 2, 1864, has a good list of the articles in charge of the guards.[2] This is supplemented by the items mentioned in Morning Reports in January and June 1865, and by Erwin Seeley's May 1865 inventory of camp and garrison equipment at Fort Washington. (See Appendix D.) The references to type examples are from readily available sources or are included in the appendices of this report.

WALLS. The walls of the guardroom should be whitewashed.

FLOORS. There should be no floor covering. The plank flooring should not be stained.

WINDOWS. There should be no window coverings.

FIREPLACE. The mantel should be finished as physical evidence indicates.

Recommended Furnishings

Object: TWO BUNKS, double width three tiers high, constructed of wood using mortise and tenon joints. The bunks should be four feet six inches wide and six feet six inches in length with a gun rack at one end. They can be whitewashed or shellacked; the latter is recommended.

Location: north wall

These are listed in the February 1864 Morning Report. A detailed description of the construction of wooden bunks is provided in David Clary's "History of Furniture," pp. 622-638. See also, "Sleeping Bunks of the First Rhode Island Regiment at the Patent Office, Washington," in Harper's Weekly (June 1, 1861) and the illustration, "No. 5. Mode of Ventilating Temporary Bunks and Hospitals," in Roeliff Brinkerhoff's Volunteer Quartermaster (Illustrations 43-44).

Object: SIX DOUBLE BEDSACKS, of cotton or linen drilling weighing four ounces to the yard, 48 inches wide and 72 inches long, with an opening in the center 18 inches long. The opening should be tied together with four strings of tape, each three-quarters of an inch wide and nine inches long. Each sack should be filled with 24 pounds of straw.

Location: one sack on each tier

Object: TWO BENCHES, wooden. These should be plain plank-style benches made of one-inch pine boards. The benches should be three or four feet in length but need not be identical in length or construction. They may be left unfinished or stained with the QMD mixture of sienna and Vandyke brown mixed with oil.

Location: south wall

Benches are listed in the February 1864 Morning Report. See Illustrations 30, 34-36, 38; also Clary, op. cit., p. 278.

Object: CLOCK, c. 1860

Location: fireplace mantel

A clock is listed in the February 1864 Morning Report, without mention of type. A shelf clock with a plain rectangular wooden case is recommended. The replacement clock purchased in 1867 was in the middle price range for clocks of the period.

Object: FIREPLACE FENDER, iron, c. 1860, to match the width of the fireplace, 43 inches

Location: hearth

A fireplace fender, and the fireplace tools which follow, are listed in the February 1864 Morning Report, and are also included in Seeley's Inventory.

Object: ANDIRONS, iron, c. 1860

Location: fireplace

For examples, see Russell & Erwin Catalog (1865), p. 382.

Object: FIREPLACE TOOLS, iron, c. 1860

Location: hearth

These should be a plain style, iron wood tongs and a sheet iron ash shovel. For examples, see Russell & Erwin Catalog (1865), pp. 99-103, and Dover Stamping Company Catalog (1869), pp. 101-02, 104.

Object: WOOD BOX

Loction: next to fireplace

This should be a military style box, designed for ammunition or commissary supplies. It should contain a supply of wood.

Object: TWO CANDLE LANTERNS, tin and glass, c. 1860

Location: one hung on a peg to the left of the door, the other standing on one end of the mantelpiece

Lanterns are listed in the February 1864 Morning Report. These should be cylindrical tin lanterns, each with a hinged door with a glass or mica window, and two small windows on either side of the door. The interior should have a candle-holder attached to the bottom. For an example, see They Fought for the Union, p. 138.

Object: WATER BUCKET, wooden, with three iron hoops and an iron bail handle, c. 1863

Location: southeast corner

For examples, see Illustration 29, and L.H. Mace Catalog (1883), p. 25.

Object: DIPPER, tin, with a long handle, c. 1863

Location: hung on a nail over the water bucket

For examples, see Dover Stamping Company Catalog (186), pp. 70 7/8 and 71; also Photograph "Soldiers Rest" (Illustration 37).

Object: SHELF, wood

Location: west wall above the coat rack

This should be a plain ten-inch board supported by simple wooden brackets. It can be stained with the QMD mixture of sienna and Vandyke brown or painted to match the woodwork. The shelf should contain the objects listed below.

Object: TWO FLAGS, garrison and storm, folded

Location: on shelf on west wall

These were listed in the June and July 1865 Morning Reports. The garrison and storm flags should be kept here when not in use.

Object: CANDLE BOX, wood or tin

Location: on shelf on west wall

This small box should contain an extra supply of candles for the two lanterns, as provided for by Army Regulations.

Object: FOUR PADLOCKS, iron

Location: on shelf on west wall

These were listed in the January 8, 1865 Morning Report. For examples, see Russell & Erwin Catalog (1865), pp. 106-08.

Object: HANDCUFFS, pair, c. 1865

Location: on shelf, west wall

A pair of handcuffs was listed in the January 8, 1865 Morning Report. For examples, see Russell & Erwin Catalog (1865), p. 161.

Object: BOWSAW, c. 1865

Location: southwest corner

The saw, and the tools that follow, were kept by the guard for the use of fatigue parties or for prisoners undergoing punishment by hard labor; they were listed in the February 1864 Morning Report. Many of them are illustrated in the Russell & Erwin Catalog (1865).

Object: CROSSCUT SAW, c. 1865

Location: southwest corner

Object: TWO RAKES, iron with wooden handles, c. 1865

Location: southwest corner

Object: THREE SPLINT BROOMS, c. 1865

Location: southwest corner

Object: TWO SHOVELS, iron with short wood handles, c. 1865

Location: southwest corner

Object: THREE SHOVELS, iron with long wooden handles, c. 1865

Location: southwest corner

Object: THREE SPADES, c. 1865

Location: southwest corner

Object: SIX PICKS, c. 1865

Location: southwest corner

Object: FIVE AXES, c. 1865

Location: southwest corner

Object: TWO AXE HELVES, c. 1865

Location: southwest corner

Object: THREE CROWBARS, iron, c. 1865

Location: southwest corner

Object: KEG, wooden

Location: center of room

This should be a small military keg, partially filled with sand for use as a spittoon. It should be stained with tobacco juice.

Object: THREE PACKING CASES, for ammunition or commissary supplies, wood

Location: center of room

Two of these serve as make-shift seats; the third serves as a small table.

Object: CHECKERBOARD AND CHECKERS, c. 1865

Location: on packing case table

Object: COATRACK, wooden

Location: west wall between the doorway and south wall

This should be a board, approximately four feet long, either plain or with simple beading, with wooden pegs or nails. It can be painted to match the woodwork in the room.

Footnotes: Guardroom

1. RG 393, Entry 1337, Morning Report, Vol. 4, NA. See entries for March and June 1865, for example.

2. Ibid. These are listed on pp. 225 and 228 above.

XVI: POST COMMANDER'S OFFICE

The east room on the second floor of the gatehouse will be interpreted as the Post Commander's office, during the period May 1864-June 1865. Although Colonel Horace Brooks was the commanding officer during this period, the furnishings should not be interpreted as those used specifically by Brooks, but rather as furnishings typical for a garrison post commander at this time. Any dated orders, records, or newspapers should reflect the May 1864-June 1865 period.

Once again, while Lieutenant Seeley's 1865 Inventory itemized the post's furnishings, it did not list them room by room nor did it give any clues to type or style. Army Regulations and contemporary photographs do give some indication of what was used in offices. As with any office, however, much depended on the personal taste and style of the user.

WALLS. The walls in the east room are brick. An historical architect should analyze them for evidence of plaster. The walls should be whitewashed and the trim (including fireplace surround) painted, as the evidence dictates.

FLOORS. The floor boards should not be stained. No floor coverings are recommended.

WINDOWS. There should be no window coverings.

<u>Recommended Furnishings</u>

Object: TABLE DESK, wooden

Location: center

Two tables or desks were to be provided for each office according to Army Regulations; Seeley's Inventory listed four desks at Fort Washington. The commanding officer's desk should be a flat top, rectangular desk with turned legs and moldings. It should have one or two drawers and be of a higher style and better quality than the desks in the adjutant's office.

Object: INKSTAND

Location: on officer's desk

This should be of cast iron or glass with an inkwell and possibly a sander and wafer box. Seeley's Inventory listed one inkstand at Fort Washington. For an example, see Russell & Erwin Catalog (1865), p. 401.

Object: PAPER FOLDER, tin

Location: on officer's desk

See reference for paper folder on adjutant's desk (p. 219).

Object: PENHOLDER, wooden, with steel pen

Location: on officer's desk

See reference for penholder and pen on adjutant's desk (p. 219). Other penholders and steel pens may be placed in the desk drawer.

Object: PEN WIPER, flannel, plain or ornamented

Location: on officer's desk

Object: RULER, 12-inch, wood

Location: on officer's desk

See note for ruler on adjutant's desk (p. 219).

Object: STEEL ERASER

Location: on officer's desk

Object: OFFICE TAPE, one piece

Location: in drawer of officer's desk

See note for office tape on adjutant's desk (p. 219).

Object: FOUR LEAD PENCILS

Location: in drawer of officer's desk

Object: SEALING WAX, four ounces

Location: in drawer of officer's desk

Sealing wax is mentioned in the Letters Sent by Acting Assistant Quartermasters at Fort Washington 1865-68.

Object: PAPER CUTTER, tin

Location: in drawer of officer's desk

Listed in Seeley Inventory and in Letters Sent by Acting Assistant Quartermasters at Fort Washington, 1865-68.

Object: BLOTTING PAPER, one piece

Location: on officer's desk

Mentioned in Letters Sent by Acting Assistant Quartermasters at Fort Washington, 1865-68.

Object: WRITING PAPER, one quire

Location: in drawer of officer's desk

The quantity of paper provided an officer was specified by Army Regulations (see p. 140 above).

Object: ENVELOPE PAPER, one quire

Location: in drawer of officer's desk

The quantity of paper allotted an officer was listed in Army Regulations (see p. 140 above).

Object: LETTERS, ORDERS, FORMS

Location: on officer's desk

These should be copies of letters, orders, and forms relating to post activities during the period under review.

Object: TABLE, wood

Location: east wall

This should be a rectangular office table with tapered legs.

Object: TABLE COVERING, cloth

Location: on table

Object: TWO MAPS, reproductions

Location: on table

One should be a plan of Fort Washington; the other, a map of Maryland and Virginia.

Object: MAP, eastern United States

Location: east wall

Object: BINOCULARS with leather case

Location: on table

A pair of binoculars is listed in Seeley's Inventory. For examples, see Lord, Encyclopedia, Volume 3, pp. 16-17.

Object: CALENDAR, 1864 or 1865

Location: south wall

A calendar is listed in Seeley's Inventory. For examples, see Dover Stamping Company Catalog (1869), p. 50¼, and Russell & Erwin Catalog (1865), p. 401.

Object: SAFE, iron

Location: southeast corner

A safe is listed in Seeley's Inventory. For an example, see Art Journal Advertiser, Volume 3, no. 2 (1859), "Wilder's Patent Salamander Safes" (Illustration 50).

Object: THREE LADDER-BACK SIDE CHAIRS

Location: two in northeast corner, one in front of table

Army Regulations permitted six chairs to an office. Seeley's post-wide Inventory listed 23 office chairs. These should have solid wooden seats and turned legs.

Object: CAMP CHAIR

Location: north wall

This should be a folding camp chair; for examples, see Illustrations 29-31.

Object: BOOKCASE, wood with solid doors

Location: west wall

Object: MONTHLY REPORTS, seventy-six

Location: west wall

This form, and the ones following, are in Army Regulations. Samples are illustrated in Appendix G.

Object: QUARTERLY RETURNS OF ORDNANCE STORES, four sets

Location: in bookcase

Object: TWO INSPECTION REPORTS

Location: in bookcase

Object: BOOKS, MILITARY MANUALS

Location: in bookcase

These should include a selection of nineteenth-century military manuals, including Scott's Military Dictionary, Casey's or Hardee's Infantry Tactics, Heavy Artillery Tactics, Army Regulations, 1861 or 1863 edition, and General Orders. There should also be a dictionary, public documents relating to the war, an Army Register for 1864 or 1865, and issues of one or more magazines such as Harper's.

Object: TABLE, square, c. 1860

Location: north wall

This should be a small table with plain tapered legs. For an example, see Illustration 28.

Object: TABLE COVERING, cloth

Location: on small table

For example, see Illustration 28.

Object: WATER BOTTLE, glass covered in wicker

Location: on small table

Object: TWO GLASS TUMBLERS, American

Location: on small table

For examples, see Illustrations 32 and 38.

Object: CLOCK

Location: north wall

This should be a plain wall clock.

Object: STOVE, iron

Location: west wall in front of fireplace

The stove in the commanding officer's office should be a coal-burning parlor stove somewhat fancier than that in the adjutant's office. Seeley's Inventory listed 22 heating stoves and a supply of anthracite.

Object: COAL BOX

Location: beside stove

This should be a used packing case.

Object: ASH SHOVEL, sheet iron

Location: in coal box

Seeley's Inventory listed three sets of shovels and tongs. See description of ash shovel for guardroom, p. 203.

Object: TONGS, iron

Location: beside stove

Object: OIL LAMP

Location: on officer's desk

Although oil lamps were not provided for in Army Regulations, many were found on military posts. For examples, see Russell & Erwin Catalog (1865), pp. 373, 417, 428, and Dietz Catalog (1860).

Object: CANDLESTICK, tin

Location: on fireplace mantel

See notes on candlesticks for guardroom and adjutant's office.

Object: MATCH SAFE, with matches

Location: on fireplace mantel

For examples of matches, see Lord, Encyclopedia, Volume 2, p. 115. For examples of match safes, see Russell & Erwin Catalog (1865), p. 373, and Dover Stamping Company Catalog (1869), pp. 46-47.

Object: COAT RACK, wood

Location: west wall between fireplace and north wall

This should be similar to the coat rack in the adjutant's office.

XVII: POST ADJUTANT'S OFFICE

The west room on the second floor of the gatehouse will be interpreted as the post adjutant's office with space for the officer-of-the-day. The adjutant's office was a center of administrative activity; the furnishings will reflect the period May 1864 to June 1865, when the 1st Independent Ohio Battery was stationed at the fort along with the staff and band of the 4th United States Artillery. Colonel Horace Brooks was the commanding officer and Lieutenant Erwin Seeley the post adjutant. All books and documents used in the furnishing plan should reflect the officers and men on post during those months.

Evidence for the adjutant's furnishings comes primarily from Lieutenant Seeley's 1865 Fort Washington Inventory (Appendix D) and from Army Regulations. Additional supporting documentation is found in the post records of Letters Sent, as noted in section VIII, pp. 144-149.

Much of the furniture would have been made on post by the Quartermaster's Department. There were no standard patterns. This is clear from the photographs of camp scenes and other garrisons taken during the Civil War. The furniture would have been stained with the mixture of sienna and Vandyke brown mixed in water, and covered with an oil finish, as described in army manuals.

WALLS. The walls in the second floor west room are brick. An historical architect should investigate them for possible evidence of plaster. The walls should be whitewashed, and the woodwork (including fireplace surround) painted, as the evidence dictates.

FLOORS. The floor boards should not be stained. There should be no floor coverings.

WINDOWS. There should be no window coverings.

Recommended Furnishings

All furnishings to be of 1860-65 period, unless otherwise indicated.

Object: ADJUTANT'S DESK

Location: south wall

Two desks or tables were specified for each office by Army Regulations. Desks used in military offices came in a variety of sizes and styles. The adjutant's desk should be plain, but may be one of two styles. It can be a drop-front table desk with a compartmentalized top sitting on a rectangular table with square, tapered legs, or it can be a flat, rectangular desk with a drawer or drawers and square, tapered legs. For examples, see Illustrations 30-32.

Object: CLOTH TABLE COVERING

Location: on adjutant's desk

This may be either a blanket type covering or a hard cloth covering. For example, see photograph, Surgeon McKay's Quarters (Illustration 32).

Object: GLASS INKWELL, pressed glass, funnel style, octagonal

Location: on adjutant's desk

This was provided for in Army Regulations. See figure 38 in Thomas McGarry, "Archeological Investigations," Volume 2 (Appendix S-1); for other examples, see Lord, Encyclopedia, Volume 2, p. 207.

Object: TWO WOODEN PENHOLDERS, with steel pens

Location: on adjutant's desk

These are provided for in Army Regulations and are listed in Seeley's Inventory. For an example, see Lord, Encyclopedia, Volume 2, p. 210.

Object: SANDER, wood

Location: on adjutant's desk

Provided for by Army Regulations.

Object: WAFER BOX, tin or wood, with wafers

Location: on adjutant's desk

Provided for by Army Regulations.

Object: RULER, wooden

Location: on adjutant's desk

Provided for in General Order 85 (September 20, 1865) and noted in Seeley's Inventory.

Object: PAPER FOLDER, tin

Location: on adjutant's desk

Provided for in General Order 85 (September 20, 1865) and Army Regulations. For an example, see Dover Stamping Company Catalog (1869), p. 51¼.

Object: OFFICE TAPE, one piece, red, modern

Location: on adjutant's desk around a bundle of papers

Provided for by Army Regulations and listed in Seeley's Inventory. For an example, see Lord, Encyclopedia, Volume 3, p. 163.

Object: STEEL ERASER

Location: on adjutant's desk

Provided for in Army Regulations.

Object: TWO LEAD PENCILS

Location: on adjutant's desk

Provided for in Army Regulations.

Object: MATCH BOX, tin, with matches

Location: on adjutant's desk

Object: SPERM OIL LAMP

Location: on adjutant's desk

Deliveries of sperm oil were made to Fort Washington. Although they were not provided for by Army Regulations, oil lamps were found on most military posts.

Object: PAPER, writing and foolscap, reproduction

Location: on adjutant's desk

Several piles of paper with various letters and reports should be placed on the desk. The quantities supplied to an office were specified by Army Regulations. See p. 140 above.

Object: BOOKCASE, wtih solid doors, pine

Location: south wall

This should be used only if a flat desk is acquired for the adjutant's desk.

The compartmentalized desk top or the bookcase should contain reproductions of books, forms, and supplies required by Army Regulations (see p. 145 above) and mentioned in Seeley Inventory and correspondence sent from Fort Washington. See Appendix G for examples.

Object: REGIMENTAL GENERAL ORDERS & REGIMENTAL ORDERS BOOK, leather binding with a label on the cover and spine. The book should contain 144 ruled leaves and four blank fly leaves; the pages should be numbered and there should be a printed index. The paper is 10¼ inches broad by 15½ inches long.

Object: REGIMENTAL DESCRIPTION BOOK, leather binding with a label on the cover and spine. The book should contain 240 ruled and printed leaves, each numbered. There should be four unruled flyleaves and a printed index. The paper is 10¼ inches broad by 15½ inches long.

Object: REGIMENTAL LETTER BOOK, leather binding with a label on the cover and spine. The book should contain 144 leaves with ruled, faint lines and four blank flyleaves. The paper is 10¼ inches broad by 15½ inches long.

Object: REGIMENTAL INDEX BOOK, leather binding with a label on the cover and spine. The book should contain 96 ruled leaves and four unruled flyleaves. The lines are faint and there is a printed index. The paper is 10¼ inches broad and 15½ inches long.

Object: POST ORDER BOOK, leather binding with a label on the cover and spine. The book has 92 leaves ruled with faint lines and four unruled flyleaves. The paper is 7 3/4 inches broad by 12½ inches long.

Object: 12 CLOTHING RECEIPT ROLL BLANKS

Object: 25 MUSTER ROLLS, FIELD, STAFF, AND BAND BLANKS

Object: 25 MUSTER ROLLS BLANKS

Object: 28 ACCOUNTS CURRENT, RECRUITING BLANKS

Object: 12 RECRUITING RETURNS BLANKS

Object: 120 CERTIFICATES OF DISABILITY BLANKS

Object: 50 MUSTER & DESCRIPTIVE LIST BLANKS

Object: 9 CLOTHING, CAMP, AND GARRISON EQUIPAGE BLANKS

Object: 1 QUIRE OF BLANK WRITING PAPER

Object: ONE-HALF QUIRE OF ENVELOPE PAPER

Object: 1 QUIRE OF FOOLSCAP PAPER

Object: 20 ENVELOPES, c. 1864

Object: STOVE, cast-iron heating, American

Location: in front of fireplace

Seeley's Inventory listed twenty-two heating stoves, without specifying type of stove or locations. His inventory also lists both wood and anthracite, so there were undoubtedly both coal and wood burning stoves on post. A box-type, wood burning stove is recommended for the adjutant's office. It should have a stove pipe leading into the fireplace. The legs should be up on bricks.

Object: WOOD BOX

Location: next to the stove

This should be similar to the wood box in the guardroom.

Object: STOVE POKER, ASH SHOVEL, WOOD TONGS, iron

Location: leaning against the fireplace, next to the stove

These were provided for by Army Regulations and are listed in Seeley's Inventory. They should be similar in style to the fireplace tools recommended for the guardroom.

Object: WOODEN BOX, small, with candles

Location: fireplace mantel

This would be the extra supply authorized for offices.

Object: TWO CANDLE LANTERNS

Location: one on the mantelpiece; one hung on a peg or nail by the door

These should be similar to the ones recommended for the guardroom.

Object: COAT RACK, wood with pegs and nails

Location: attached to the east wall between the fireplace and the north wall

This should be similar to the rack in the guardroom.

Object: MAIL BAG, canvas

Location: hanging on the coat rack

A mail bag is mentioned in Seeley's Inventory. For an example, see Lord, Encyclopedia, Volume 2, pp. 106-07.

Object: DESK FOR THE OFFICER-OF-THE-DAY, pine, c. 1860

Location: north wall

This should be a rectangular table with square, tapered legs. It should be smaller than the adjutant's desk and should have one drawer.

Object: INKWELL, octagonal, glass

Location: on the officer-of-the-day's desk

This should be similar to the inkwell recommended for the adjutant's desk.

Object: PENHOLDER, wood, with steel pen

Location: on the officer-of-the-day's desk

Object: CANDLESTICK, tin

Location: on the officer-of-the-day's desk

This should be an inexpensive candleholder without an ejector. For an example, see Russell & Erwin Catalog (1865), p. 146.

Object: CONSOLIDATED MORNING REPORT BOOK, reproduction

Location: on the officer-of-the-day's desk

Fort Washington's book is in the National Archives.

Object: GUARD REPORT BOOK, reproduction

Location: on the officer-of-the-day's desk

Object: PASS BOOK, reproduction

Location: on the officer-of-the-day's desk

This should be similar to the 1866-1867 Fort Washington Pass Book in the National Archives.

Object: SHEET OF WRITING PAPER, reproduction

Location: on the officer-of-the-day's desk

This should have a list of the men on guard duty and their posts, and the men on fatigue duty. These can be taken from the Morning Reports; a microfilm copy is available at Fort Washington.

Object: ARMCHAIR, low-back windsor

Location: behind the officer-of-the-day's desk

Object: ARMCHAIR, low-back windsor

Location: behind the adjutant's desk

Object: FOUR CHAIRS, ladder-back

Location: west wall

These should be standard barracks chairs with turned legs and wooden seats.

Object: TABLE, wood

Location: north wall

This should be a very plain, small, rectangular table with square or slightly tapered legs.

Object: TRAVELING DESK, wood

Location: on table, north wall

This desk should have the markings of the 1st Ohio Battery. It should have a drop front, hinged at the bottom, and compartments for the battery's books and papers. For examples, see Lord, Encyclopedia, Volume 3, pp. 71-72, and photograph "Dr. C.K. Ervine" (Illustration 31).

Object: COMPANY MUSTER ROLLS, 30, reproductions

Location: in the traveling desk

These should be grouped in bundles and tied with office tape. A few may be blank.

Object: COMPANY MUSTER ROLLS AND PAY ROLLS, 90, reproductions

Location: in the traveling desk

Some should be bound in bundles and tied with office tape; others should be blank.

Object: QUARTERLY COMPANY RETURNS OF DECEASED SOLDIERS, 15, reproductions

Location: in the traveling desk

These should be folded and put in one of the compartments.

Object: DESCRIPTIVE LISTS, 20, reproductions

Location: in the traveling desk

Object: BLANK WRITING PAPER, one quire, reproduction

Location: in the traveling desk

Object: ENVELOPE PAPER, one-half quire, reproduction

Location: in the traveling desk

Object: INKWELL, wood or glass

Location: in the traveling desk

For examples, see Lord, Encyclopedia, Volume 2, p. 207.

Object: TWO WOODEN PENHOLDERS, with steel pens

Location: in the traveling desk

These should be similar to the pens on the desks in the office.

Object: SPITTOON, tin

Location: on the floor near the officer-of-the-guard desk

For an example, see Dover Stamping Company Catalog (1869), p. 43.

Object: WATER BOTTLE, glass covered with wicker

Location: in the northeast corner

Object: TUMBLER, glass, c. 1860

Location: on mantel

Object: BOOKS, military manuals

Location: stacked on the mantelpiece

These might include: The Ordnance Manual (1861), two copies of Casey's Infantry Tactics, Heavy Artillery Tactics, and Revised Army Regulations, 1861, a court-martial manual, and a dictionary.

XVIII: OFFICERS' QUARTERS

The Officers' Quarters at Fort Washington will be furnished as of late 1861 when Company D, 1st United States Artillery was stationed at the post.

The specific assignment of rooms in the officers' quarters is not known. It would have changed as new troops and officers came and went. For example, when the volunteer troops first arrived at Fort Washington they may have been billeted in the commanding officer's quarters. The captain, 1st lieutenant, and 2nd lieutenants of the 1st United States Artillery could have been housed in the officers' quarters. When the volunteers moved to their new quarters in the ravelin, the captain would have moved into the commanding officer's quarters, while the other officers, possibly including the post chaplain and doctor, would have been billeted in the officers' quarters. The post records indicate the movement of these officers in and out of the officers' quarters (see section IX above). Any number of arrangements is plausible, and undoubtedly several were implemented over time.

The Site proposes to exhibit only three rooms: the basement kitchen, the mess room, and one officer's room on the ground floor.

No evidence has been found regarding furnishings or personal belongings of specific officers at Fort Washington. Although the focus for the officers' quarters will be on Company D, 1st United States Artillery, and the fall of 1861, the furnishings cannot be described as those belonging to 1st Lieutenant William Graham, 2nd Lieutenants Hardman Norris and William Haskins, Dr. Samuel Storrer, or Reverend Matthias Harris. The furnishings can only be representative of the

belongings of men holding their rank or position at that period. The recommended furnishings are based on the information provided in section IX and contemporary photographs and accounts.

The following recommendations are compatible with the architecture of the officers' quarters c. 1861. It is assumed that the building will be restored to that period and that later changes will be reversed. An historical architect should review the structure and a paint analysis is required.

WALLS. The walls in the entryways, halls, and rooms were plastered and should be whitewashed or painted with a whitewash-like covering. The finish of the interior woodwork needs to be determined by paint analysis. The doors, trim, and fireplace mantels should be painted in accordance with these findings and a review of the documentary evidence, if any, in contemporary invoices and vouchers.

FLOORS. The floors on the first and second floor should be wood, finished but not stained. Floor coverings for each room will be recommended along with the other furnishings. The kitchen floor should be brick.

WINDOWS. No window hangings are recommended. The officers' quarters had exterior wooden shutters or "blinds." These should be restored.

All furnishings should date from 1855-60 unless otherwise indicated.

Recommended Furnishings

The layout of rooms on the first floor is shown in Lt. Barry's 1834 drawing, "Barracks &c Fort Washington" (Illustration 6).

First Floor: Entryways. The entryways should not have any furnishings or floor coverings.

Officers' Mess

First Floor: Northwest Room. The northwest room is identified as the officers' mess because of the location of the dumbwaiter. The dumbwaiter (which is in the collection at Fort Washington) should be restored and reinstalled. No floor coverings are recommended for this room.

Object: TABLE

Location: center

This should be a rectangular wooden table of middle to good quality, large enough to seat six men. It should have turned legs and no drawers (Illustration 32).

Object: TABLE COVERING, printed oilcloth, reproduction

Location: on the table

See Illustrations 29, 32.

Object: OIL LAMP

Location: on the table

See notes on an oil lamp for the commanding officer's office.

Object: SIDE CHAIRS (3), spindle-back, wood seat

Location: around the table

Object: ARMCHAIR, low back windsor

Location: west wall

Object: SIDE CHAIRS (2), ladder-back, wood or rush seat

Location: around table

Object: SIDE TABLE

Location: south wall

This should be a smaller rectangular table than the one used as the dining table. It could serve as either a serving table or as a writing table, when the officers were not at mess. The legs may be either turned or tapered; the overall appearance should be plain.

Object: CLOTH TABLE COVERING

Location: on the side table

This cover can be white or printed.

Object: HEATING STOVE, cast-iron

Location: in front of fireplace, north wall

This should have a stovepipe hooked into the fireplace. It can be a small stove and should have a piece of sheet iron or heavy tin laid on the floor under it.

Object: WOOD BOX

Location: next to the stove

The box should be partially filled with wood.

Object: ASH SHOVEL, sheet iron

Location: leaning against side of fireplace

Object: CANDLESTICK, brass, without ejector

Location: on fireplace mantelpiece

This should have a used candle in place and a few additional, unused candles lying next to it. (See Illustrations 28, 29, 32.)

Object: PLATES (6), ironstone

Location: on dining table

For examples, see Figure 122 and Figure 127 in McGarry, "Archeological Investigations," Volume 2.

Object: CUPS AND SAUCERS (6), ironstone

Location: on dining table

For an example, see Figure 153 in McGarry, "Archeological Investigations," Volume 2.

Object: TUMBLERS (6), glass

Location: on dining table

Object: JAR, stoneware

Location: on dining table

For examples, see Catalog of the "Fort Edward Stoneware Association."

Object: KNIVES, FORKS, SPOONS (6 sets)

Location: on dining table

See notes on eating utensils for the enlisted men's mess. The ones used for the officers should be of a higher quality than those for the enlisted men. See Illustrations 34-38.

Object: PLATTERS (2), ironstone

Location: on side table

Object: MESS PAN, tin

Location: on side table

This should be 8½ inches in diameter at the bottom and 11½ inches in diameter at the top, with a rim turned over a stout wire.

Object: SERVING SPOONS (2)

Location: on side table

Object: BOWL, earthenware, with apples

Location: on side table

Object: CROCK, small earthenware, with cloth covering

Location: on side table

2nd Lieutenant's Quarters (a)

First Floor: South-Central Room: Company D, 1st U.S. Artillery

Object: BUNK, single, wood, without shelf

Location: south wall

See Illustration 29.

Object: BEDSACK, single

Location: on bunk

Object: COVERLET, double woven

Location: on bunk

Object: LINEN SHEETS (2)

Location: on bunk

Object: ARMY BLANKET

Location: on bunk

Object: PILLOW

Location: on bunk

Object: CHEST, personal traveling

Location: south wall

For an example, see photograph, "Lt. J.B. Neill, 153rd New York Infantry" (Illustration 30). This should have an officer's name and company painted on the outside.

Object: SMALL BOX, wooden

Location: south wall

Object: TABLE, rectangular

Location: east wall

This should be a small rectangular table with turned legs and a single small drawer.

Object: TABLE COVER, white cloth

Location: on table

Object: TUMBLER, glass

Location: on table

Object: TOOTHBRUSH

Location: on table

For examples, see Lord, Encyclopedia, Volume 2, p. 201 and Volume 3, p. 188.

Object: COMB

Location: on table

Object: HAIRBRUSH

Location: on table

Object: TWO BOTTLES, glass

Location: on table

One should be for hair oil; the other for patent medicine.

Object: SCISSORS, small

Location: on table

Object: WASHBASIN, tin

Location: east wall

This should be hung from a nail on the wall.

Object: BUCKET, tin

Location: beside table

Object: MIRROR, small, in oval frame

Location: east wall

Object: CLOTHING

Location: northeast closet

This should be a selection of c. 1861 military pants, shirts, and underwear, such as an artillery officer would have had.

Object: HEATING STOVE, cast-iron

Location: north wall, in front of fireplace

This should be a small to middle-sized box stove. A piece of tin or sheet iron should be placed under it.

Object: WOOD BOX

Location: next to stove

Object: CLOTHING, c. 1861

Location: northwest closet

This should include a greatcoat, shawl, gloves, sash, and a pair of boots, suitable for an artillery officer.

Object: SWORD AND BELT, c. 1861

Location: northwest corner

Object: ASH SHOVEL, sheet iron

Location: next to stove

Object: PIPE, corncob with long stem

Location: on mantel

Object: TOBACCO TIN

Location: on mantel

For examples, see Russell & Erwin Catalog (1865), p. 346.

Object: TABLE, square

Location: east wall

Object: TABLE COVERING, cloth, print

Location: on square table

Object: AMBROTYPE of woman, c. 1860

Location: on square table

Object: WATCH

Location: on square table

Object: POCKETBOOK

Location: on square table

Object: EYEGLASSES

Location: on square table

Object: BOOKS (2)

Location: on square table

A popular novel and a Bible would be suitable.

Object: VIOLIN, c. 1830-60

Location: south wall

This should be hung from a nail or nails.

Object: CANDLESTICK, brass

Location: on square table

This should be a short candlestick with no ejector; it should have a used candle in place.

Object: PIECE OF CARPET, ingrain

Location: center

Object: CHAIRS (2), ladder-back

Location: one by square table; one against south wall

These should have turned legs and wooden seats.

Object: PRINTS (2)

Location: one on west wall; one on south wall

These should be contemporary prints, one a cheap lithograph in an inexpensive wooden frame, one a picture cut from a

contemporary newspaper or magazine and attached to the wall. See photograph, "Inside an Officer's Tent" (Illustration 28), for an example.

Object: BOOTJACK, wood

Location: south wall, rear chair

This should appear to be homemade.

Officers' Kitchen

Basement

Object: BUNK

Location: east wall

This should be a single, wooden bunk without shelf, for the cook.

Object: BEDSACK, single

Location: on bunk

Object: LINEN SHEET

Location: on bunk

Object: COVERLET, overshot

Location: on bunk

Object: CRATE, made into table

Location: south wall next to bunk

Object: TABLE COVER, linen towel

Location: on crate

Object: HAIRBRUSH

Location: on crate

Object: CUP, tin

Location: on crate

Object: LOOKING GLASS, unframed

Location: on crate

Object: SHOES

Location: under crate

Object: WOOD RACK with nails for pegs

Location: south wall

Object: CLOTHES, c. 1861

Location: on peg rack

These might include a civilian coat, hat, and shirt.

Object: SHELF, wood

Location: south wall

Object: SHELF CLOCK

Location: on shelf

This should be an inexpensive type.

Object: CUPBOARD, built-in

Location: south wall

Object: WORKTABLE, wooden

Location: west wall

Object: COOKING STOVE, iron

Location: north wall

This will be connected to the chimney by a length of stove-pipe.

Object: DUMBWAITER, wooden

Location: north wall

The dumbwaiter is in the collection of Fort Washington. It should be restored and re-installed.

Object: CROCKS (3), earthenware

Location: built-in cupboard in south wall

These should be various sizes; they should have muslin covers tied with twine.

Object: CROCKS (2), stoneware

Location: built-in cupboard in south wall

Object: PITCHER, small earthenware

Location: built-in cupboard in south wall

Object: MASON JARS (5) with lids

Location: built-in cupboard in south wall

Object: MESS PANS (4), tin

Location: south wall cupboard

Object: COFFEE MILL

Location: south wall cupboard

Object: TEA CANISTER, tin

Location: south wall cupboard

Object: COFFEE CAN, tin

Location: south wall cupboard

Object: SPICE BOX

Location: south wall cupboard

Object: BAG OF SUGAR

Location: south wall cupboard

Object: GRATER, tin

Location: south wall cupboard

Object: PEPPER BOX, tin

Location: south wall cupboard

Object: CORKSCREW, metal

Location: south wall cupboard

Object: TIN PLATES (3)

Location: south wall cupboard

Object: MUGS (2), tin

Location: south wall cupboard

Object: BUTTER KNIVES (2)

Location: south wall cupboard

Object: FORKS, two-tined (2)

Location: south wall cupboard

Object: SOUP SPOONS (3), tin

Location: south wall cupboard

Object: CANNED GOODS

Location: south wall cupboard

These should be the types of goods offered for sale by the sutler at Fort Washington, such as condensed milk, oysters, and peaches. See Appendix E.

Object: BOTTLED GOODS

Location: south wall cupboard

These should be the types of items offered for sale by the sutler, such as pickles, tomato catsup, Worcestershire sauce, and lemon extract.

Object: BUCKETS (2), wooden

Location: southwest corner

Object: TUB, small wooden

Location: west wall

Object: WORKTABLE, wooden

Location: west wall

Object: TOWEL, linen

Location: hanging on side of table

Object: POTATO MASHER, wooden

Location: on table

Object: BASKET, small

Location: on table

This should be filled with eggs.

Object: BOWL, large earthenware

Location: on table

Object: FLOUR SACK

Location: on table

Object: CROCK, stoneware

Location: on table

Object: SCOOP, tin

Location: on table

Object: SPOONS (2)

Location: on table

One should be a metal serving spoon; the other should be a wooden spoon.

Object: BASKET, large

Location: west wall, on floor

Object: SHELF, wooden

Location: west wall

Object: MINCING KNIFE

Location: on shelf

Object: BUTCHER'S KNIFE

Location: on shelf

Object: FLESH FORK

Location: on shelf

Object: MUFFIN PANS (2), cast-iron

Location: on shelf

Object: KETTLE WITH LID, cast-iron

Location: on stove

Object: BOILER, tin

Location: on stove

Object: COFFEE POT, tin

Location: on stove

Object: WASH BOILER, tin

Location: on floor beside stove

Object: FRYING PANS (2), cast-iron

Location: hung on west wall

Object: LADLE, tin

Location: hung on wall behind stove

Object: CANDLESTICKS (2), tin

Location: west wall, window ledge

Object: BROOM

Location: northeast corner

Object: SIDE CHAIR, spindle-back

Location: center

XIX: ENLISTED MEN'S BARRACKS

The enlisted men's barracks at Fort Washington will be furnished to help visitors visualize barracks life in a fort along the eastern seaboard at the time of the Civil War. The specific period selected is April 1861 through December 1861 when Company D, 1st United States Artillery, was in these barracks. Although there were other units at Fort Washington--the Logan Guards and the Washington Artillerists--they were quartered elsewhere.

The proposal for recommended furnishings in the enlisted men's barracks is determined by the architecture of the building during the period 1860-1865. During these years, the second story had four doors and six windows across the front. The two main divisions, created by a masonry wall and fireplaces, were subdivided to create four squadrooms. This arrangement is seen in G.C. Humphries' rendition of the "Elevation & Plans of Soldiers' Barracks, Fort Washington," which is based on Samuel Cooper's plan and was drawn in February 1849 (Illustration 8). This arrangement lasted at least until 1868, as noted in Assistant Surgeon Alfred Delaney's letter of April 16, 1868.[1]

Since restoration of the second floor will not be carried out, the first floor squadroom will be treated as a double-size enlisted men's squadroom.

WHOLE BUILDING. The walls should be plastered and whitewashed.

FLOORS. No floor coverings are recommended. The boards should not be stained but should show evidence of wear and hard scrubbing.

WINDOWS. No interior window treatment is recommended. The exterior should have functional wooden shutters.

Recommended Furnishings:

Squadroom (1)

The squadroom should be furnished with the following, all dating to c. 1861:

Object: DOUBLE BUNKS (4), wood, reproduction

Location: arranged along the interior blank wall (north or south) and along the east wall

Seeley's 1865 Inventory listed 33 double bunks. These should be two-man, two-tiered bunks, of mortise and tenon construction. Clary, "History of Furniture" has an analysis and recommendation on bunk construction. The physical arrangement of the bunks would have varied with the changing roster of troops. The bunks recommended for Fort Washington should have attached gun racks and shelves. Each bunk should be labeled with the names of two soldiers of Company D. See Illustrations 43-48.

Object: DOUBLE BEDSACKS (8), reproductions

Location: one bedsack to each tier

These were prescribed by Army Regulations. For a description of bedsacks, see guardroom furnishings, p. 202. Each bedsack should be stuffed with straw and folded at the head of the bunk.

Each bunk should have the soldier's gear laid out according to Army Regulations. Only those articles which are visible would be required; items in a knapsack would not be necessary.

Object: BLANKETS (16), reproductions

Location: folded on top of bedsack (2 on each bunk, 3 on one bunk, to indicate the presence of at least one 3-year veteran)

For a description, see notes on guardhouse furnishings.

Object: KNAPSACKS (16), military, reproductions

Location: on lower bunk shelf (4 on each)

Object: GREATCOATS (16), military, reproductions

Location: folded inside-out under knapsacks

Object: ENLISTED MEN'S CAPS (7), artillery insignia

Location: in the arms rack of each bunk (4 each)

One knapsack will have a full complement of clothing to demonstrate what a Civil War soldier would have owned. This may be spread open as if for inspection. The personal effects of Private J.D. Howe, Company M, 4th United States Artillery, may be used as an example.[2]

Object: UNIFORM COAT OR JACK COAT, reproduction

Location: folded on knapsack

Object: TROUSERS (1 pair), reproductions

Location: folded on knapsack

Object: FLANNEL DRAWERS, reproductions

Location: folded on knapsack

Object: FLANNEL SHIRT (1), military, reproductions

Location: folded on knapsack

Object: COTTON SHIRTS (2), military, reproductions

Location: folded on knapsack

Object: BOOTEES (pair), reproductions

Location: folded on knapsack

Object: SOCKS (2 pairs), reproductions

Location: folded on knapsack

Object: HANDKERCHIEF, reproduction

Location: folded on knapsack

Object: SCARVES (2), wool, reproduction

Location: folded on knapsack

Object: LINEN COAT, reproduction

Location: folded on knapsack

Object: TOWEL

Location: folded on knapsack

Object: PHOTOGRAPHS (5)

Location: under clothing on knapsack

Object: PIPE, wood

Location: under clothing on knapsack

In addition to the items relating to the bunk and soldier's gear, the squadroom will be furnished with the following:

Object: WATER BUCKETS (4), wood

Location: west wall

For a description, see guardroom and guardhouse furnishings.

Object: DIPPER (2), tin

Location: hung on nail over buckets

Object: ANDIRONS, iron

Location: in fireplace

Object: WOOD BOXES (2)

Location: next to fireplace

Object: ASH SHOVELS AND FIRE TONGS (2), iron

Location: next to fireplace

Object: CANDLESTICKS (4), wood, homemade, with molded candles

Location: on fireplace mantel

See David Clary's "History of Furniture" for a description of barracks lighting.

Object: CANDLES, extra

Location: next to candlestick

These may be piled loose on the mantelpiece or placed in a small wooden box.

Object: PEG RACKS (2), wood

Location: on fireplace wall

This should be a wooden board with pegs or nails sufficient to hang 16 tin washbasins. It may be a single or triple board.

Object: WASHBASINS (16), tin

Location: hung on peg rack

For examples, see Dover Stamping Company Catalog.

Object: CHAIRS (4)

Location: west wall

These should be all-wood chairs with turned legs and solid wooden seats.

Object: DOMINOES, in box

Location: fireplace mantel

Footnotes: Enlisted Men's Barracks

1. RG 393, Entry 1331, Register of Letters Sent, 1867-72.

2. Special Order 46 (May 19, 1868), RG 393, Entry 1336, Proceedings of the Post Council.

XX: COST ESTIMATES

The following prices represent the estimated cost of each item recommended in the preceding sections. The prices are for good usable originals or reproductions. They are based on current antique price guides, dealers' recommendations, and the price lists and quotations of those producing reproductions.

Flag

1	flagstaff			$ 3,500.
	hardware			800.
2	storm flags	@	400.	800.
2	garrison flags	@	600.	1,200.
1	halyard			75.
		TOTAL:		$ 6,375.

Ordnance: Cannon

1	32-pounder guns	@	10,000.	$ 10,000.
		TOTAL:		$ 10,000.

Ordnance: Carriages

1	barbette carriages, 32-pdr. gun	@	15,000.	15,000.
1	flank casemate carriages, 24-pdr.	@	8,000.	8,000.
		TOTAL:		$ 23,000.

Ordnance: Implements (* = Fort Washington Collections)

24-Pounder Gun:

2	rammers	@	75.	$ 150.
2	sponges	@	85.	170.
2	sponge covers	@	25.	50.
*1	worm			--
1	ladle			45.
2	priming wires	@	5.	10.
*1	gunner's gimlet			--

1	gunner's pincers				20.
1	vent punch				10.
*2	lanyards				--
*2	thumbstalls				--
*2	tube pouches				--
*1	gunner's perpendicular				--
1	breech sight				100.
1	budge barrel				150.
1	pass box				40.
2	vent covers	@	25.		50.
2	tompions	@	30.		60.
2	tarpaulins	@	85.		170.
1	water bucket				38.
1	chalk line				5.
	chalk				2.
1	broom				25.
1	wrench				10.
2	handspikes	@	50.		100.
		TOTAL:		$	1,205.

ORDNANCE - GRAND TOTAL: $ 34,205.

Prison Cells

2	army blankets	@	125.	$	250.
4	buckets	@	45.		180.
2	ladles, gourd	@	10.		20.
		TOTAL:		$	450.

Guardhouse (Optional)

3	army blankets	@	125.	$	375.
1	water bucket				30.
1	ladle, gourd				3.
1	24-pound ball, chain and shackle				100.
		TOTAL:		$	508.

Guardroom

2	three-tier bunks	@	800.		1,600.
6	bedsacks	@	75.		450.
2	benches	@	150.		300.
1	clock, c. 1860			$	400.
1	fireplace fender				100.
1	pair of andirons				125.
1	ash shovel & poker				75.
1	woodbox				38.
2	candle lanterns	@	45.		90.
1	water bucket				45.
1	tin dipper				30.
1	shelf				45.
2	flags				800.
1	coat rack				35.
1	tin box				50.
6	candles	@	1.	$	6.
4	padlocks	@	65.		260.
1	pair of handcuffs				75.
1	boxsaw				10.
1	crosscut saw				150.
2	rakes	@	30.		60.
3	splint brooms	@	35.		105.
5	shovels	@	45.		225.
3	spades	@	45.		135.
6	picks	@	45.		270.
5	axes	@	50.		250.
2	axe helves	@	8.		16.
3	crowbars	@	15.		45.
1	keg				45.
3	crates	@	38.		114.
1	checkerboard & checkers				35.
		TOTAL:		$	5,984.

Post Commander's Office

1	commanding officer's desk	$	750.
1	armchair		175.
1	inkstand		45.
1	paper folder		8.
1	pen & point		2.
1	pen wiper		1.
1	ruler		8.
1	steel eraser		8.
1	piece of office tape		1.

4	lead pencils	@	1.		4.
4	ounces of sealing wax				20.
1	paper cutter				10.
	blotting paper				2.
1	quire of writing paper				5.
1	quire of envelope paper				5.
	miscellaneous stationery				25.
1	office table				250.
1	table covering				30.
3	maps mounted on linen	@	125.		375.
1	pair binoculars with case				150.
1	calendar				30.
1	safe				500.
1	coat rack				35.
3	chairs, ladder-back	@	75.	$	225.
1	chair, camp				85.
1	bookcase				175.
	forms				35.
5	books	@	12.		60.
1	table, side				100.
1	table covering				25.
1	water bottle				25.
2	glass tumblers	@	10.		20.
1	clock				150.
1	stove				200.
1	coal box				38.
1	ash shovel & tongs				28.
1	oil lamp				125.
1	candlestick				25.
1	box of wooden matches				10.
1	match safe				50.
		TOTAL:		$	3,815.

Adjutant's Office

1	adjutant's desk			$	500.
1	table cover				25.
1	glass inkwell				6.
2	pens and points	@	2.		4.
1	sander				30.
1	wafer box				15.
1	ruler				8.
1	paper folder				8.
1	piece red tape				1.
1	steel eraser				8.
2	lead pencils	@	1.		2.

