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The Kennebec Arsenal: An Historical and Architectural Survey, 1997

Maine Historic Preservation Commission

Kennebec Historical Society

Augusta Historic Preservation Commission

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