1	tin box & wood matches				15.
1	oil lamp				100.
1	quire of paper				5.
1	bookcase				300.
4	regimental books	@	120.		480.
	blank forms				35.
1	stove				300.
1	wood box				38.
1	stove poker & ash shovel				48.
1	wood tongs				20.
1	wooden candle box				45.
6	candles	@	1.	$	6.
2	candle lanterns	@	40.		80.
1	coat rack				35.
1	mail bag				20.
1	office desk				450.
1	inkwell				6.
3	pens & points	@	2.		6.
1	candlestick				18.
3	company books	@	100.		300.
1	quire of paper				5.
1	chair, windsor				400.
1	chair, desk				175.
4	chairs, ladder-back	@	125.		500.
1	traveling desk				400.
1	military desk and table				400.
	blank forms				35.
1	inkwell, glass or wood				6.
1	spittoon				35.
1	waterbottle				25.
1	glass tumbler				30.
6	books	@	15.		90.
		TOTAL:		$	5,015.

Officers' Quarters: Mess

1	dining table			$	500.
1	table covering				100.
1	oil lamp				125.
3	chairs, spindle-back	@	75.		225.
1	chair, low-back windsor				135.
2	chairs, ladder-back	@	100.		200.
1	table, side				500.
1	table covering				75.
1	stove, parlor				200.
1	woodbox				38.
2	platters	@	50.		100.

1	mess pan				50.
2	serving spoons	@	10.		20.
1	ash shovel & poker				28.
1	candlestick				75.
6	plates	@	10.		60.
6	cups and saucers	@	20.		120.
6	tumblers	@	20.		120.
1	stoneware jug				75.
6	knives and forks	@	15.	$	90.
6	spoons	@	5.		30.
1	bowl, earthenware				50.
1	crock				75.
		TOTAL:		$	2,991.

Officers' Quarters: 2nd Lieutenant's (South Central Room)

1	bunk			$	400.
1	bedsack				40.
1	coverlet				200.
2	linen sheets	@	15.		30.
1	army blanket				35.
1	pillow				30.
1	chest				75.
1	small box				18.
1	table				225.
1	table covering				75.
1	glass tumbler				30.
1	toothbrush				10.
1	comb				15.
1	hairbrush				20.
2	bottles	@	15.		30.
1	pair of scissors				10.
1	washbasin				9.
1	bucket				25.
1	mirror				15.
	clothing				100.
1	stove				200.
1	woodbox				38.
1	sword				175.
1	ash shovel				20.
1	pipe				75.
1	tobacco tin				25.
1	square table				250.
1	cloth cover				25.
1	daguerreotype				15.
1	watch				85.
1	pocket book				25.

1	pair of eyeglasses & case			15.
2	books	@	10.	20.
1	violin			100.
1	candlestick, brass			35.
1	piece of carpet, ingrain			125.
2	chair, ladder-back			185.
2	prints	@	50.	100.
1	bootjack			18.
		TOTAL:		$ 3,098.

Officers' Quarters: Kitchen

1	bunk			$ 325.
1	bedsack			40.
1	linen sheet			15.
1	coverlet			175.
1	crate			38.
1	table covering			25.
1	hairbrush			20.
1	cup, tin			4.
1	mirror			10.
1	pair of shoes			60.
1	wooden pegrack			150.
	clothes			75.
1	shelf			35.
1	shelf clock			95.
1	cupboard			125.
1	table			75.
1	stove			200.
3	crocks, earthenware	@	75.	225.
2	crocks, stoneware	@	75.	150.
1	pitcher			45.
5	mason jars	@	6.	30.
4	mess pans	@	20.	80.
1	coffee mill			65.
1	tea canister			95.
1	coffee can			12.
1	spice box			75.
1	bag			5.
1	grater			12.
1	pepper box			75.
1	corkscrew			13.
3	plates, tin	@	5.	15.
2	mugs	@	4.	8.
2	butter knives	@	7.50	15.
2	forks	@	5.	10.
3	soup spoons	@	10.	30.

	canned goods				60.
	bottled goods				50.
2	buckets	@	25.	$	50.
1	tub				100.
1	table				85.
1	towel				5.
1	potato masher				10.
2	baskets	@	45.		90.
1	bowl				65.
1	sack				5.
1	crock, stoneware				75.
1	scoop, tin				10.
2	spoons	@	10.		20.
1	shelf				35.
1	mincing knife				40.
1	butcher's knife				10.
1	flesh fork				12.
2	muffin pans	@	18.		36.
1	kettle with lid				65.
1	boiler, tin				5.
1	coffee pot				15.
1	wash boiler				45.
2	frying pans	@	18.		36.
1	ladle				10.
2	candlesticks	@	20.		40.
1	broom				35.
1	chair, spindle-back				75.
		TOTAL:		$	3,511.
	OFFICERS' QUARTERS - GRAND TOTAL:			$	9,600.

Enlisted Men's Barracks: Squadroom (1)

4	two-tier bunks	@	800.	3,200.
8	bedsacks	@	60.	480.
16	blankets	@	125.	2,000.
16	knapsacks	@	120.	1,920.
16	greatcoats	@	175.	2,800.
16	enlisted men's caps	@	35.	560.
7	muskets	@	325.	2,375.
7	sets of accoutrements	@	190.	1,330.
1	uniform coat			200.
1	pair of trousers	@	55.	55.
1	pair of flannel drawers			25.
1	flannel shirt	@	40.	40.

2	cotton shirts	@	35.	70.
1	pair of shoes			50.
2	pairs of socks	@	4.	8.
1	handkerchief			2.
2	scarves			20.
1	linen coat			55.
1	towel			5.
5	photographs	@	20.	100.
1	pipe			12.
4	water buckets	@	45.	180.
2	dippers	@	10.	20.
2	stoves	@	200.	400.
2	wooden boxes	@	38.	76.
2	ash shovels & pokers	@	28.	56.
4	candlesticks	@	18.	72.
18	candles			11.
1	box of matches			10.
2	peg racks	@	35.	70.
16	washbasins	@	30.	480.
4	chairs, ladder-back	@	100.	400.
1	box of dominoes			25.
		TOTAL:		$ 17,107.

SUMMARY OF COSTS

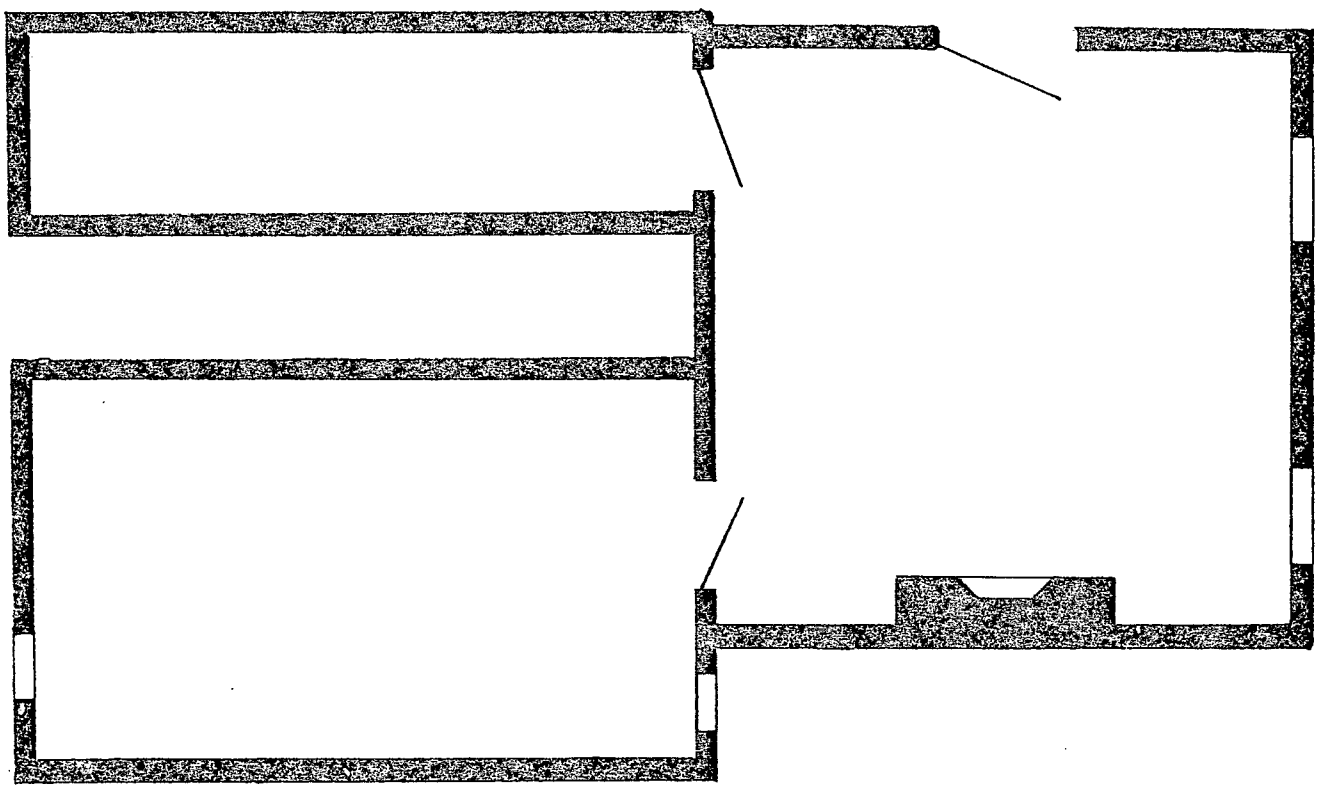
Flag	$ 6,375.
Ordnance	34,205.
Prison Cells	450.
Guardhouse (Optional)	508.
Guardroom	4,604.
Post Commander's Office	3,815.
Adjutant's Office	5,015.
Officers' Quarters	9,600.
Enlisted Men's Barracks	17,107.
TOTAL:	$81,679.

XXI: FLOOR PLANS AND ELEVATIONS

LIST OF FLOOR PLANS AND ELEVATIONS

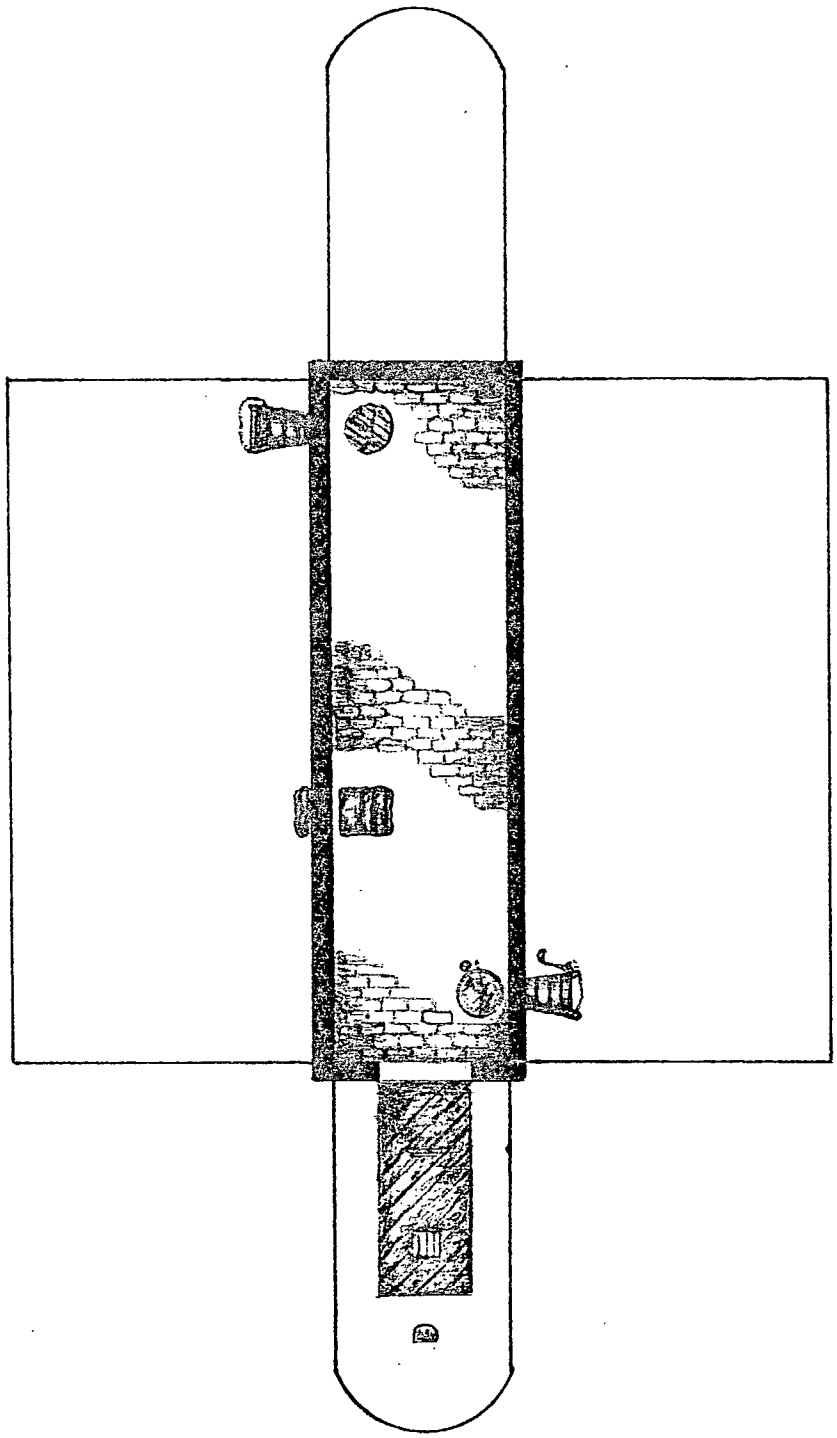
		Page
1.	Guardhouse and Prison Cells	263
2.	Dark Cell	264
3.	Light Cell	265
4.	Guard Room	266
5.	Post Commander's Office	267
6.	Adjutant's Office	268
7.	Officers' Quarters Mess	269
8.	Second Lieutenant's Quarters (a)	270
9.	Officers' Kitchen	271
10.	Enlisted Men's Barracks: Squad Room	272

1. Guardhouse and Prison Cells

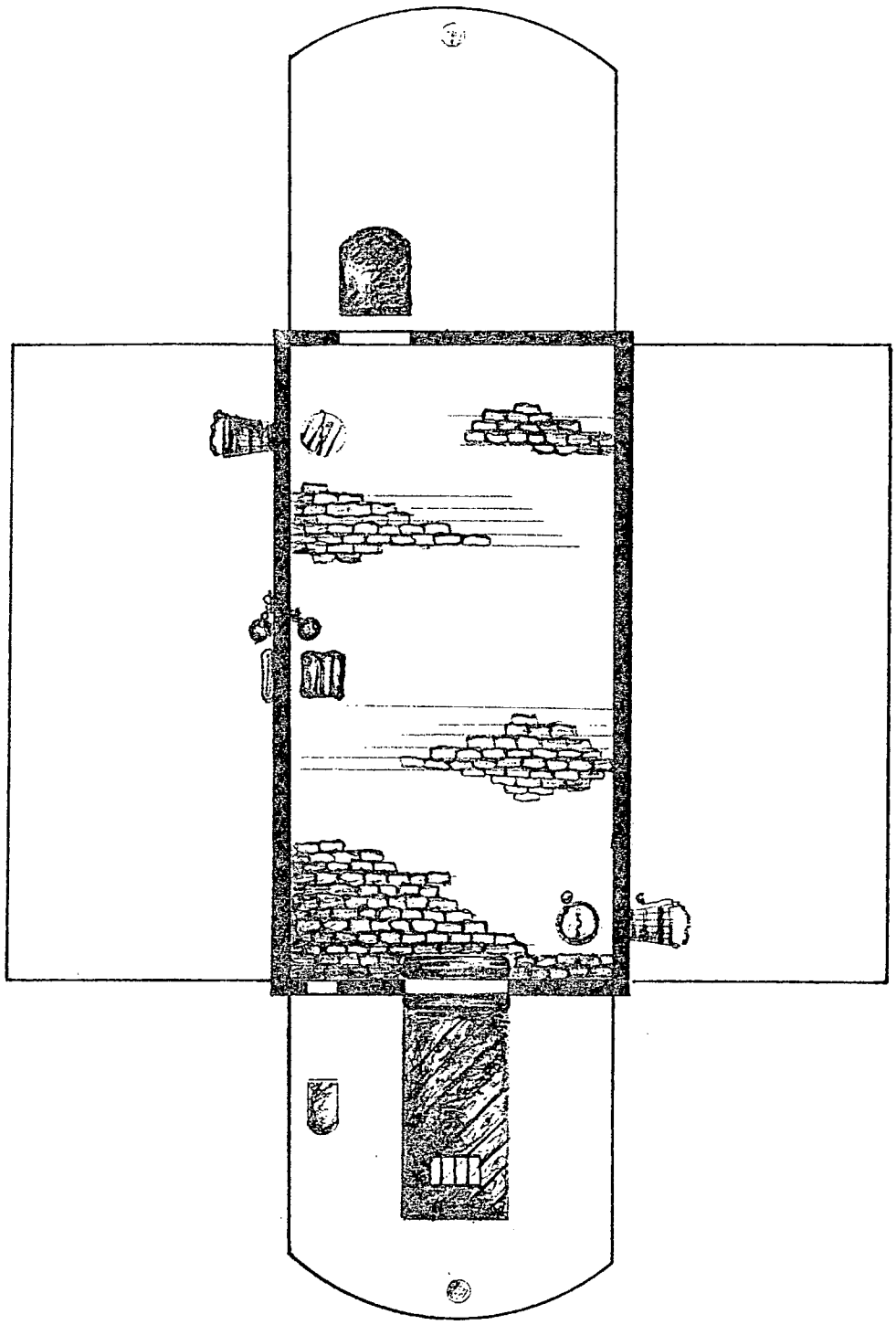


N

2. Dark Cell

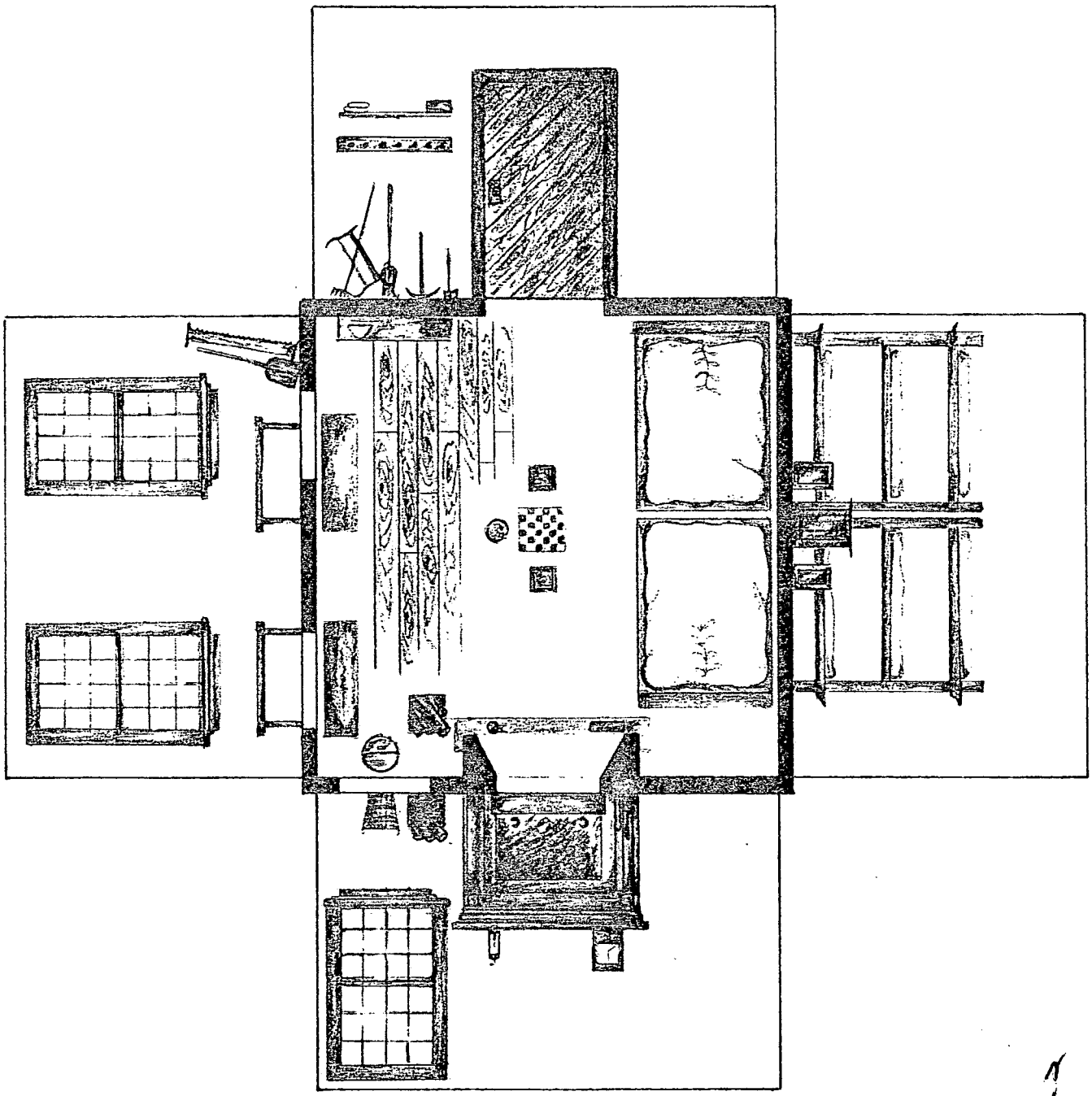


3. Light Cell

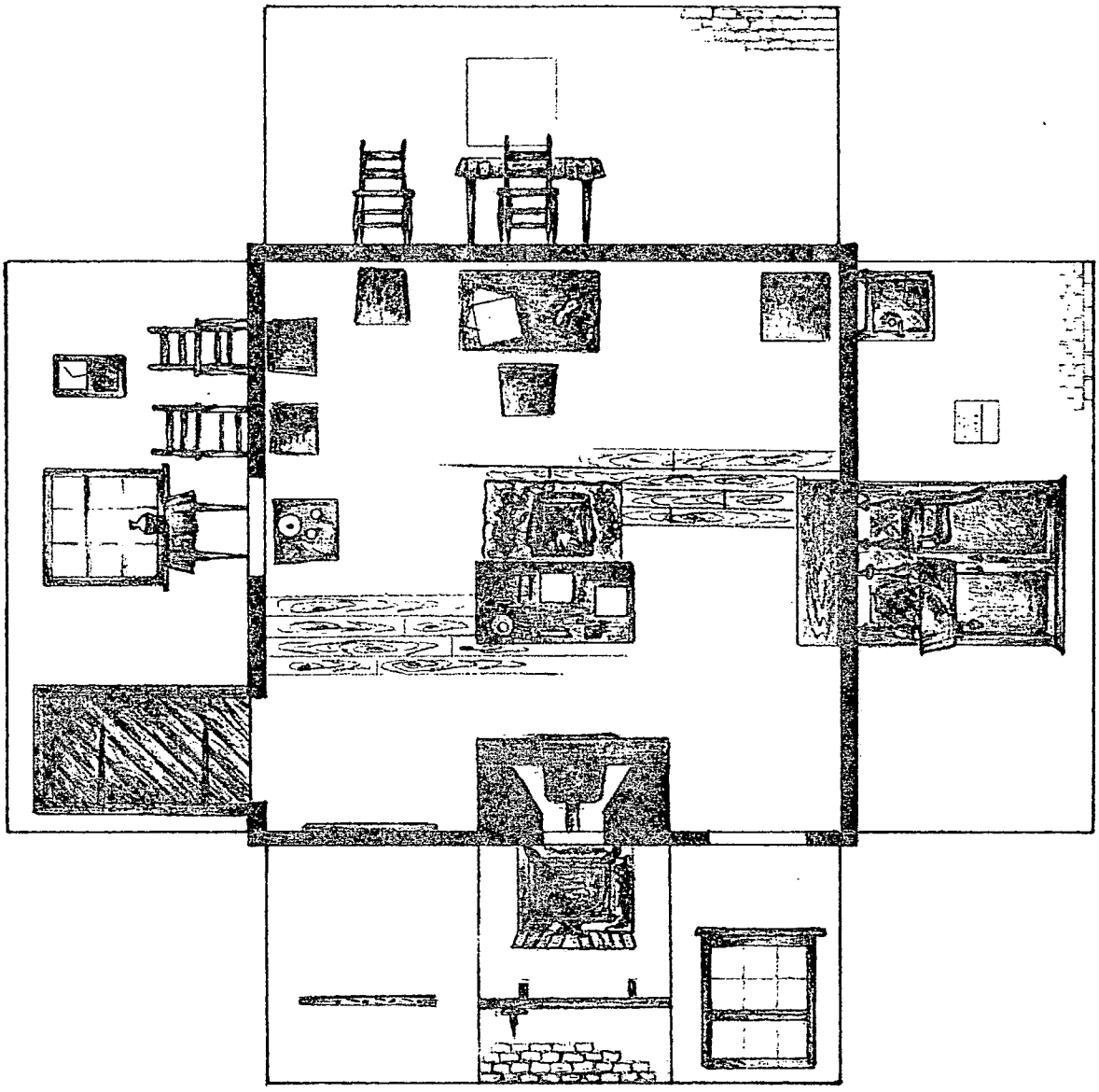


N

4. Guard Room

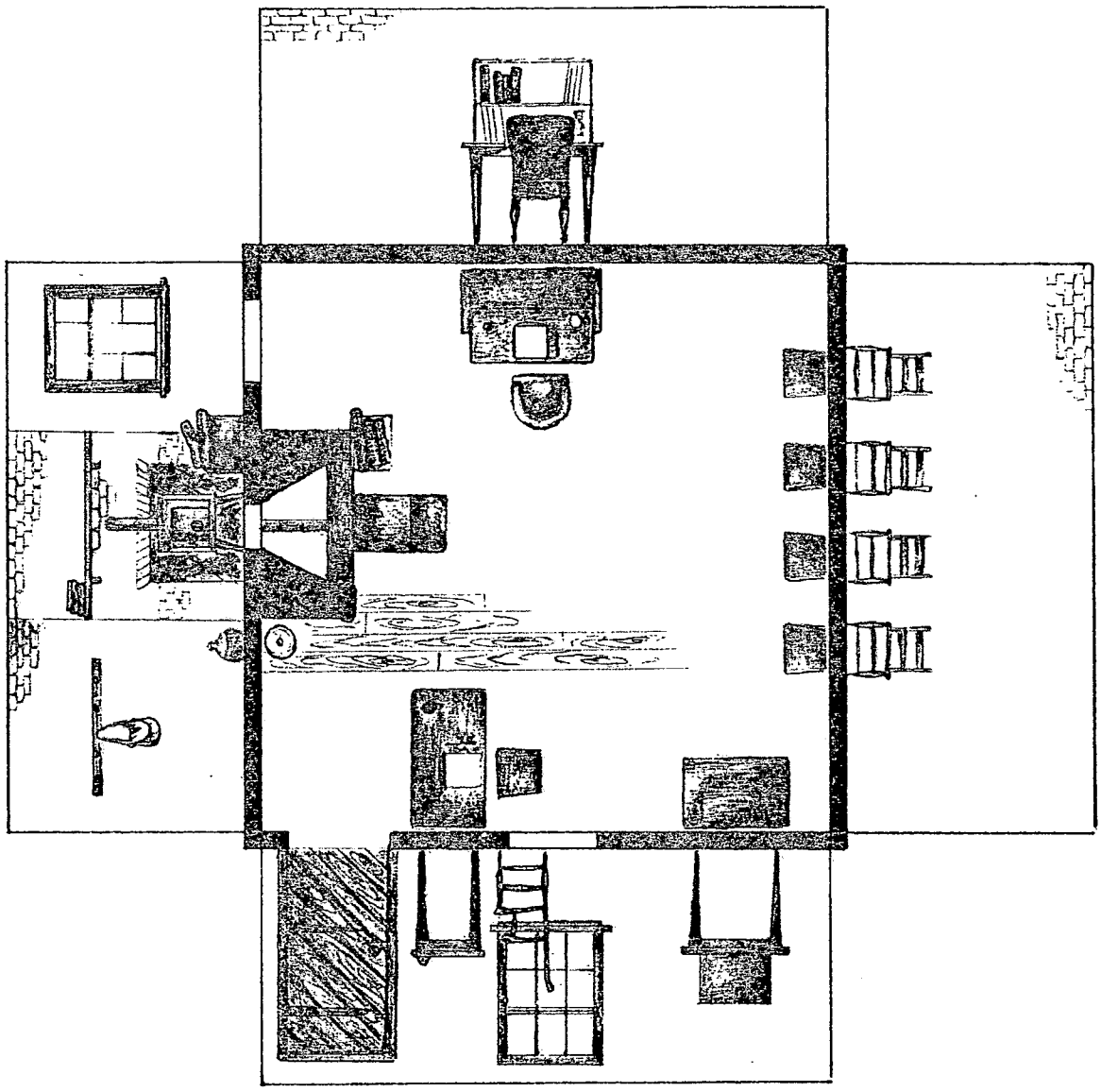


5. Post Commander's Office

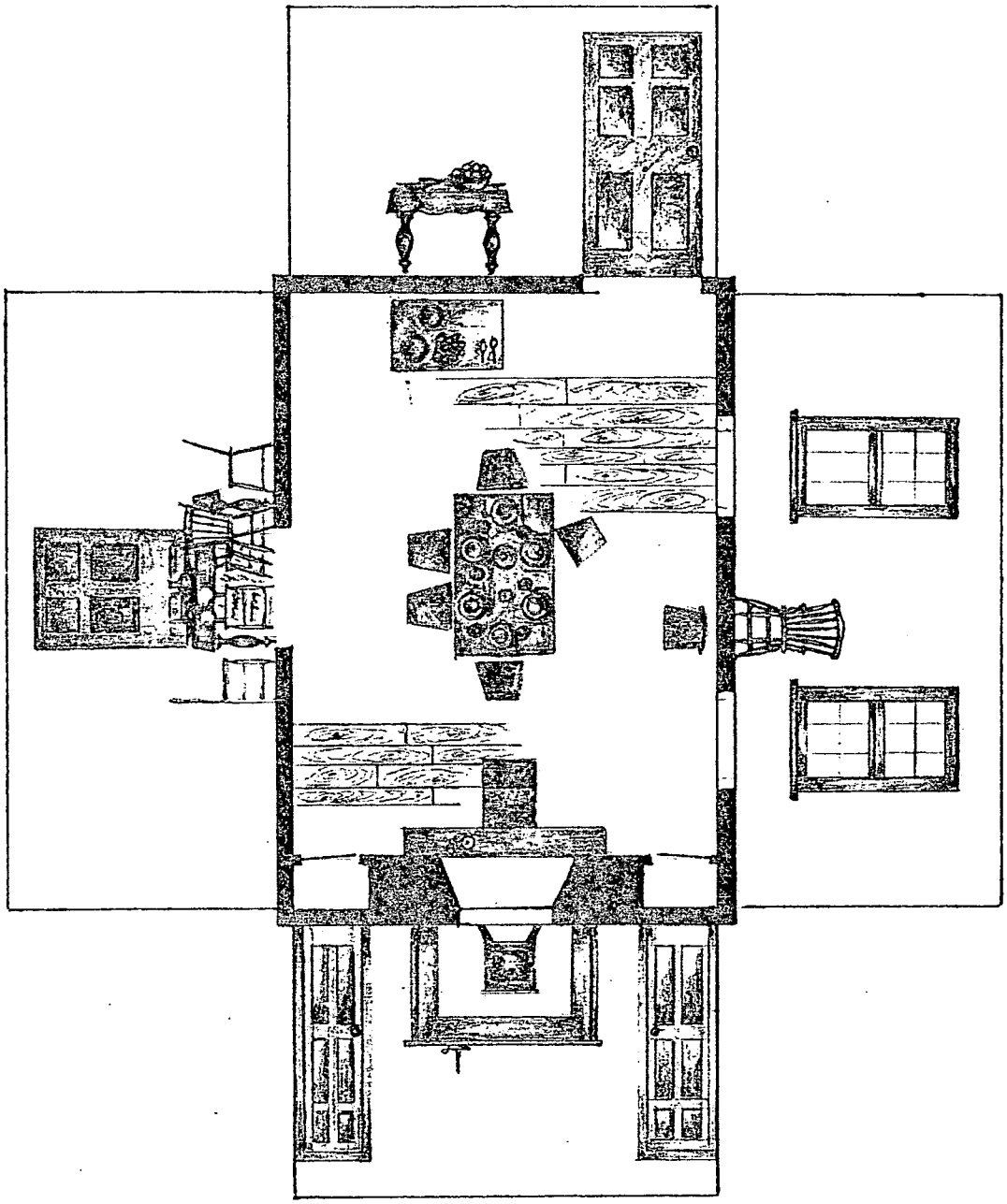


N

6. Adjutant's Office

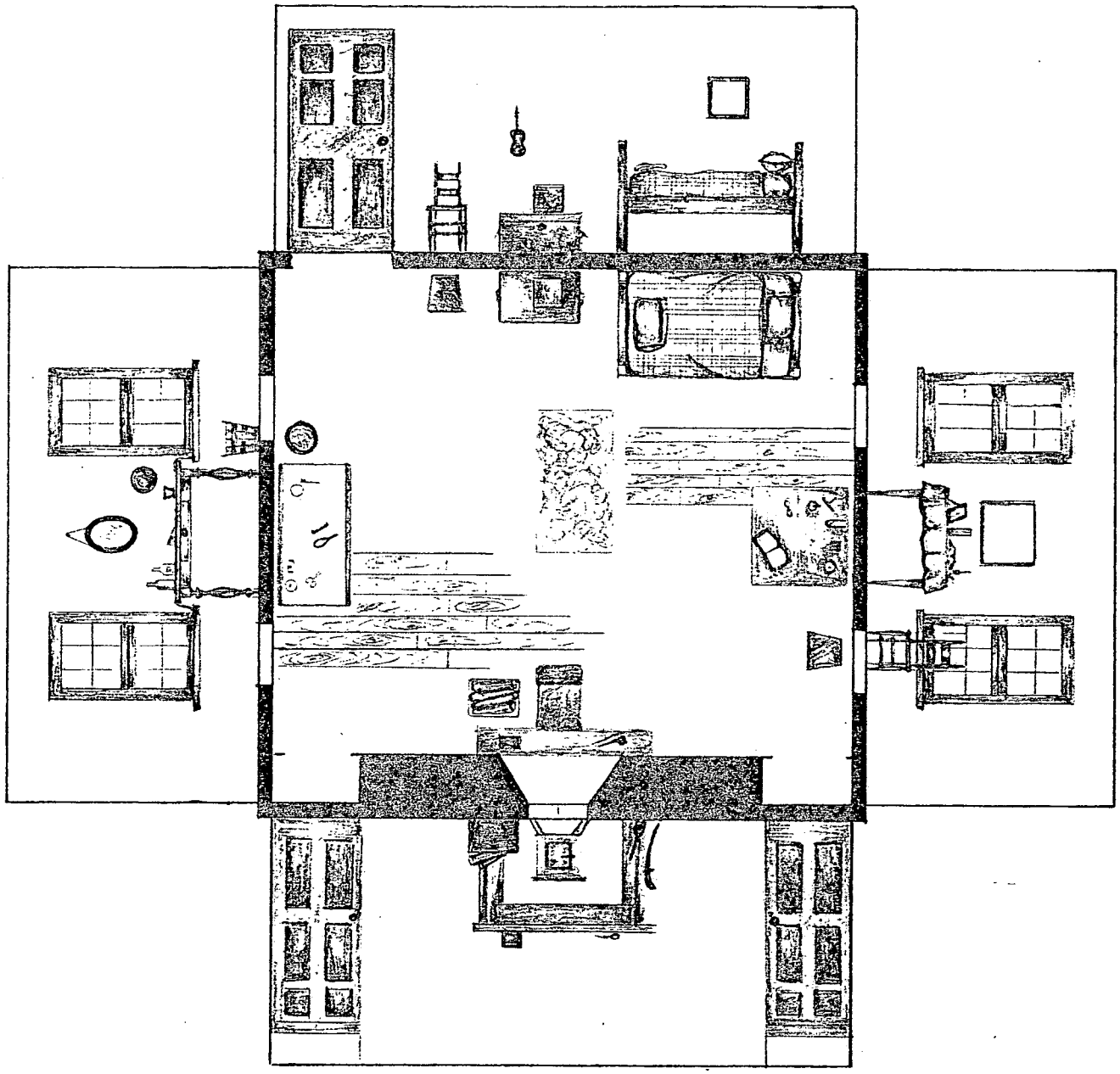


7. Officers' Quarters Mess

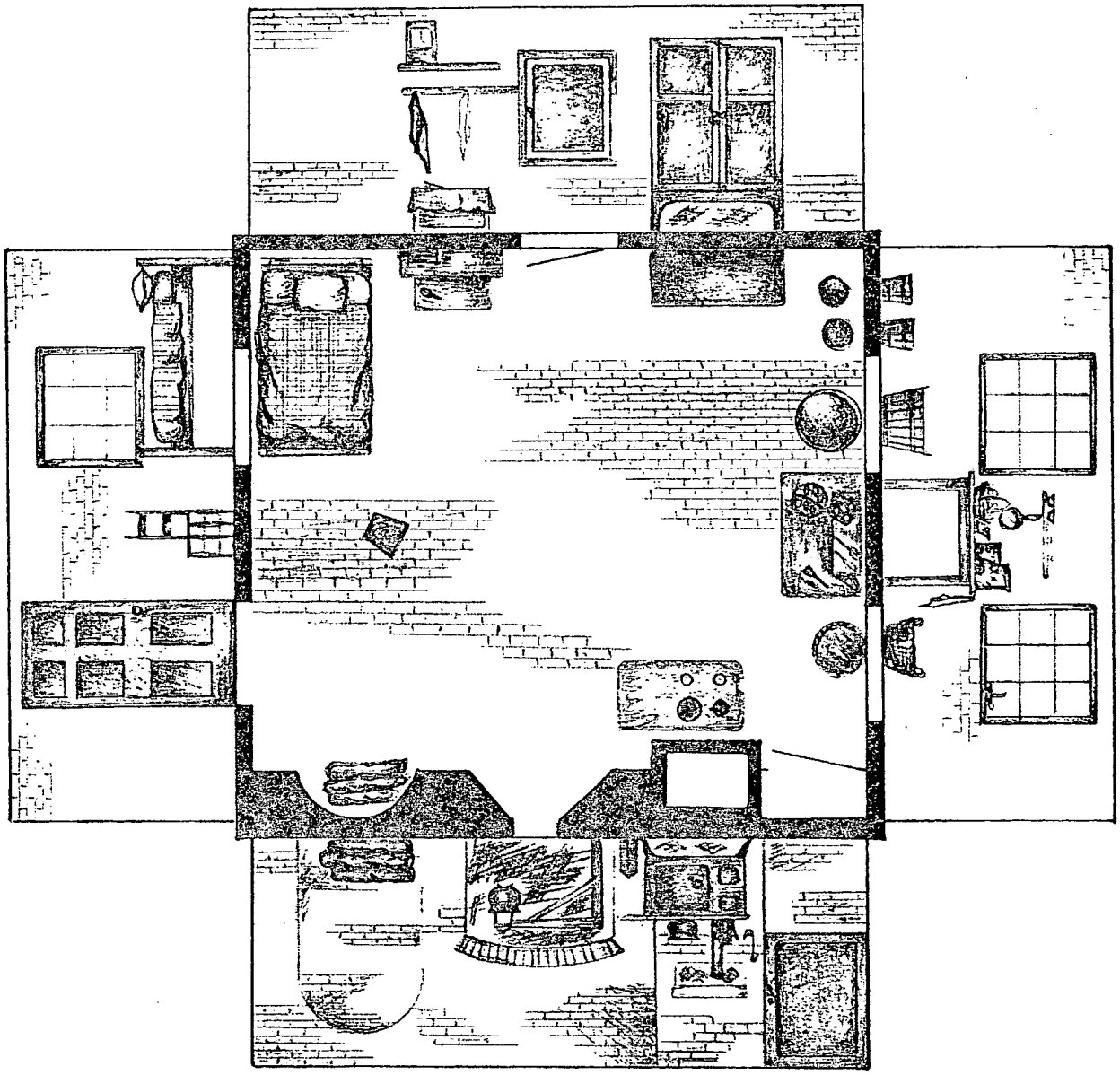


N

8. Second Lieutenant's Quarters (a)

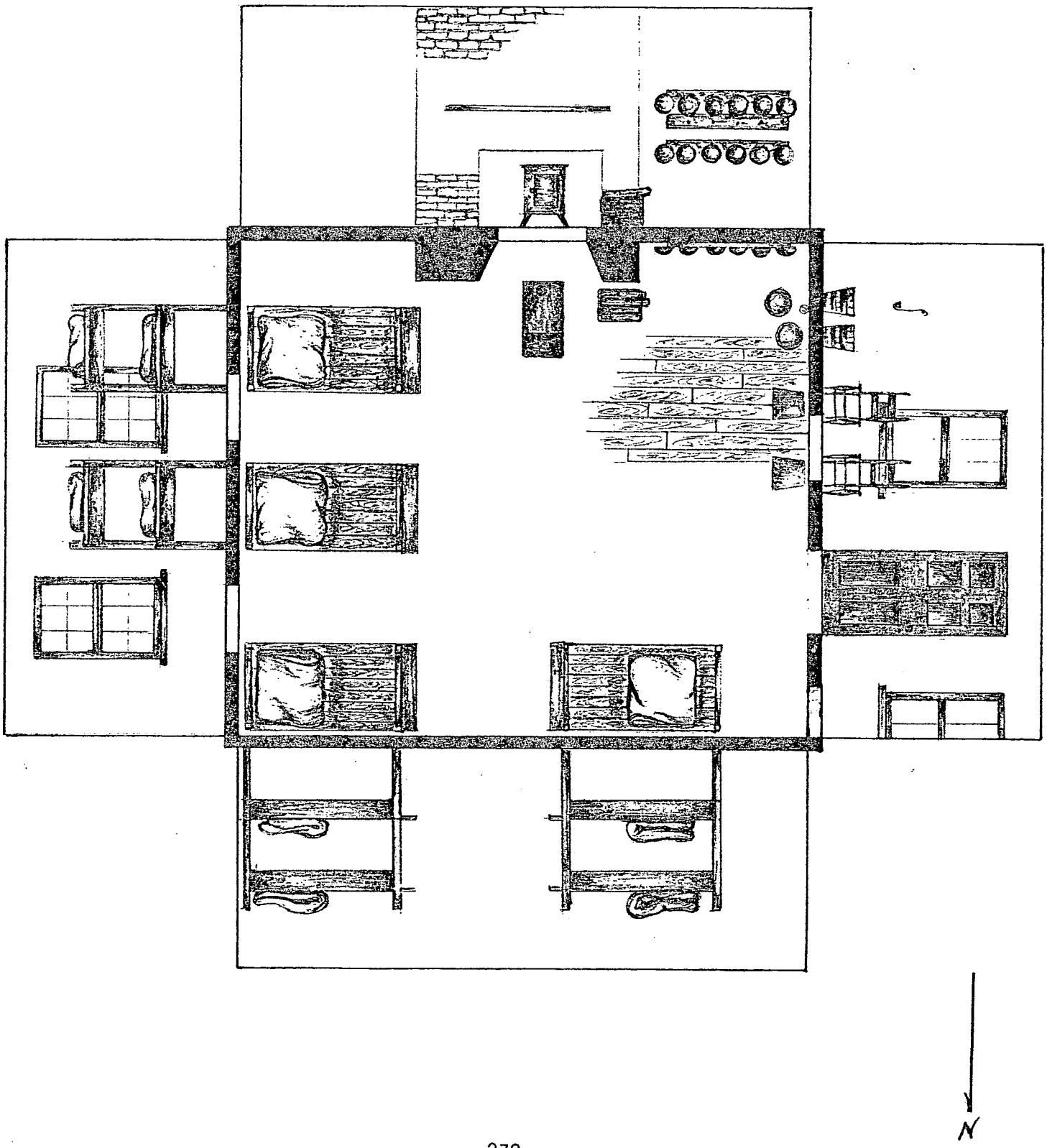


9. Officers' Kitchen



N

10. Enlisted Men's Barracks: Squad Room



APPENDIXES

APPENDIX A

Units Stationed at Fort Washington
1840-1872

Unit	Co.	From	To
NO GARRISON		1840-1848	
1st U.S. Artillery	F	Oct. 15, 1848	Oct. 28, 1850
1st U.S. Artillery	H	Oct. 15, 1848	Sept. 26, 1849
NO GARRISON		November 1850-December 1850	
4th U.S. Artillery	I	Dec. 12, 1850	Oct. 10, 1853
4th U.S. Artillery	F	Jan. 3, 1851	Nov. 19, 1852
NO GARRISON		October 1853-December 1860	
Company of Marines		Jan. 6, 1861	Jan. 25, 1861
Company of Recruits		Jan. 26, 1861	Assigned Co. D
1st U.S. Artillery	D	Apr. 15, 1861	Dec. 21, 1861
Logan Guards		Apr. 30, 1861	Jul. 24, 1861
Washington Artillerists (*)		Apr. 30, 1861	Jul. 24, 1861
37th New York Volunteers	I	Aug. 5, 1861	Apr. 15, 1862
37th New York Volunteers	H	Aug. 10, 1861	Apr. 15, 1862
4th U.S. Artillery Staff & Band		Feb. 13, 1862	Jan. 4, 1866
9th New York Independent Battery		Apr. 15, 1862	Mar. 6, 1863
16th Indiana Battery		Mar. 6, 1863	May 16, 1864
Maine Coast Guard	A	May 18, 1864	May 19, 1865
1st Independent Ohio Battery		May 19, 1864	June 18, 1865
3rd U.S. Artillery	G	June 17, 1865	July 10, 1865
1st Vermont Heavy Artillery	D	July 9, 1865	Aug. 12, 1865
1st Maine Heavy Artillery	H	Aug. 11, 1865	Sept. 9, 1865
4th U.S. Artillery	C	Sept. 9, 1865	Nov. 17, 1865
4th U.S. Artillery	E	Sept. 9, 1865	Sept. 24, 1865
4th U.S. Artillery	A	Nov. 17, 1865	July 29, 1870
4th U.S. Artillery	D	Oct. 27, 1866	Aug. 29, 1867
4th U.S. Artillery	M	Aug. 31, 1867	July 29, 1870
4th U.S. Artillery	M	Sept. 1870	June 19, 1872
4th U.S. Artillery	F	June 19, 1872	Sept. 16, 1872
GARRISON WITHDRAWN		September 1872	

(*) Became Companies B, E, and H, 25th Pennsylvania Volunteers

APPENDIX B

Commanding Officers at Fort Washington
1840-1872

1841-1847--NO GARRISON	Capt. Fred A. Smith	U.S. Engineers
Oct. 18, 1848-Oct. 28, 1850	Capt. George Nauman	1st Artillery
Dec. 12, 1850-Oct. 10, 1853	Capt. John B. Scott	4th Artillery
Jan. 11, 1861-Jan. 25, 1861	Capt. Algernon Taylor	U.S. Marines
Jan. 26, 1861-Apr. 15, 1861	1st Lt. Delavan D. Perkins	4th Artillery
Apr. 16, 1861-Dec. 16, 1861	Capt. Joseph A. Haskin	1st Artillery
Dec. 17, 1861-Aug. 30, 1863	Col. Charles S. Merchant	4th Artillery
Aug. 30, 1863-Sept. 9, 1863	1st Lt. Charles R. Deming	16th Indiana
Sept. 10, 1863-Jan. 4, 1866	Col. Horace Brooks	4th Artillery
Jan. 4, 1866-Feb. 9, 1866	1st Lt. Rufus King, Jr.	4th Artillery
Feb. 9, 1866-Apr. 22, 1866	1st Lt. John M. Stephenson	4th Artillery
Apr. 23, 1866-July 25, 1866	1st Lt. Joseph B. Campbell	4th Artillery
July 26, 1866-Oct. 26, 1866	1st Lt. Henry H. Huntington	4th Artillery
Oct. 27, 1866-Aug. 29, 1867	Capt. Fred M. Follett	4th Artillery
Aug. 30, 1867-May 31, 1868	Capt. John Mendenhall	4th Artillery
June 1, 1868-Sept. 25, 1872	Maj. Albion P. Howe	4th Artillery

APPENDIX C

Selected Post Returns
Fort Washington, 1848-1872

Date	Unit	Co.	Officers	On Duty	Extra Duty	Sick	Arrested	Daily Duty	TOTAL
Oct. 1848	1st Art.	F & H	6	54					60
Jan. 1849	1st Art.	F	2	18					20
	1st Art.	H	2	44		3			49
Dec. 1850	4th Art.	I	5	27	5	2			39
	4th Art.	L	1						1
July 1851	4th Art.	F	1	15					16
	4th Art.	I	4	25		2			31
April 1861	4th Art.	Staff	1	1					2
	1st Art.	D	1	38	2	1	1		43
	Recruits		1	38	3		4		46
	Logan Guards		4	83					87
	Wash. Art.		3	120					123
July 1861	25th Pa.	B	3	65		10			78
	25th Pa.	E	4	73		1			78
	25th Pa.	H	3	73		2			78
June 1862	4th Art.	Staff	3	21	2				26
	9th NY Art.		3	87	7				97
Mar. 1863	4th Art.	Staff	1	25	1				27
	16th Ind.		4	86	12	13			115
	4th Art.	C	5	109	13	13			140

Date		Unit	Co.	Officers	On Duty	Extra Duty	Sick	Arrested	Daily Duty	TOTAL
May	1864	4th Art.	Staff	3	23		2	1		29
		Me. C.G.	A	3	60	17	2	1		83
		4th Art.	Vet. Res.		10	16	8			34
		4th Art.	K		5			1		6
May	1865	1st Oh. Bat.		5	118	13	8			144
June	1865	3rd Art.	G	2	75	7	11	3		98
July	1865	3rd Art.	G				5			5
		4th Art.	Staff	4	21	1	5			31
		4th Art.	Attach.		10		8			18
		1st Vt.	D	4	69	7	16			96
Oct.	1865	4th Art.	Staff	4	22	2	2			30
		4th Art.	Attach.			2	2			4
		4th Art.	C	3	29	11	7	3		53
Oct.	1866	4th Art.	Staff		1					1
		4th Art.	A		55	12	4	1		72
		4th Art.	D	2	63	8	5	4		82
Aug.	1867	4th Art.	M	3	59	6	8	10		86
		4th Art.	A	3	48	24	10	3		88
		Casual at Post				1		35		36
Jan.	1869	4th Art.	A	4	40	16	4	6		70
		4th Art.	M	4	45	10	3	1		63
		Gen. Staff		2	3					5
Jan.	1870	4th Art.	A	1	40	11	6	2		60
		4th Art.	M	3	17	10	1	1		32
Jan.	1872	4th Art.	M	3	35	8	3	4	5	58

APPENDIX D

Seeley's Inventory

Approximate Statement of Quartermaster Stores, Clothing, Camp, and Garrison Equipage in possession of Erwin Seeley, 2nd Lieutenant, 4th U.S. Artillery, A[cting] A[ssistant], Quartermaster, U.S. Army at Fort Washington, Maryland on the last day of the month of May, 1865.

National Archives RG92, Entry 1203, Monthly Returns of Quartermaster Stores, 1861-1873. Box No. 1.

of Erwin Seeley 2d Lieut 4th U.S. Artillery A.A. = Quartermaster U.S. Army at Fort Washington Md. on the last day of the month of May 1865

262 = 8.	Two hundred & Sixty two Cord 8 ft	Wood
11437½	Eleven thousand four hundred & thirty seven lbs	Coal Anthracite
1100	Eleven Hundred lbs	" Bituminous
1146	Eleven hundred & forty six lbs	Oats
3460	Three thousand four hundred & Sixty lbs	Hay
23	Twenty three	Grain Sacks
588	Five hundred & Eighty eight lbs	Straw
12	Twelve Qrs.	Foolscap paper
17½	Seventeen Qrs.	Letter paper
½	One half Qrs.	Foliopost paper
14	Fourteen Qrs.	Envelope paper
423	Four hundred & twenty three	Envelopes
3	Three	2 Quire blank books
1	One	4 Quire blank books
14	Seventy four	Steel pens
6½	Six & one half pieces	Office tape
1	One	Inkstands
2	Two	Rulers
1	One	Paper cutter tin
6	Six [illegible]	[illegible]

Clothing Camp and Garrison Equipage in possession of Erwin Seeley 2d Lieut 4th U.S. Artillery A.A. = Quartermaster U.S. Army at Fort Washington Md. on the last day of the month of May 1865

262 = 8.	Two hundred & Sixty two Cord & 8 ft	Wood
11437½	Eleven thousand four hundred & thirty seven lbs	Coal anthracite
1100	Eleven Hundred lbs	" Bituminous
1146	Eleven hundred & forty six lbs	Oats
3460	Three thousand four hundred & Sixty lbs	Hay
23	Twenty three	Grain Sacks
588	Five hundred & Eighty eight lbs	Straw
12	Twelve Qrs.	Foolscap paper
17½	Seventeen Qrs.	Letter paper
½	One half Qrs.	Foliopost paper
14	Fourteen Qrs.	Envelope paper
423	Four hundred & twenty three	Envelopes
3	Three	2 Quire blank books
1	One	4 Quire blank books
14	Seventy four	Steel pens
6½	Six & one half pieces	Office tape
1	One	Inkstands
2	Two	Rules
1	One	Paper cutter tin
6	Six quart bottles	Mucilage

Evening Camp and Garrison Equipage in possession of Erwin Seeley 2d Lieut 4th U.S. Artillery A.A. = Quartermaster U.S. Army at Fort Washington Md. on the last day of the month of May 1865

262 = 8.	Two hundred & Sixty two Cord & 8	Wood
11437½	Eleven thousand four hundred & thirty seven lbs	Coal Anthracite
1100	Eleven Hundred lbs	" Bituminous
1146	Eleven hundred & forty six lbs	Oats
3460	Three thousand four hundred & Sixty lbs	Hay
23	Twenty three	Grain Sacks
588	Five hundred & Eighty eight lbs	Straw
12	Twelve Qrs.	Foolscap paper
17½	Seventeen Qrs.	Letter paper
½	One half Qrs.	Foliopost paper
14	Fourteen Qrs.	Envelope paper
423	Four hundred & twenty three	Envelopes
3	Three	2 Quire blank books
1	One	4 Quire blank books
14	Seventy four	Steel pens
6½	Six & one half pieces	Office tape
1	One	Inkstands
2	Two	Rulers
1	One	Paper cutter [illegible]
10	[illegible]	[illegible]

2	Two	Paper folder
5	Five	Penholders
20	Twenty Qrs.	Com: note paper
1	One bottle	Arnolds fluid ink
4	Four	Office desks
[illegible]	[illegible]	Office chairs
22	Twentytwo	Tables
24	Twentyfour	Benches
33	Thirtythree	Bunks double
14	Fourteen	Bunks Single
9	Nine	[illegible]
22	Twentytwo	[illegible]
11	Seven	Stoves Cooking
3	Three	Shovels & tongs
3	Three	[illegible]
1	One	Iron [illegible]
424	Fourhundred & twentyfour ft	Stove pipe feet
44	Fortyfour ft.	Stove pipe elbow
70	Seventy ft.	Stove pipe
4	Four	Sheet iron chimneys [illegible]
1	One	[illegible]
3	Three	[illegible]
[illegible]	[illegible]	[illegible]
5	Five	[illegible]
1	One	[illegible]
3	Three	Carts
2	Two	Wagons light
4	Four	Set cart harness
5	Three	Set wheel harness
1	One	Set [illegible]

1	One	Riding Bridles
2	Two	Riding Saddles
6	Six	Halters & Straps
2	Two	Horse Collars
4	Four	Horse pads
2	Two	Horse blanks
1	One	Hammers
1	One	Sledges
2	Two	Compasses
2	Two	Blacksmith files & handles
6	Six	Blacksmith files & round handles
1	One Set	Shoeing tools
1	One	Shoeing Knife
1	One Set	Blacksmith tools
1	One	Monkey wrench
2	Two	Hand gauges
2	Two	Hand Snips
2	Two	Soldering Iron
1	One	Soldering Pot
1	One	Blowhorn Stick
1	One	Beak.
1	One	[illegible]
1	One	[illegible]
1	One	Candle Mould
2	Two	Squares
1	One	Needle case
1	One	Solid punch
1	One	Calender
1	One	Force Stem

6 ft long

1	One	Racing hammer
1	One	Setting hammer
4	Four	Mallets
1	One	Bench [illegible]
2	Two	Chisels framing & handles
12	Twelve	" " " [illegible]
2	Two	Brace & Bits
11	Eleven	Chisels [illegible]
17	Seventeen	Augers & handles
1	One	Bench screw
2	Two	Files assorted
54	Fifty four	" [illegible]
16	Sixteen	" Mitsaw
18	Eighteen	Hansaw
3	Three	Gimlets
2	Two	Gouges
7	Seven	Gauges
1	One	Glue pot
2	Two	Grindstone
9	Nine	Hammers
10	Ten	Hatchets & handles
3	Three	[illegible]
1	One	Level spirits
1	One	Nail punch
1	One	Boxes
1	One	Adz & handles
2	Two	Oil cans
1	One	Oil stone
8	Eight	[illegible]

hammer	1	One	Planes hollow & round
mmer	1	One	" plong & bit
	2	Two	" Match
	1	One	" rabbit
& handle	3	Three	" fork
Locks	2	Two	" Smoothing
	5	Five	" bead
	2	Two	" fork
ndles	1	One	Pincers
w	1	One	Rasps
ed	2	Two	Carpenters rules
dles	9	Nine	Saws hands
w	1	One	" compasses
	1	One	" tennant
	1	One	" set
	2	Two	Screw drivers
	1	One	Square Steel
	1	One	" Iron
	2	Two	Spoke Shave
	1	One	Scratch awl
handles	1	One	Trowels
	2	Two	Crow bars
	2	Two	Compasses
	2	Two	Combs graining
	2	Two	Tattlers hammers
dles	2	Two	Knives round
	1	One	" head
	2	Two	Spring [illegible]
	2	Two	Claes [illegible]

2	Two	Creasers	
1	One	Glasier diamond	
1	One	Paint Stone & Moulds	
1	One	Knife putty	
1	One	Jugs	
1	One	Plane & bit dou	
1	One	" " Gings	
1	One	" " 2 3/5	
2	Two	Tarpaulin Large	1
9	Nine	Lightning rods Points	
3	Three	Horse brushes	
12	Twelve	White washbrushes	
11	Eleven	Water buckets	
1	One	Pump Iron	
8	Eight	Curry Comas	
26	Twentysix	Paint brushes	
26	Twentysix	Padlocks	
4	Four	Hoes	3
3	Three	Felling Axes	1
96	Ninetysix	Ax helves	5
2	Two	Manure forks	
4	Four	Double [illegible]	
3	Three	[illegible] Laws	
1	One	Mail bags	
7	Seven	Shovels	
4	Four	Ox yokes	1
3	Three	Wood [illegible]	
2	Two	Marine glasses	
1	One	Tarpaulins	

	5	Five	Wheel Barrows
iamond	1	One	Hay Scales
& Moulds	1	One	Moulding plane
ty	1	One	Cutting gauge
	6	Six	Axe handles
& bit dou	1	One	[illegible]
Singe	1	One	Cutting box
2 3/5	2	Two	Reaping Sickles
Large	10	Ten	Stable brooms
rds Points	1	One	Tool Chest
shes	1	One	Lines Set
brushes	2	Two	Tin Cans (5 gal.)
ets	2	Two	" " (3 gal)
	1	One	[illegible]
	6	Six	4 gallon cans
ies	4	Four	Scythe blades
	1	One	Scythe Stones
	300	Threehundred ft.	Scantling 3 X 4
es	100	Onehundred ft.	2 inch Oak plank
	500	Fivehundred ft.	1 inch board com. cutting
ks	3/4	Threefourths Kg.	Nails & Kegs
k	1/4	Onefourth Box	[illegible] 3 X 10
	1/2	[illegible]	[illegible]
	4	Four bbls	Lime
	20	Twenty	Slates 15 X [illegible]
	100	Onehundred	" 20 X 10
	60	Sixty [illegible]	Nails [illegible]
es	2	Two [illegible]	[illegible]
	3/4	Threefourths Kg.	[illegible]

100	Onehundred lbs	Iron Assorted
60	Sixty lbs	Hoop Iron
30	Thirty lbs	Steel wire
40	Forty lbs	Charcoal
1	One gal	Linseed Oil
—	—	Wicking
1/4	Onefourth lbs	Chalk
5 1/2	Five and onehalf gross	Screws
435	Fourhundred & thirtyfive lbs	Horse Shoes
—	—	Neat foot oil
20	Twenty lbs	Putty
4 1/2	Four and onehalf gals	Turpentine
4	Four lbs	Lethargy
1/4	Onefourth lbs	Sandpaper
1/2	Onehalf	[illegible]
200	Twohundred lbs	Shoe iron
30	Thirty lbs	White lead
5	Five lbs	Chrome green
1	One	Powels Liniment
1 1/2	One and onehalf lbs	Borax
9	Nine lbs	Harness Leather
1	One side	[illegible]
[illegible]	One gal	Sweet oil
1/4	Onefourth lbs	Anisetica
1 1/2	One and onehalf gross	Butt hinges
4 1/2	Four and onehalf lbs	Dumpblock
1 1/2	One and onehalf lbs	Castile Soap
5000	Five thousand	Shingles

Clothing Camp and Garrison Equipage

30	Thirty	Hats
115	One hundred & fifteen	Forage caps
39	Thirtynine	Cords & tassels
37	Thirtyseven	Ostrich feathers
50	Fifty	Eagles & rings
207	Two hundred & seven	Chambers
40	Forty	Privates Infantry Coats
82	Eightytwo	" Artillery coats
22	Twentytwo	Metalic Scales Corporals
3	Three	Sashes
44	Fortyfour	Uniform jackets Privates Art
88	Eightyeight	Trousers
75	Ninetyfive	Knit Shirts
31	Thirtyseven	Sack Coats
75	Seventyfive	Flannel Shirts
60	Sixty	Drawers
28	Twentyeight	Boots cavalry pairs
38	Thirtyeight	Booters Infantry pairs
81	Eightyone	Stockings pairs
51	Fifty one	Leather Stocks
56	Fifty six	[illegible]
30	Thirty	Blankets woolen
35	Thirtyfive yds	Red lace ½ inch
23½	Twentythree & one half yds	" " ½ inch
1	One pair	Hospital Steward chevron
4	Four pair	Sargeants Chevrons
16	Sixteen pair	Corporals chevrons

37	Thirtyseven	Bedsacks Single
59	Fiftynine	" double
9	Nine	Spades
40	Forty	Knapsacks complete
13	Thirteen	Haversacks
30	Thirty	Axes
13	Thirteen	Camp Kettles
30	Thirty	Mess pans
18	Eighteen	Camp hatchets
21	Twentyone	Hatchet handles
6	Six	Shovels
4	Four	Garrison flag halliards
4	Four	Storm flags
1	One	Garrison flag
9	Nine	Drumhead Snare
6	Six	Slings
2	Two	Sticks pair
2	Two	Cords
6	Six	Sibley tents
6	Six	Sibley tent poles
2	Two	Wall tent poles & pins
3	Three	[illegible]
4½	Fortynine & one half	Shelter tents
140	One hundred & forty	Tent pins common
11	Eleven	Pickaxes
17	Seventeen	Pickax handles
1	One	Clothing account Book
1	One	Regle Index Book
4	Four	Morning Report Book
89	Eightynine	Axkeves

Single	2	Two	Post guard Book
double	1	One	Letter Book

Complete

Certify that the above is a true Statement of Supplies on hand on the last day of May 1865

Station Fort Washington Md.

Date May (31st) 1865

Erwin Luby
2d Lieutenant 4th Regt Artillery
A. A. Quartermaster, W.S.A.

ets
ndles
lliards
)
Snare
bair
poles
oles & pins
poles & pins
mmon
Book
Book
Report Book

APPENDIX E

Articles to be Kept by Sutler
Fort Washington
Post Order 24, May 12, 1863
and September 10, 1867

May 1863:

Fancy soaps	10	cts	a	cake
Scented soaps	60	"	"	pound
Shaving soaps	5	"	"	cake
Coal oil	75	"	"	cake
Snuff	1.00	"	"	pound
Starch	15	"	"	pound
Thread	5	"	"	skein
Combs	10 to 25	"		each
Tripoli	12	"	"	paper
Gun polish	15	"	"	paper
Sweet oil	10	"	"	bottle
Emery paper	2½	"	"	sheet
Yeast powder	15	"	"	paper
Tooth brush	15	"		each
Portfolio	75	"		each
Envelopes	10	"	"	pack
Writing paper	20	"	"	quire
Beer	5	"	"	glass
Cider	5	"	"	glass
Brooms	30	"		each
Brooms, whiskers	25	"		each
Crackers, Water	10	"	"	pound
Crackers, Butter	10	"	"	pound
Ginger Cakes	10	"	"	dozen
Sugar Cakes	10	"	"	dozen
Flour	5½	"	"	pound
Mustard	25	"		each
Adamantine candles	5	"		each
Tallow candles	20	"	"	pound
Ginger	25	"	"	pound
Nutmegs	10	"	"	ounce
Mace and cloves	90	"	"	pound
Allspice	90	"	"	pound
Cheese	25	"	"	pound
Matches	1	"	"	box
Briarwood pipes	60	"		each
Common wood pipes	15	"		each

Clay pipes	1	cts	each
Chow chow	30	"	a bottle
Pepper sauce	30	"	" bottle
Pickles	30	"	" bottle
Suspenders	50	"	" pair
Stockings	25	"	" pair
Ink	5	"	" bottle
Blacking	5	"	" box
Blacking brush	25	"	each
Clothes brush	50	"	each
Shaving brush	20	"	each
Sugar, white	20	"	" pound
Ground coffee	45	"	" pound
Butter	35	"	" pound
Eggs	25	"	" pound
French candies	60	"	" pound
Molasses	30	"	" pound
Cigars	2.50	"	dozen
Ham	15	"	" pound
Cod fish	10	"	" pound
Lake fish	10	"	" pound
Mackeral	10	"	" pound
Tomato catsup	30	"	" bottle
Worcestershire sauce	30	"	" bottle
Hard plug tobacco	1.00	"	" pound
Cavendish tobacco	1.00	"	" pound
Oranges	5	"	each
Lemons	50	"	" dozen
Raisins	30	"	" pound
Figs	12	"	" dozen
Almonds, soft	35	"	" pound
Almonds, hard	25	"	" pound
Filberts	20	"	" pound
Cream nuts	20	"	" pound
Navy tobacco	1.00	"	" pound
English walnuts	30	"	" pound
Peanuts	6	"	" pint
Dates	15	"	" pound
Apples	2½	"	each
Cocoanuts	10	"	each
Sugar, brown	15	"	" pound
Shoulder	12	"	" pound
Chewing (fine cut)	1.25	"	" pound
Tobacco	5	"	" paper
Kinnekenick	25	"	" paper
Common smoking	5	"	" paper
German smoking	12	"	" paper
Worcestershire sauce	80	"	" bottle
Cinnamon	1.10	"	" pound

A somewhat different variety was available in September 1867, after the war:

Ale	8¢ a glass; 15¢ for two; CO changed to 10¢ a glass
Basins, tin	45¢ each
Brooms	50¢ each
Butter	
Buttons (shirt: horn, brass)	
Blacking, Large Box	10¢
Small Box	5¢
Bluing, washing	6¢
Brushes, shaving	50¢
tooth	50¢
hair	75¢
button	50¢
Bristol	
Brick, bath:	
Beef, dried	
Bicarbonate of soda	
Cheese	25¢ pound
Crackers, soda	20¢ pound
Cigars, 1st class	10¢
2nd class	5¢
Combs, coarse	20¢
fine	20¢
large	40¢
Cups, tin	15¢
Cream of tartar	
Collars, paper	40¢ per 10
Cravats	60¢
Chimneys, lamp	
Candles, adamantine	35¢ pound
sperm	50¢ pound
Crocus, cloth	15¢ sheet
Codfish	10¢ pound
Emery	3¢ sheet; 5¢ for two
Condensed milk	50¢ can
Envelopes, assorted	25¢ package
Figs	
Cornstarch	25¢ package
Farina	25¢ package
Fishing hooks, no. 1	3¢
no. 2	5¢
Fishing line, no. 1	25¢
no. 2	10¢
no. 3	10¢

Gloves, 1st class	25¢ pair
Ginger, dried	
Handkerchiefs, linen	50¢
Herring	4¢ for five
Hooks and eyes	10¢ bottle
Ink	10¢ bottle
Hair oil	45¢ bottle
Knives, pocket	
Mustard, box	20¢
French	50¢
Matches, box	3¢; 5¢ for two
Mackeral	12½¢ pound
Needles, assorted	
Nuts	
Nutmegs	
Oil, armor	7¢ bottle; 20¢ for three bottles
kerosene	70¢ gallon
Oysters, pickled	75¢ can
Onions	
Olives	$1 quart
Peaches	60¢ can
Pens, steel	5¢ for two
Penholders	4¢
Pins	1¢ for a roll of twelve
Pipes, briar root	75¢ for the first; 50¢ for the second
Pickles	
Pencils	8¢
Paper, note	25¢ quire
letter	30¢ quire
foolscap	35¢ quire
Pomade	35¢ bottle
Raisins	
Rotten stone	
Pepper	15¢ box
Sardines	30¢ box
Raspberry syrup	90¢ bottle
Suspenders	65¢ pair
Sausage, bologna	20¢ pound
Scissors	
Shoe strings	
Soap (shaving, fancy, common)	50¢ Castile
Starch	20¢ pound
Spices, assorted	
Sauces	
Tobacco, chewing	10¢ piece

Tobacco, smoking	80¢ pound
Thread	1¢ skein
Twine	
Tripoli	10¢ paper; 15¢ paper
Trimmings, tailor	
Tomato catsup	50¢ bottle
Wallets	
Wicks, lamp	
Wax, bees	
Yeast powder	35¢ bottle
Whiskey	10¢ drink
Wine, claret	$1 bottle
Hock	85¢ bottle
Sherry	$6 gallon

APPENDIX F

List of Books, Reports, Rolls, and Papers Kept by the Company Clerk

from August V. Kautz, The Company Clerk

THE COMPANY CLERK.

1. THE company clerk is a non-commissioned officer or soldier, selected on account of his penmanship and capacity for keeping the records and making the reports and returns required from the company. He is directed and instructed by the commanding officer of the company and the first sergeant. He is reported on daily duty, and does not receive any additional pay, but, whilst employed, is excused from all other duties possible with the company. In times of active service, however, he should always be prepared for service in the field.

The following are the books and records he is required to keep, viz.:

Books.

2. MORNING REPORT BOOK,
SICK BOOK,
ROSTERS,
DESCRIPTIVE BOOK,
CLOTHING BOOK,
ORDER BOOK,
ACCOUNT BOOK OF COMPANY FUND,
REGISTER OF ARTICLES ISSUED TO SOLDIERS,
RECORD BOOK OF TARGET PRACTICE.

Reports, Returns, Rolls, and Papers.

3. The following reports, returns, rolls, and other papers are required to be made out by him, viz.:

DAILY.—List of Sick, in the Sick Book.
Morning Report, in the Morning Report Book
Details of men for guards, detachments, and fatigue.

MONTHLY.—Monthly Return.

BI-MONTHLY,—viz.: at the end of February, April, June, August, October, and December, viz.:
Muster Rolls.
Report of Damaged Arms.

QUARTERLY,—viz.: at the end of March, June, September, and December:—
Return of Clothing, Camp and Garrison Equipage.
Return of Ordnance and Ordnance Stores.
Return of Quartermaster's Property.
Return of Deceased Soldiers.
Descriptive list of men joined.
Return of Blanks.

QUARTO-MONTHLY,—viz.: at the end of April, August, and December:—
Return of Company Fund.

ANNUALLY.—Annual Return of Casualties.

Papers.

4. In addition to the foregoing papers, the following are also required when circumstances render them necessary.

Certificates of Disability.
Final Statements.
Discharges.
Descriptive Rolls.

Furloughs, Passes, Sick Furloughs, &c.
Affidavits, Certificates, &c.
Inventories of Deceased Soldiers.
Proceedings of Company Council of Administration.
Provision Returns.
Requisitions for Forage, Fuel, Stationery, Straw, and for every kind of Property, as Arms, Accoutrements, Ammunition, Clothing, Camp and Garrison Equipage, Quartermaster's Property, and, in fact, every thing required by a company.
Inventories for Inspection Reports of Property to be inspected and condemned.
Inventories of Damaged Property for Boards of Survey.
Letters of Transmittal, Complaints of Soldiers, Applications for Transfer, &c.
Returns of Killed, Wounded, and Missing in Action.
Reports of Target Practice.
Charges and Specifications.

The foregoing will be treated of in the order in which they are likely to come to the attention of an inexperienced person.

General Observations.

5. It will be remarked that the foregoing books and papers relate to two objects, viz.; the men and the property.

What relates to the men is a record of their accounts and services; that these should be correct and perfect, is a matter of justice to the men and to the Government.

6. What relates to property is a matter of account between the officer and the Government. The property is intrusted to his charge, he is paid for taking care of it, and required to show how he has done so. To do this, he must remember the following general principles, viz.:

7. To get invoices of all the property he receives.

8. To take receipts for all the property he transfers.

APPENDIX G

Forms and Reports Required by Army Regulations

A Selection from the
Revised Regulations for the Army of the United States
1861

1. Inventory of Deceased Soldiers (p. 28)

2. (a) Form of Guard Report (p. 63)
   (b) List of the Guard
   (c) List of Prisoners

3. Recruiting Service. Form C. Abstract of disbursements on account of contingencies of the recruiting service (p. 144)

4. Quartermaster's Department. No. 1. Monthly Summary Statement (p. 173)

5. Quartermaster's Department. No. 5. Monthly Return of Public Animals, Wagons, Harness, and other means of transportation (p. 178)

6. Quartermaster's Department. No. 6. Monthly Report of Forage (p. 179)

7. Quartermaster's Department. No. 7. Report of Officers . . . Quarters and Fuel (p. 180)

8. Quartermaster's Department. No. 51. Quarterly Return of Clothing, Camp, and Garrison Equipage (pp. 232-37)

9. Quartermaster's Department. No. 52. [Receipt of Clothing] (pp. 238-39)

10. Pay Department. Form 8. (Pay Roll of Militia) [Receipt of Pay] (pp. 366-67)

11. Ordnance Department. Form 1. Return of Ordnance and Ordnance Stores (pp. 417-30)

12. General Order No. 364 (November 12, 1863). Statement of the cost of Clothing, Camp and Garrison Equipage (Kautz, The Company Clerk, pp. 18-21)

1. Inventory of Deceased Soldiers

[p. 28 ¶ 152.] Each inventory will be endorsed:

Inventory of the effects of _____ _____, late of company (____) _____ _____ regiment of _____, who died at _____, the _____ day of _____, 186 ___.

2.

(a) Form of Guard Report

(b) List of the Guard

(c) List of Prisoners

FORM OF GUARD REPORT.

Report of a Guard mounted at —, on the —, and relieved on the —.

Parole.	Lieutenants.	Sergeants.	Corporals.	Musicians.	Privates.	Total.	Aggregate.	Articles in Charge.					Received the foregoing articles. A. B.—— Lieut. 1st Infantry.
Countersign.													
Detail.													

LIST OF THE GUARD.

Reliefs, and when posted.										Where posted.	Remarks
1st Relief. From — to — and — to —				2d Relief. From — to — and — to —			3d Relief. From — to — and — to —				
No.	Name.	Co.	Rt.	Name.	Co.	Rt.	Name.	Co.	Rt.		
1	C. D.	A	1st	I. J.	D	3d	O. P.	G	8th	Guard-House.	
2	E. F.	B	4th	K. L.	E	2d	Q. R.	H	9th	Magazine.	
3	G. H.	C	6th	M. N.	F	5th	S. T.	I	10th	Quarm'r Store.	
1	Sergeant W. V., Co. A, 1st Artillery.									Serg't Guard.	
2	Corporal W. X., Co. B, 1st Infantry.									Corp'l "	
3	Corporal Y. Z., Co. C, 3d Infantry.									" "	

LIST OF PRISONERS.

No.	Names.	Company.	Regiment.	Confined.		Charges.	Sentences.	Remarks
				When.	By whom.			
1								
2								
3								
4								
5								

A. B. C.,
Lieut. — Regt. ——,
Commanding the Guard.

3.

Form C. Abstract of disbursements on account of contingencies of the recruiting service, by _____ _____, in the quarter ending _____, 18____, _____ at _____.

FORM C.

Abstract of disbursements on account of contingencies of the recruiting service, by ——— ———, in the quarter ending ———, 18—, at ———.

No. of voucher.	Date of payment.	To whom paid.	On what account.	Amount.	
				Dolls.	Cts
			$		

Recruiting Officer.

No. 1.

MONTHLY SUMMARY STATEMENT.

The United States in account with ———, *at* ———, *in the month of* ———, 186 .

Dr.				Cr.		
To amount of purchases within the month				By balance per last statement.....		
To amount of expenditures within the month.....				By cash received from.....		
To amount of advances made to officers, per abstract.....				By cash received from Treasurer of the United States, being amount of warrant No. —.....		
Balance due the United States, carried to next statement.....						
	$				$	

I certify that the above is a true statement of all the moneys which have come into my hands on account of the Quartermaster's Department, during the month of ———, 186 , and that the disbursements have been faithfully made. The balance due the United States is deposited in ———.

A. B., *Quartermaster.*

NOTE.—No vouchers accompany this statement; abstracts of advances or transfers only, when the number of them makes the abstract necessary.

No. 5.

Monthly Return of Public Animals, Wagons, Harness, and other means of transportation in the possession of ——, at ——, during the month of ——, 186 .

Date.		Horses.	Mules.	Oxen.	Wagons.	Ambulances.	Carts.	Wheel harness, single sets of.	Lead harness, single sets of.	Wagon saddles.	Ships.	Schooners.	Sloops.	Steamers.	Boats and barges.	Skiffs and bateaux.	Remarks.
	On hand.....																18 horses purchased; average cost $——.
	Purchased during the month.....																Wagons purchased at ——.
	Received from officers.....																6 horses received from ——.
	Total to be accounted for.....																
	Transferred.....																Horses transferred to ——.
	Sold and worn out.....																Wagons transferred to ——.
	Died and lost.....																1 horse sold; — horses died on the road to ——.
	Total issued and expended.....																
	Remaining on hand.....																

I certify that the above return is correct.

NOTE.—No other articles than those above enumerated will be placed on this return.

A. B., *Quartermaster.*

No. 6.

Monthly Report of Forage which has been issued to Horses, Mules, and Oxen in the public service at ———, by ———, during the month of ———, 186 .

Date.	To whom issued.	Public.			Private		Total.	Quantity issued.				Average cost of								Remarks.
		Horses.	Mules.	Oxen.	Horses.	Mules.	Animals.	Corn.	Oats.	Hay.	Fodder.	Corn, per bush. (56 lbs.)		Oats, per bush. (32 lbs.)		Hay, per 100 pounds.		Fodder, per 100 pounds.		
								Pounds.		Pounds.		$	c.	$	c.	$	c.	$	c.	
	Field and staff officers	6	...	...	12	...	18	6,480	...	1,350	.....	1	00		50		60	1	00	
	Company A, 1st Dragoons..	61	...	...	4	...	65	23,400	...	2,240										Hay purchased at —, at — per 100 pounds. Corn purchased at —, and hauled at — per bush.
	" B, 2d "	47	...	...	4	...	51	18,360	...	2,100	.....	...	...	...	...	...	...	...	...	
	" K, 1st Artillery..	45	...	...	6	...	51	18,360	...	.....	1,640	...	...	...	...	...	...	...	...	Fodder delivered at the post, at — per 100 lbs.
	Qr. Master's Department...	60	300	80	...	...	440	158,400	...	33,000										
	Total.....	219	300	80	26	...	625	225,000	...	38,690	1,640									

I certify that the above report is correct.

A. B., *Quartermaster.*

7. No. 7. Report of Officers of the Army Stationed at _____, whose Quarters and Fuel . . .

No. 7.

Report of Officers of the Army stationed at ———, whose Quarters and Fuel are commuted, for the month of ———, 186 , by ———.

Names.	Rank.	Corps.	Period.		Quarters.					Fuel.							Under what order.	Remarks.
						Rate per month.		Amount.		Wood.			Price per cord.		Amount.			
			From.	To.	Room No.	Dolls.	Cts.	Dolls.	Cts.	Cords.	Feet.	Ins.	Dolls.	Cts.	Dolls.	Cts.		
																		Paid—
Amount of Quarters, $										Amount of Fuel, $								

I certify, that the above report is correct. A. B., *Quartermaster.*

No. 51.

Quarterly Return of Clothing, Camp, and Garrison Equipage received and issued at ———, in the quarter ending on the ——— day of ———, 186 , by ———.

WHEN RECEIVED.	No. of invoice.	OF WHOM RECEIVED.	Cavalry hats.	Caps and bands.	Cap-letters, castle, shell and flame.	Cap-covers.	POMPONS. Color.		CLOTHING. Eagle and rings.	Plumes for cavalry.	COATS. Sergeant-majors'.	Quartermaster-sergeants'.	Ordnance sergeants'.	Chief musicians'.	First sergeants'.	Sergeants'.	Corporals'.	Musicians'.	Privates'.	METALLIC SEALS. Non-commissioned staff.	Sergeants'.	Corporals' and privates'.	Sashes.	UNIFORM JACKETS. Sergeant-majors'.	Quartermaster-sergeants'.	First sergeants'.
		On hand per last return																								
Total to be accounted for.....																										
WHEN ISSUED.	No. of roll.	TO WHOM ISSUED.																								
Total issued.....																										
On hand to be accounted for.....																										

No. 51.

Quarterly Return of Clothing, Camp and Garrison Equipage, received and issued, &c.—Continued.

CLOTHING.

Uniform jackets.																	
Sergeants'.	Corporals'.	Privates'.	Trowsers.	Yards of binding.		Flannel shirts.	Drawers, pairs of.	Boots, cavalry, pairs of.	Boots, infantry, pairs of.	Stockings, pairs of.	Leather stocks.	Great-coats.	Great-coat straps, number of.	Talmas.	Blankets.	Knapsacks and straps.	Haversacks.

EQUIPAGE.

		Bed-sacks.															
Canteens and straps.		Single.	Double.	Axes.	Axe-helves.	Spades.	Camp kettles.	Mess pans.	Camp hatchets.	Hatchet handles.	Garrison flag.	Garrison flag halliards.	Storm flag.	Recruiting flags.	Recruiting flag halliards.	Camp colors.	Guidons.

No. 51.

Quarterly Return of Clothing, Camp and Garrison Equipage, received and issued, &c.—Continued.

EQUIPAGE.																															BOOKS AND BLANKS.						
			DRUMS.																																		
Trumpets.	Bugles, with extra mouth-pieces.	Fifes.	Complete.	Heads, batter.	Heads, snare.	Slings.	Sticks, pairs.	Drum-stick carriages.	Cords.	Snares, sets.	Wall-tents.	Wall-tent flies.	Wall-tent poles and pins, sets.	Common tents.	Common-tent poles and pins, sets.	Iron pots.	Pickaxes.	Pickaxe-handles.											Clothing account-book.	Descriptive book.	Order-book.	Clothing returns.	Receipt-rolls.	Final statements.	

9. No. 52. We, the undersigned Non-commissioned officers . . . receipt of clothing

No. 52.

We, the undersigned Non-commissioned Officers, Artificers, Musicians, and Privates of ———, do hereby acknowledge to have received of ——— the several articles of Clothing set opposite our respective names.

Date of the issue.	Name and designation of the soldier.	Caps.	Cap-covers.	Pompons.	Eagles and rings.	N. C. S.	Uniform coats. Sergeants'	Uniform coats. Corporals'	Uniform coats. Musicians'	Uniform coats. Privates'	Uniform jackets. Sergeants'	Uniform jackets. Corporals'	Uniform jackets. Musicians'	Uniform jackets. Privates'	Trowsers, pairs.	Flannel shirts.	Drawers, pairs.	Boots, cavalry, pairs.	Bootees, infantry, pairs.	Stockings, pairs.	Leather stocks.	Great-coats.	Fatigue overalls.	Stable-frocks.	Blankets.	Signatures.	Witness.

NOTES.—Erasures and alterations of entries are prohibited.
Regular and extra issues will be distinguished on the receipt-roll.
Each signature, whether written by the soldier or acknowledged *by mark*, must be witnessed.
Vacant space will be filled by a cipher.
Mounted men may receive *one* pair of "boots" and *two* pairs of "bootees," instead of *four* pairs of bootees.

As the metallic shoulder-scales, letters, numbers, castles, and shells and flames will last for many years, they will be borne on the returns as company property, in the same manner as are sashes, knapsacks and straps, haversacks, canteens and straps, and other articles of camp and garrison equipage, and will be charged to the soldier only when lost or destroyed through neglect.

FORM 8.— (PAY ROLL OF MILITIA.)

We, the subscribers, do hereby acknowledge to have received of ——— ———, Paymaster, the sums annexed to our names respectively, being the full of our pay and allowances for the period herein expressed, having signed duplicates thereof.

Number.	Names.	Rank.	Period of service.				Pay per month.	Amount of pay.	Clothing.	Subsistence.	Forage.	40 cents per day, use of horse, arms, &c.	25 cents per day for rations and forage, or 12½ cents for either.	Traveling allowances.			Total amount.	Stoppages.	Balances paid.	Signature.	Witness.	Remarks.
			Commencement.	Expiration.	Months.	Days.								Pay.	Subsistence.							

We certify that we actually employed the servants, and owned and kept in service the horses, for which we have received payment, for the whole of the time charged, and did not, during any part of the time, employ a soldier as a servant. The names and description of our servants are below. We also certify that the non-commissioned officers and privates of the company to which we belong, who are made up for pay, &c., as having horses and arms, actually owned and had them in service for the time paid for, although, in some cases, they may not have been valued. We also certify that we witnessed the payment of the whole company.

——— ———, *Captain*, servant named ——— ———.
——— ———, *1st Lieut.*, do. ——— ———.
——— ———, *2d Lieut.*, do. ——— ———.
——— ———, *Ensign*, do. ——— ———.

Form 1. (Property Return) - Ordnance

FORM 1.

RETURN

OF

ORDNANCE AND ORDNANCE STORES RECEIVED, ISSUED, AND REMAINING ON HAND, AT ——— ARSENAL, COMMANDED BY MAJOR A. B., DURING THE QUARTER ENDING ——, 18—.

FORM 1.— (PROPERTY RETURN.)

CLASS I.—ORDNANCE. | CLASS II.—ARTILLERY

Date. 18—.		No. of voucher.	Second Quarter, 18—.	Brass guns. English trophies. 6 pdr., weight 674 lbs.	Brass guns. English trophies. 3 pdr., weight 215 lbs.	Brass guns. Mexican. 18 pdr., trophies, weight 4354 lbs.	Brass guns. U. S. 6 pdr., old pattern, 800 lbs.	Brass guns. U. S. 12 pdr., pattern 1840, 1770 lbs.	Brass guns. U. S. 6 pdr., pattern 1840, 865 lbs.	Brass howitzers. U. States. 24 pdr., 1512 lbs.	Brass howitzers. U. States. 12 pdr., 782 lbs.	Brass mortars. French. 16 inch, stone, 1050 lbs.	Brass mortars. French. 10 inch, 785 lbs.	Iron guns. 42 pdr., model of 1831.	Iron guns. 42 pdr., model of 1840.	Iron guns. 32 pdr., model of 1840.	Iron guns. 24 pdr., model of 1819.	Iron guns. 12 pdr., garrison, model of 1839.	Iron how'rs. 10 inch, sea-coast, model of 1840.	Iron how'rs. 8 inch, sea-coast, model of 1840.	Unserviceable. Brass guns. 24 pdr.	Unserviceable. Brass guns. 6 pdr., old pattern, weight 660 lbs.	Unserviceable. Brass guns. 3 pdr., old pattern, 318 lbs.	Unserviceable. Iron guns. 24 pdr., old pattern, 5370 lbs.	Unserviceable. Iron guns. 18 pdr., old pattern, 4233 lbs.	Unserviceable. Iron guns. 6 pdr., old pattern, 844 lbs.	Field artillery. 12-pdr. stocktrail gun carriages, pattern 1840.	Field artillery. 6-pdr. caissons, pattern 1840.	Field artillery. Traveling forges, pattern 1840.	Field artillery. Battery wagons, pattern 1840.	Barbette. 24-pdr. gun carriages.	Barbette. 24-pdr. chassis.
April	1		On hand from last quarter																														
"	15	1	Received from C. D., Military Storekeeper																														
May	10	2	Do. do. E. F., contractor at ——																														
"	22	3	Do. do. Capt. G. H., —— regiment of artillery																														
June	30	4	Fabricated at the post during the quarter, per abstract																														
"	"	5	Purchased during the quarter, per abstract																														
"	"	6	Repaired during the quarter																														
			Total to be accounted for																														
May	15	7	Condemned and dropped from the return by order of the President of the United States																														
June	30	8	Issued to sundry persons, per abstract																														
"	"	9	Expended at the post, per abstract																														
"	"	10	Issued for current service, per abstract																														
"	"	6	Repaired during the quarter																														
			Total issued and expended																														
			Remaining on hand to be accounted for next quarter																														

FORM 1.— (Property Return.)—Continued.

CARRIAGES.					CLASS III.—ARTILLERY EQUIPMENTS AND IMPLEMENTS.																
CASEMATE.					CANNON LOCKS.		HANDSPIKES.						SPONGES.						WORMS AND STAVES.		
8-inch columbiad gun carriages.	8-inch columbiad chassis.	32-pdr. gun carriages.	32-pdr. chassis.	24-pdr. howitzer for flank defense, complete.	Percussion, left side, for guns, with lock pieces.	Percussion, left side, for guns, without lock pieces.	Trail, for field carriages.	Manœuvring.	Shod.	Linstocks.	Port-fire cases.	Shell hooks.	32 pdr.	24 pdr.	10-inch columbiad, bore.	Tarpaulins, large.	Tarpaulins, small.	Tube pouches.	For siege and garrison guns.	For 12-pdr. field guns.	For 6-pdr. field guns.

CLASS IV.—CANNON BALLS.								CL. V.—FIXED AMMUNITION, &C.									CLASS VI.—SMALL					
SHOT.			SHELLS.		SPHERICAL CASE.			SHOT, FIXED.		SPHERICAL CASE, FIXED.			STRAPPED SHOT.				MUSKETS.		RIFLES.		PISTOLS.	
42 pdr.	32 pdr.	24 pdr.	10 inch.	8 inch.	24 pdr.	12 pdr.	6 pdr.	12-pdr. shot for 12-pdr. gun, rounds.	12-pdr. canister do. do.	For 12-pdr. gun do.	For 12-pdr. howitzer do.	For 6-pdr. gun do.	12-pdr. shot for 12-pdr. field gun.	6-pdr. shot.	12-pdr. canisters for 12-pdr. howitzer.	12-pdr. grape.	National Armory, percussion, bright.	National Armory, altered to percussion, brown.	Hall's patent, flint.	Percussion, new.	Percussion, new model.	Colt's.

FORM 1.—(PROPERTY RETURN.)—Continued.

ARMS.			CLASS VII.—ACCOUTREMENTS.								CLASS VIII.—POWDER, &c.							
SWORDS AND SABRES.			FOR MUSKETS.			FOR RIFLES.			CAVALRY.		POWDER, LBS.			CARTRIDGES.			LEAD BALLS, LBS.	
Cavalry sabres, pattern 1840.	Horse artillery sabres, pattern 1840.	Non-commissioned officers' swords.	Infantry cartridge boxes.	Infantry cartridge box plates.	Cartridge box belts.	Wipers.	Ball screws.	Bullet moulds.	Holsters.	Cavalry cartridge boxes.	Cannon.	Rifle.	Fulminate of mercury.	Musket buck and ball.	Pistol ball.	Rifle blank.	Musket, pressed.	Buckshot.

CLASS IX.—PARTS OF ARTILLERY CARRIAGES.									CLASS X.—MISCELLANEOUS.					
					SPARE PARTS FOR FIELD CARRIAGES.									
Elevating screws for barbette carriages.	Flange rollers for do.	Plates for casemate chassis.	Sets of iron-work for 24-pdr. barbette carriages, complete.	Traverse wheels for barbette chassis.	Fellies.	Nave bands.	Pole yokes.	Spokes.	Sling carts, large.	Garrison gins.	Hand carts.	Casemate trucks.	Falls for garrison gins.	Double blocks, iron.

FORM 1.— (PROPERTY RETURN.)—Continued.

CLOTH, ROPE, THREAD, &C.									FORAGE.			IRONMONGERY, &C.						
														IRON.		NAILS.		
Cotton cloth, yards.	Marline, pounds.	Rope, hemp, do.	Thread, patent, do.	Twine, bundling, do.	Worsted stuff, yards.	Yarn, cotton, pounds.			Hay.	Oats.		Buckles, No.	Horse-shoes.	Bar, pounds.	Sheet, do.	Copper, do.	Iron, cut, do.	

LABORATORY STORES.						GUN CARRIAGE TIMBER.									
						FOR FIELD CARRIAGES.				FOR 24-PDR. BARBETTE CARRIAGES.					
						12-pdr. gun carriages.		Caissons.		Gun carriages.			Chassis.			
Alcohol, pounds.	Beeswax, do.	Gum arabic, do.	Quicksilver, do.	Rosin, do.		Stocks.	Axle bodies.	Stocks.	Middle rails.	Uprights.	Braces.	Axle bodies.	Rails.	Tongues.	Front transoms.	Middle transoms.

FORM 1.—(PROPERTY RETURN.)—Continued.

PAINTS AND OILS.					STATIONERY.				TOOLS.				MISCELLANEOUS.			
Lead, white,	Ochre, yellow,	Oil, linseed,	Oil, sperm,	Paint, olive,	Paper, letter,	Paper, drawing,	Ink, black,	Ordnance Regulations.	Axes, hand.	Hammers, saddlers'.	Planes, bench.	Rules, carpenters'.	Carboys.	Coal, bituminous,	Lime,	Sand,
pounds.	do.	gallons.	do.	pounds.	quires.	sheets.	quarts.							tons.	barrels.	loads.

I certify that the foregoing Return exhibits a correct statement of the public property in my charge during the —— quarter, 18—.

A. B., *Captain Commanding.*

U. S. ARSENAL (ARMORY OR POST),
———, 18—.

NOTE.—For the quarter ending 30th June add a certificate that an accurate inventory of property has been made, and the return corrected accordingly. Abstracts of the receipts and issues will be made when their number makes it more convenient.

GENERAL ORDERS, No. 364, WASHINGTON, NOV. 12, 1868.

STATEMENT *of the cost of Clothing, Camp and Garrison Equipage, for the Army of the United States, until further orders, with the allowance of Clothing to each soldier during enlistment, and his proportion for each year:*

CLOTHING.	Engineer Troops.	Hospital Stewards.	Ordnance Sergeants.	Ordnance Mechanics.	Cavalry.	Light Artillery.	Artillery.	Infantry.	Invalid Corps.	Proportion for each year. First.	Second.	Third.	Fourth.	Fifth.	Allowance for five years.
Uniform Hat	$1 65	$1 65	$1 65	$1 65	$1 65	$1 65	$1 65	$1 65		1	1	1	1	1	5
" " Feather	15	15	15	15	15	15	15			1	1	1	1	1	5
" " Cord and tassel	12	12	12	12	12	12	12			1	1	1	1	1	5
" " Eagle	2	2	2	2	2	2	2								
" " Castle	13														
" " Shell and flame			3	3											
" " Crossed sabres					2										
" " Crossed cannon						8	8								
" " Bugle								8							
" " Letter					1	1	1	1							
" " Number					1	1	1	1							
" Cap (Light Artillery)						1 06									
" " Tulip						8									
" " Cord and tassel						75									
" " Plate						4									
" " Rings, pairs of						8									
" " Hair plume						75									
Forage Cap	58	58	58	58	58	58	58	58	58	1	1	1	1	1	5
" " Cover	15	15	15	15	15	15	15	15	15						
Uniform Coat, Musicians'	7 80						7 80	7 80		2	1	2	1	2	8
" " Privates'	7 00	7 00	7 00	7 00			7 00	7 00		2	1	2	1	2	8
" Jacket, Musicians'					5 75	5 75			4 56	2	1	2	1	2	8
" Jacket, Privates'					5 30	5 30			4 25	2	1	2	1	2	8
Chevrons, pairs, N. C. S.			1 25		1 25		1 25	1 25							
" " 1st Sergeants'	30				30	30	30	30	30						
" " Sergeants'	20				20	20	20	20	20						
Chevrons, pairs, Corporals'	15				15	15	15	15	15						
Caduceus		85													
Shoulder Scales, pairs, N. C. S.		50	50		50		50	50							
" " " Sergeants'	50				50	50	50	50							
" " " Privates'	50			50	50	50	50	50							
Trowsers, Sergeants'	2 70	2 70	2 70		3 75	3 75	2 70	2 70	2 70	3	2	3	2	3	13
" Corporals'	2 70				3 75	3 75	2 70	2 70	2 70	3	2	3	2	3	13
" Privates'	2 50			2 50	3 55	3 55	2 50	2 50	2 50	3	2	3	2	3	13
Sash	1 70	1 70	1 70		1 70	1 70	1 70	1 70	1 70						
Flannel Sack Coat (unlined)	2 35	2 35	2 35	2 35	2 35	2 35	2 35	2 35	2 35						
" " (lined)	3 12	3 12	3 12	3 12	3 12	3 12	3 12	3 12	3 12						
Knit Jackets	2 55	2 55	2 55	2 55	2 55	2 55	2 55	2 55	2 55						
Flannel Shirts	1 53	1 53	1 53	1 53	1 53	1 53	1 53	1 53	1 53						
Knit "	1 27	1 27	1 27	1 27	1 27	1 27	1 27	1 27	1 27	3	3	3	3	3	15
Flannel Drawers	90	90	90	90	90	90	90	90	90						
Knit "	1 04	1 04	1 04	1 04	1 04	1 04	1 04	1 04	1 04	3	2	2	2	2	11
Stockings	32	32	32	32	32	32	32	32	32	4	4	4	4	4	20
Bootees, sewed	2 05	2 05	2 05	2 05	2 05	2 05	2 05	2 05	2 05						
" pegged	1 48	1 48	1 48	1 48	1 48	1 48	1 48	1 48	1 48	4	4	4	4	4	20
Boots, sewed					3 35	3 35									
" pegged					2 92	2 92									
Great Coats	7 50	7 50	7 50	7 50	8 75	8 75	7 50	7 50	7 50	1					1
" " Straps, pairs	11	11	11	11			11	11	11						
Blankets, woolen	3 25	3 25	3 25	3 25	3 25	3 25	3 25	3 25	3 25						
" painted	1 27	1 27	1 27	1 27			1 27	1 27	1 27						
" rubber	2 48	2 48	2 48	2 48			2 48	2 48	2 48						
Poncho, painted					1 70	1 70									
" rubber					2 75	2 75									
Leather Stocks	9	9	9	9	9	9	9	9	9	1		1			2
Leggins, leather								1 20	1 20						
" linen								68	68						
Overalls	1 24			1 24						1	1	1	1	1	5
Stable Frocks					1 30	1 30				1		1			2

Mounted men may, at their option, receive *one* pair of "boots" and *two* pairs of bootees, instead of *four* pairs of bootees.

Metallic eagles, castles, shell and flame, crossed sabres, trumpets, crossed cannon, bugles, letters, numbers, tulips, plates, shoulder-scales, rings, the cap cord and tassels, the hair plume of the light artillery, the sashes, knapsacks and straps, haversacks, canteens, straps of all kinds, and the talisms, will not be issued to the soldiers, but will be borne on the return as company property while fit for service. They will be charged on the muster-rolls against the person in whose use they were when lost or destroyed by his fault.

Camp and Garrison Equipage.

Knapsacks and straps	$1 85
Haversacks, unpainted	53
" enamelled & painted	49
Canteen, complete	41
" straps, leather	15
Bedsacks, single	2 30
" double	2 65
Mosquito bars	1 00
Axe	98
" helve	13
" sling	63
Hatchet	36
" helve	3
" sling	25
Spade	72
Shovel	77
Pickaxe	69
" helve	11
Camp kettle	60
Mess pan	24
Iron pot	1 08
Garrison flag	43 00
" " halliards	2 50
Storm flag	15 00
Recruiting flag	5 00
" " halliards	63
Guidon	7 70
Camp color	1 50
Standard, for mounted regiments	18 75
National color, artillery and infantry	39 00
Regimental color, artillery and infantry	57 00
Color belt and sling	3 75
Trumpet, with extra mouth-piece	2 22
Bugle, " " "	2 50
Cords and tassels, for trumpets or bugles	80
Fife, "B" or "C"	32
Drum, complete	5 10
" head, batter	80
" " snare	30
" sling	40
" sticks, pairs	22
" " carriage	40

Drum cord		$0 30
" snares, sets		16
" case		45
Wall tent	$13 50	
" " fly	15 50	
" " poles, sets	93	
" " pins "	45	
		30 38
Sibley tent	50 00	
" " pole and tripod	3 40	
" " pins, sets	31	
		53 71
" " stove		2 62
Hospital tent	86 00	
" " fly	29 50	
" " poles, sets	2 50	
" " pins, "	1 00	
		119 10
Common tent	21 50	
" " poles, sets	71	
" " pins, "	25	
		22 46
Shelter tent, complete		3 78
Tent pins, hospital, large		3
" wall "		2
" common, small		1
Regimental book, order	1 92	
" " letter	1 92	
" " index	1 04	
" " desc'ptive	2 85	
		7 73
Post book, morning report	50	
" guard report	86	
" order	50	
" letter	50	
		2 86
Company book, clothing	2 01	
" " descriptive	1 10	
" " order	93	
" " morn. rep't	1 25	
		5 32
Regimental book, general order		1 93
Record book, for target practice		75

TABLE *specifying the money value of Clothing allowed to the Army of the United States.*

	Non-com. staff.		Chief musicians.		First sergeant.			Sergeant.			
	Cavalry or Lt. Artillery.	Artillery or Infantry.	Cavalry or Lt. Artillery.	Artillery or Infantry.	Engineers.	Cavalry or Lt. Artillery.	Artillery or Infantry.	Engineers.	Ordnance.	Cavalry or Lt. Artillery.	Artillery or Infantry.
1st year	$57 58	$55 13	$58 48	$55 73	$54 47	$56 68	$53 23	$54 27	$55 18	$55 48	$53 03
2d year	32 17	31 77	32 62	32 07	32 00	31 22	30 82	31 96	31 77	31 12	30 72
3d year	47 11	46 06	48 01	46 66	45 40	45 21	44 16	45 20	46 06	45 01	43 06
4th year	32 17	31 77	32 62	32 07	32 06	31 22	30 82	31 96	31 77	31 12	30 72
5th year	42 47	42 72	43 37	43 82	42 06	40 57	40 82	41 86	42 72	40 37	40 62
	211 50	207 45	215 10	209 85	206 05	203 90	199 85	206 25	207 45	203 10	199 05

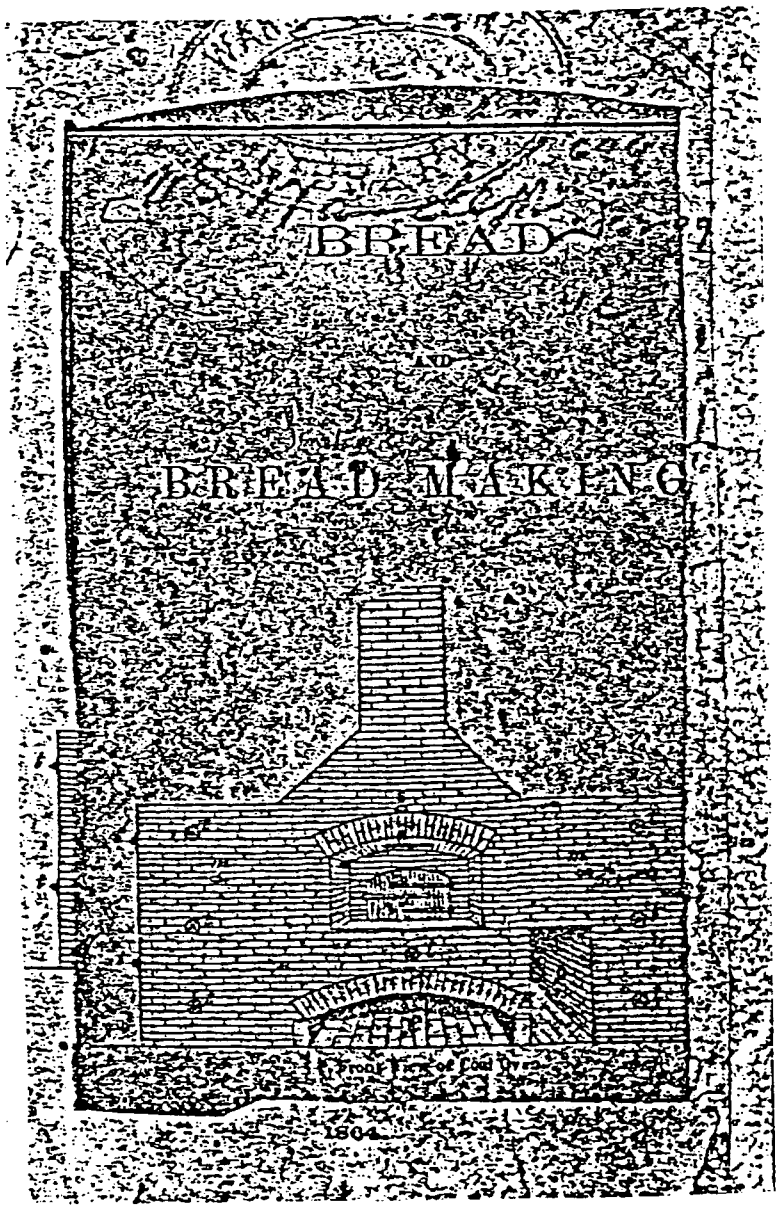
	Hospital steward.	Corporal.			Musicians.			Artificer and privates.			
		Engineers.	Cavalry or Lt. Artillery.	Artillery or Infantry.	Engineers.	Cavalry or Lt. Artillery.	Artillery or Infantry.	Engineers.	Ordnance.	Cavalry or Lt. Artillery.	Artillery or Infantry.
1st year	$54 53	$54 17	$55 58	$52 93	$53 87	$55 38	$52 63	$53 27	$53 27	$54 48	$52 03
2d year	31 37	31 91	31 07	30 67	31 66	30 97	30 42	31 36	31 36	30 62	30 12
3d year	45 26	45 10	44 91	43 86	44 80	44 91	43 86	44 20	44 20	44 01	42 06
4th year	31 37	31 91	31 07	30 67	31 66	30 97	30 42	31 30	31 36	30 62	30 12
5th year	41 92	41 76	40 27	40 62	41 46	40 27	40 22	40 86	40 86	39 37	39 62
	204 25	204 85	202 70	148 65	203 45	202 50	197 25	201 05	201 06	198 90	194 86

The allowance to Volunteer troops is at the rate of $42 per annum.

APPENDIX H

Extracts from

Bread and Bread Making
1864


BREAD
AND
BREAD MAKING
1864

by taste. It should not be burnt, but baked to an equal brown color. The crust ought not to be detached from the crumb. On opening it, when fresh, one ought to smell a sweet and balsamic odour.

"The choice of water for Bread is essential. As far as practicable, limpid water, without scent or peculiar taste, and which dissolves soap freely, only should be used. River or rain water is preferable to that of springs, wells or ponds."

The following methods of making Yeast and Bread have been used for several years, viz:

At United States Bakery, Alexandria, Va.

FIRST.—STARTING FERMENTATION.

Take one-half (½) oz. hops; boil them fifteen (15) minutes in three (3) pints of water; then scald one (1) pound of Flour with five (5) gills of hop water; stir and beat the paste well. After the paste is cool, mix it with one-half (½) pint of raw malt. Then add a portion, or all if required, of the remaining hop water (which should be milk warm), until the paste is reduced to a very stiff batter; cover it tight, and set it away; in about twenty-four (24) hours it will ferment itself, rise and settle, and it is then ready for *immediate* use.

(This is made only for the purpose of renewing Stock Yeast, when the old has failed, or is about to fail, and is to stock, new made Stock Yeast.)

SECOND.—MAKING STOCK YEAST.

Put two (2) oz. of hops in two and one-half (2½) gallons of water; boil fifteen (15) or twenty (20) minutes, then scald one and a half (1½) pounds of Flour with one and a half (1½) pints of the boiling hop water, from which the hops have been strained; then stir it quickly, so that the Flour may get well scalded; it will now be a stiff paste. Strain the balance of the hop water, and let it get cool. When the paste is cool, mix one (1) pint of raw malt with it; then add the balance of the hop water, and one and one-half (1½) pints of Stock Yeast, or in the absence of good Stock Yeast, the above fermentation. Mix thoroughly together; permit it to stand twenty-four (24) hours, strain out the malt, and it is ready for use. This, when made, will give about two and one-half (2½) gallons of Stock Yeast.

THIRD.—MAKING FERMENT YEAST.

Take twenty (20) pounds of raw potatoes, wash and boil them; when they are well boiled, mash them and six pounds of Flour well together; then add eighteen (18) gallons of water; strain the skins out, add to the foregoing quantity, two and one-half (2½) gallons of Stock Yeast; mix them well together, and in about eight (8) hours it will be ready for use.

The above will make twenty-three (23) gallons Ferment Yeast. (The potatoes should be boiling hot when mixed with the Flour, in order to scald the Flour.)

FOURTH.—SETTING SPONGE.

Take the twenty-three (23) gallons of Ferment and seven (7) gallons of water, put it in a trough; put in it two hundred and eighty-four (284) pounds of sifted Flour, and mix well together, but let it stand from two and one-half (2½) to three (3) hours, until it has done rising, and commenced falling, (and in a sponge of this size until it has fallen about one (1) inch) when it is ready for making Dough.

FIFTH.—MAKING DOUGH.

Take twenty-four (24) gallons of water; dissolve in it twelve (12) pounds of salt; pour it into the sponge, mix the sponge and water well together, then add five hundred (500) pounds of Flour; knead it well together; let it stand after kneading about two and one-half (2½) hours, when it will be ready for moulding into loaves.

Scale off twenty (20) ounces of dough, which, when baked, will weigh eighteen (18) ounces to the loaf or ration; put it into pans, place the pans in a rack in front of the ovens; let them stand from forty (40) to fifty (50) minutes, according to the temperature of the weather, then put it in the ovens, and it will bake in one hour.

In the foregoing calculations, four (4) barrels of Flour have been used, which will make nine hundred and thirty-two (932) rations of eighteen ounces each, or two hundred and thirty three (233) rations to the barrel.

In all the processes, making Ferment, Sponge and Dough, the water required should be tempered according to the season; in warm weather all that can, should be used cold, and in cold weather, warm water is essential.

OVENS.

A good Oven is necessary for the production of good Bread.

If the arch is too high, great difficulty will be experienced in baking the Bread, the bottom will be baked too much, when the top is unbaked; therefore great precaution should be taken to have it of the proper height. In so doing, the Bread will be thoroughly baked in all its parts. If the Oven is too hot, the Bread will be *underbaked*.

Materials required in their construction.

Number of Ovens.	Number of Bricks.	Barrels of Lime.	Bushels of Sand.	Remarks.
One.....	13,716	14	240	The Ovens are united. A brick hearth for each Oven is included in this estimate.
Two.....	23,648	24	360	
Three.....	34,980	34	510	
Four.....	44,112	44	660	
Five.....	54,244	54	810	
Six.....	64,376	64	960	

The average weight of the kind of brick used is about five and one-half (5½) pounds each; of a bushel of lime, about sixty (60) pounds; and sand, about ninety-six (96) pounds.

Bricks used in constructing Ovens.

The best hand-made bricks—composed of red, arch, and galipon. When they come in contact with fire, the fire-brick can be used to greater advantage, and will last much longer. For temporary use, the common brick will be found sufficient; they will last for two or three years, with little repairing.

The ordinary mortar is the best for the construction of Ovens, except when it comes in contact with the fire; then the fire-clay should be used, if the proper kind can be had; if not, the common mortar will answer, and last for several years.

Ovens which have been advantageously used for baking Bread by the Subsistence Department, consist of the following dimensions, and are illustrated by the accompanying drawings, with directions for their construction:

Fig. 1.

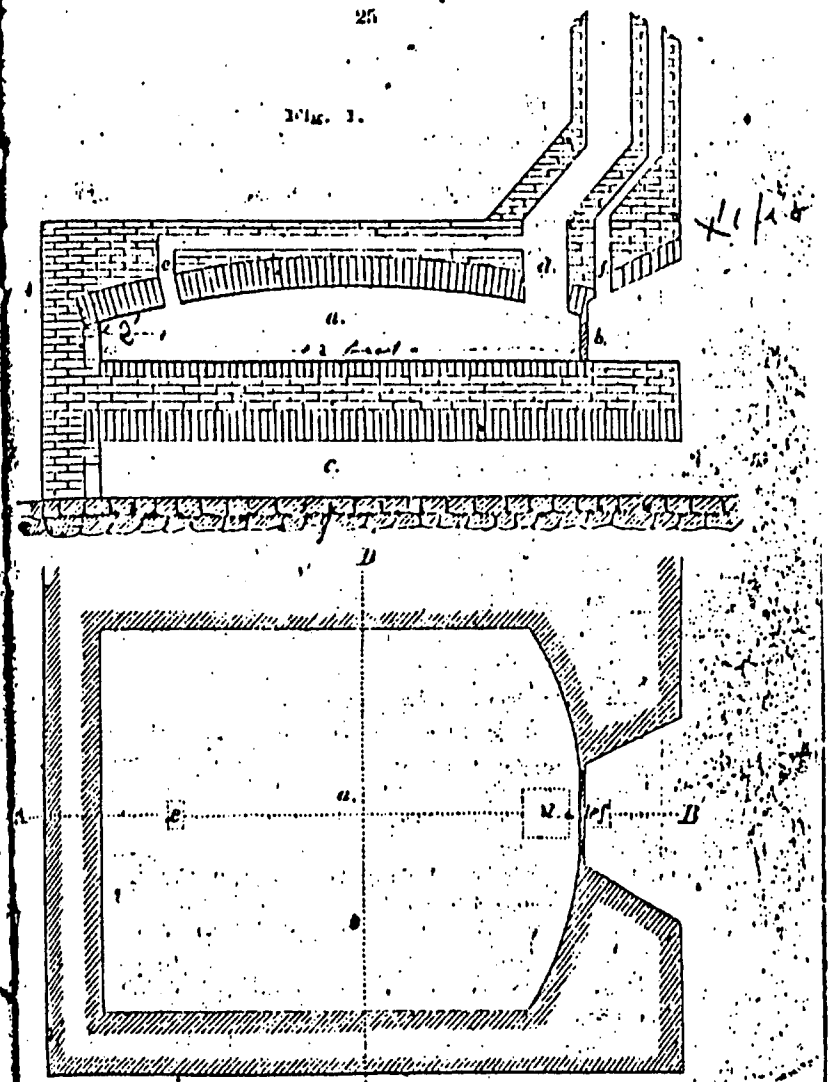
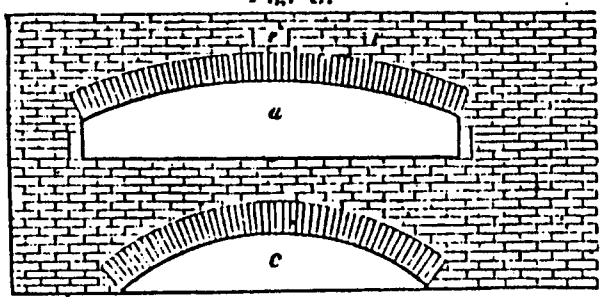


Fig. 2.

Fig. 3.



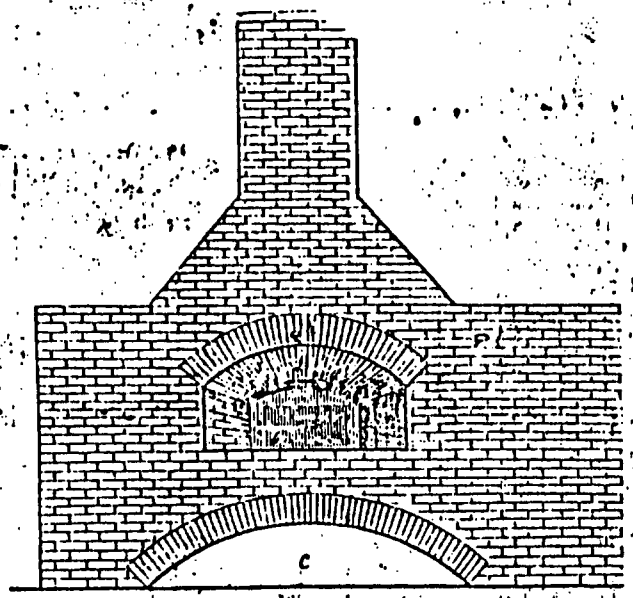


Fig. 4.

SCALE, 8 FEET TO 1 INCH, OR 1-80.

Figure 1.—Section on A B.
Figure 2.—Plan of Wood Oven.
Figure 3.—Section on C D.
Figure 4.—Front of Wood Oven.

a.—Body of Oven.
b.—Oven Door.
c.—Archway.
d.—Main Flue.
e.—Back Flue.
f.—Smoke Flue.
g.—Foundation.
h.—Damper for Main Flue.
i.—Damper for Back Flue.

Dimensions, &c., of a Wood Oven.

(See Figures on pages 25 and 26.)

Foundation (*g*) of brick, or rubble stone masonry, depth...18 inches.

Body of Oven, (*a*)
- Length in clear.....12 feet.
- Width in clear.....9 ft. 4 in.
- Height from hearth to crown, (in centre) 23 inches.
- Height at sides and back.....11 inches.

Arch underneath Oven, (*c*).....
- Width of span.....8 ft. 6 in.
- Height at centre.....3 ft. 8 in.
- Height from hearth.....18 inches.
- Length from front to rear.....14 feet.

Arched entrance to Oven.....
- In front, *i. e.*, flush with the front face,
  - Width.....5 feet.
  - Height at centre, 2 ft. 6 in.
  - Heigh at sides...18 inches.
- In rear, *i. e.*, flush with Oven door,..
  - Width.....2 ft. 8 in.
  - Height at centre..18 inches.
  - Height at sides..14 inches.

Main flue, (*d*).....14 in. x 14 in.
Back flue, (*e*).....9 in. x 5 in.
Smoke flue, (*f*).....14 in. x 4½ in.
Distance from front of main flue to Oven door.....4 inches.
Distance from back of back flue to back wall.....2 feet.
Distance from back of smoke flue to Oven door.....2 inches.
Oven door, (*b*,) cast iron.....2 feet wide x 14 inches high.
Hearth of Oven above floor.....3 ft. 4 in.
Height of mass of masonry above foundation.....6 ft. 8 in.
Distance from front to rear of same.....15 ft. 6 in.
Thickness of side and back walls.....18 inches.
Thickness of division wall between two adjacent Ovens....14 inches.
Maximum thickness of front wall.....27 inches.
Chimney, exterior dimensions.....2 feet 7 inches x 22 inches.

The *height* of the chimney to be regulated by circumstances, such as draft, nature of roof, &c., &c.

Dimensions of brick used.....8½ x 4½ x 2¼

In case the bricks employed are of different dimensions from the above the necessary allowance must be made:

The same letters refer to the same objects in all the figures.

Both wood and coal ovens require additional strengthening. Abutments of masonry, and other means, have been employed. The best method, perhaps, is by passing ties of wrought iron through the masonry, transversely, and from front to rear. These bars may be either round or rectangular: the latter are the best, as they are easier weld-

ed or bolted. If round, they should be at least ¾ in. in diameter, if rectangular, about 1¼ in. x ¾ in. Between the washers and the masonry, on each end, pieces of scantling or timber, about 4 in. thick, should be introduced. The expansion caused by heat will affect the oven to such an extent as to require frequent attention to these ties.

In the drawings of the wood oven, the iron rods are not represented; their number and position may be seen in those of the coal oven.

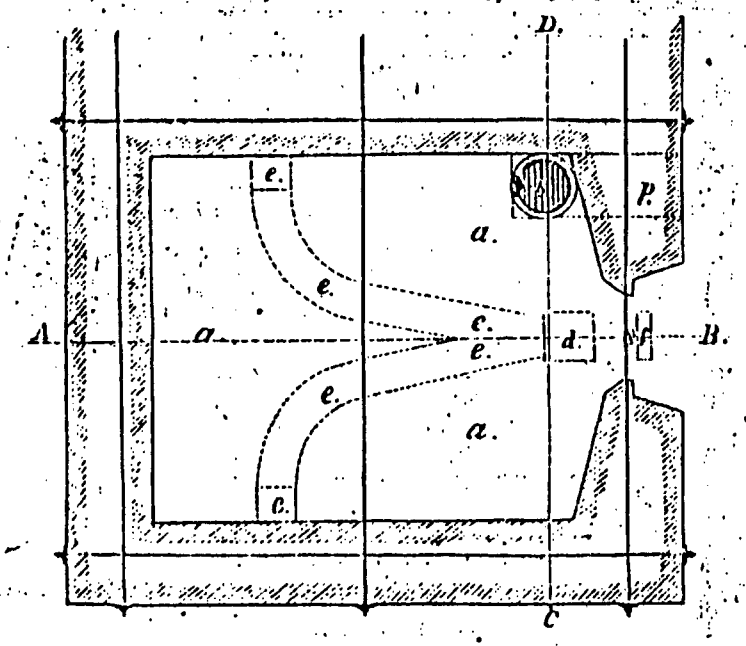
COAL OVEN.

The general dimensions the same as those of the Wood Oven.

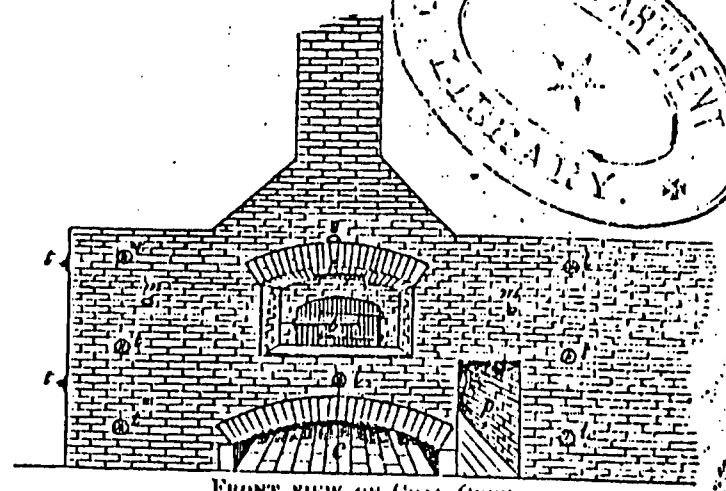
a.—Body of Oven.
b.—Door.
c.—Archway.
d.—Main Flue.
e.—Back Flues.
f.—Front, or Smoke Flue.
g.—Foundation.
k.—Grate.
m. m.—Dampers for Back Flues.
p.—Ash-pit.
s.—Damper for Main Flue.
t. t. t. &c.—Iron Ties, with Nuts and Washers.

PLAN OF COAL OVEN.

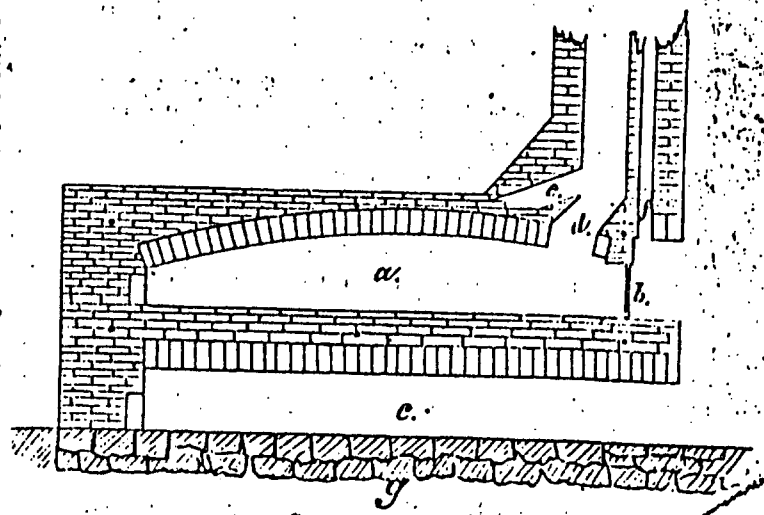
SCALE, 8 FEET TO 1 INCH, OR 1-96.



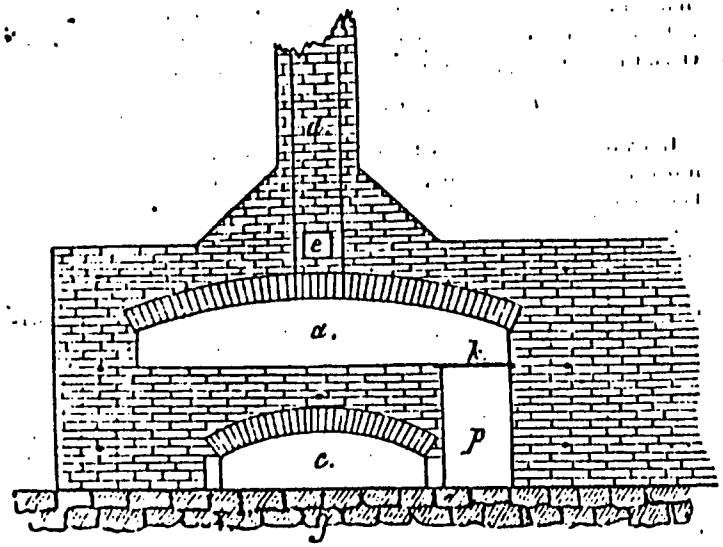
WAR DEPARTMENT LIBRARY.



FRONT VIEW OF COAL OVEN.



SECTION ON A B.



SECTION ON C D.

The coal is placed on the grate through the main door *b*. The grate can be unpinned, and the fire thrown into the ash-pit when required.

The manner of building the Arch.

The sides should be built eleven (11) inches high from hearth to spring of arch, (an ellipse,) and rise twenty-three (23) inches to centre. The centre may be formed of packed earth, sand, or made of plank, whichever may be most convenient.

The first six courses of bricks from the side walls, or abutments, should be laid in mortar. The remainder of the arch should be laid dry, and the interstices filled in with grouting of mortar or cement.

As the centre of timber, or packed sand, is only to support the arch during construction, as soon as the arch is keyed, and the mortar sufficiently set, the centre may be removed.

Manner of burning out an Oven when just constructed.

Commence by burning a handful of shavings, gradually increasing the heat—a too sudden or rapid increase of it will crack the Oven—

until, at the expiration of forty-eight (48) hours, the Oven is hot enough to bake Bread. Then let the fire die out, and if it be found that the Oven has a white appearance inside, it will be found fit for use.

To determine if of proper temperature.

If, on throwing a few pinches of Flour on the bricks of the hearth, it remains white, after the lapse of a few seconds, the temperature is too low; if, on the contrary, the Flour assumes a deep brown color, the temperature is too high; if the Flour turns yellowish, or looks slightly scorched, the temperature is right.

When the Ovens have been brought to their proper temperature, the fire is withdrawn in the wood Ovens, all the flues closed by the damper plates, and the dough introduced.

The gas burner in the Oven should be lit when the Bread is put in, and again a short time before its removal, to enable the baker to notice its condition. The door should not be opened while the Bread is baking, except in case of necessity, as the cold air will chill the Bread.

In the wood Ovens the back flue can be used advantageously in starting the fire and controlling the temperature in that part of the Oven. Objections have been made to this flue, on the grounds of an alleged escape of a large amount of hot air. This cannot occur if the damper plate is properly fitted in the flue. Their advantages in other respects, in giving a uniform temperature to the oven, &c., are considered more than a compensation for such a loss.

The same objections have been made to all but one flue in the coal Ovens.

By many the flue farthest from the fire is considered sufficient. In these Ovens the flame and heated air can be drawn by either flue to that part of the Oven which requires most heat. After the fire is fairly started or regulated, all the flues can be closed, but the one farthest from it, in which case the flame and hot air will sweep around the back of the Oven, and escape through this flue. Before baking, the fire is permitted to die out, or is covered with ashes. A screen is frequently used around it to protect the Bread, but not successfully.

In a coal Oven with one flue there are certain parts of the Oven which do not receive a uniform heat. This depends in some measure upon the direction of the flame produced by the shape of the top of the Oven, the location of the flue, and other causes. After it is used several

times, the condition of the Bread when baked in the different parts will show this want of uniformity. Two flues remove this difficulty. This also occurs in a wood Oven, but to a less extent, as the fire can be shifted to any part of the Oven.

One chimney for two Ovens, midway between them, has been found to work satisfactorily, provided the flues are properly curved. If an abrupt change of direction takes place in them, the draft is injured.

The arch under the Oven gives a convenient space for drying wood, or placing coals or ashes, if they are not at once removed from the bakery.

If the ground over which the Oven is built is wanting in firmness or solidity, the arch is desirable. It has its objections, however.

TEMPERATURE AT WHICH BREAD IS BAKED.

The lowest heat at which Bread can be efficiently baked is from three hundred and twenty (320) to four hundred (400) degrees Fahrenheit.

Prof. Horsford's Self-Raising Bread.

Three hundred and fifty (350) to four hundred and fifty (450) degrees Fahrenheit.

English Method.

Heating the Oven to five hundred and seventy (570) degrees and falling off gradually to four hundred and thirty (430) or four hundred and twenty (420) degrees Fahrenheit.

Perkins' Hot-Air Ovens, (English.)

Four hundred and twenty (420) to four hundred and fifty (450) degrees Fahrenheit.

Rollins' Revolving Oven, (French.)

Four hundred and ten (410) degrees Fahrenheit.

The following is the result of a series of observations made at the "G" Street U. S. Bakery, Washington, D. C., upon the temperature of the Ovens, before baking and at regular intervals while it was progressing. The figures indicate the number of degrees by the Fahrenheit scale, viz:

Immediately after the fire was removed.	Temperature after the bread was put in.				Loss of heat.				REMARKS. (Time of baking, one hour.)
	In ten minutes.	In twenty minutes.	In forty minutes.	In sixty minutes.	In ten minutes.	In twenty minutes.	In forty minutes.	In sixty minutes.	
550	.....	418	415	400	.....	132	135	150	Bread properly baked.
564	.....	450	442	422	.....	114	122	142	Do. do.
550	.....	440	430	410	.....	110	120	140	Do. do.
560	.....	460	450	430	.....	100	110	130	Do. do.
575	430	425	415	410	145	150	160	165	Do. do.
570	.....	425	415	395	.....	145	155	175	Do. do.
580	430	425	420	405	150	155	160	170	Do. do.
560	.....	420	410	400	.....	140	150	160	Do. do.
580	.....	430	422	410	.....	150	158	170	Do. do.
570	.....	430	422	410	.....	140	148	160	Do. do.
565.9	430	432.3	424.1	409.2	147.5	133.5	141.3	156.2	Mean.

By placing the bulb of the Thermometer in the interior of a loaf of Bread, it was found that the temperature, at different times during the process of baking, was as follows, viz:

After remaining in the oven 20 minutes.....212 degrees.
" " " " 40 " .....230 "
" " " " 60 " .....240 "

From the above it will be seen that the temperature in the loaf increases while that of the oven diminishes.

The Bread is put into the oven immediately after the fire is removed; this occupies about five minutes. The door being open, a large amount of hot air escapes; besides, the temperature is considerably diminished by the evaporation, or conversion of the moisture in the dough into steam. Observations were very unreliable if taken in less than twenty minutes after the Bread was placed in the oven.

Amount of Wood used.

It was found that three (3) feet and ten hundred and eighty-eight (1,088) inches (cubic), or about one thirty-fifth (1-35) of a cord of Baker's pine was necessary to re-heat the ovens,* increasing their temperature one hundred and seventy-five (175) degrees, or even as high as two hundred and twenty-five (225) degrees, taking about twenty-five (25) minutes. Also, that it required sixteen (16) cubic feet, or one-eighth (1/8) of a cord, to heat an oven from eighty (80) or one hundred (100) degrees, to five hundred and sixty (560) degrees, taking about one hour. The wood, in all cases, was finely split.

From the foregoing, it will be seen that the temperature of the oven should be from five hundred and fifty (550) to five hundred and eighty (580) degrees; that it loses about one hundred and forty (140) degrees the first ten minutes after the Bread is put in, and gradually falls after this to about four hundred (400) degrees in one hour, at which time the Bread is properly baked, without unnecessary drying or crusting.

A higher temperature than five hundred and eighty (580) degrees will under-bake the Bread, if a very rapid decrease does not immediately take place.

To heat a single oven which is perfectly cold, of the dimensions given in the drawing, will require about three-sixteenths (3-16) of a cord,

* These Ovens were a little smaller than those described in the drawing.

or twenty-four (24) cubic feet of wood. After the oven is heated, it will require about twelve (12) cubic feet, or three thirty-seconds (3-32) of a cord to heat it once, or bake once in twenty-four (24) hours. To bake two batches, if one follows the other immediately, will require about sixteen (16) cubic feet. If the bakings are twelve (12) hours apart, it will require nearly three thirty-seconds (3-32) of a cord at each heating. If the ovens are heated more than twice a day, it will require about one thirty-second (1-32) part of a cord at each heating.

As this oven has capacity for five hundred (500) rations, it follows from above that it will require one-eighth (1/8) of a cord to bake one thousand (1,000) rations. If the oven is kept constantly hot, baking ten (10) or twelve (12) batches per day, one-sixteenth (1-16) of a cord will bake one thousand (1,000) rations.

The kind of Wood used.

Bakers' Pine is the kind of Wood generally used although Spruce will answer; split the fuel fine, the length of the stick;—which is usually four (4) feet.

In wood ovens fine brick are not essential. These kind of ovens are more easily managed, give a more uniform heat in all their parts, securing thereby more regularity for the Bread in baking.

The ordinary brick in a wood oven will last longer than fire brick will in a coal oven. If the proper kind of coal is not used, and the Bakers not perfectly familiar with its management, the Bread will be imperfectly baked.

Wood is more expeditious, the coal fire being necessarily at one corner of the oven, it requires a great degree of heat at that point to heat the most distant part of the oven sufficiently to bake properly; this destroys the front wall immediately about the furnace, injures the flue immediately in front and over the oven door, injures the hearth of the oven, and unless great care is used, burns the crust of the Bread of several pans nearest the furnace.

Organization of Gangs or Working Parties.

To turn out twelve (12) batches of Bread every twenty-four (24) hours, which is full work, it will require three (3) gangs, working eight hours each.

Each Gang consists of one (1) Foreman, four (4) Bakers, and one

(1) Helper or Assistant. Two (2) Gangs, require two (2) Foremen, eight (8) Bakers, and two (2) Helpers. Three (3) Gangs, require three (3) Foremen, twelve (12) Bakers, and three (3) Helpers, that is, for working (what is called a Shop or) two ovens for twenty-four (24) hours to their full capacity.

When the organization is for full work, it always remains the same.

NUMBER OF MEN EMPLOYED, AND AMOUNT OF LABOR PERFORMED IN TWENTY-FOUR (24) HOURS WORK.

Number of Ovens.	Clerks.	Foremen.	Day Bakers.	Night Bakers.	Yeast Maker.	Day Laborers.	Night Laborers.	Total number of Employees in 24 hours.	Daily labor for one Baker.	Rations baked by each oven in 12 hours, with one Gang of Bakers.	Rations baked by each oven in 24 hours, with two Gangs of Bakers.*	Rations baked by each oven in 24 hours, with three gangs of Bakers.
One.....	..	..	3	3	1	1	..	8	About 700 rations.	2,100	4,200	
Two.....	..	..	6	6	1	1	..	14		4,200	8,400	
Three ..	1	1	9	9	1	1	..	21		6,300	12,600	
Four....	1	1	11	12	1	1	1	26		8,400	16,800	
Five.....	1	1	15	15	1	2	1	34		10,500	21,000	
Six	1	2	18	18	1	3	2	44		12,600	25,200	
Six	1	2	25	25	1	4	2	60		.....	.....	37,800

As a general rule, the total number of men employed in a Bakery can be determined by estimating each Baker will turn out seven hundred (700) rations daily, and adding one additional man, (as Clerk, Yeast Maker or Laborer as may be required,) for each three thousand (3,000) rations turned out. In very hot weather, or as circumstances may necessitate, the number can be changed.

For a smaller amount of work, requiring one (1), two (2) or three (3) Gangs, the following will give the details:

One (1) oven, with one (1) Foreman and two (2) Bakers, will bake four (4) batches in twelve hours, of five hundred and twenty-five (525)

* Maximum amount of labor performed by the total number of men.

rations each, or two thousand one hundred (2,100) rations in twelve (12) hours.

Two (2) Gangs of the same number, working twelve (12) hours each, will produce eight (8) batches of five hundred and twenty-five (525) rations, or four thousand two hundred (4,200) rations in twenty-four (24) hours.

Three (3) Gangs of three (3) men each, working eight (8) hours, will turn out four (4) batches of the same size, or two thousand one hundred (2,100) each Gang—six thousand three hundred (6,300) rations from the one (1) oven in a day.

Two (2) ovens, with Foreman, second hand and four (4) Bakers, will turn out, in twelve (12) hours, four (4) batches of one thousand and fifty (1,050) rations, or four thousand two hundred (4,200) rations in twelve (12) hours.

Two (2) Gangs of men, as above, six (6) each, will produce eight (8) batches, same size, in twelve (12) hours or eight thousand four hundred (8,400) rations every twenty-four (24) hours, from two (2) ovens.

UTENSILS REQUIRED FOR THE BAKERY PROPER.

Number of Ovens.	Pans.	Bakes.	Tables.	Peels.	Troughs.	Scrapers.	Sieves.	Scales.	Shovels.	Scrub Brushes.	Brooms.	Hatchets.	Axes.	Wood Saws.	Copper Brushes.	50 galls. Cauldrons.	Buckets.
One	70*	1	1	2	1	2	1	1	2	1	2	1	1	1	1	1	4
Two.....	140	1	1	4	2	4	1	1	2	2	4	1	1	1	1	1	4
Three.....	210	2	2	6	3	6	2	2	4	3	6	2	2	1	2	2	6
Four.....	280	2	2	8	4	8	2	2	4	4	8	2	2	1	2	2	8
Five	350	3	3	10	5	10	3	3	6	5	10	3	3	1	3	3	10
Six	420	3	3	12	6	12	3	3	6	6	12	3	3	1	3	3	12

The *Foreman* should heat the ovens, set the sponges, control the temperature of the water used, superintend the working of the sponge into

* Half the number of Pans will answer, but not to the same advantage.

dough at the proper time, regulate the amount of salt used, and the "sealing" of the Bread, see that it is properly proved and placed in the oven, regulate its baking, and be responsible generally for all the details of the Bakers. During the absence of the Foreman, a Baker should perform all these duties.

The Bakers sift the Flour, mix the dough, grease the pans—and move them wherever required—except placing them in the oven, (this is done by the Foreman) remove the Bread when baked, and perform all the duties connected with the general operation of the Bakery.

Utensils required for Yeast Room:

No. of Ovens.	No. of 80 gallon Cauldrons.	Yeast Tubs.	Buckets.	Shovels.	Sieves.	Strainers.	Dippers.	Scrub Brushes.	Brooms.	Hatchets.	Scoops.	Stock Yeast Barrels.	Ferment Brushes.
One	2	1	2	1	2	2	2	2	2	1	1	1	3
Two	2	2	2	1	2	2	2	2	2	1	1	1	6
Three	2	3	2	2	2	2	2	2	2	1	1	2	9
Four	2	4	2	2	2	2	2	2	2	1	1	2	12
Five	2	5	2	3	2	2	2	2	2	1	1	3	15
Six	2	6	2	3	2	2	2	2	2	1	1	4	18

An experienced Stock Yeast maker, should be employed for its manufacture and the preparation of Ferment Yeast, with such assistance as the size of the Bakery demands.

Description of Utensils used in Bakery.

Pans.—Size—17 in. wide, 22 in. long, 3 in. deep (15 ration pans).

Tables—Size—4 feet wide, 14 10-12 feet long, 2 10-12 feet high.

Bakes.—Size—14 feet long.

Peels.—Size of blade—10 in. wide, 24 in. long; pole, long, 16 feet, short, 10 feet long.

Troughs.—Size—Troughs should be made of 2½ inch pine plank, 15 feet 8 in. long, by 2 feet 6 in. at top, 22 in. at bottom, and 18 in. in depth, inside measurement; and top of Trough, 2 feet 10 in. from the

floor; Trough top should be in two equal sections; two sets of boards are needed in each Trough for separating Flour, Sponge and Dough.

Scrapers.—Size—6 in. long, 4 in. wide (made of steel).

Sieves.—Size—No. 12.

Scales.—Size—Counter Scale (small).

Shovels.—Size—Scoop Shovels (iron).

Cauldron.—Size—80 or 120 gallons. The best Cauldrons which can be used are those holding 80 or 90 gallons, or more. By purchasing the bowl without the furnace and stand, and having it cased in brick work, it will be more economical in fuel, and more advantageous in other respects.

Yeast Tubs.—Size—½ of whisky barrels, with side handles.

Bucket.—Size—ordinary wooden, not painted.

Strainer.—Size—12 in. deep, 12 in. in diameter at the bottom, and 15 in. in diameter at the top. Made of block tin, filled with ½ and 1-16 holes, 4 handles to the rim.

Dimensions of Proof Rack.—7 feet 6 in. high, 6 feet 2 in. wide, and 23 in. deep; divided by shelves made of one inch boards, 4 in. apart; to prevent the shelves from springing, there should be stops or stays between each of them in the center. Dovetail the frame work together.

In the construction of a Bakery, with all its necessary appendages, Bread and Yeast rooms, Store and Flour rooms, and, if necessary, Dormitory and Kitchen, circumstances are so varied that no definite rules could be advantageously applied. A due regard for room, and in the Bakery proper, ridge or comb ventilation and skylight should be adopted, if possible, in all cases. The temperature of the Bake-House should never be below 75 degrees Farenheit; sometimes it exceeds 90 degrees, and even reaches one hundred and six (106) degrees. Such a temperature is too exhausting to the Bakers, and should not be allowed. Roof ventilators are far the best, as the cold air cannot sensibly effect the Bread. Too much precaution cannot be taken to guard against fire.

All the foregoing estimates are made on the supposition that the ovens are of the dimensions of those in the plates. Any change in them will, of course, produce a corresponding one in their equipments.

BIBLIOGRAPHY

MANUSCRIPTS, PHOTOGRAPHS, AND MAPS

Historical Society of Schuylkill County

Company Accounts, Washington Artillerists.

Roll Book of the Washington Artillerists.

Baird Snyder Diary.

Library of Congress

Prints and Photographs Division: Civil War Photographs.

National Archives

Cartographic Division:

Record Group 77. Miscellaneous Fort File: Fort Washington.

Record Group 79. Records of the National Park Service.

Old Army and Navy Branch:

Record Group 77. Office of the Chief Engineers.

Entry 2. Printed Index to Letters in Series 4, 6, 8, and 11 Relating to Public Lands, 1812-67.

Entry 17. Register of Letters Received, 1826-70.

Entry 219. Letters, Reports, and Other Records Relating to Fortifications, 1810-69.

Entry 223. Report of Boards of Engineers Relating to Fortifications and Defenses, 1821-34.

Entry 575. Memoranda of General J.G. Bernard Regarding Forts, May 23, 1863-July 18, 1864.

Record Group 92. Office of the Quartermaster General.

Entry 225. Consolidated Correspondence File, 1794-1890.

Entry 228. Reporting Officer Index to Part (1861-94) of Series 238, 1849-53, 1861-72.

Entry 1124. Personal Records, Officers, Mainly Volunteer, of Quartermaster Corps, 1861-65.

Entry 1126. Monthly Returns of Officers of the Quartermasters Department, 1840-72.

Entry 1188. Property and Stores Returns, 1818-61.

Entry 1194. Abstracts of Quarterly Returns of Quartermaster Stores on Hand and Received, 1850-51.

Entry 1195. Abstracts of Quarterly Returns of Quartermaster Stores Issued in Fiscal Year 1850 and 1851.

Entry 1200. Abstracts of Reports of Quartermaster Property Purchased and Issued, 1857-58, Issued and Transferred, 1864, Consumed and Expended, 1861, and on Hand, 1863.

Entry 1203. Monthly Returns of Quartermaster Stores Received and Issued, 1861-73.

Entry 1204. Special Reports of Stores on Hand, 1865.

Entry 1338. List of Prices Paid by the Quartermasters for Various Articles, 1861.

Entry 1339. Price Lists of Certain Supplies from Various Quartermasters, 1862.

Entry 1341. Specifications for Miscellaneous Supplies Adopted by the Quartermaster General, 1875-84.

Record Group 94. Historical Information on Posts.

Record Group 107. Secretary of War.

Microfilm Group 6. Letters Sent, 1800-89.

Microfilm Group 22. Register of Letters Received, 1800-70.

Microfilm Group 221. Letters Received--Registered, 1801-70.

Microfilm Group 222. Letters Received--Unregulated Series, 1789-1861.

Microfilm Group 420. Index to Letters Received, 1871-80.

Microfilm Group 491. Register of Letters Received, 1861-66.

Microfilm Group 492. Letters Received--Irregular Series.

Record Group 156. Office of the Chief of Ordnance.

Entry 20. Register of Letters Received, 1827-89.

Entry 102. Summary Statement of Ordnance and Ordnance Stores on Hand at the Forts of the United States.

Entry 109. Quarterly Summary Statements of Ordnance and Ordnance Stores in the Hands of Regular Army and Volunteer Artillery Regiments, 1862-64, 1870.

Entry 110. Quarterly Summary Statements of Ordnance and Ordnance Stores in the Hands of Regular Army and Volunteer Cavalry Regiments, 1870-71.

Entry 113. Registers of Cannon and Carriages Required for, on Hand at, and Supplied to Forts and Batteries, 1861-73.

Entry 156. Ledgers of Accounts of Officers and Military Storekeepers at Ordnance Installations and Posts, 1861-94.

Record Group 391. United States Regular Army Mobile Units, 1821-1942.

First Artillery:

Entry 15. Roster of Officers and Enlisted Men, 1813-51.

Entry 18. Monthly Returns, 1828-1901.

Entry 21. Regimental Description Books, 1838-85, 1895-1901.

Entry 22. Description Book of Batteries A, D, G, and H, 1830-89.

Entry 34. Miscellaneous Records, 1821-1900.

Fourth Artillery:

Entry 191. Letters Sent, 1828-1901.

Entry 198. Letters Received, 1863-1901.

Entry 206. Regimental Monthly Returns, 1821-1900.

Entry 207. Regimental Monthly Returns, 1826-1901.

Entry 209. Company Council Book, 1861-66.

Entry 211. Regimental Description Books, 1817-84.

Record Group 393. Army Continental Command, U.S., 1821-1920; Military Installations, 1821-81: Fort Washington, Maryland, 1851-53, 1861-72.

Entry 1329. Letters Sent, 1851-53, 1861-66.

Entry 1330. Endorsements Sent, 1867-72.

Entry 1331. Register of Letters Received, 1867-72.

Entry 1332. General, Special, and Post Orders, 1861-65.

Entry 1333. General, Special, and Post Orders, 1865-67.

Entry 1334. General Orders and Circulars Issued, 1867-72.

Entry 1335. Special Orders Issued, 1867-72.

Entry 1336. Proceedings of the Post Council of Administration, 1861-1870.

Entry 1337. Guard Reports and Morning Report, 1863-70.

Entry 5423. Inventory and Inspection Reports, 1865-69.

Post Orders:

Fort Washington:	Letters Sent, 1866-72.
Fort Washington:	Post and Special Orders, 1835-50.
Fort Washington:	General Orders, 1872.
Fort Washington:	Listing of Papers Forwarded, 1868-69; Letters Sent, 1871-72; Roster, 1868-71.
Fort Washington:	Pass Book, 1866-67; Duty Book, 1867-68; List of Books in Post Library, 1871; List of Persons Borrowing Post Library Books, 1868-72.
Fort Washington:	Complete History and Geographical Description, 1812-1912.
Fort Washington:	Letters Sents by Assistant Quartermasters, 1862-66.
Fort Washington:	Monthly Returns and Provisions, 1819-27, 1828-40

Photographic Division: Civil War Photographs.

United States Army Military History Institute, Carlisle, Pennsylvania

Civil War Miscellaneous. Henry Hoyt Letters.

Harrisburg Civil War Round Table Collection. George Albert Diary.

ORAL INTERVIEWS

Mrs. Henry Blunt, Bethesda, Maryland, discussion with Jeff Deeschmacher, Fort Washington, Maryland, November 1, 1982.

PRINTED PRIMARY

Art Journal Advertiser. III (March 1859).

Barnard, John G. Notes on Sea-Coast Defence: Consisting of Sea-Coast Fortifications, the Fifteen-Inch Gun, and Casemate Embrasure. New York: n.p., 1861.

Beecher, Catherine E., and Harriet Beecher Stowe. The American Woman's Home. Watkins Glen, New York: American Life Foundation, 1979; originally published in 1869.

Billings, John D. Hard Tack and Coffee: The Unwritten Story of Army Life, ed. Richard Harwal. The Lakeside Classics, No. 58, Chicago: R.R. Donnelly, 1960; orig. pub. 1887.

Blair, F.P., Jr. Permanent Fortifications and Sea-Coast Defences. 37th Congress, 2nd sess., 1862. Report No. 86.

Bread and Bread Making. N.p.: 1864.

Brinkerhoff, Roeliff. The Volunteer Quartermaster. New York: D. Van Nostrand, 1865.

Brooks, T.B. Duties of Grand Guard. Cincinnati: Bradley & Webb, 1862.

Buell, Augustus. "The Cannoneer": Recollections of Service in the Army of the Potomac. Washington, D.C.: The National Tribune, 1890.

Case, Theodore S. The Quartermaster's Guide. Saint Louis: P.M. Pinckard, 1865.

The Country Kitchen, 1850. Scotia, N.Y.: Americana Review, 1965.

Dietzgen. Catalog of Eugene Dietzgen Company. 16th ed. Chicago: 1938.

Dover Stamping Co., 1869. Princeton, New Jersey: The Pyne Press, 1971. Reprint of 1869 catalog.

Fort Edward Stoneware Association. Manufacturers of and Dealers in All Kinds of Stone and Rockingham Ware. Fort Edward, New York (c. 1860).

Gemrig's Illustrated Catalog. N.p.: 1879.

Gibbon, John. The Artillerist's Manual. New York: D. Van Nostrand, 1863.

Hodge, Robert W., ed. The Civil War Letters of Perry Mayo. East Lansing, Michigan: Stone Printing Co., 1967.

Jenkins, Walworth. Q.M.D. or Book of Reference for Quartermasters. Louisville, Kentucky: John P. Morton & Co., 1865.

Kautz, August V. The Company Clerk. Philadelphia: J.B. Lippincott, & Co., 1864.

L.H. Mace & Co., 1883. Princeton, New Jersey: The Pyne Press, 1971.

Meyers, Augustus. Ten Years in the Ranks of the U.S. Army. New York: The Stirling Press, 1914.

Mordecai, Alfred. Artillery for the Land Service of the United States. Washington, D.C.: J. & G.S. Gideon, 1849.

Morris, Hobart L., Jr. One Year at War: The Diary of Private John A. Schultz, August 1, 1863-August 1, 1864. New York: Vantage Press, 1968.

Official Roster of the Soldiers of the State of Ohio in the War of the Rebellion, 1861-1866. 10 vols. Cincinnati: The Ohio Valley Company, 1889.

Outline Description of the Posts and Stations of Troops in the Geographical Divisions and Departments of the United States. Washington, D.C.: Government Printing Office, 1872.

Price List of the Japanese Paper Ware, . . .For Sale by Robert B. Bradley & Co., Wholesale Dealers in Agricultural and Horticultural Implements, Farm and Garden Seeds, Fertilizers, Grindstones, Wooden Ware, Brooms, Mats, Well Buckets, Baskets, Brushes, &c. New Haven, Connecticut: N.p. 1875.

A Record of the Commissioned Officers, Non-commissioned Officers and Privates of the Regiments Which Were Organized in the Service of the United States to Assist in Suppressing the Rebellion. 8 Vols. Albany, New York: Weed, Parsons and Company, 1868.

Reed, William Howell. Hospital Life in the Army of the Potomac. Boston: William V. Spencer, 1866.

Report of the Adjutant General of the State of Indiana. Indianapolis: Alexander H. Conner, 1869. 8 Vols.

Revised Roster of Vermont Volunteers and Lists of Vermonters Who Served in the Army and Navy of the United States During the War of the Rebellion, 1861-66. Montpelier, Vermont: Watchman Publishing Co., 1892.

Roberts, Joseph. The Hand-Book of Artillery for the Service of the United States. New York: D. Van Nostrand, 1860.

Russell and Erwin. Illustrated Catalog of American Hardware of the Russell and Erwin Manufacturing Company. Introduction by Lee H. Nelson. N.p.: Association for Preservation Technology, 1980 (reprint of 1865 catalog).

Scott, Henry L. Military Dictionary. New York: D. Van Nostrand, 1864.

Totten, Joseph G. Report on Fortifications. 32nd Congress, 1st Session, 1851. House Executive Document No. 5.

_____. Papers on Practical Engineering. No. 6. Report Addressed to the Hon. Jefferson Davis, Secretary of War, on the Effects of Firing With Heavy Ordnance From Casemate Embrasures. Washington, D.C.: Taylor and Maury, 1857.

A Victorian Chair for All Seasons: A Facsimile of the Brooklyn Chair Company Catalogue of 1887. Watkins Glen, New York: American Life Foundation Library of Victorian Culture, 1978.

Victorian Lighting: The Dietz Catalogue of 1860. Watkins Glen, New York: American Life Foundation and Study Institute, 1982.

U.S. Department of the Army. Flags and Guidons: Descriptions and Use of Flags, Guidons, Tabards, and Automobile Plates. Social Regulations No. 840-10-1, October 28, 1952.

_____. Flags and Guidons: Descriptions and Use of Flags, Guidons, Tabards, and Automobile Plates. AR 840-10, August 1962.

U.S. War Department. Annual Report of the Quartermaster General, 1876. Washington, D.C.: Government Printing Office, 1877.

_____. Annual Reports of the Secretary of War. Washington, D.C.: Government Printing Office, 1840-72.

_____. General Orders: Adjutant General's Office 1861. Washington, D.C.: Government Printing Office, 1862.

_____. General Orders: Adjutant General's Office, 1862. Washington, D.C.: Government Printing Office, 1863.

_____. General Orders: Adjutant General's Office, 1867. Washington, D.C.: Government Printing Office, 1868.

_____. General Orders: Adjutant General's Office, 1871. Washington, D.C.: Government Printing Office, 1872.

_____. General Orders: Adjutant General's Office, 1872. Washington, D.C.: Government Printing Office, 1873.

_____. Instruction for Field Artillery. Prepared by a Board of Artillery Officers. Philadelphia: J.B. Lippincott & Co., 1860.

_____. Instruction for Heavy Artillery. Prepared by a Board of Officers for the Use of the Army of the United States. Washington, D.C.: Government Printing Office, 1863.

_____. Manual for Army Cooks. Rev. edition, 1883. Washington, D.C.: Government Printing Office, 1883.

_____. The Ordnance Manual for the Use of the Officers of the United States Army. 2nd ed. Charleston: Evans & Cogswell, 1861.

_____. The Ordnance Manual for the Use of the Officers of the United States Army. 3rd ed. Philadelphia: J.B. Lippincott & Co., 1862.

_____. Regulations Concerning Barracks and Quarters For the Army of the United States, 1860. Washington, D.C.: George W. Bowman, 1861.

_____. Revised Regulations for the Army of the United States, 1861. Philadelphia: J.G.L. Brown, 1861.

_____. Quartermaster General's Office. Outline Description of U.S. Military Posts and Stations in the Year 1871. Washington, D.C.: Government Printing Office, 1871.

_____. Surgeon General's Office. Circular No. 3. Approved Plans and Specifications for Post Hospitals. Washington, D.C.: Government Printing Office, 1870.

_____. Surgeon General's Office. Circular No. 4. A Report on Barracks and Hospitals with Descriptions of Military Posts. Washington, D.C.: Government Printing Office, 1870.

_____. Surgeon General's Office. Circular No. 8. A Report on the Hygiene of the United States Army, with Descriptions of Military Posts. Washington, D.C.: Government Printing Office, 1875.

The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies. Washington, D.C.: Government Printing Office, 1880-1910.

SECONDARY SOURCES

Anson, Joseph. The New Encyclopedia of Furniture. New York: Crown Publishers, 1967.

Antique Clocks with Current Values. 1976-77 Edition. Paducah, Kentucky: Collector Books, 1977.

Boyer, Louise and H. Batterson Boyer, compilers and editors. The Dictionary of Antiques and the Decorative Arts. New York: Charles Scribners' Sons, 1967.

Brooks, Stewart. Civil War Medicine. Springfield, Illinois: Charles C. Thomas, 1966.

Butler, Joseph T. Candleholders in America, 1650-1900. New York: Crown Publishers, 1967.

Clary, David A. "These Relics of Barbarism: A History of Furniture in Barracks, Hospitals, and Guardhouses of the United States Army, 1800-1880." Harpers Ferry, West Virginia: U.S. National Park Service, 1982 (not yet published).

Cohen, Hal L. Official Guide to Bottles, Old and New. Florence, Alabama: House of Collectibles, 1975.

Copeland, Willis R. The Logan Guards of Lewistown, Pennsylvania. Lewistown, Pennsylvania: Mifflin County Historical Society, 1962.

Dornbusch, C.E., comp. Military Bibliography of the Civil War. 3 vols. New York: The New York Public Library, 1961.

Dyer, Frederick H. A Compendium of the War of the Rebellion. 3 vols. New York: Thomas Yoseloff, 1959.

Eggenberger, David. Flags of the U.S.A. New York: Thomas Y. Crowell, 1959.

Fernald, Graville. The Story of the First Defenders. Washington, D.C.: Clarence E. Davis, 1892.

Gould, Mary Earle. Early American Wooden Ware & Other Kitchen Utensils. Springfield, Massachusetts: The Pond-Eckberg Company, 1942.

Hammond, John Martin. Quaint and Historic Forts of North America. Philadelphia: J.B. Lippincott Company, 1915.

Haskin, William L. The History of the First Regiment of Artillery From Its Organization in 1821, to January 1st, 1876. Portland, Maine: B. Thurston and Company, 1879.

Hayden, Howard K. Billy Yank: Soldier of the North. Long Branch, New Jersey: The Drum Press, 1965.

Heitman, Francis B. Historical Register and Dictionary of the United States Army, From . . . 1789, to . . . 1903. 2 vols. Washington, D.C.: Government Printing Office, 1903.

Herskovitz, Robert M. Fort Bowie Material Culture. Tucson: University of Arizona Press, 1978.

Kendell-Lowther, Minnie. Marshall Hall and Other Potomac Points of Interest in Story and Picture. N.p.: 1925.

Ketcham, Sally Johnson. "Historic Furnishing Report: The Bake House: Fort Scott, Kansas." Omaha, Nebraska: Midwest Regional Office, National Park Service, 1979. Unpublished research report.

_____. "Historic Furnishing Report: The Dragoon Barracks: Fort Scott National Historic Site." Omaha, Nebraska: Midwest Regional Office, National Park Service, 1978. Unpublished research report.

_____. "Historic Furnishing Report: The Dragoon Stables: Fort Scott National Historic Site." Omaha, Nebraska: Midwest Regional Office, National Park Service, 1980. Unpublished research report.

_____. "Historic Furnishing Report: The Guardhouse: Fort Scott National Historic Site." Omaha, Nebraska: Midwest Regional Office, 1977. Unpublished research report.

_____. "Historic Furnishing Report: The Headquarters: Fort Scott National Historic Site." Omaha, Nebraska: Midwest Regional Office, National Park Service, 1978. Unpublished research report.

_____. "Historic Furnishing Report: The Magazine: Fort Scott National Historic Site." Omaha, Nebraska: Midwest Regional Office, National Park Service, 1978. Unpublished research report.

_____. "Historic Furnishing Report: Quartermaster Storehouse--H5-12: Fort Scott National Historic Site, Kansas." Omaha, Nebraska: Midwest Regional Office, National Park Service, 1979. Unpublished research report.

Kovel, Ralph and Terry. The Kovels' Antiques Price List. 14th ed. New York: Crown Publishers, 1981.

Lamps and Other Lighting Devices, 1850-1906. Des Moines, Iowa: Wallace-Homestead Book Co., 1972.

Landreau, Anthony N. America Underfoot: A History of Floor Coverings from Colonial Times to the Present. Washington, D.C.: Smithsonian Institution Press, 1976.

Lantz, Louise K. Old American Kitchenware, 1725-1925. New York: Thomas Nelson, Inc., 1970.

Lewis, Emanuel Raymond. Seacoast Fortifications of the United States: An Introductiory History. Washington, D.C.: Smithsonian Institution Press, 1970.

Lord, Francis A. Civil War Collector's Encyclopedia. Harrisburg, Pennsylvania: The Stackpole Company, 1965.

_____. Civil War Collector's Encyclopedia. Volumes II and III. West Columbia, South Carolina: Lord Americana & Research, Inc., 1975.

_____. They Fought for the Union. Harrisburg, Pennsylvania: The Stackpole Company, 1960.

McClure, Stanley W. "The Defenses of Washington, 1861-1865." National Capitol Parks: U.S. Department of the Interior. Reprint 1961. Unpublished research report.

_____. "The Restoration of the Drawbridge at Fort Washington, Md." Unpublished report. Fort Washington, Maryland: United States National Park Service, 1941.

McGarry, Thomas E. "Archeological Investigations for the Restoration of Old Fort Washington, Maryland. National Capitol Parks--East, 1977-78." 2 vols. Unpublished research report. United States National Park Service: Denver Service Center, 1980.

_____. "Preliminary Report of the Fort Washington Archeological Project." Denver, Colorado: National Park Service, 1978. Unpublished research report.

Milhollen, Hirst Dillin, and James Ralph Johnson. Best Photos of the Civil War. New York: Arco Publishing Co., Inc., 1961.

Milhollen, Hirst Dillon, and Milton Kaplan. Divided We Fought: A Pictorial History of the Civil War, 1861-1865. New York: The Macmillan Company, 1952.

Nathanson, David, comp. "Guide to the Trade Catalog Collection, Harpers Ferry Center Library." Harpers Ferry, West Virginia: U.S. National Park Service, 1981. Unpublished.

Ormsbee, Thomas H. Field Guide to American Victorian Furniture. Boston: Little, Brown and Company, 1952.

Peterson, Harold L. American Interiors. New York: Charles Scribners' Sons, 1971.

Phipps, Francis. The Collector's Complete Dictionary of American Antiques. New York: Doubleday & Company, 1974.

Phisterer, Frederick, comp. New York in the War of the Rebellion, 1861 to 1865. 3rd ed. 5 vols. Albany, New York: J.B. Lyon Company, 1912.

Powell, Benjamin B. "Archeological Investigations 'Old Fort' Area. Fort Washington, Maryland, May 12-23, 1958." Unpublished research report, National Park Service.

Reid, Whitelaw. Ohio in the War: Her Statesmen, Her Generals, and Soldiers. 2 vols. Cincinnati: Moore, Wilstock & Baldwin, 1868.

Rice, Margery. "Old Fort Washington--Forgotten Stronghold." The Sunday Star. July 31, 1932, pp. 3-4.

Ripley, Warren. Artillery and Ammunition of the Civil War. New York: Van Nostrand Reinhold Company, 1970.

Rivera, Betty and Ted. Inkstands & Inkwells: A Collectors' Guide. New York: Crown Publishers, Inc., 1973.

Robinson, Willard B. American Forts: Architectural Form and Function. Fort Worth, Texas: Amon Carter Museum of Western Art, 1977.

Rodenbough, Theodore F., and William L. Haskin. The Army of the United States: Historical Sketches of Staff and Line with Portraits of Generals-In-Chief. New York: Maynard, Merrill & Co., 1896.

Roe, Alfred Seelye. The Ninth New York Heavy Artillery. Worcester, Massachusetts: By the author, 1899.

Seale, William. The Tasteful Interlude: American Interiors Through the Camera's Eye, 1860-1917. 2nd ed., rev. Nashville, Tennessee: American Association for State and Local History, 1981.

Shaw, Horace H. The First Maine Heavy Artillery, 1862-1865. Portland, Maine: n.p., 1903.

Steiner, Paul E. Diseases in the Civil War: Natural Biological Warfare in 1861-1865. Springfield, Illinois: Charles C. Thomas, 1968.

Stern, Philip Van Doren. They Were There: The Civil War in Action as Seen by its Combat Artists. New York: Crown Publishers, Inc., 1959.

Sullivan, Charles J. Army Posts and Towns. Burlington, Vermont: Interstate Printing Co., 1935.

Swedberg, Robert and Harriet. Victorian Furniture: Styles and Prices. Book I Revised. Des Moines, Iowa: Wallace-Homestead Book Co., 1976. [Revised 1981].

Thompson, Heber S. The First Defenders. N.p.: n.p., 1910.

Tomlinson, Charles, ed. Cyclopedia of Useful Arts, Mechanical and Chemical, Manufacturing, Mining, and Engineering. 2 vols. London & New York: George Virtue & Co., 1854.

U.S. Department of the Interior. History Section. National Capitol Parks. "Historical Orientation Report: Officers' Quarters, Fort Washington, Maryland." Unpublished research report, 1958.

Weinert, Richard P., Jr., and Colonel Robert Arthur. Defender of the Chesapeake: The Story of Fort Monroe. Annapolis, Maryland: Leeward Publications, Inc., 1978.

Whitman, William E.S., and Charles H. True. Maine in the War for the Union: A History of the Part Borne by Maine Troops in the Suppression of the American Rebellion. Lewiston: Nelson Dingley Jr. & Co., Publishers, 1865.

Wiley, Bell Irwin. The Life of Billy Yank: The Common Soldier of the Union. New York: The Bobbs-Merrill Company, 1952.

Williams, Hermann Warner, Jr. The Civil War: The Artists' Record. Boston: Beacon Hill Press, 1961.

ILLUSTRATIONS

Figure 1. "Plan of a part of Waberton showing the Position and Plan of Fort Washington on the Potomack," c. 1815.

Drawer 56. Bureau Dec 5th 1839.

Sheet 3.

Plan of a part of Waberton

Shewing the Position and Plan of

Fort Washington on the Potomack

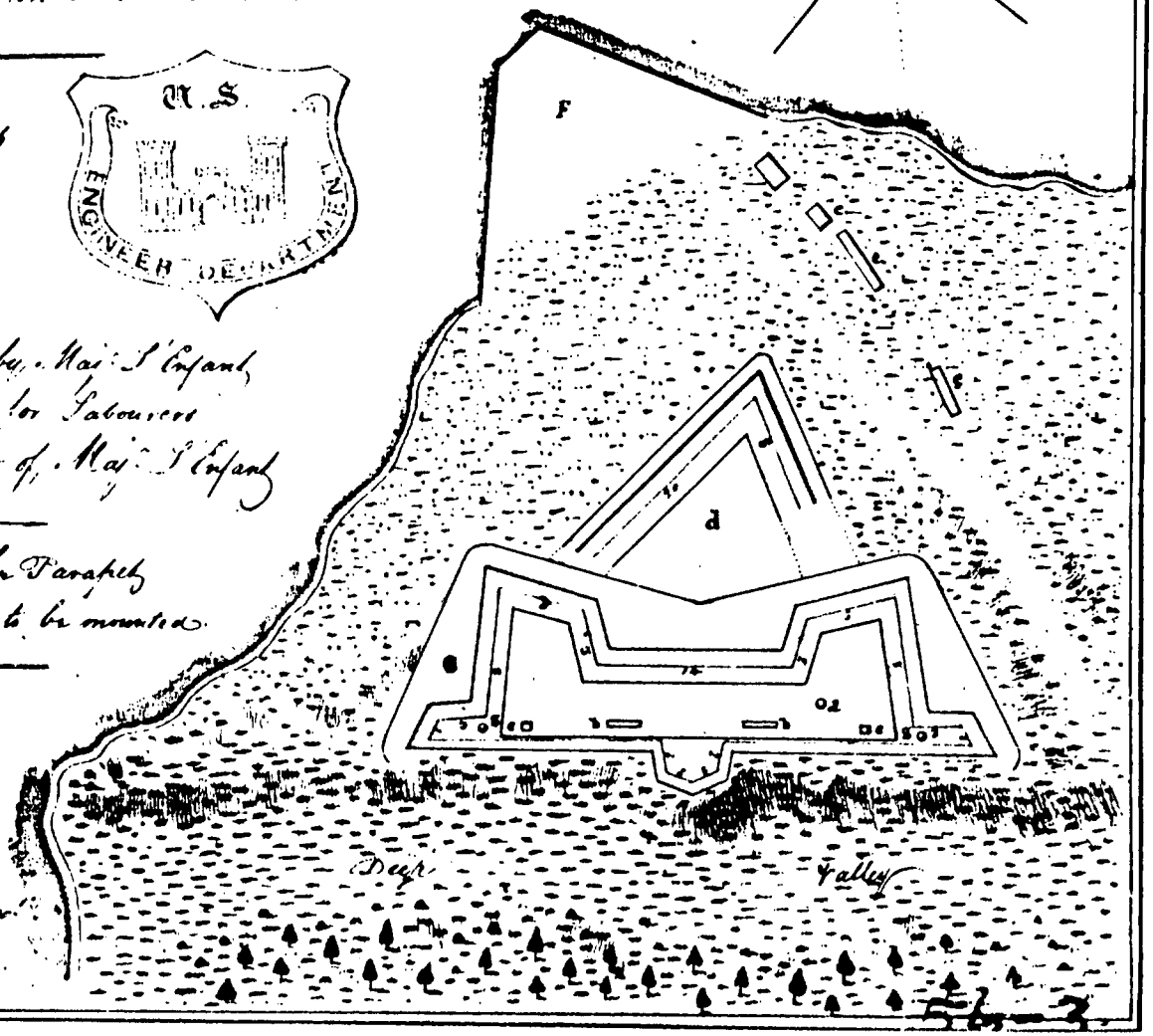
ENGR DEPT
U. STATES
TOPL BUREAU

U.S. ENGINEER DEPARTMENT

References

a Block house
b Barracks
c. Magazines
d Rawlin commenced by Maj. L'Enfant
e Temporary Barracks for Labourers
f Wharf built by order of Maj. L'Enfant
g. Martello Towers

Note The figures round the Parapet [illegible] Guns to be mounted



Scale of Feet 200 to an Inch

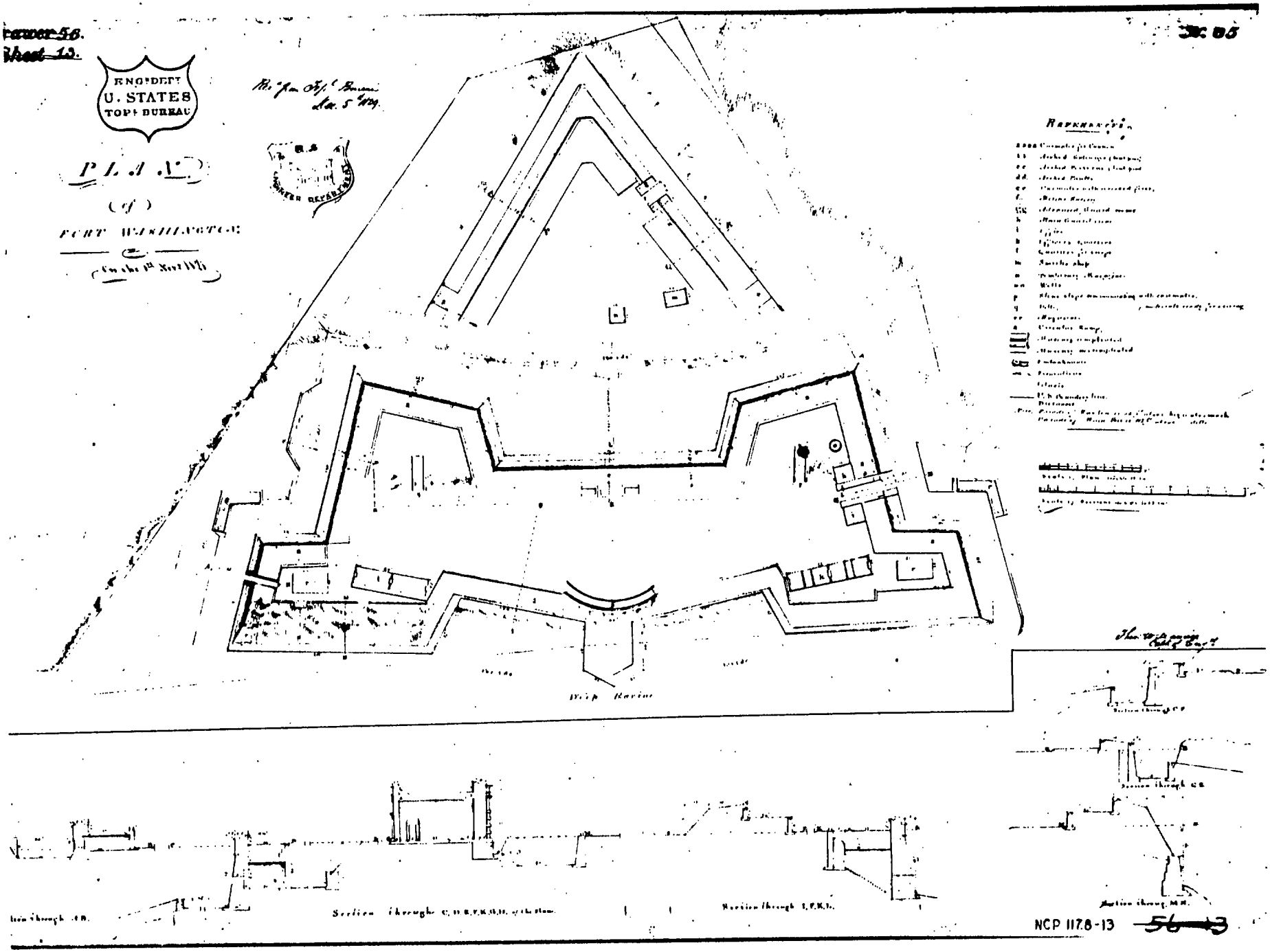
FILE COPY
RETURN PROMPTLY TO
NATIONAL CAPITAL PARKS
MAP FILES

Figure 2. "Plan of Fort Washington on the 1st Novr. 1821," by Theodore W. Maurice, Captain of Engineers.

Drawer 56.
Sheet 13.

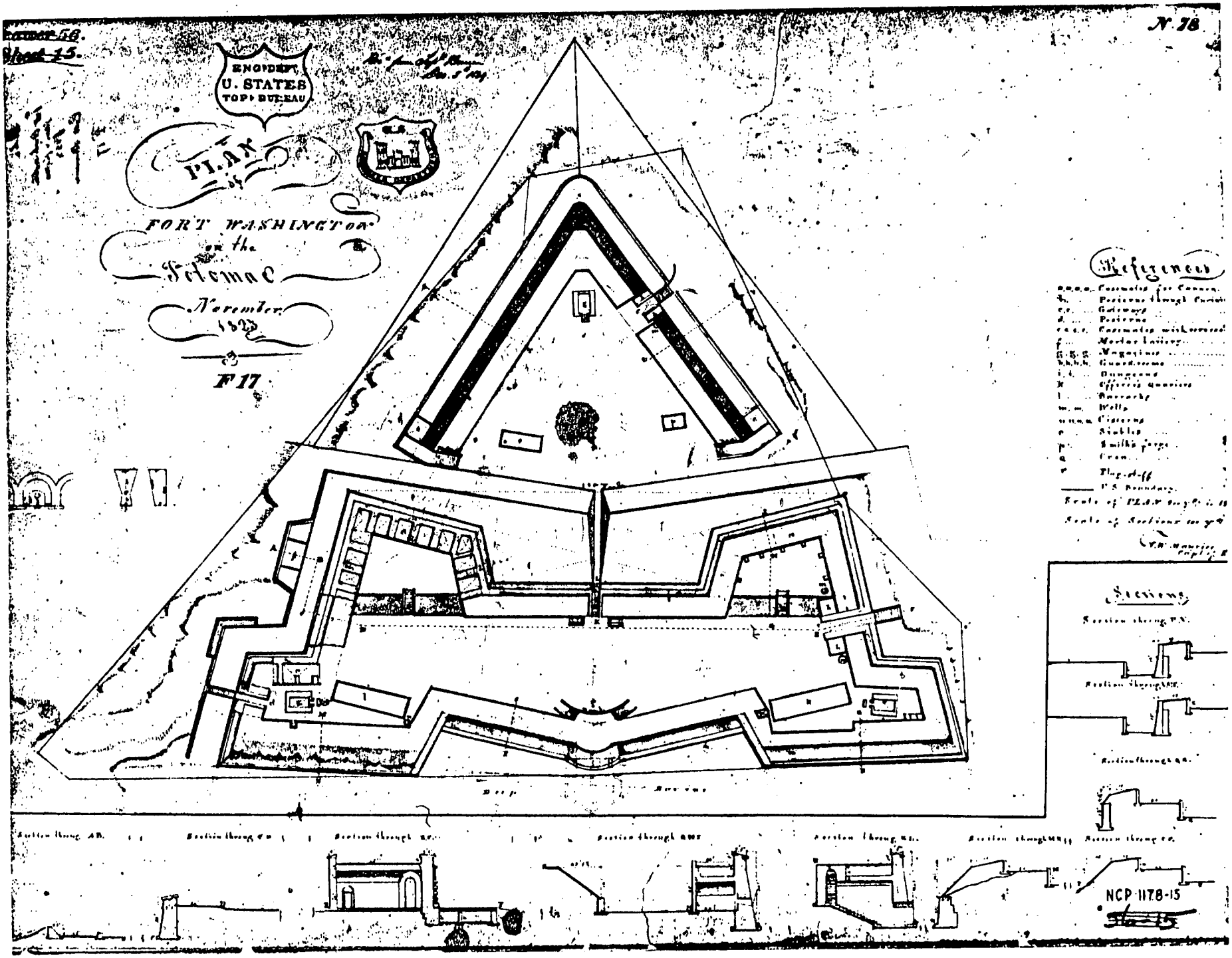
ENGINEER
U. STATES
TOPL BUREAU

PLAN
(of)
FORT WASHINGTON



NCP 117.8-13 ~~56-13~~

Figure 3. "Plan of Fort Washington on the Potomac November 1823," by Theodore W. Maurice, Captain of Engineers.



Sheet 15.
N. 78
ENG. DEPT.
U. STATES
TOP. BUREAU
PLAN
of
FORT WASHINGTON
on the
Potomac
November
1823
F 17
References
Sections
NCP 1178-15

Figure 4. Ground Plan of Fort Washington, c. 1871.

Source: Record Group 77, Miscellaneous Forts File, Sheet 16, National Archives.

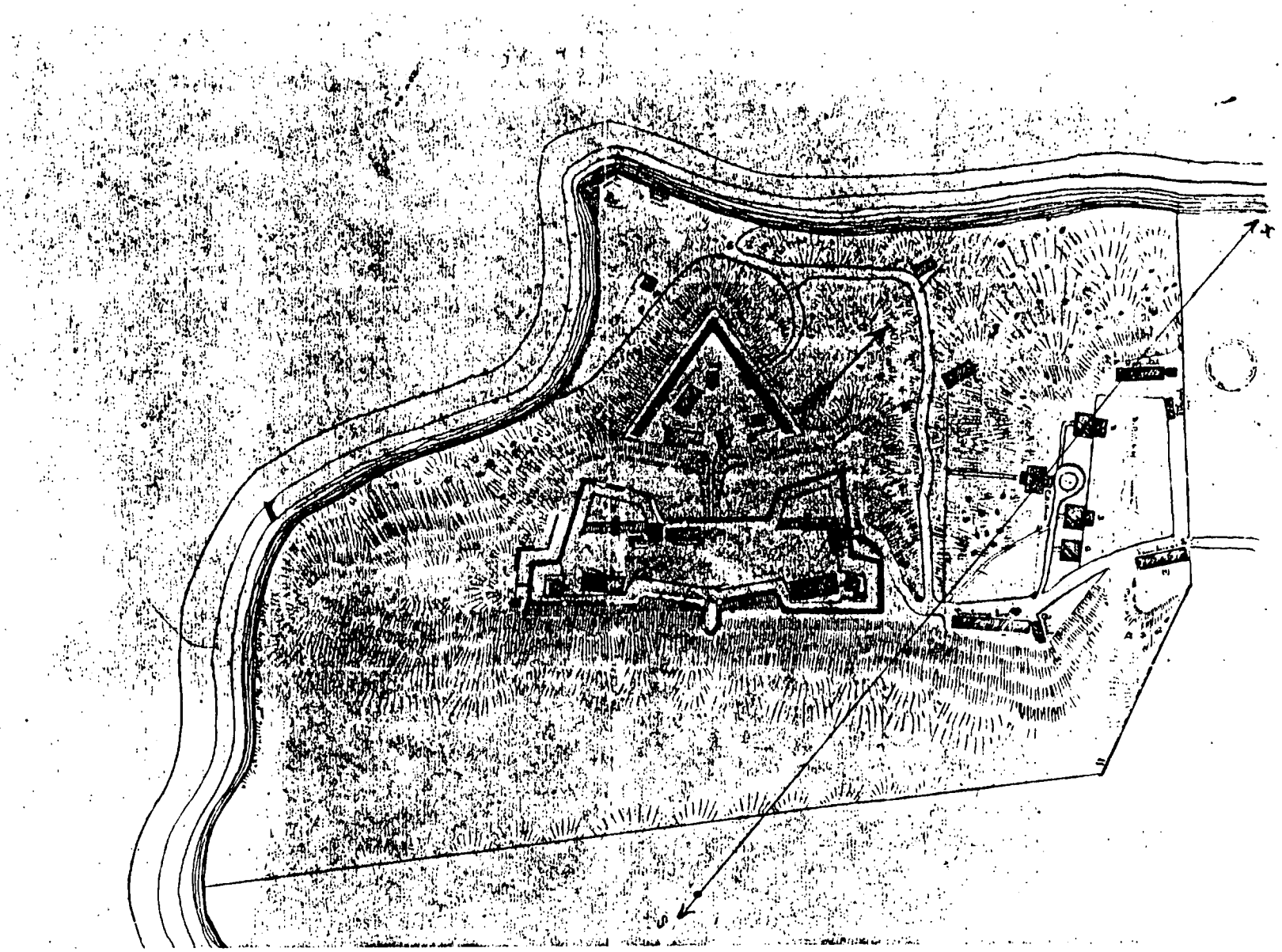
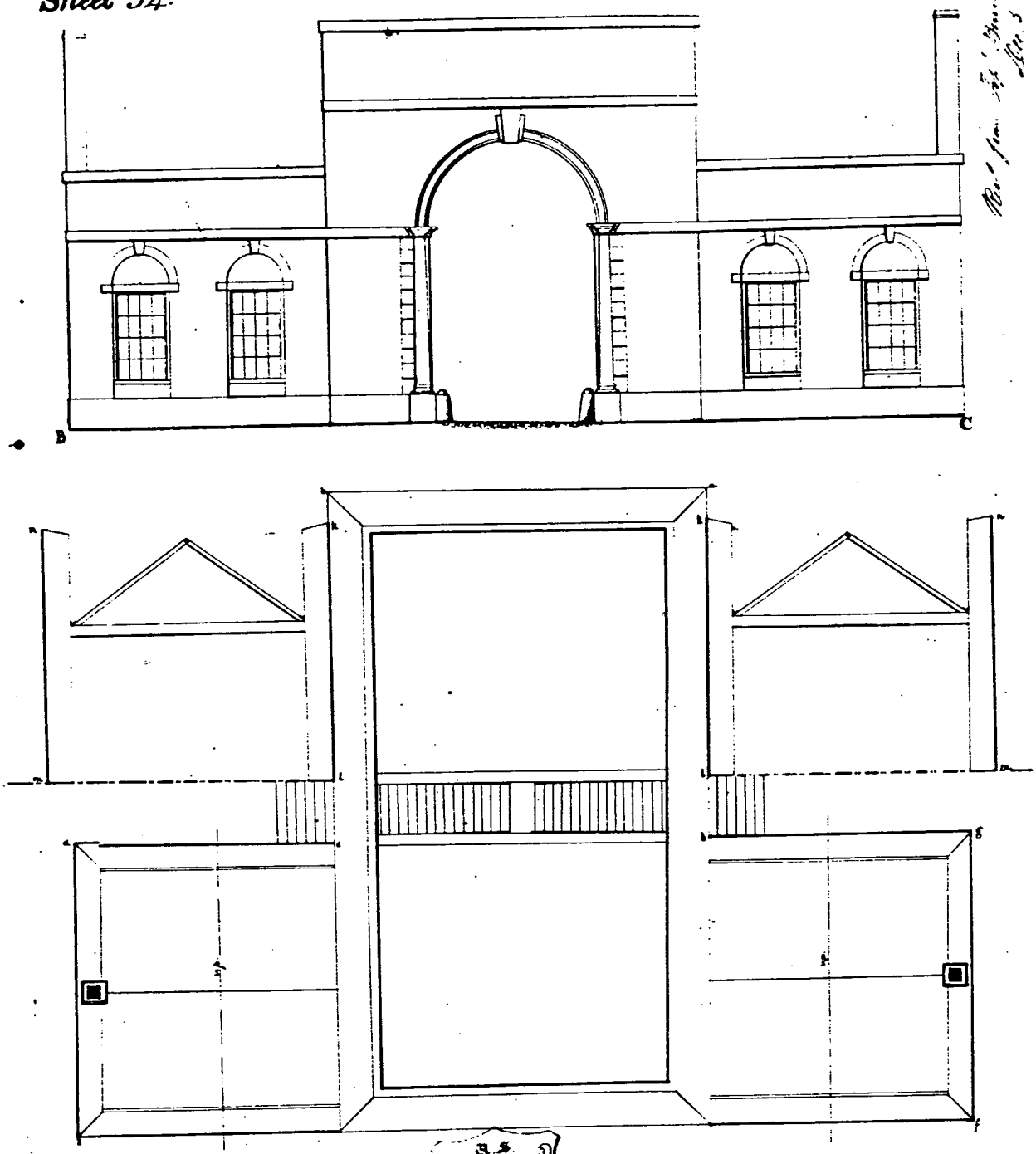


Figure 5. Elevations of Gateway, Fort Washington, by John W. Barry, before December 5, 1839.

Source: RG 79: 117.8-34, National Archives.

Drawer 56.
Sheet 34.



U.S. ENGINEER DEPARTMENT

References

BC .... Front of Gateway as seen from the Terra Plain

abcdefgh .... Horizontal projection.

klmn .... Vertical Section of the wings.

up .... Sinus of vertical Plane

Scale, 8 feet 3 inches to the inch.

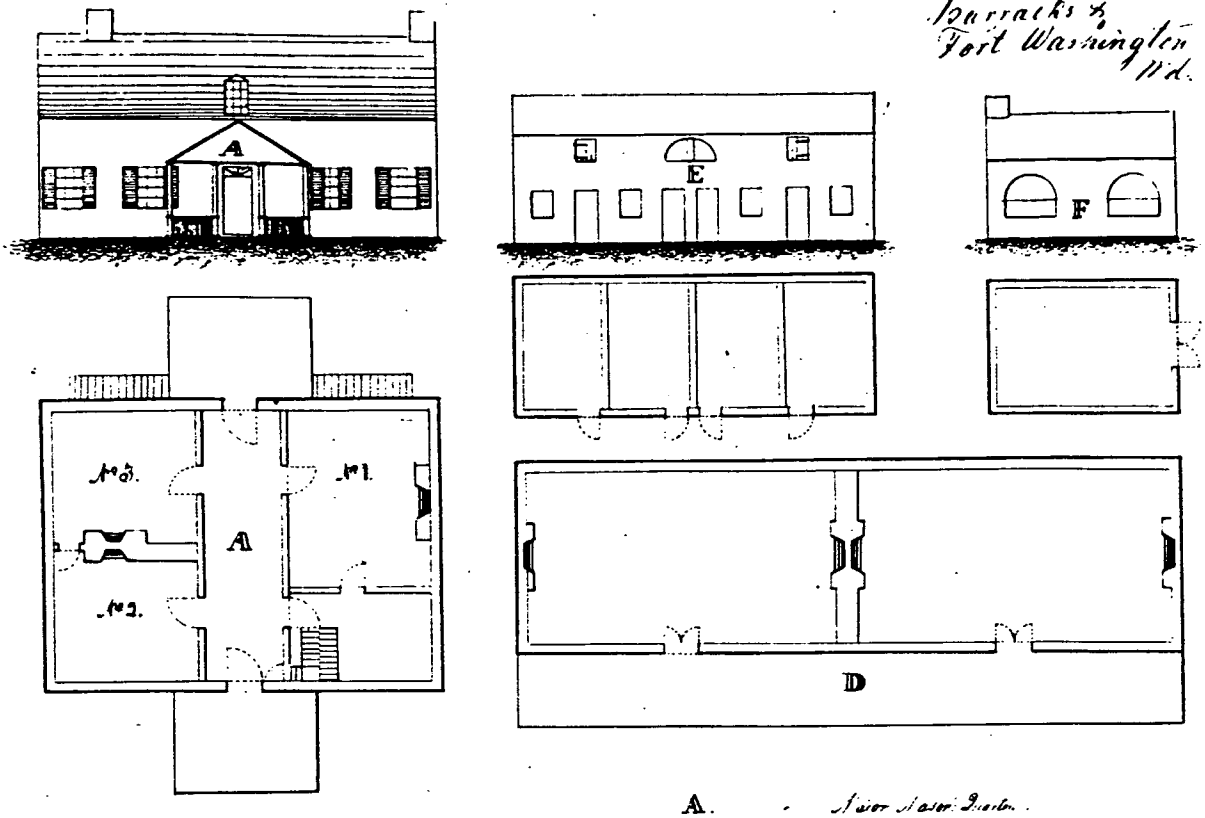
56-34

NCP 117.8-34

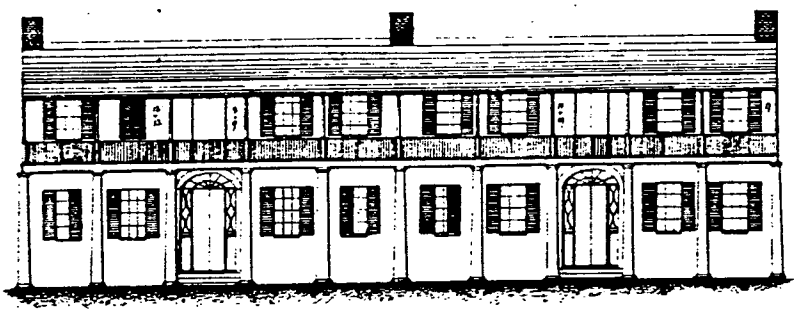
Figure 6. "Barracks &c Fort Washington, Md.," drawn by J. Waller Barry, Lt. of 1st Artillery. Undated, c. 1834. This shows (A) Commanding Officer's Quarters, (B) Lt. Barry's Quarters, (C) Officers' Quarters, (D) Enlisted Men's Quarters, (E) Stable, and (F) Blacksmith Shop.

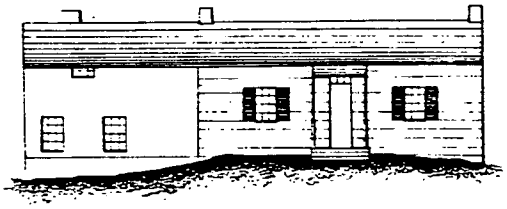
Source: RG 79: 117.8-22, National Archives.

Barracks &
Fort Washington
Md.



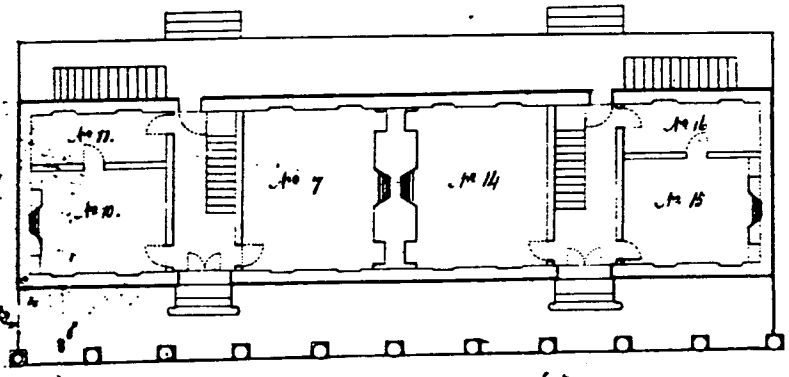
A. Major Mason's Quarters.
B. Lieut Barry's
C. Lieut Machan's Chairmen & 1st Sergeant Brown
D. Quarters for enlisted men; front similar to C.
E.F. Stable & Blacksmith Shop.

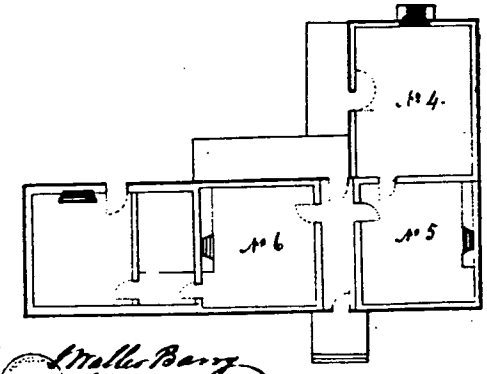




C

B





feet
Scale

L Waller Barry
1st Art

22.

Figure 7. Plans and Elevation of Enlisted Men's Barracks, Fort Washington, undated.

Source: RG 79: 117.8-45, National Archives.

56745

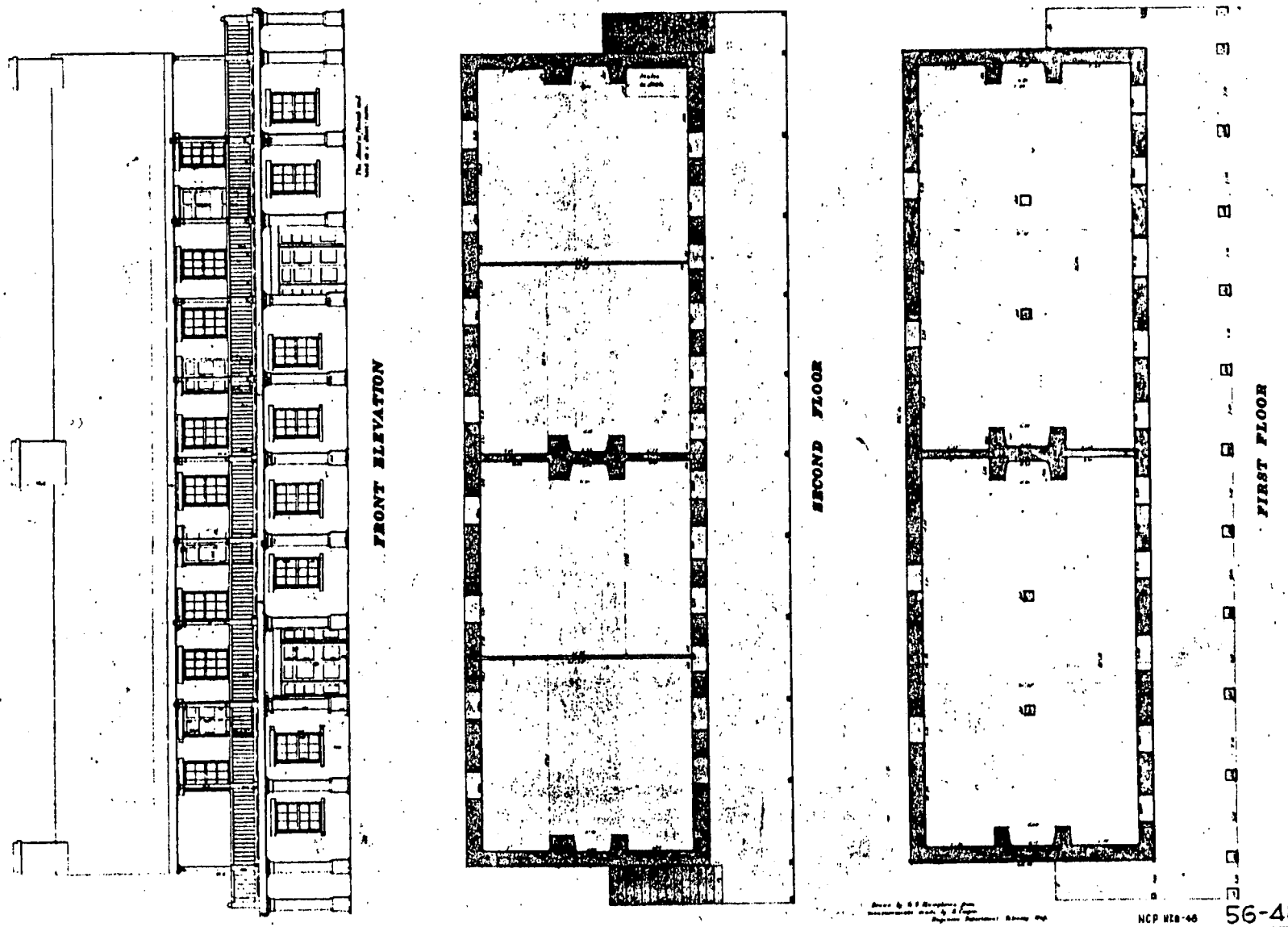
Figure 8. "Elevation and Plans of Soldiers' Barracks, Fort Washington," drawn by G.C. Humphries after Samuel Cooper, February 1849.

Source: RG 79: 117.8-48, National Archives.

FORTIFICATIONS. MARYLAND.

Drawer 56.
Sheet 48.

ELEVATION & PLANS OF SOLDIERS' BARRACKS,
FORT WASHINGTON. **Scale, 1 Inch to 5 Feet.**

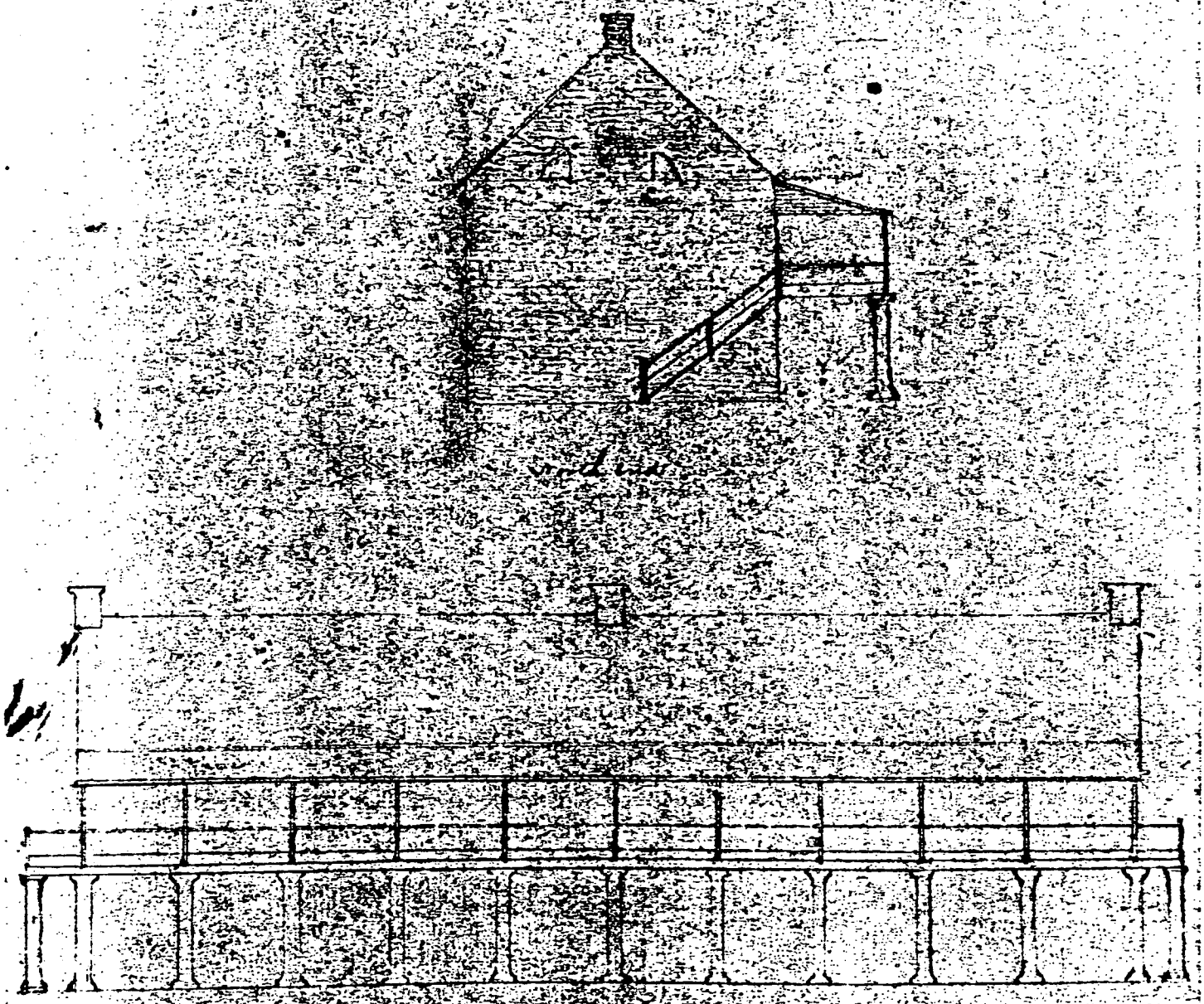


NCP HEB-48 56-48

Figure 9. Elevations of Enlisted Men's Barracks, "Co. A Qrs," c. 1867.

Source: RG 77: 10, National Archives.

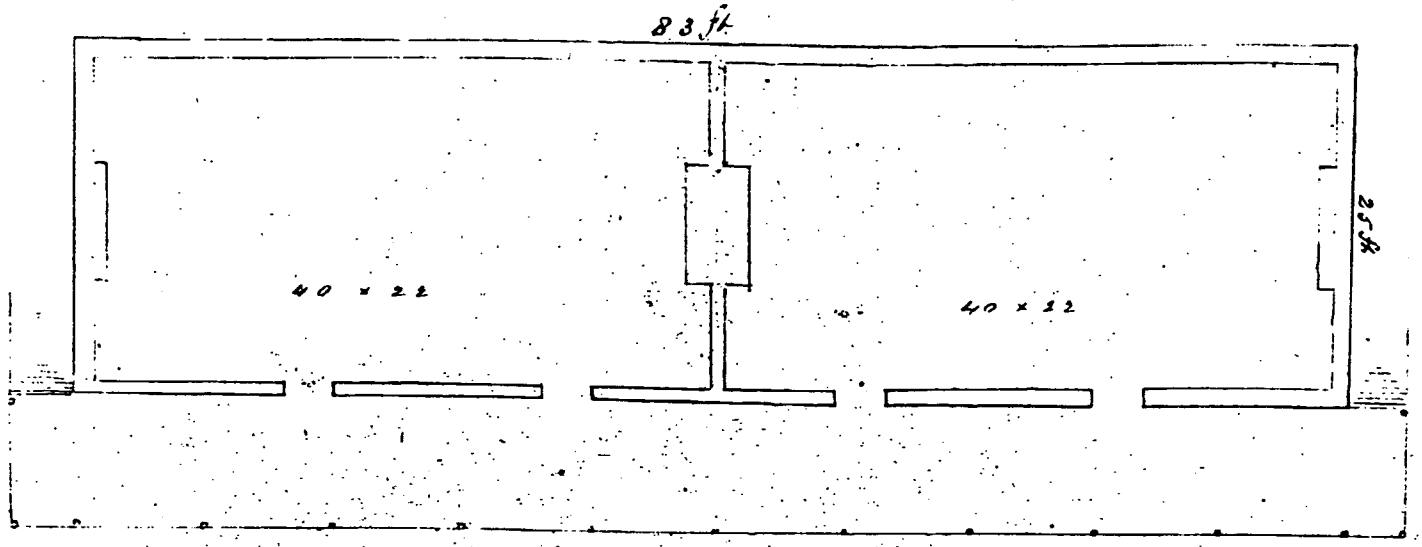
Co-it Gps -



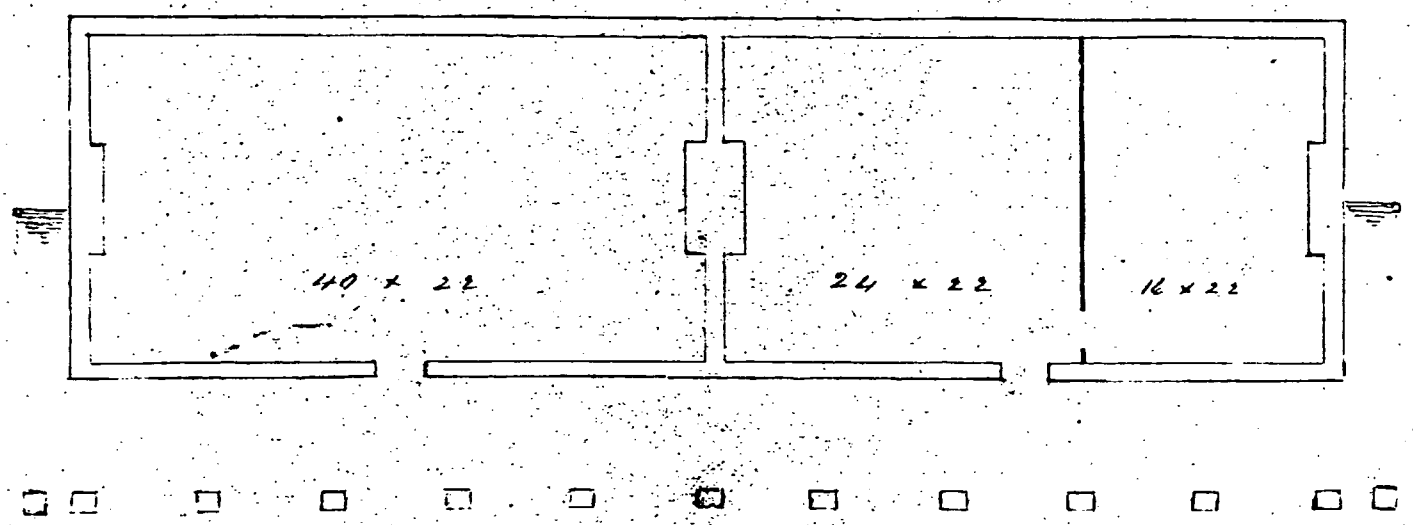
Elevation - out side

Figure 10. Floor Plans, Enlisted Men's Barracks, c. 1867.

Source: RG 77: 11, National Archives.



Ground plan - 2nd story.



Ground plan - 1st story.

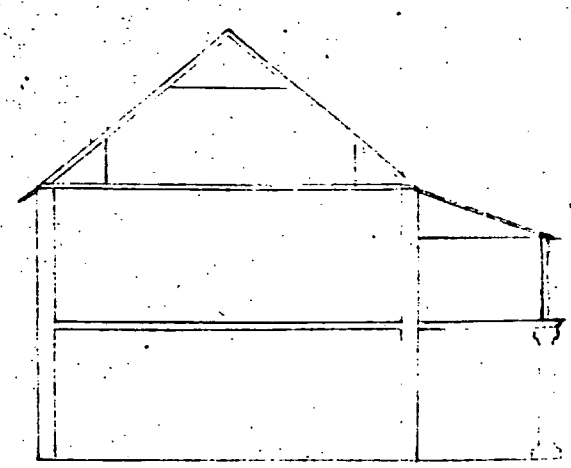
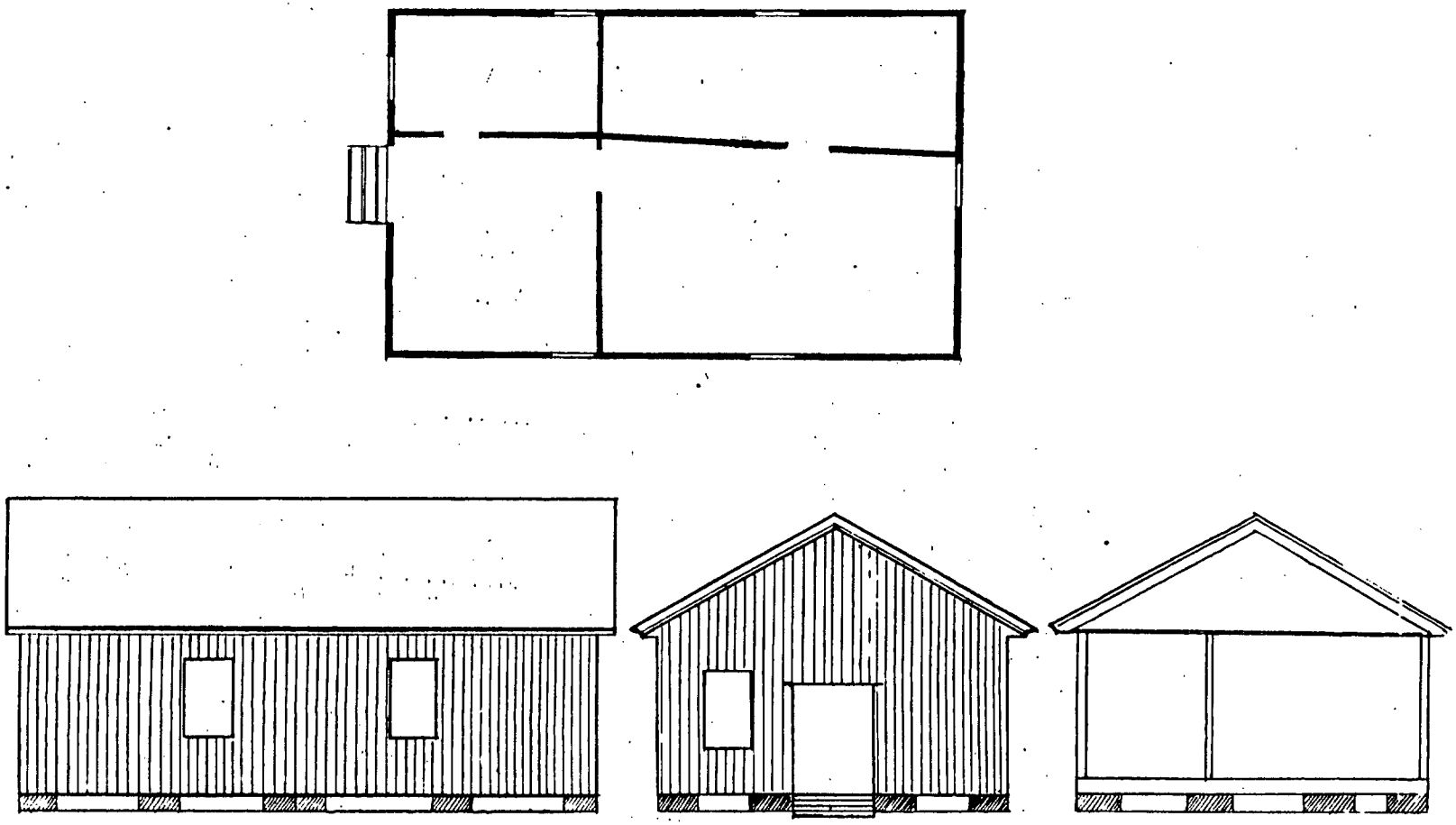


Figure 11. "Commissary Store House," Fort Washington, plan and elevations by Col. Van Vliet, April 29, 1871.

Source: RG 77: 3, National Archives.

Fort Washington Md.

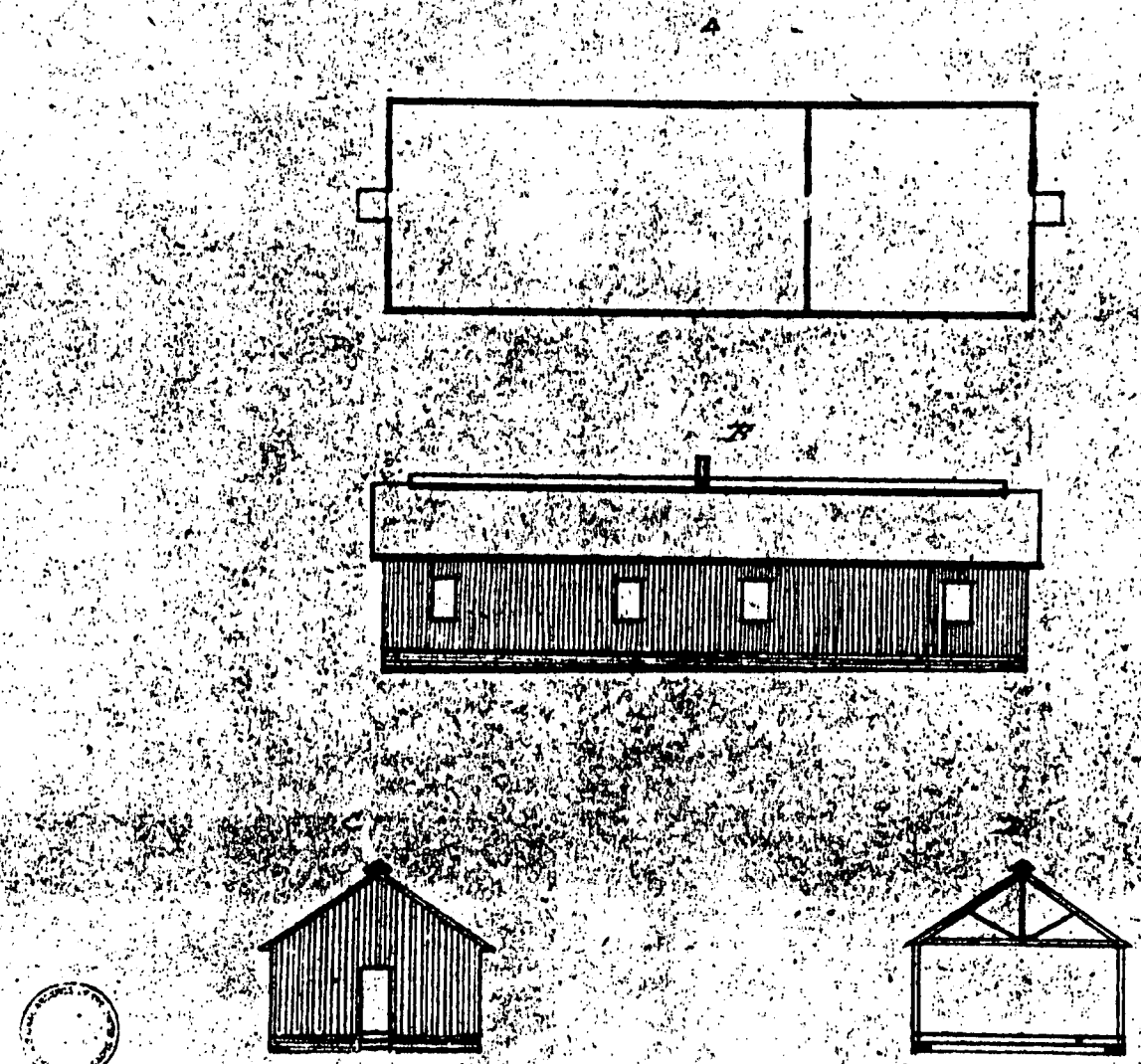


This and accompanying sketches furnished for file by
Geo Van Vliet Apl 29-71 —
See 1968. QMCO 1871

Figure 12. "School Room & Flour Store Room" (Commissary Store Room), plan and elevations by Van Vliet, April 1871.

Source: RG 77: 4, National Archives.

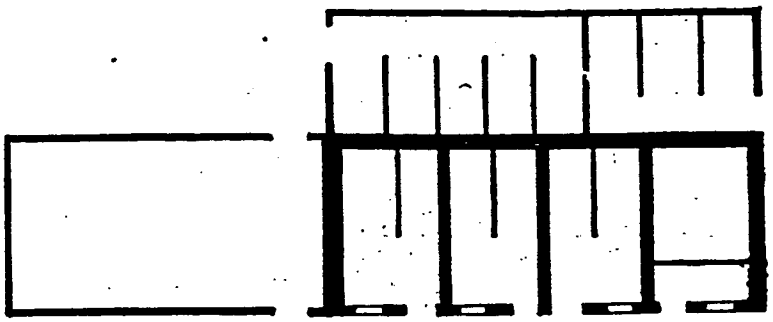
Fort Washington Md



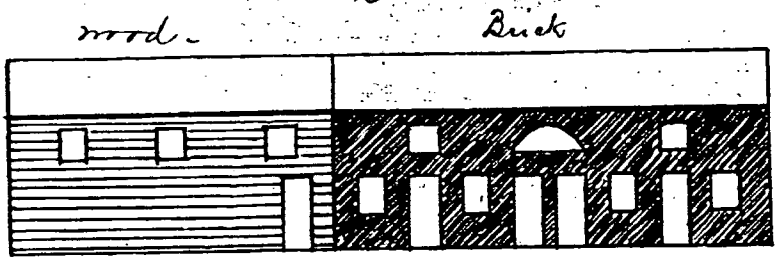
Scale 16 ft. to one inch.

Figure 13. "Stables,", plan and elevations by Van Vliet, April 1871.

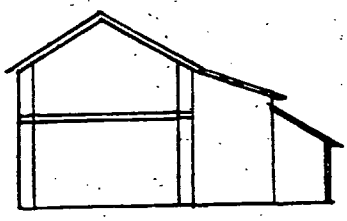
Source: RG 77: 5, National Archives.



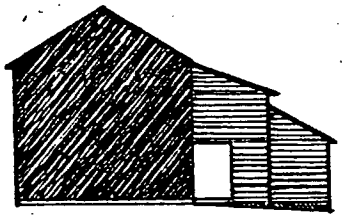
b



d



c

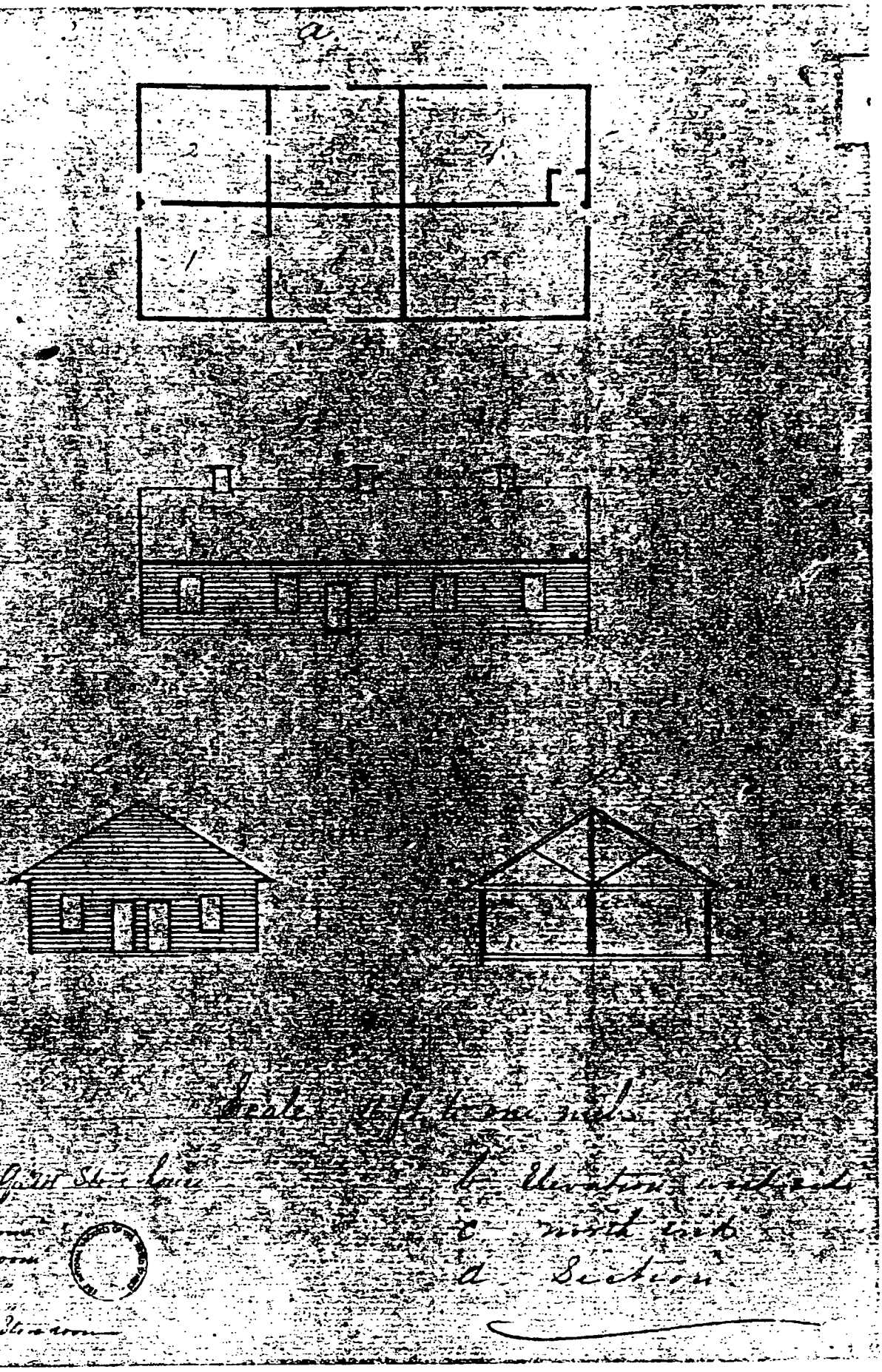


Scale - 16 ft to one in

Stables
3rd plan
- Elevation west side
South end
Section -

Figure 14. Quartermaster Store House, Fort Washington, plans and elevations by Van Vliet, April 1871.

Source: RG 77: 6, National Archives.

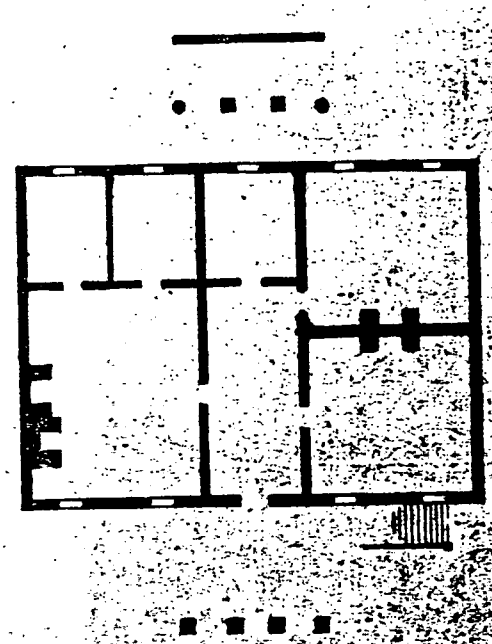


Fort Washington Md

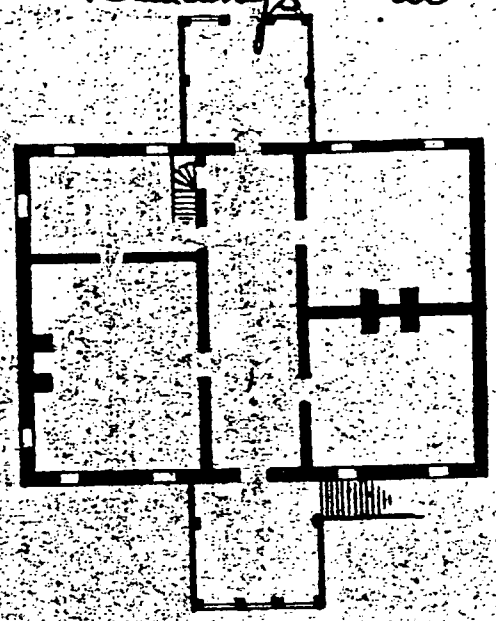
Figure 15. Commanding Officer's Quarters ("C.O. Qrs"), Fort Washington, plans and elevations by Van Vliet, April 1871.

Source: RG 77: 8, National Archives.

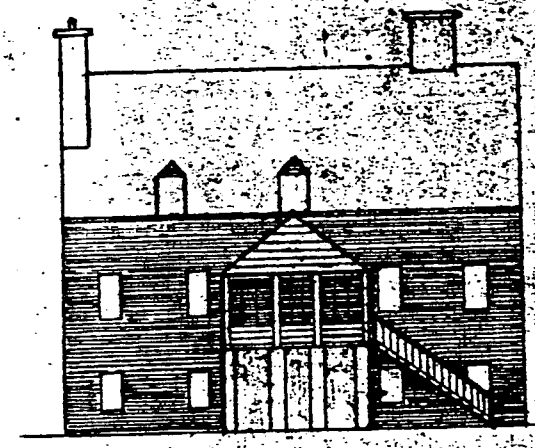
Buildings at Fort

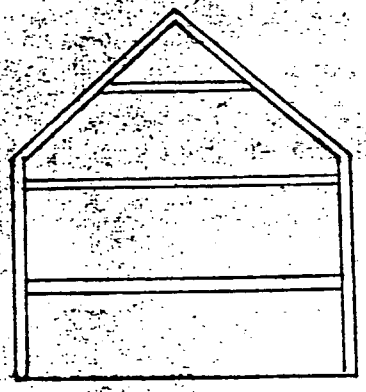


1st Story



2nd Story



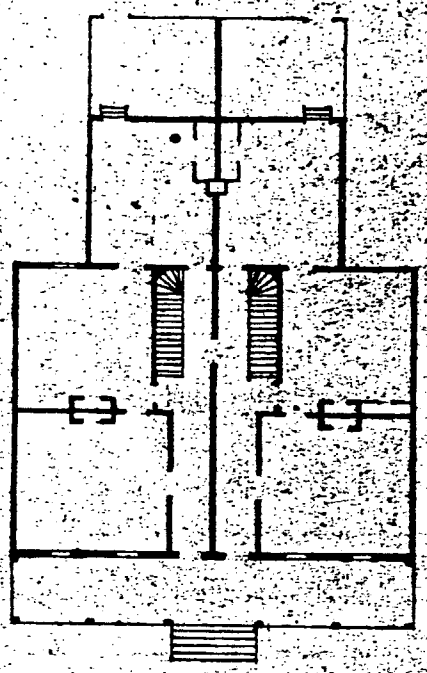


Elevation – south side

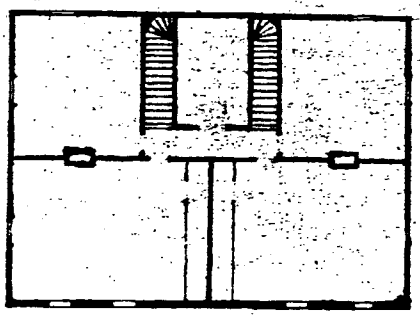
This and accompanying sketches were furnished for file in QMG.O. Apl 14-71 by Geo Van Vliet — See 1682 QMGO 1871 —

Figure 16. Officers Quarters (new), Fort Washington, plans and elevations by Van Vliet, April 1871.

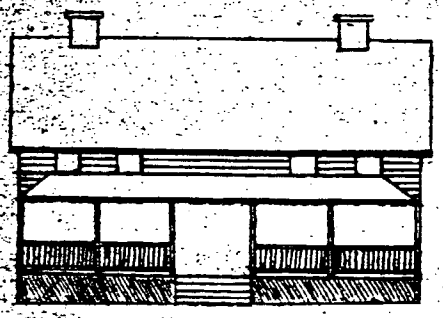
Source: RG 77: 9, National Archives.



1st Story



2d Story



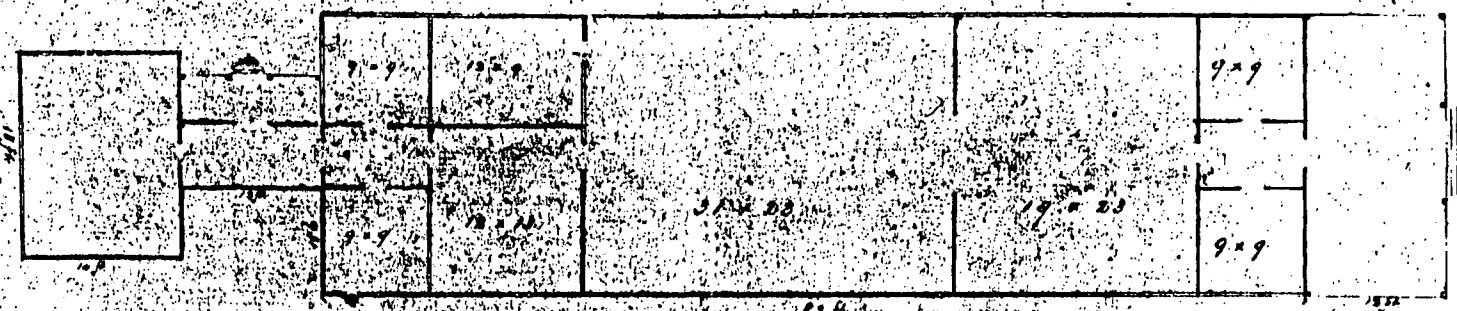
Elevation: south side

Scale: 16 ft. to one inch.

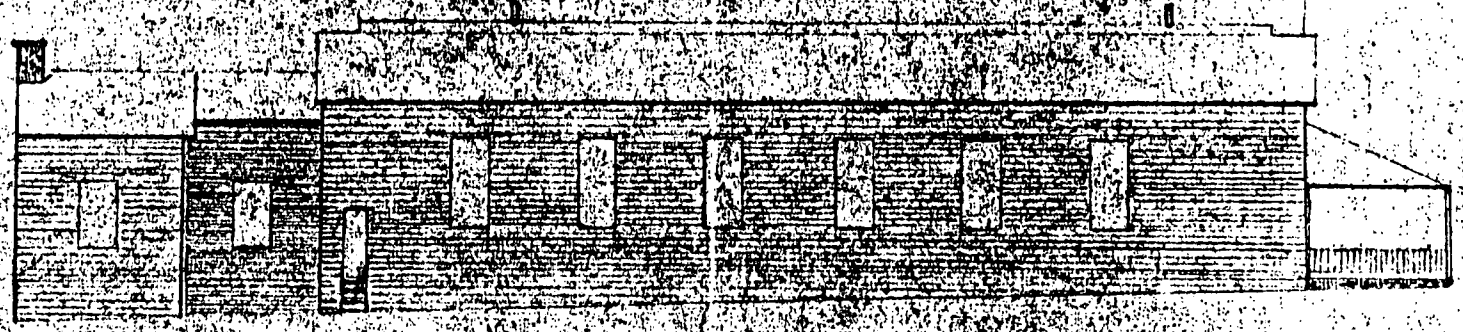
Figure 17. "Hospital," Fort Washington, plans and elevations, c. 1867.

Source: RG 77: 15, National Archives.

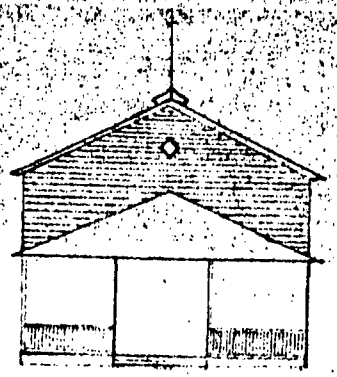
Hospital



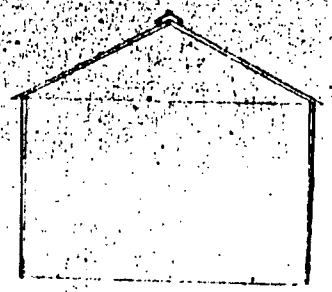
Hospital Ground Plan



Elevation - East Side



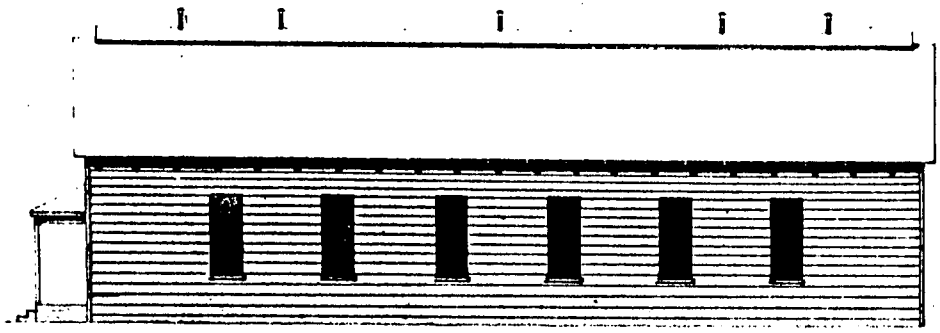
South end



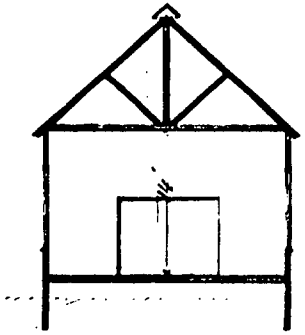
Section

Figure 18. "Hospital at Fort Washington," plans and elevations, 1872.

Source: RG 77: 20, National Archives.

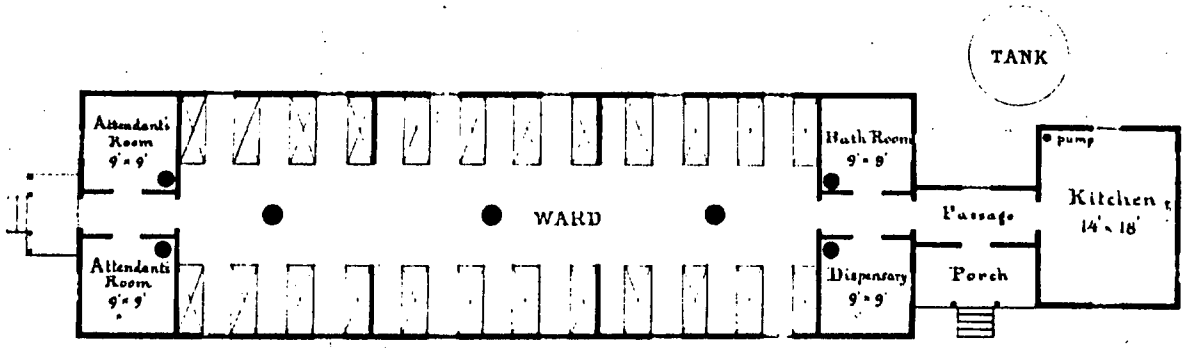


Elevation

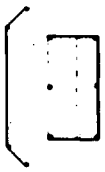


Section

Dead House



Plan



Sink

HOSPITAL AT FORT WASHINGTON

Cost, including water fixtures $4135.

MARYLAND.

Figure 19. "Co. M Qrs," (New Enlisted Men's Barracks), Fort Washington, c. 1867.

Source: RG 77: 12, National Archives.

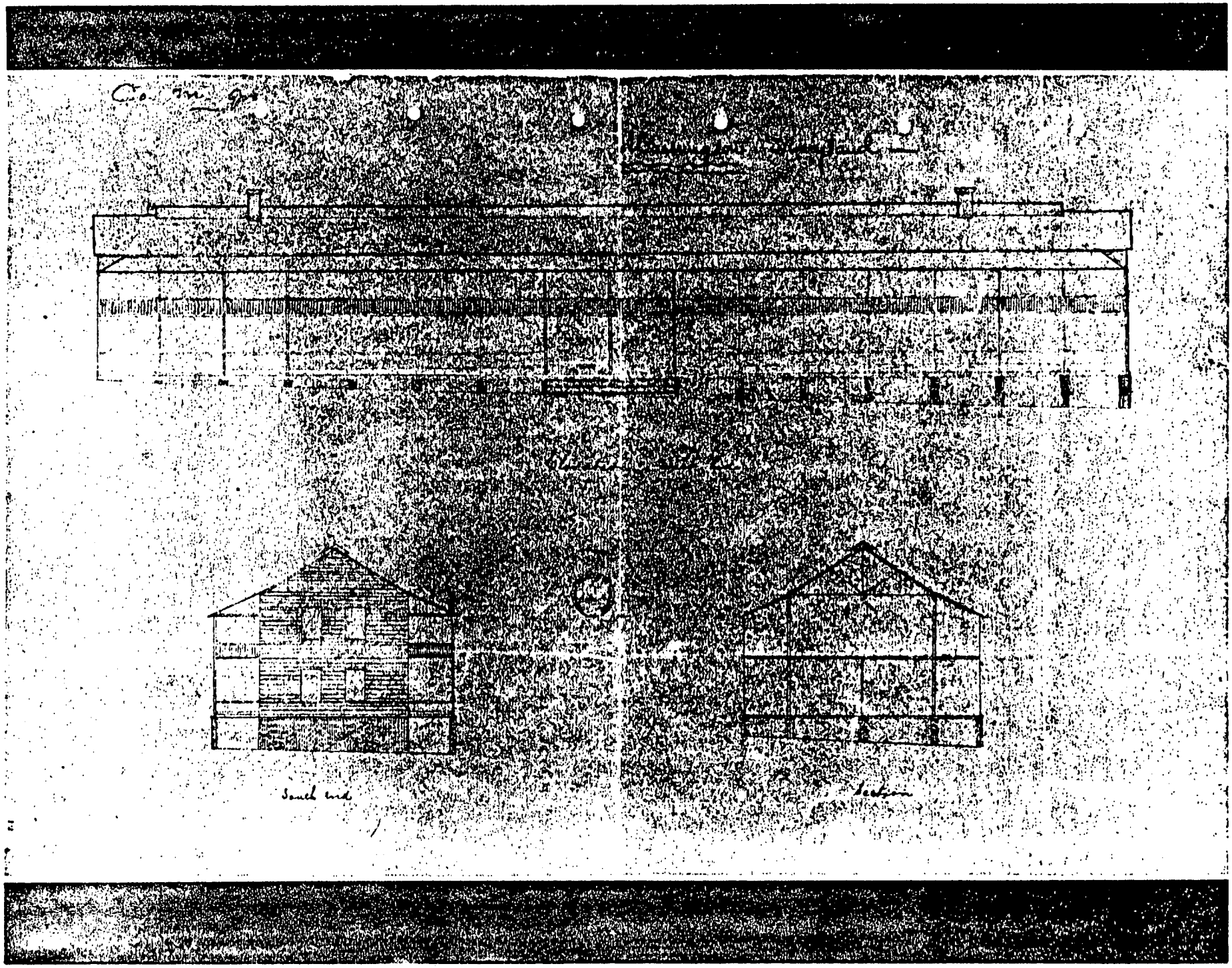
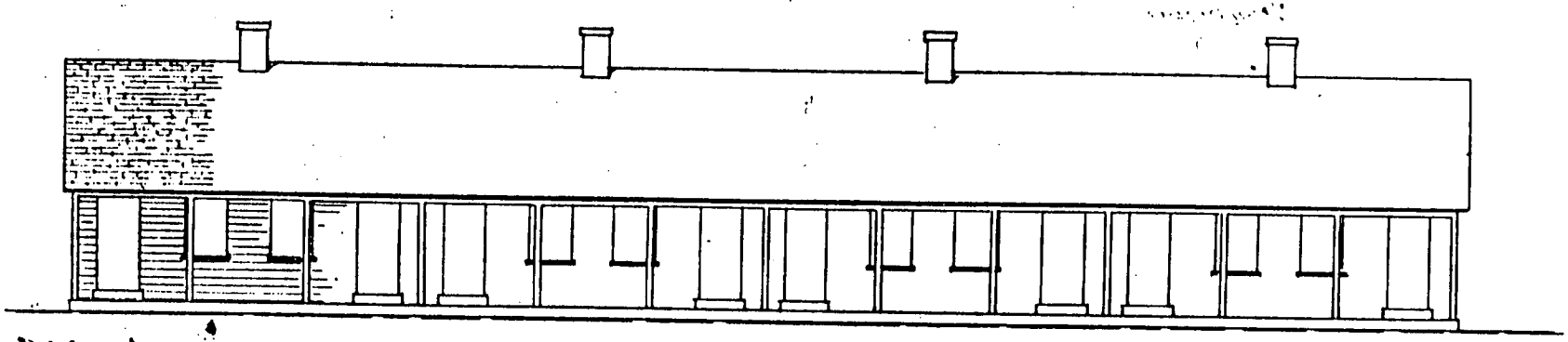
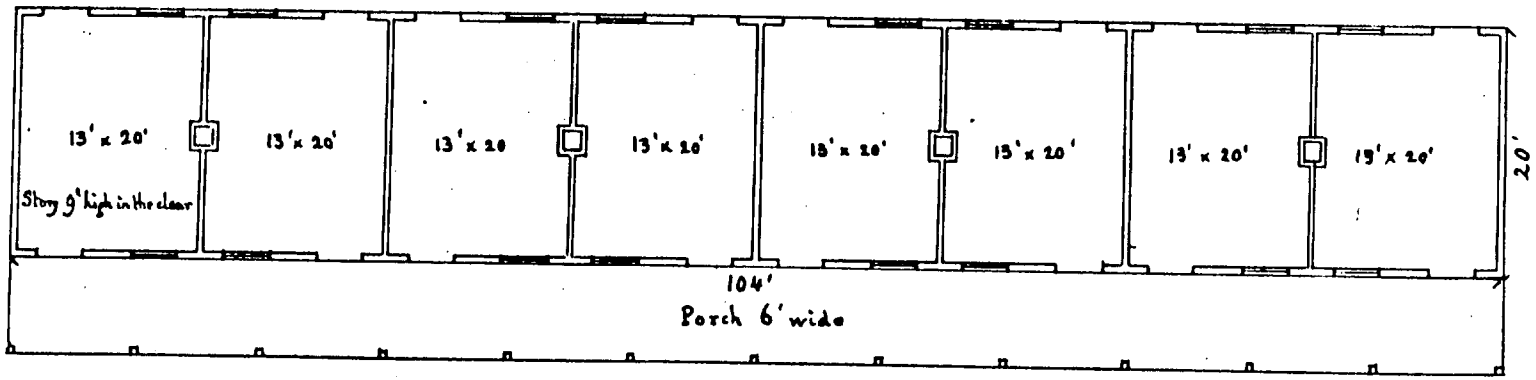

Co. m. gr.
Sauch end
Section

Figure 20. "Quarters for Eight Laundresses at Fort Washington," plans and elevations, 1868.

Source: RG 77: 19, National Archives.



Elevation



N.B.
To be built of new material. Estimated cost $2,000.
Quarters for Hospital Steward and matrons at Fort Washington
to be the same size as the Ord. Sergt's Qrs at Fort Rankin,
to be built of new material and to cost about $[illegible]

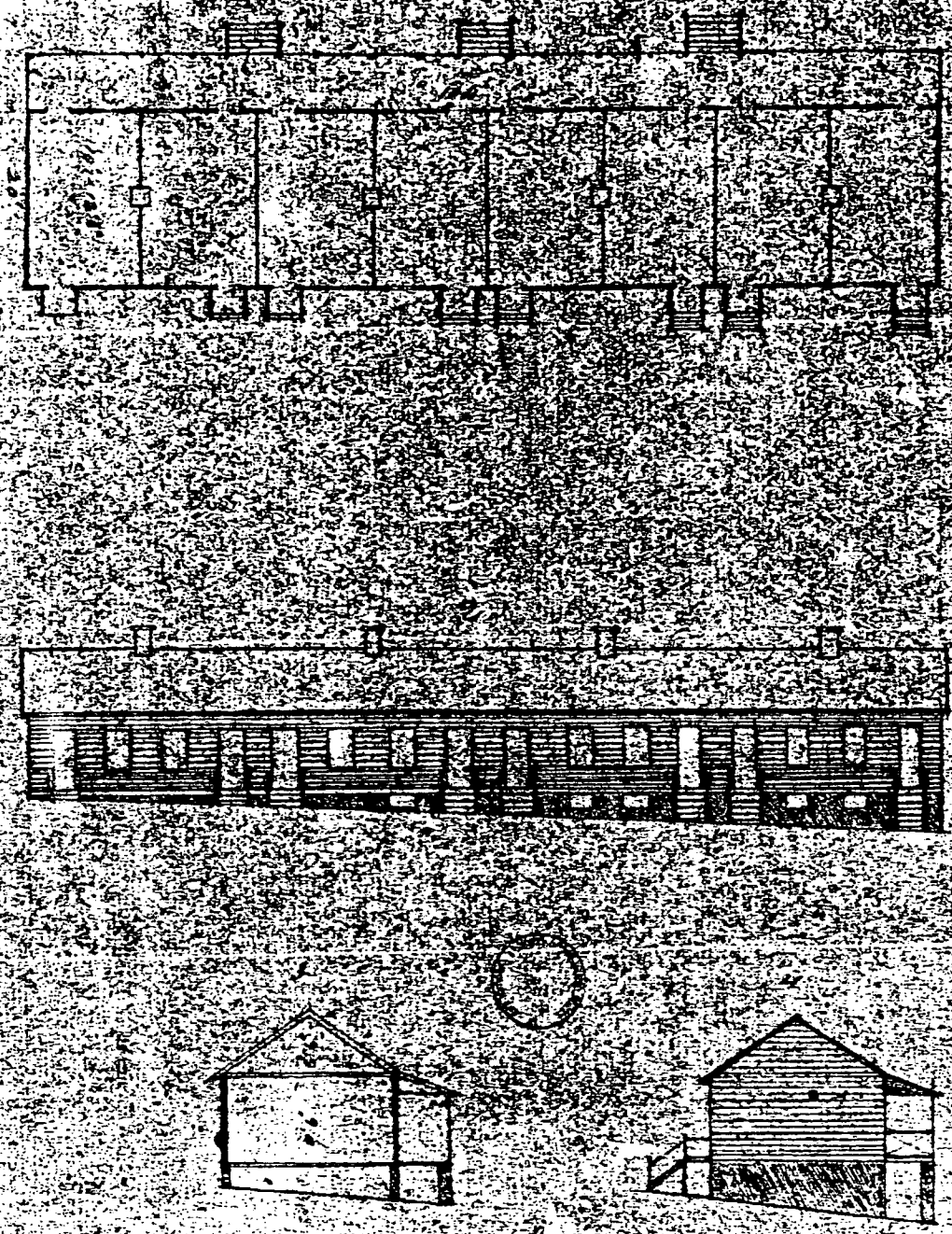
Quarters for Eight Laundresses

AT FORT WASHINGTON

19

Figure 21. "Laundresses Qrs," Fort Washington, plans and elevations, 1868.

Source: RG 77: 14, National Archives.

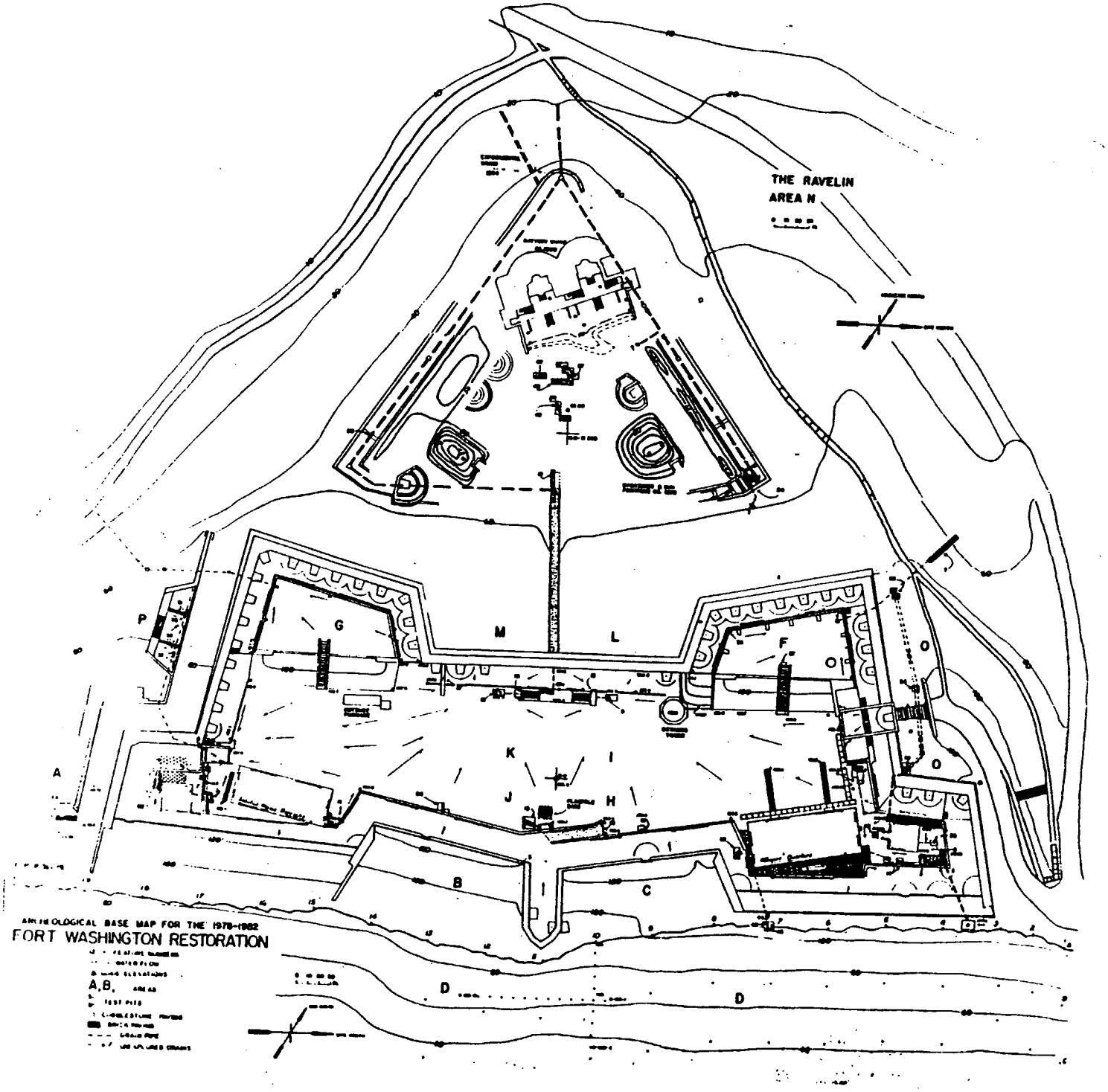


Scale 16 ft. to one inch

1. Plan
2. Elevation, outside
3. Section
4. End view, south

Figure 22. "Archeological Base Map for the 1978-1982 Fort Washington Restoration," National Park Service, showing location of original flagstaff foundations.

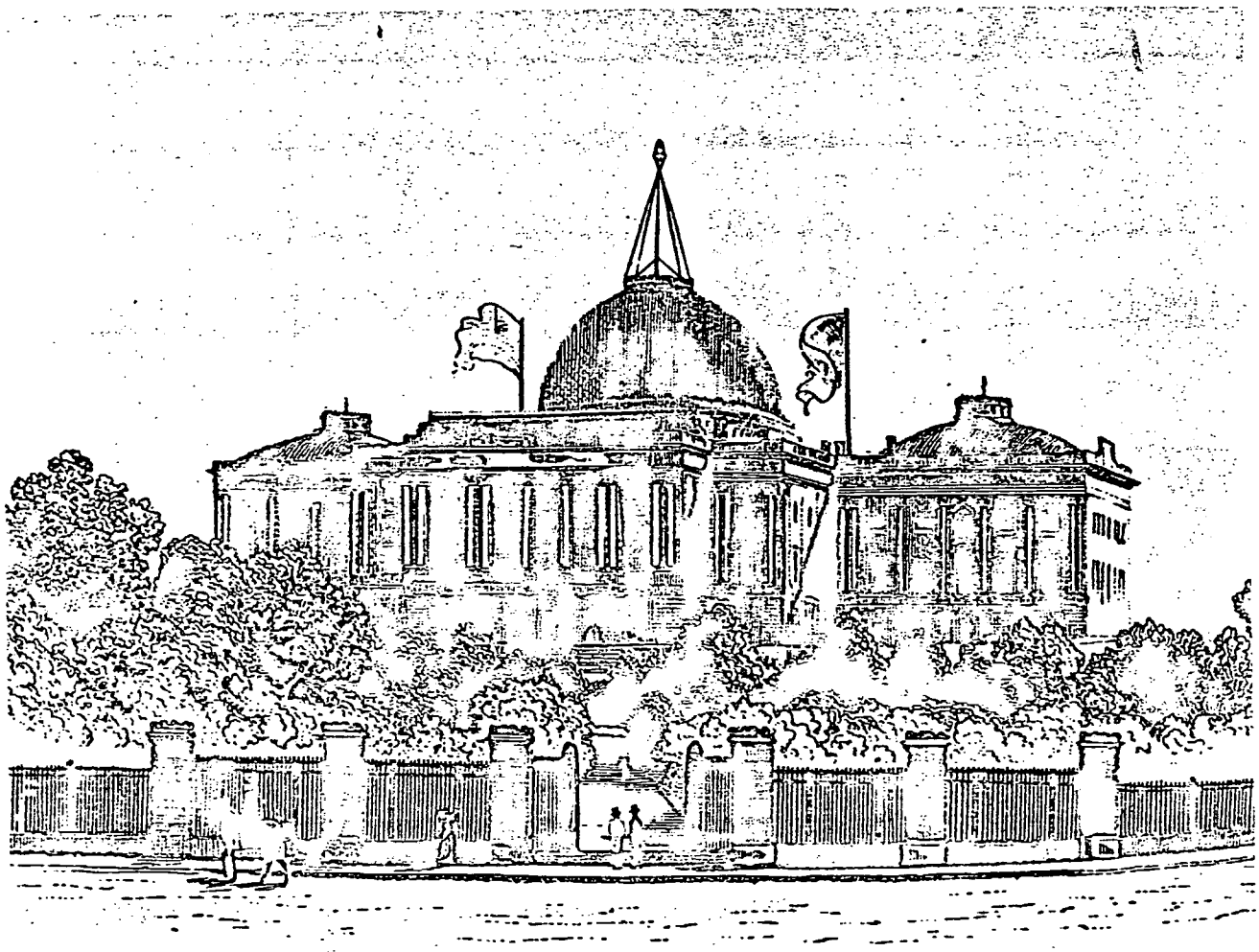
Map 6



■ Flagstaff Location

Figure 23. "Capitol, South West View," c. 1847-48.

Note the flagpoles and the lantern (?) pole on the dome.



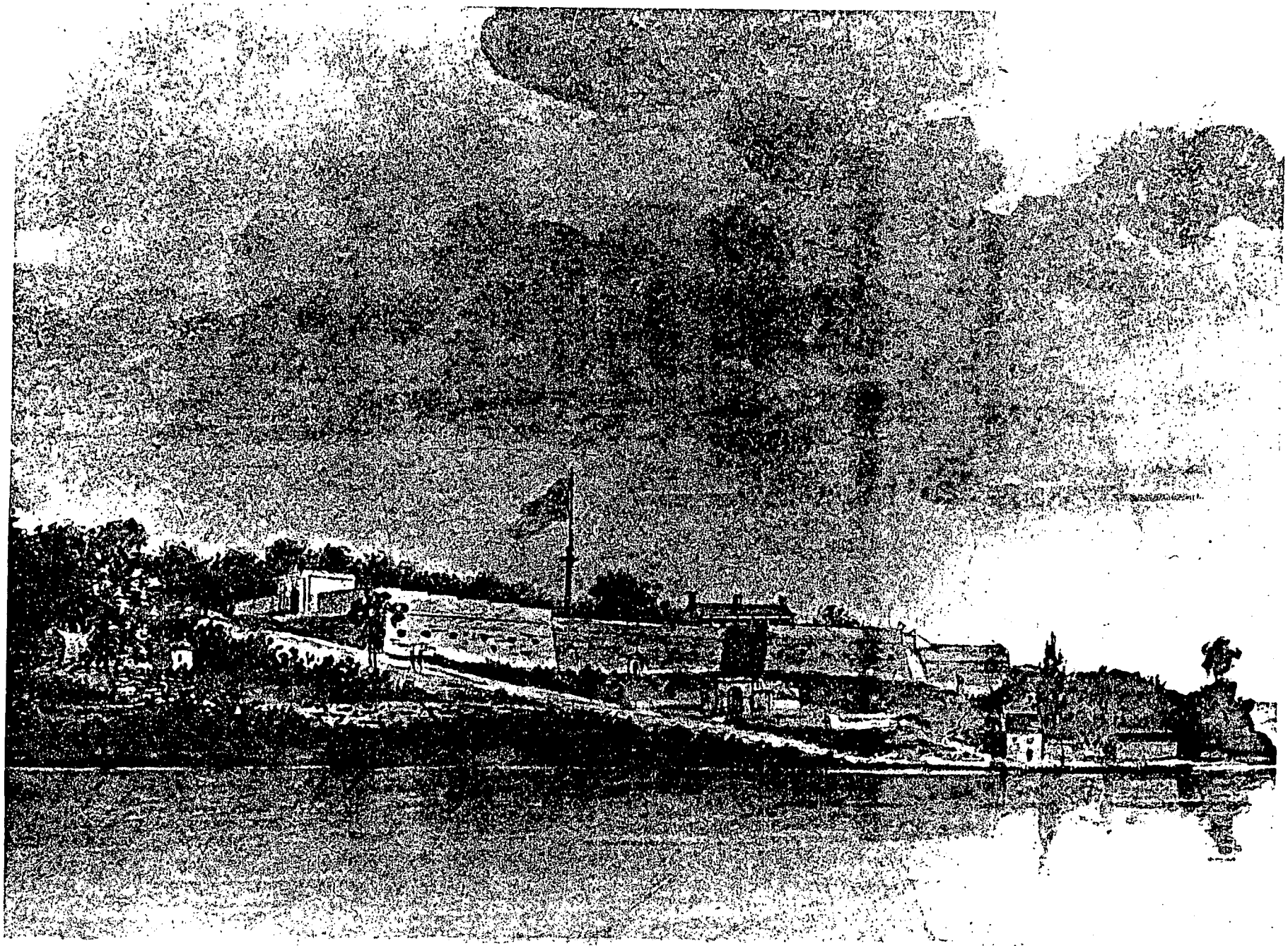
CAPITOL

South West View

Figure 24. View of Fort Washington, c. 1830.

If the estimated date of this print is correct, the flagstaff illustrated was removed in 1848. Note the platform, suggesting a stepped pole.

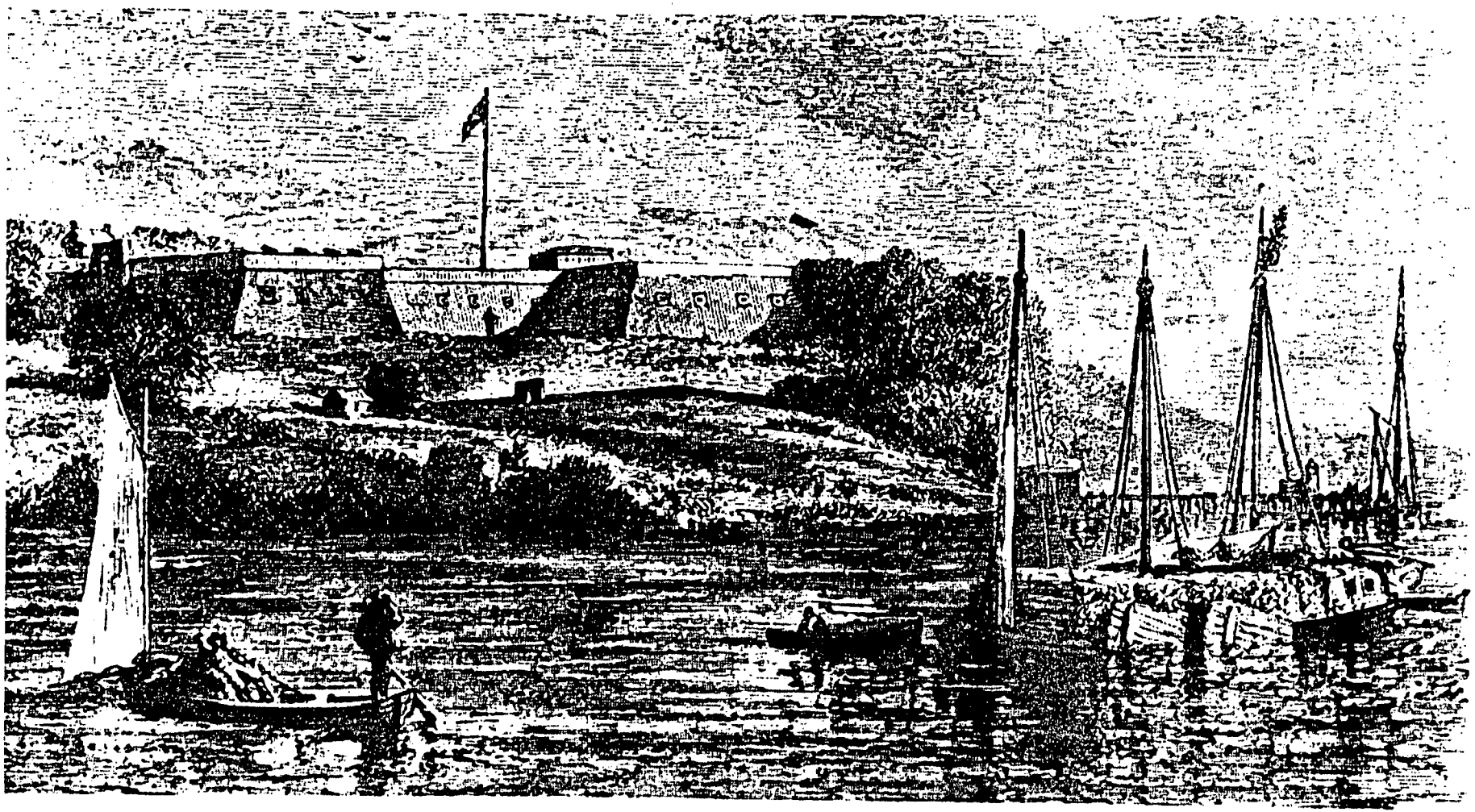
Source: Photo by Abbie Rowe, NPS No. 116-1P, from an old print.



FORT WASHINGTON. POTOMAC RIV. OPPOSITE MT. VERNON.

Figure 25. View of Fort Washington, from an old print.

The date of this print is uncertain as is its accuracy. The details of the fort's architecture have been simplified. Note the straight flagstaff, without a platform, possibly indicating a post-1848 date.



FROM AN OLD PRINT

FORT WASHINGTON

Figure 26. Fort Massachusetts (later Fort Stevens)

Note the simple flagstaff with a disk at the top.

Source: National Archives 111-B-628.

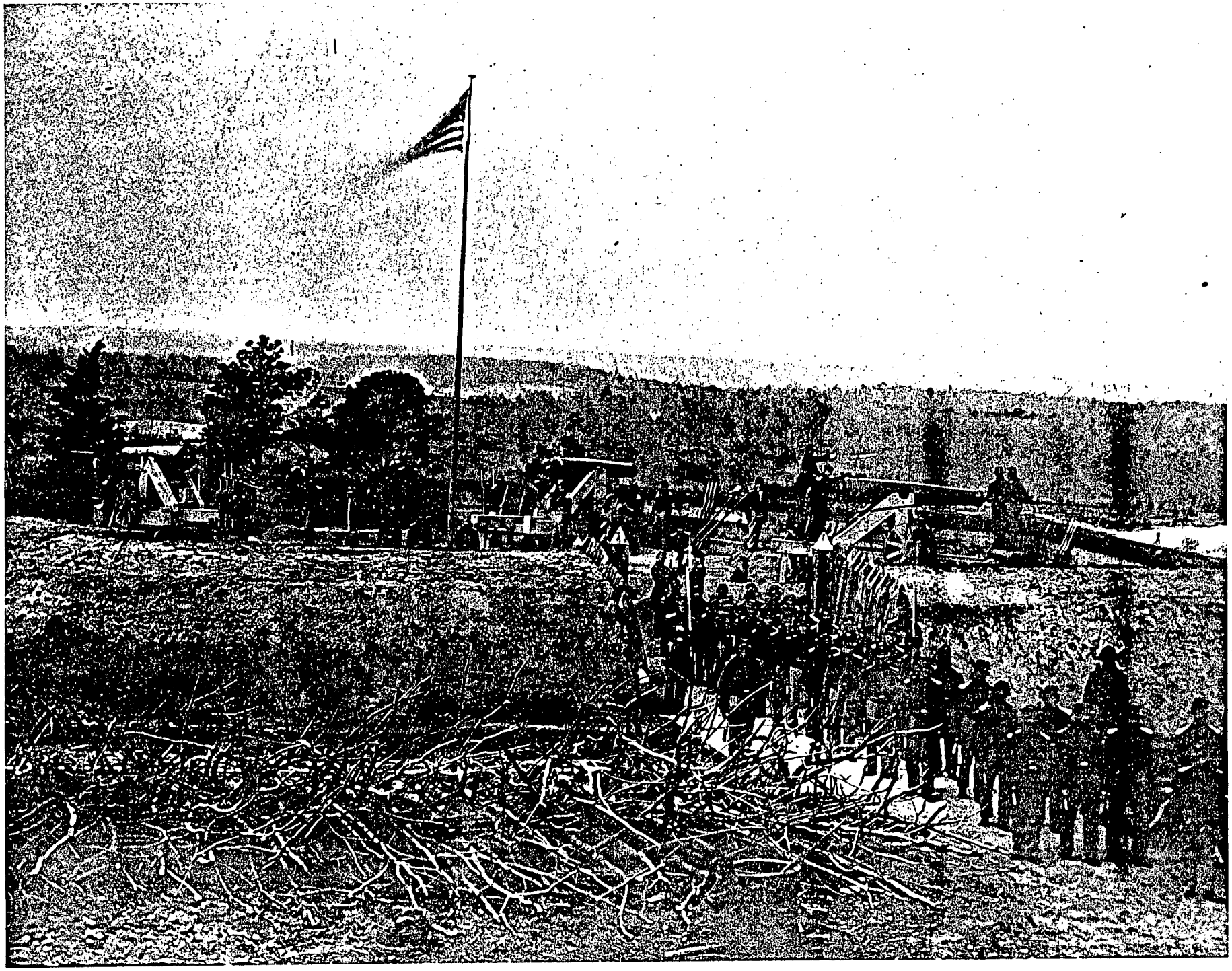
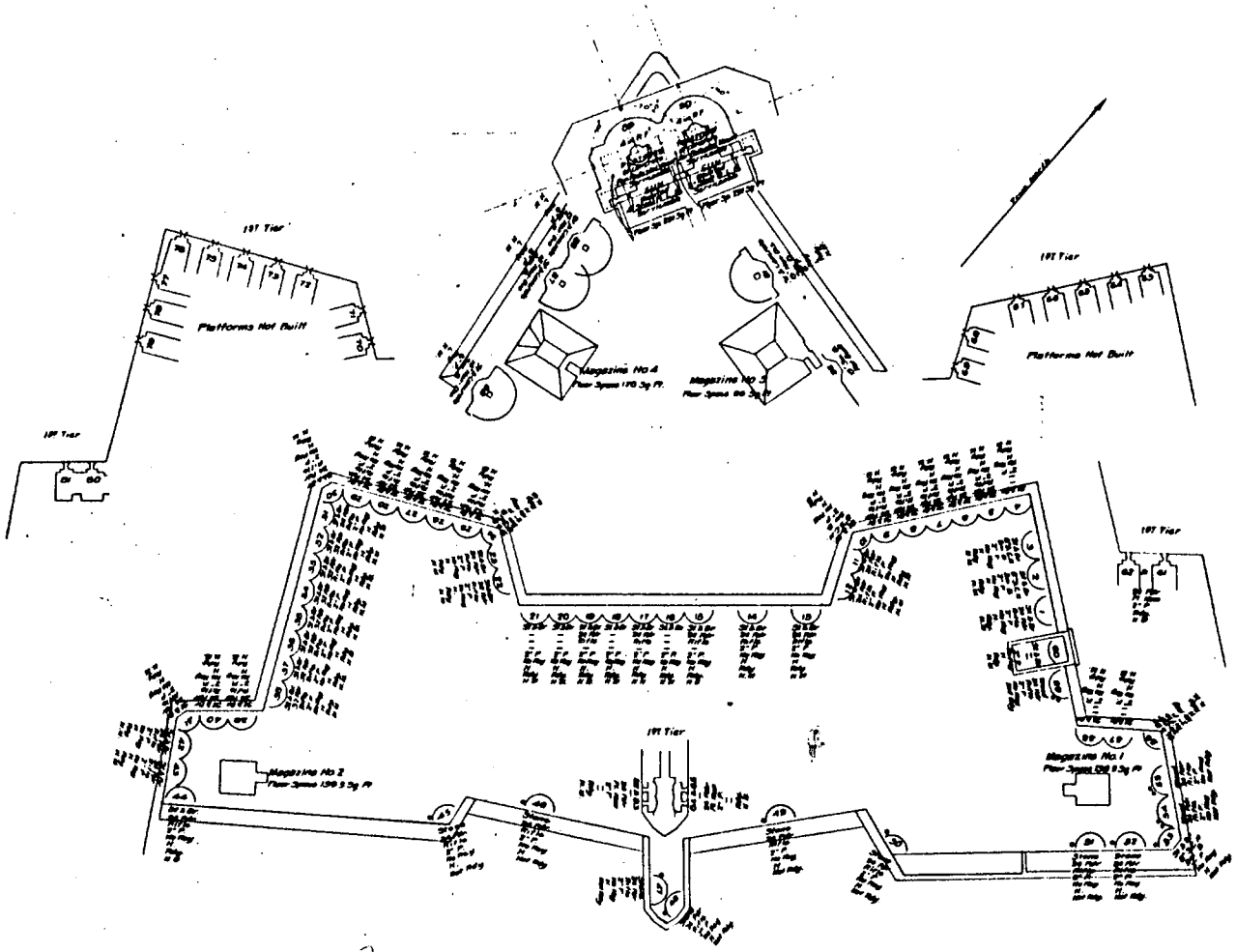


Figure 27. "Fort Washington, Md., Armament Sketch, December 31, 1902, to accompany Lieut. Col. Allen's letter of January 22, 1903."



SHEET NO 1

FORT WASHINGTON, MD.

ARMAMENT SKETCH

December 31, 1902.

Scale 1"=50'

To accompany Lieut Col Allen's letter of January 22, 1903

Descriptive Abbreviations

St & Br - Stone and Brick Platforms
2" P. - - 2 inch Pintle
H. - - High Traverse Stones.
L. - - Low " "
Rdy. - Ready for Gun or serviceable.
8" S.C.R - 8" Sea Coast Howitzer
Sm B. - Smooth Bore.
Fl Hom - Flank Howitzer.
N M - Gun not mounted

-NOTES-

Casemates from No 63 to No 81 inclusive have no traverse circles or places for pintles
Platforms marked St & Br have stone pintle blocks and traverse stones and brick filling around pintle block.
Gun positions marked thus * have stone pintle blocks and traverse stones but no apparent filling around pintle block.
Gun positions marked thus * * have no traverse circle irons.
All guns on this sheet non-disappearing.

Magazine No 3 was removed when the 4" R F Battery was constructed.

Drawer 252
Sheet 6-38

Figure 28. "Officer's Tent," c. 1861-65.

Despite the stark simplicity of its furnishings, this officer's quarters has a very personal look. The occupant must have provided almost everything himself, although the bedding includes an army blanket (note stripe at top) and pillows.

Two swords, in scabbards, hang on the wall; a pair of binoculars, in case, hang near them.

The shawl probably belonged to a woman visitor; the hat on the bed appears to be a lady's bonnet.

An unframed print of a rider on horseback is tacked above the small table.

The table is small and square with plain, rectangular legs. It is covered with a white, possibly linen, cloth. On it is an array of personal objects, including a razor case, an ambrotype, magazines and booklets, a pair of sewing scissors, a needlecase, and a candlestick.

A folding chair with canvas seat is in the foreground.

Source: 111-B-3647, National Archives.

Figure 29. "Inside of Tent," c. 1861-65.

Like the preceding illustration, this photograph shows a mixture of military and domestic furnishings of spartan simplicity.

The bed is a wooden bunk either without a mattress, or with the mattress set into a box frame; note the square edges. The covering is an army blanket. A pillow or pillows are evident.

A plain rectangular washstand is placed at the foot of the bunk. It has side rails and a small towel is hung from one. A tin washbasin sits on the top shelf; an iron-banded wooden bucket, with iron bail, rests on the shelf below.

The rectangular bunk-side table has a black cloth covering. A number of undistinguishable items are on the table; one appears to be an inkwell.

A sword, sash, binoculars, and clothing hang along the back wall.

The three chairs are all of the folding camp variety. Two of the chairs have horizontal slat backs and carpet seats. The other chair appears to have a white canvas seat.

Lastly, note the floor covering.

Source: 111-B-3650, National Archives.

Figure 30. "Lieut. J.B. Neill, 153rd New York Infantry."

Lieutenant Neill's even simpler camp quarters include a cot, army blanket covering, and pillows. His sword rests against one corner of the cot. A plank bench, at the foot of the cot, holds a tin washbasin and tin water bucket.

A rectangular table, without a cover, sits in the center of the tent. On the table, Lieutenant Neill has a variety of books and, prominently displayed, a tintype or ambrotype. Beneath the table is Lieutenant Neill's traveling trunk with his name and company stenciled on the end.

Lieutenant Neill sits on a well-formed folding chair. He is smoking a pipe and his watch and chain hang conspicuously across his chest.

A shelf rests across the back of the tent. A tin box, binoculars, and some other items are arranged here.

Source: LC-4191-B310, Library of Congress.

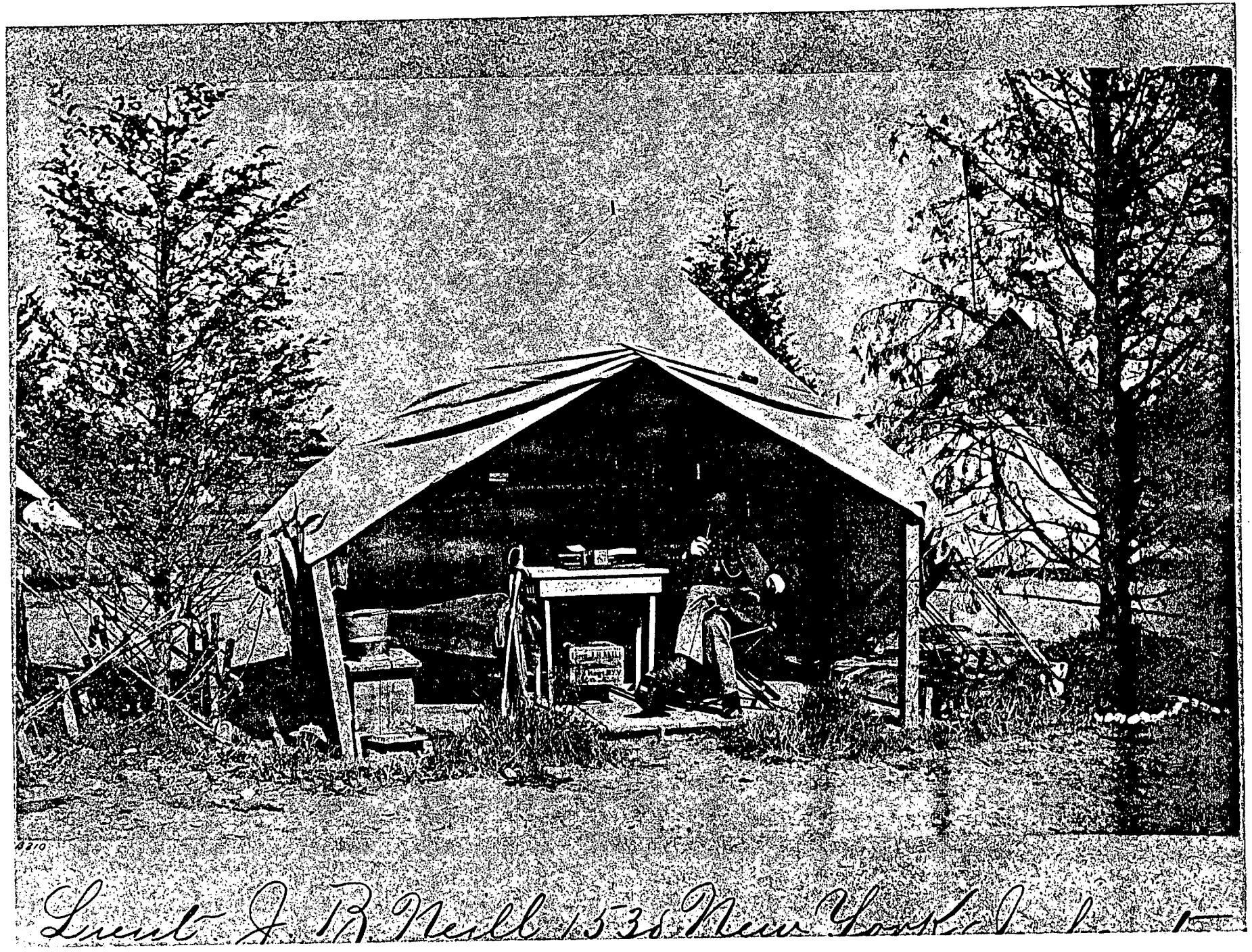

Lieut. J. B. Neill 1538 New York

Figure 31. "Dr. C.K. Ervine, 72nd New York Infantry."

Dr. Ervine's furnishings include a traveling cot with a striped pillow and two folding camp shairs.

Against the back wall of his tent is a drop-front traveling desk with his neatly arranged ledgers, forms, and correspondence. The drop-front is supported by a stick prop. An octagonal bottle of ink and a book are among the desk's furnishings, along with a bottle (wine or beer?) and two tin mugs.

A leather bucket and tin basin sit to one side.

Source: LC-42760A, Library of Congress.

Figure 32. "Interior of Surgeon McKay's Quarters."

Surgeon McKay's room, in a house, has one of the most interesting sets of furnishings.

A bunk or cot, with a blanket, is in the left rear of the photograph.

A rectangular table with a dark covering, possibly oilcloth, sits in the middle of the room. On it are playing cards, two broad-based tin candlesticks with ejectors, glass tumblers, wine or ale bottles, a tin bowl, a tobacco tin, and another bottle.

Seating includes a backless bench and a home-made plank-style chair.

Prominently displayed around the room are a number of musical instruments: a banjo, a guitar, two accordions, a flute, and a violin.

Hanging from the front of the fireplace mantel are a checkerboard, a mirror, a slate, and a pair of spurs.

Several thick volumes are scattered along the top of the mantelpiece. An unholstered revolver rests on top of one book. A box marked "candles" also is found there.

The doctor's drop-front traveling desk rests on two plain rectangular tables.

Source: LC-B8184-1024, Library of Congress.

5 Drors

Figure 33. "Camp of Chief Ambulance Officer."

Note the drop-front traveling desks with pigeonholes crammed with correspondence, forms, and ledgers. The desk on the left sits on a plain, square-legged, plank table.

Also note the variety of chairs: turned spindle ladder-back side chairs, two types of folding camp chairs with arms and one without.

Source: LC-B8161-7538, Library of Congress.

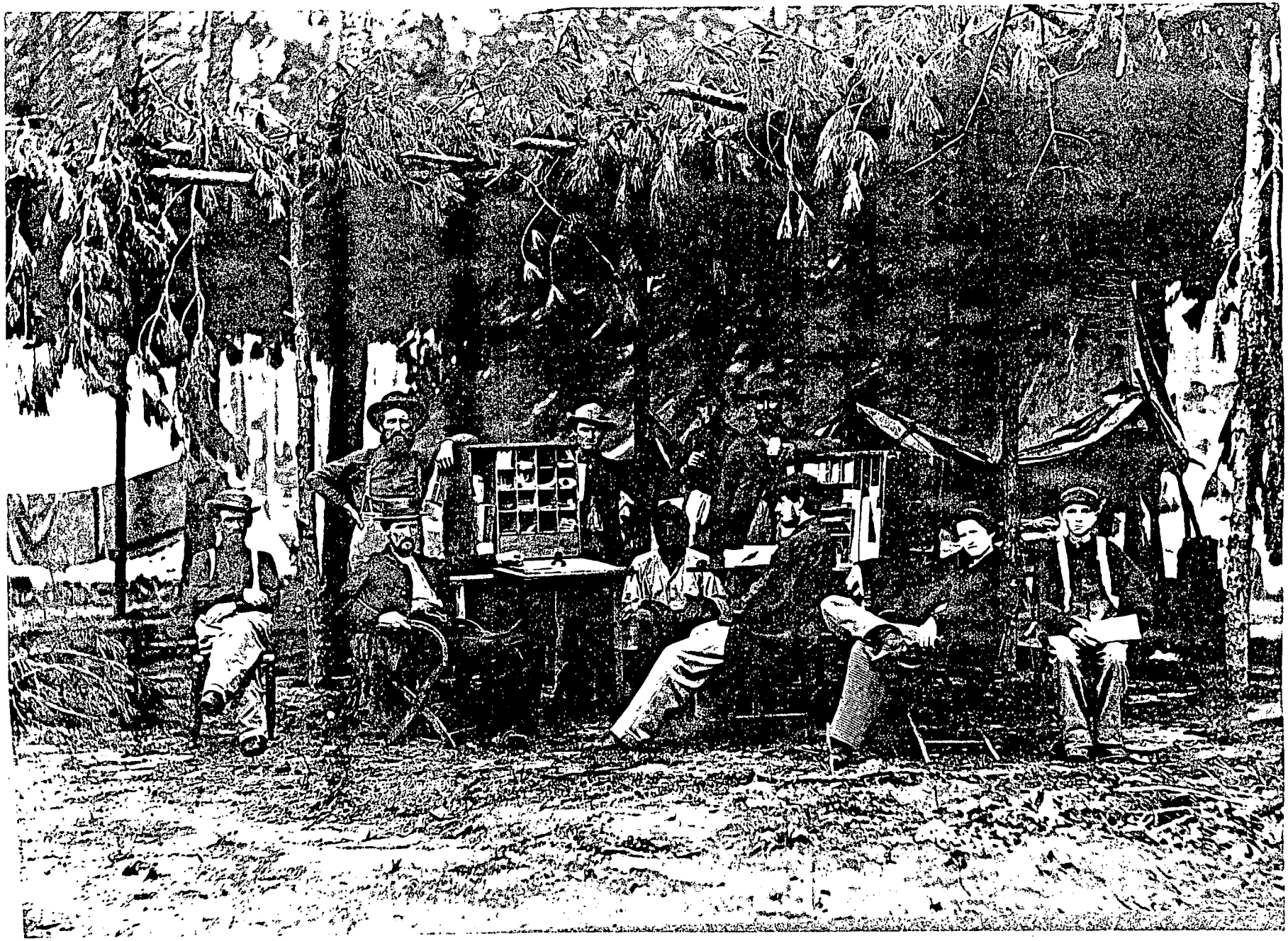


Figure 34. "Soldiers' Dining Room."

The furnishings are plain: plank benches and trestle tables. Note the length of each table. The fanciest items in the building are the stoves.

Lighting was provided by hanging kerosene lamps. The globe is missing from the one in the foreground.

The tables are set with what appear to be tin plates and cups. Eating utensils--knives and/or forks--are on the table. Salt and pepper dispensers, and a bottle (vinegar?) also are visible.

Source: 111-B-4069, National Archives.

Figure 35. "Soldiers' Dining Room," stereograph.

The benches and tables in the dining room are connected to each other and run the length of the room. This is a special event--the table is covered with a cloth and is adorned with floral arrangements.

A tin cup, tin plate, and single utensil is set at each place. White serving platters are arranged in the middle.

Source: 111-B-5039, National Archives.

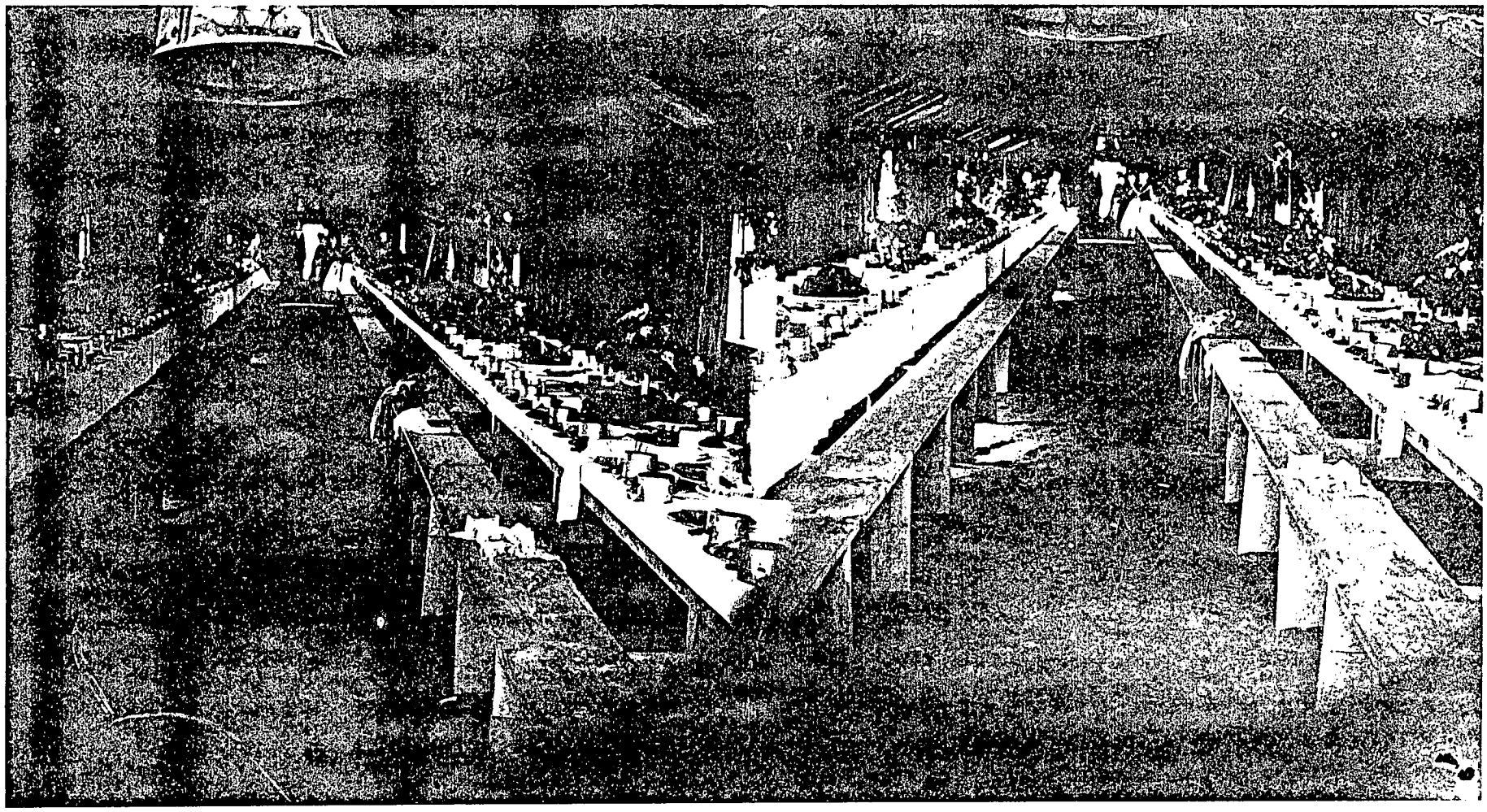


Figure 36. "Harewood Hospital, Washington, D.C., Mess Hall, 1864."

The benches in this mess hall are separate from the tables. They are a plain plank style typical of the period.

The plank tables are continuous, running the length of the room.

The plates are china. Knives and forks are criss-crossed in the middle of the table.

Source: LC-B8171-1168, Library of Congress.

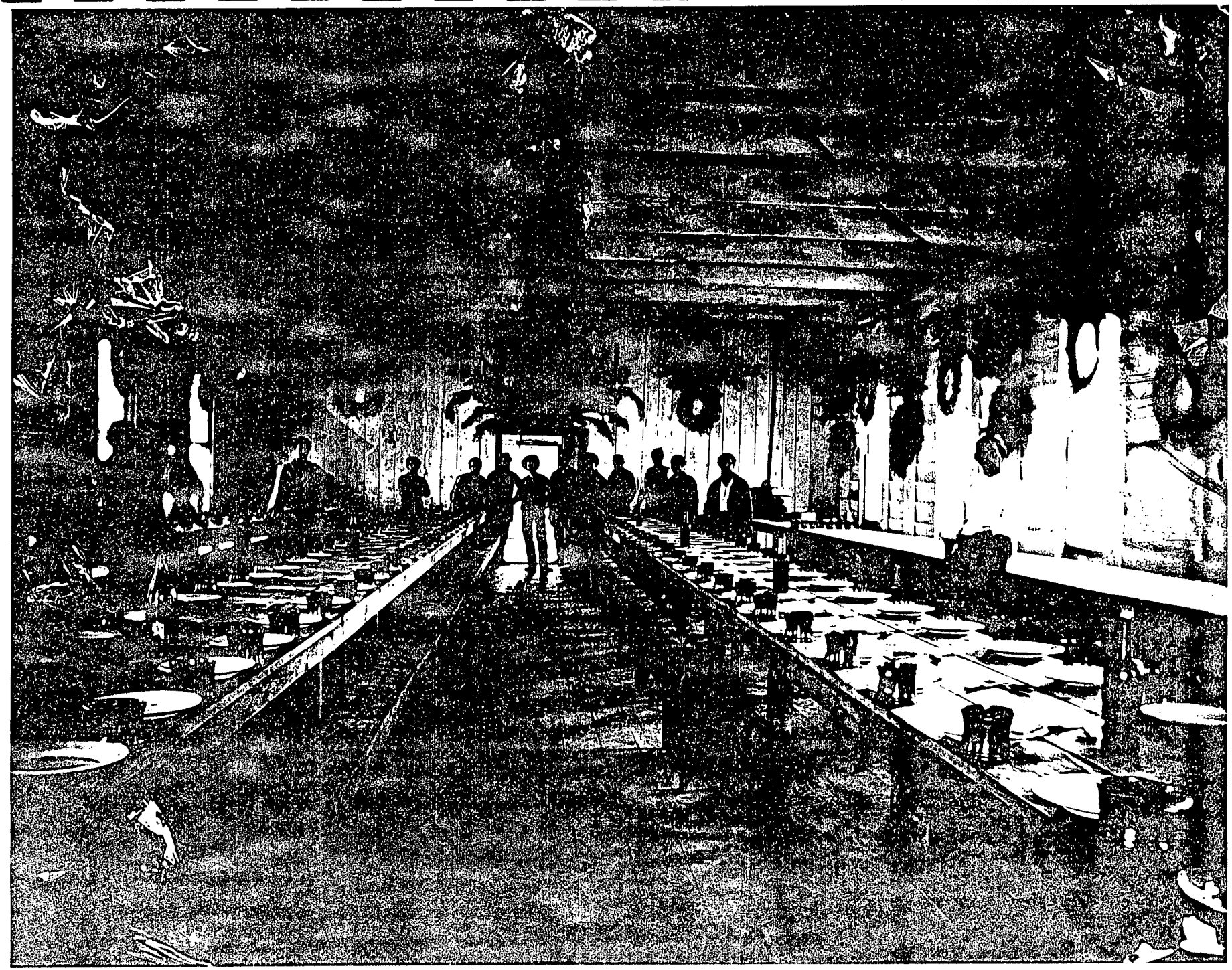


Figure 37. "Kitchen--Soldier's Rest, Alexandria, Virginia."

This kitchen scene shows an elaborate array of furnishings, not the least of which is the series of kitchen ranges in the middle. Note the hot water tank in the right center. A variety of tinware sits on the stove on the right and two wash boilers are on the floor next to it.

Hanging on the walls or on shelves around the perimeter are long handled ladles, two sizes of ladles, a row of wooden buckets, large tin boilers, and some smaller items. A corner cupboard contains several larger plates, several pitchers, and some canisters.

The table against the left wall has a series of slatted drain boards. The table on the right holds a stack of tin plates, a basket, some crocks, and several tin bowls. Beneath the table are a bench and several baskets. One basket is filled with tin plates.

This kitchen had running water. Note the sink and faucet in the right foreground.

Source: USZ62-23246, Library of Congress.

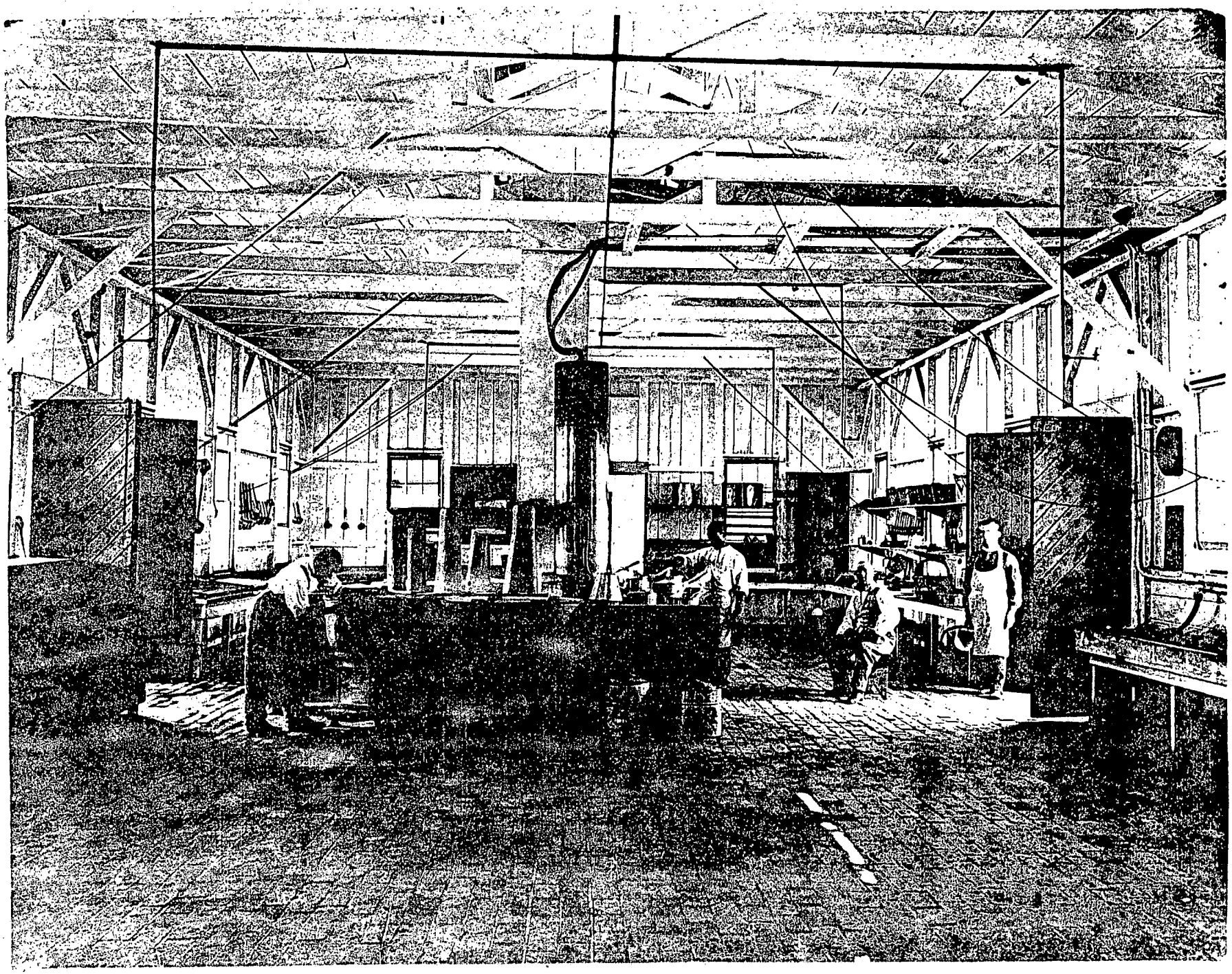


Figure 38. "Noncommissioned Officers' Mess, Company D, 93rd New York Infantry, Bealton, Virginia, 1863."

Note the folding table and matching chairs.

The tableware includes tin cups, glass tumblers, tin plates, tin bowls, spoons, knives, forks, glass containers, and glass bottles.

Note also the stack of hardtack.

Source: LC-B8171-217, Library of Congress.

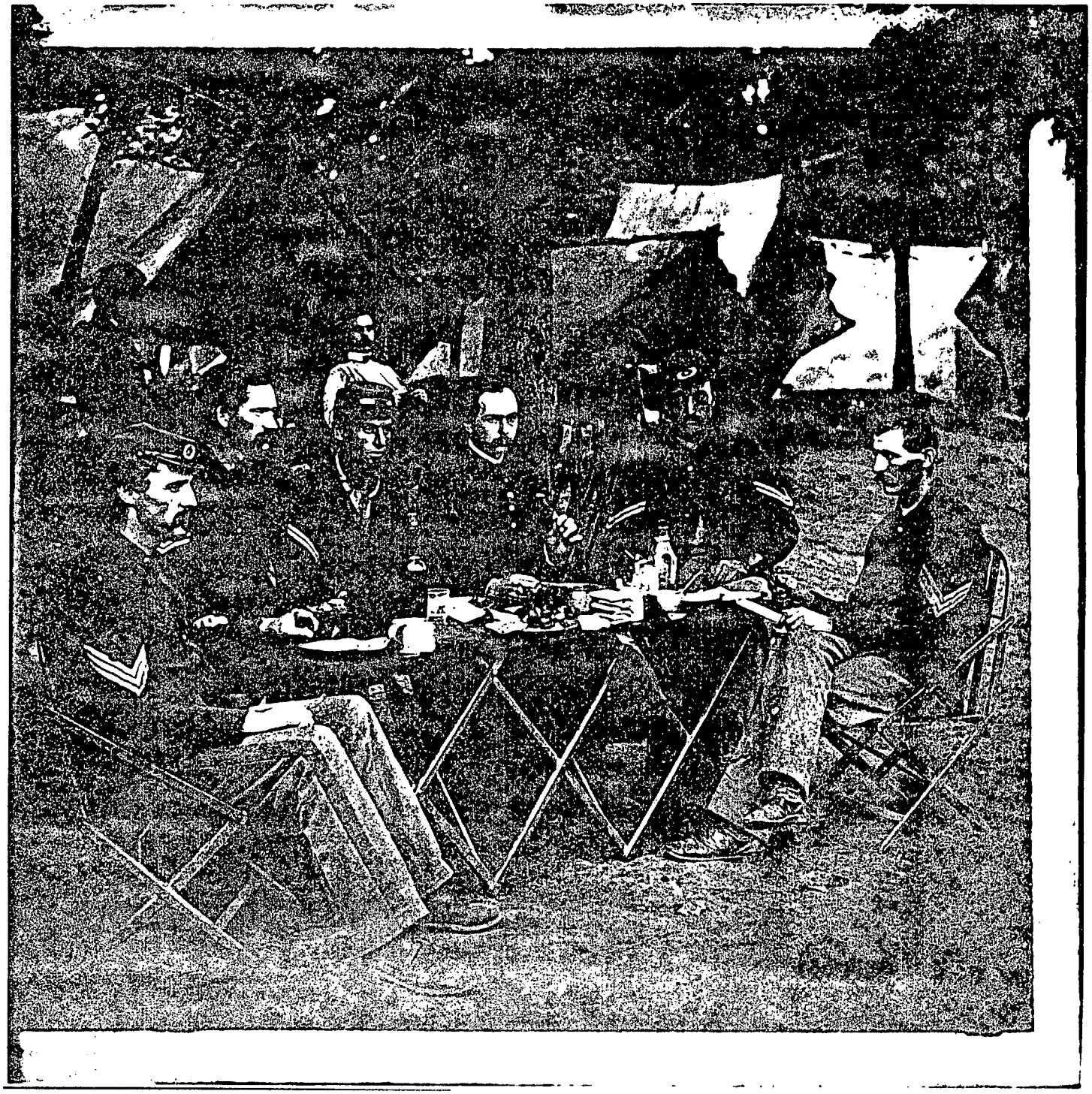
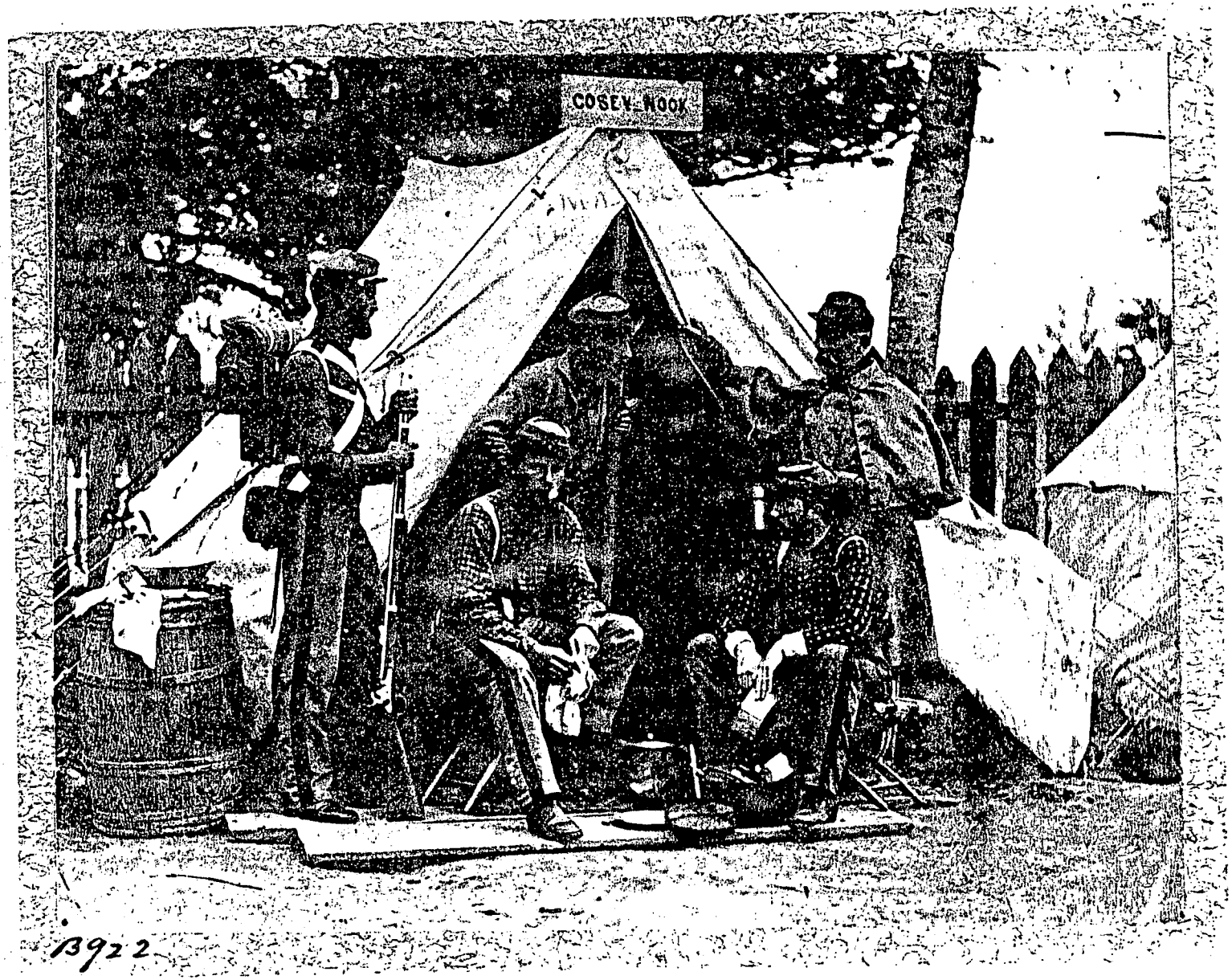


Figure 39. "7th New York Militia, Camp Cameron, District of Columbia, 1861."

Note the eating utensils: a tin coffee pot, tin plates, tin mugs, tin bowl, and tin wash-basin. Note also the barrel on which sits a tin basin, a bar of soap, and a cloth.

Source: LC-B8184-B922, Library of Congresss.



13922

Figure 40. "7th New York State Militia, Camp Cameron, District of Columbia," c. 1863.

Note the small camp stove with tin coffee pot on the left. A table in the tent holds a pile of fruit (apples ?), a bottle, and a glass decanter. Note also the broom.

Source: LC-B8151-935, Library of Congress.

3935

Figure 41. "6th New York Artillery."

This camp scene shows a camp kitchen. Note the several barrels--most with wooden hoops, one with flat wooden bands. One barrel has a homemade carrying deveice which must have been useful for moving the heavy barrels.

Source: LC-B8184-40484, Library of Congress.

Figure 42. "Cook at Work."

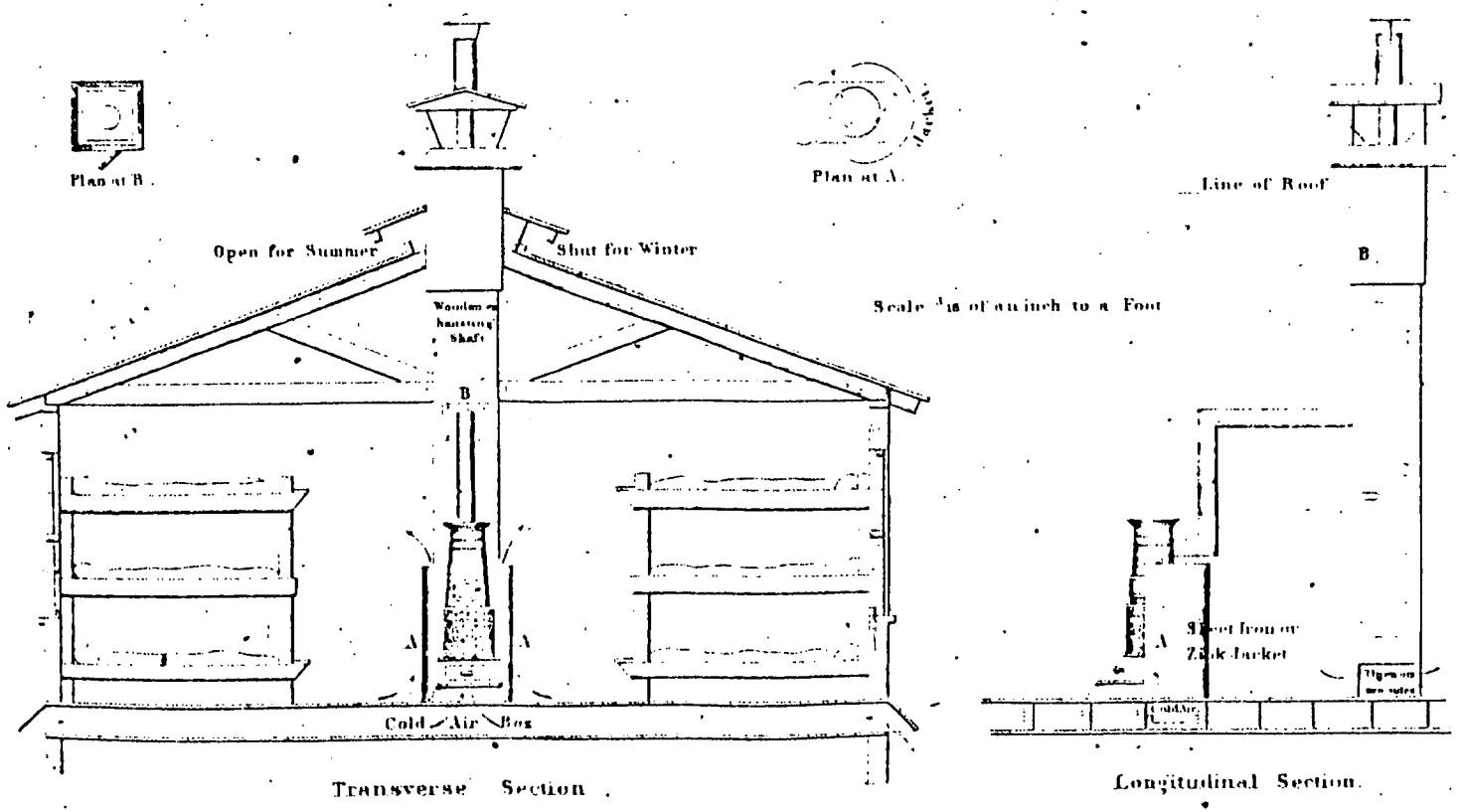
This camp scene shows a line of tents with several Sibley stoves. Note the fry pans, mess pan, barrel, and boilers.

Source: 111-B-236, National Archives.

Figure 43. "Mode of Ventilating Temporary Barracks and Hospitals...."

Note the three-tiered bunks with end shelves on the first and third tiers.

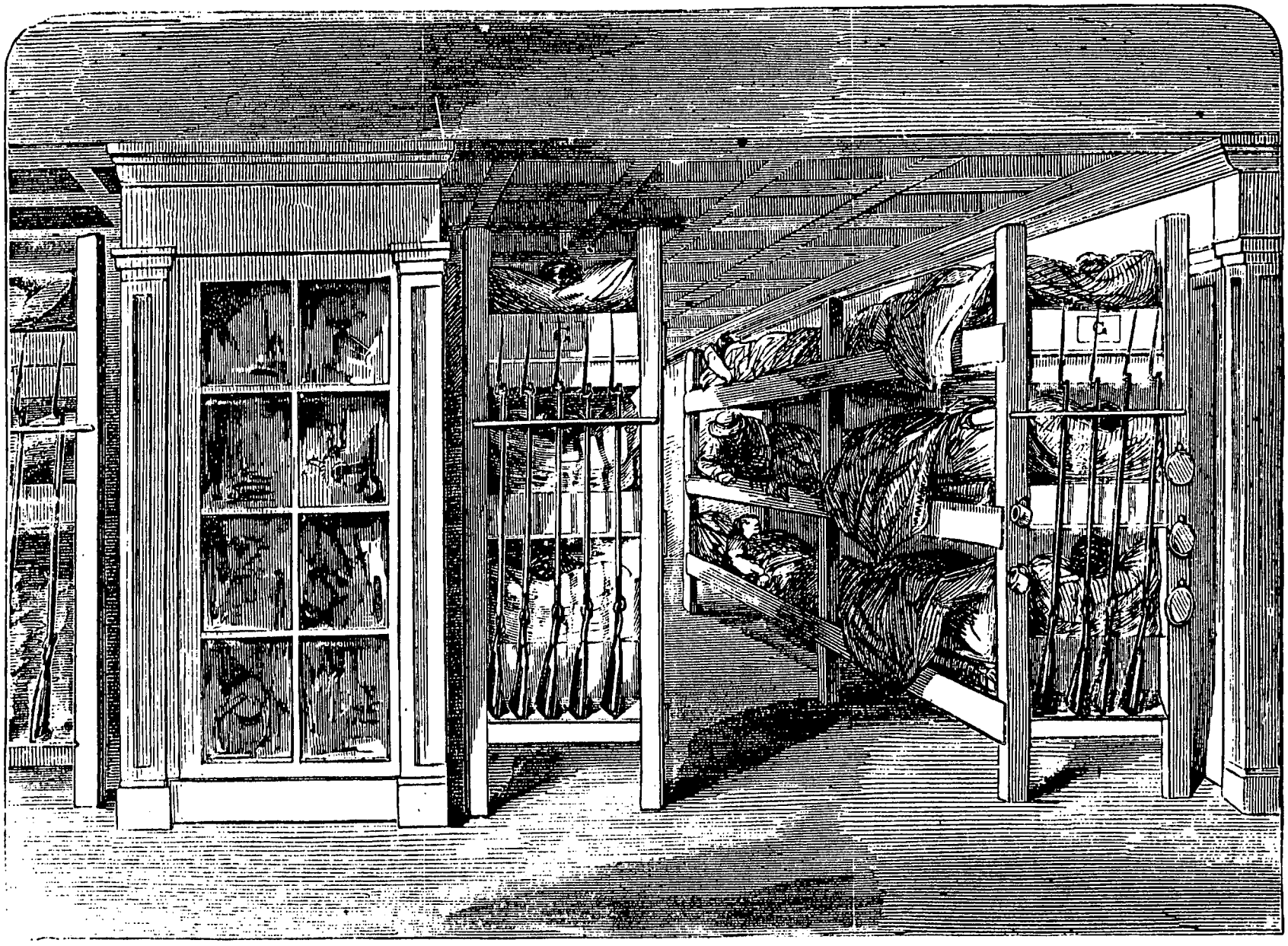
Source: Roeliff Brinkerhoff, The Volunteer Quartermaster, 1865.



Nº 5. MODE OF VENTILATING Temporary Barracks and Hospitals, heated by Stoves during cold weather, when the usual Summer Ridge Ventilation becomes excessive.

Figure 44. "Sleeping Bunks of the First Rhode Island Regiment, at the Patent Office, Washington."

Source: Harper's Weekly, June 1, 1861.



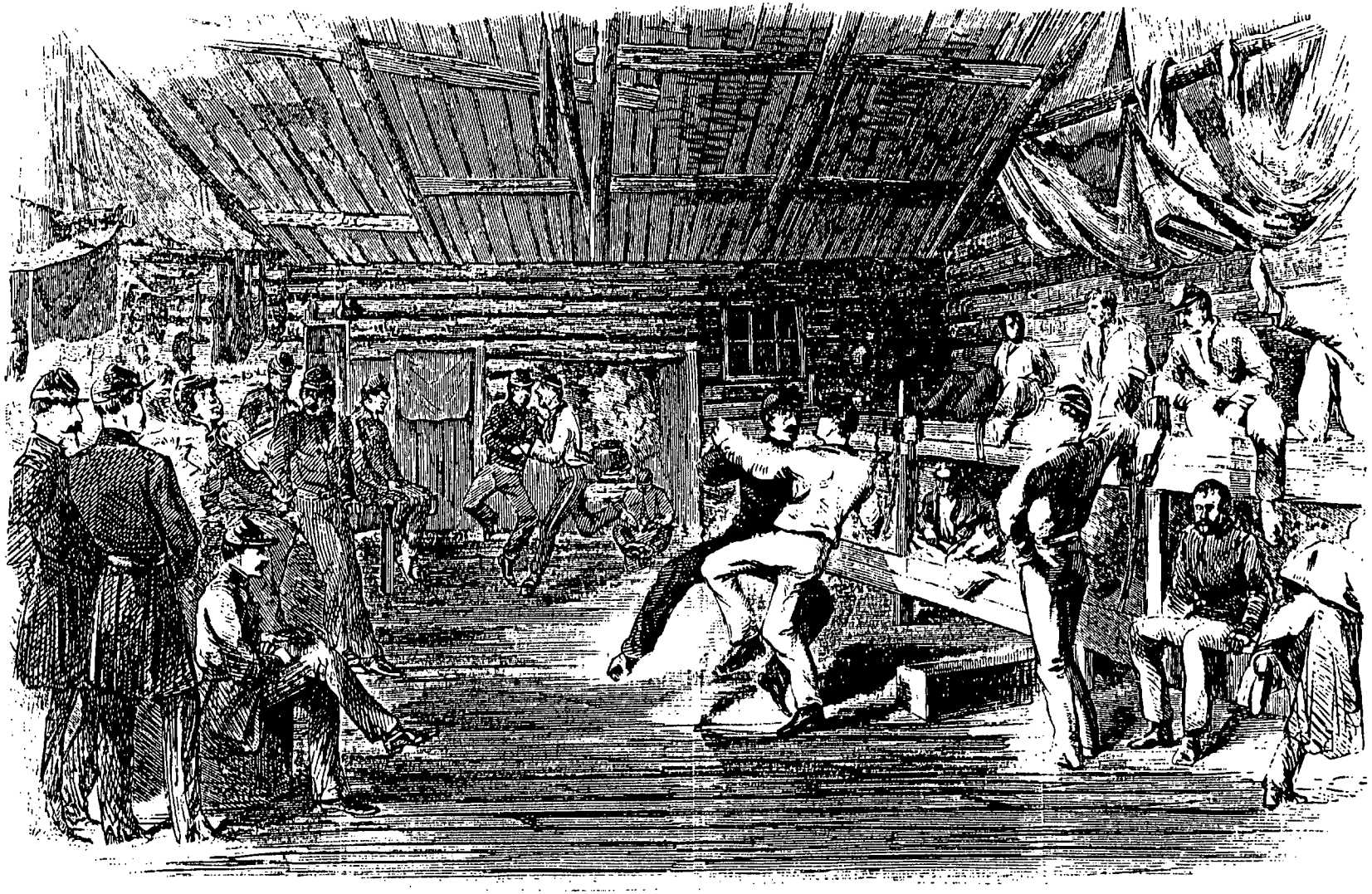
SLEEPING-BUNKS OF THE FIRST RHODE ISLAND REGIMENT, AT THE PATENT OFFICE, WASHINGTON.

[SKETCHED BY OUR SPECIAL ARTIST.]

Figure 45. "The Stag Dance."

Note two-tier two-man bunks.

Source: Harper's Weekly, February 6, 1864, p. 93.



THE STAG DANCE.

Figures 46-48. Drawings of An "Average" Bunk.

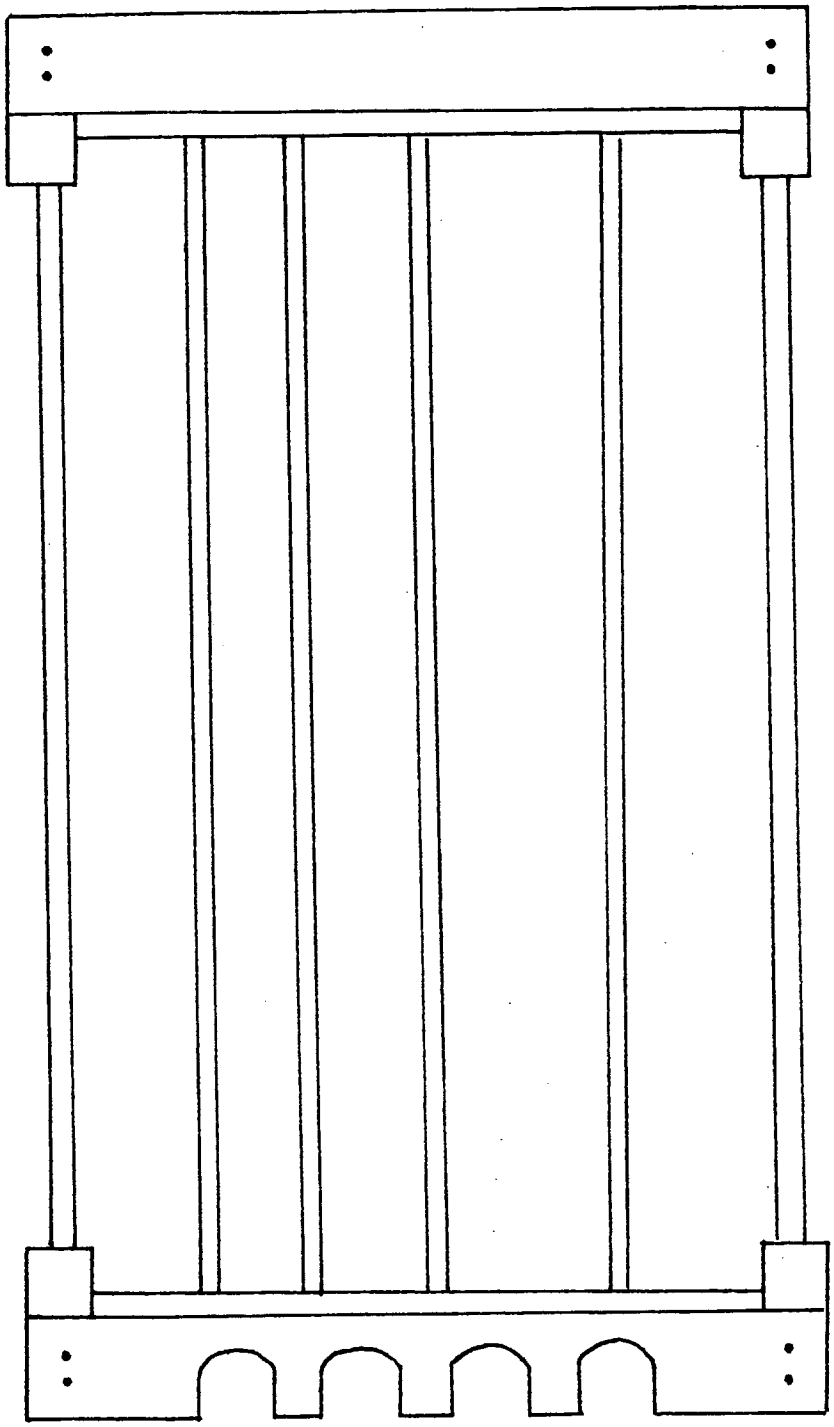
Side View (46), End View (47), and Top View (48).

Source: Clary, "History of Furniture in Barracks ...." (NPS, not yet published).

46.

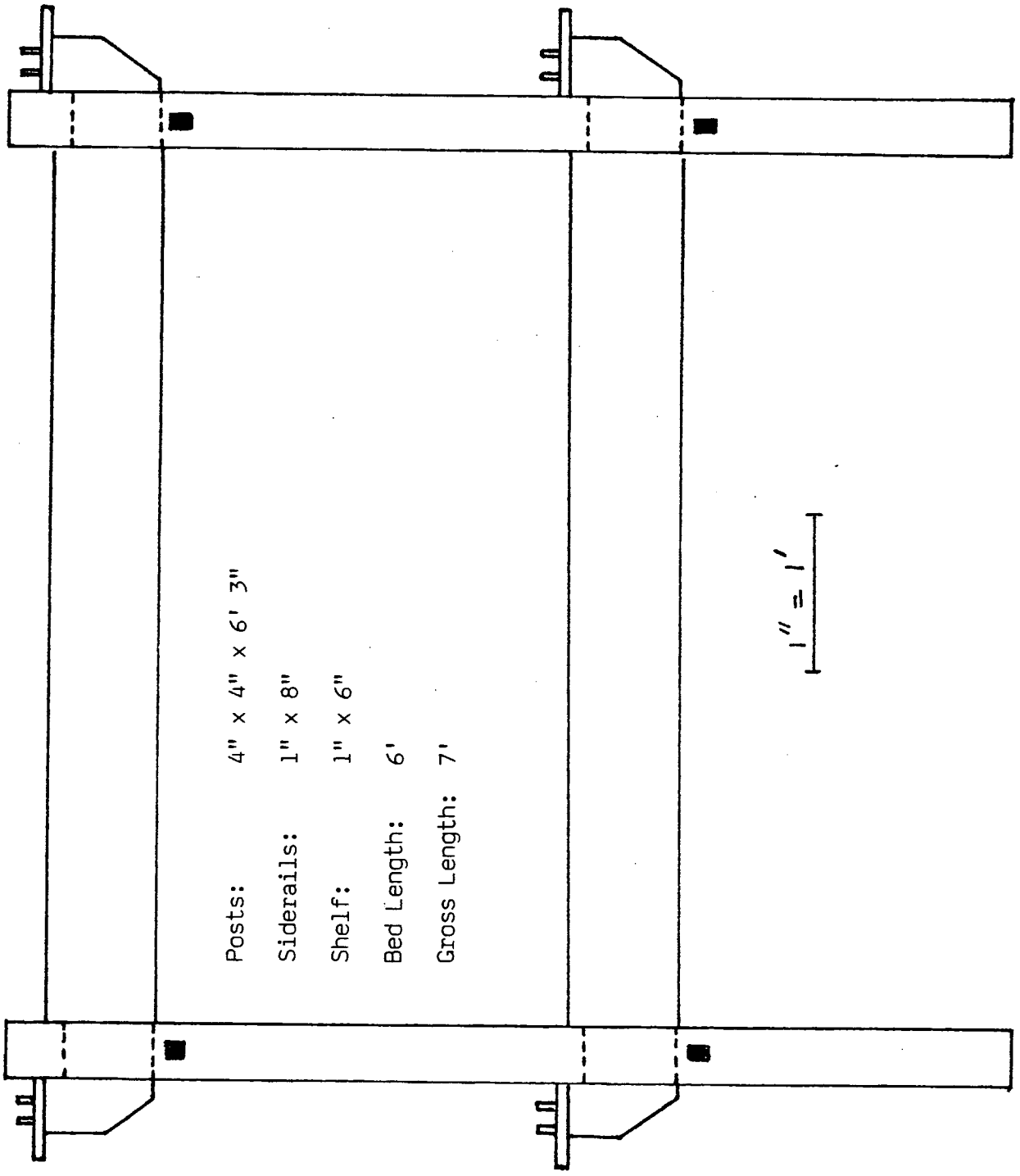
An "Average" Bunk

Top View



An "Average" Bunk

Side View



An "Average" Bunk

End View

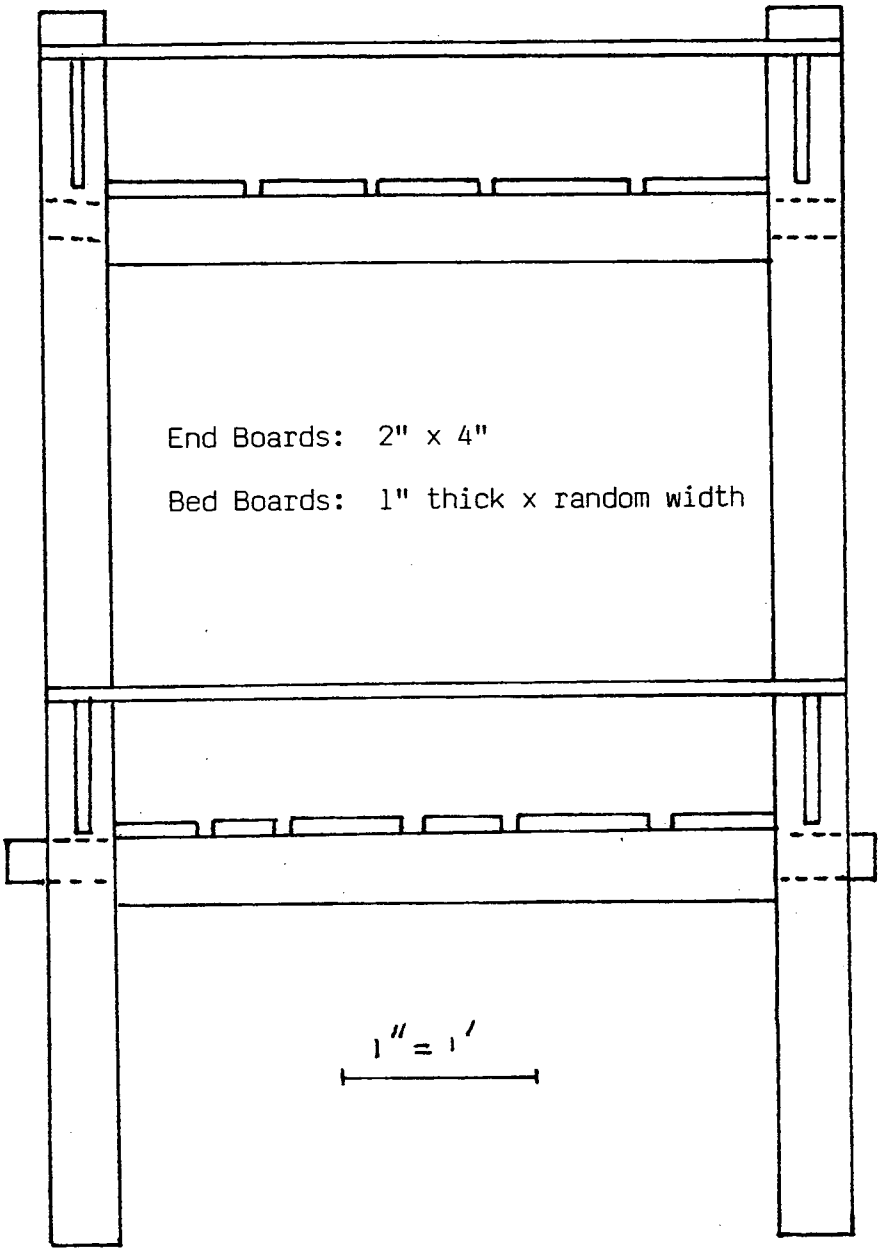


Figure 49. "Preservation of Ordnance: Pile of Shot at Fort Rodgers," c. 1861-65.

Note the frame built to hold the pile of shot and the small penthouses for canister. In the background, crossed stakes hold a sponge and rammer.

Source: LC-B8171-1130, Library of Congress.

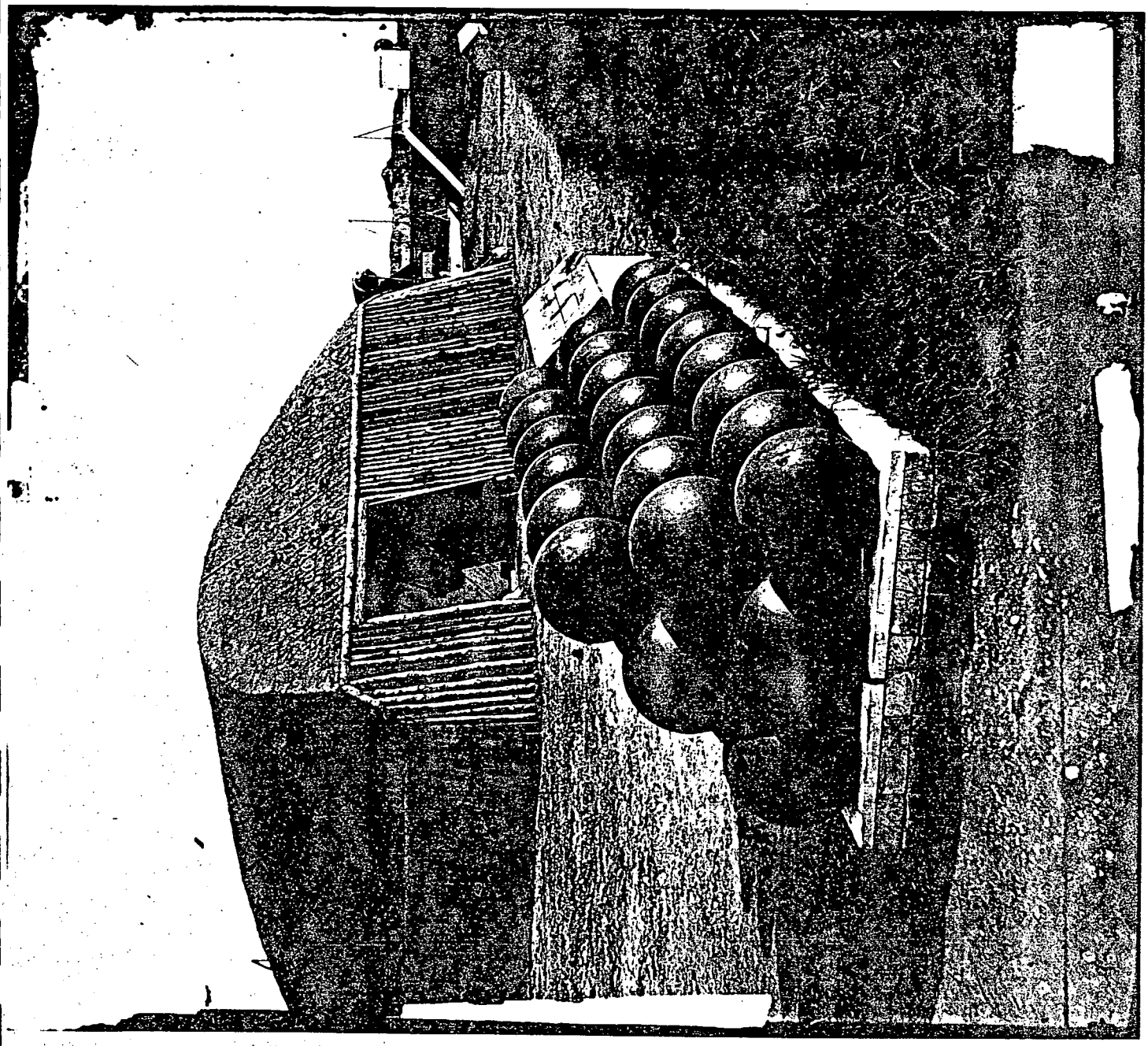


Figure 50. "Wilder's Patent Salamander Safes."

Source: Advertisement from Art Journal Advertiser, Vol. III, no. 2 (1859).

WILDER'S PATENT SALAMANDER SAFES,

WITH WILDER'S PATENT POWDER AND BURGLAR PROOF LOCK.

B. G. WILDER & CO., Agents

FOR PATENTEES AND MANUFACTURERS OF

The Best Fire-Proof Safe in the World!!

DEPOT, NO. 191 BROADWAY,

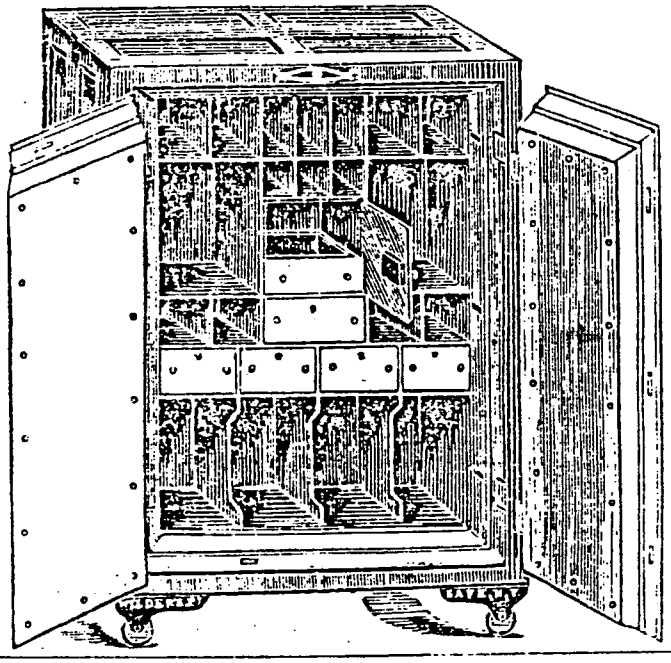
COR. DEY-STREET, NEW-YORK.

LIST OF NEW-YORK PRICES.

Double Flange Single Door Safes.

INSIDE MEASURE.

No.	High.	Wide.	Deep.	Price.
1	14	10	10	$50
2	16	12	11	60
3	20	15	12½	80
4	21¼	21½	13	100
5	26	18	13	110
6	22½	26	14	120
7	26	21	11	130
8	29	24	14½	150
9	32	22	14½	160
10	32	27	14½	180



Double Flange Folding Door Safes.

INSIDE MEASURE.

No.	High.	Wide.	Deep.	Price.
1	22	32	16	$175
2	34	24	16	190
2½	32	33	16	210
3	38	24	16	215
4	44	24	16	240
5	44	32	17	300
5½	40	38	17	315
6	50	32	17	325
7	50	38	17	375
8	56	38	18	425
9	56	44	18	475
10	64	51	19	625

EXTRA CHARGES to the above list of prices, for Powder-Proof Locks $10 and Inside Iron Vaults from $10 to $20.

JEWELLERS' and BANKERS' SAFES made to order, lined with Hardened Steel.

HOUSE AND PLATE SAFES.

To this celebrated Safe was awarded the GOLD MEDAL at the WORLD'S FAIR, in London, in 1851.

NOTICE.—This celebrated Fire-Proof Safe is no longer made and sold by SILAS C. HERRING, his license to make and sell them having expired.

The thousands of Certificates from Merchants, Bankers and Mechanics of all trades, that have been given in favor of this, the ONLY TRUE "SALAMANDER," renders it useless for the subscribers to multiply words in its favor, as full twenty-five thousand of "**WILDER'S PATENT SALAMANDER SAFES**" have been manufactured and sold in the United States; and, in almost every large fire that has taken place during the last ten years, these Safes have been subjected to the SEVEREST TESTS, and **Not one of the "Genuine Salamanders" has ever been destroyed.**

A good assortment constantly on hand and for sale by

B. G. WILDER & CO., Agents for Patentees & Manufacturers.

Warehouses, No. 191 Broadway, cor. Dey St., N. Y.

No. 107 South Water St., Chicago, Ill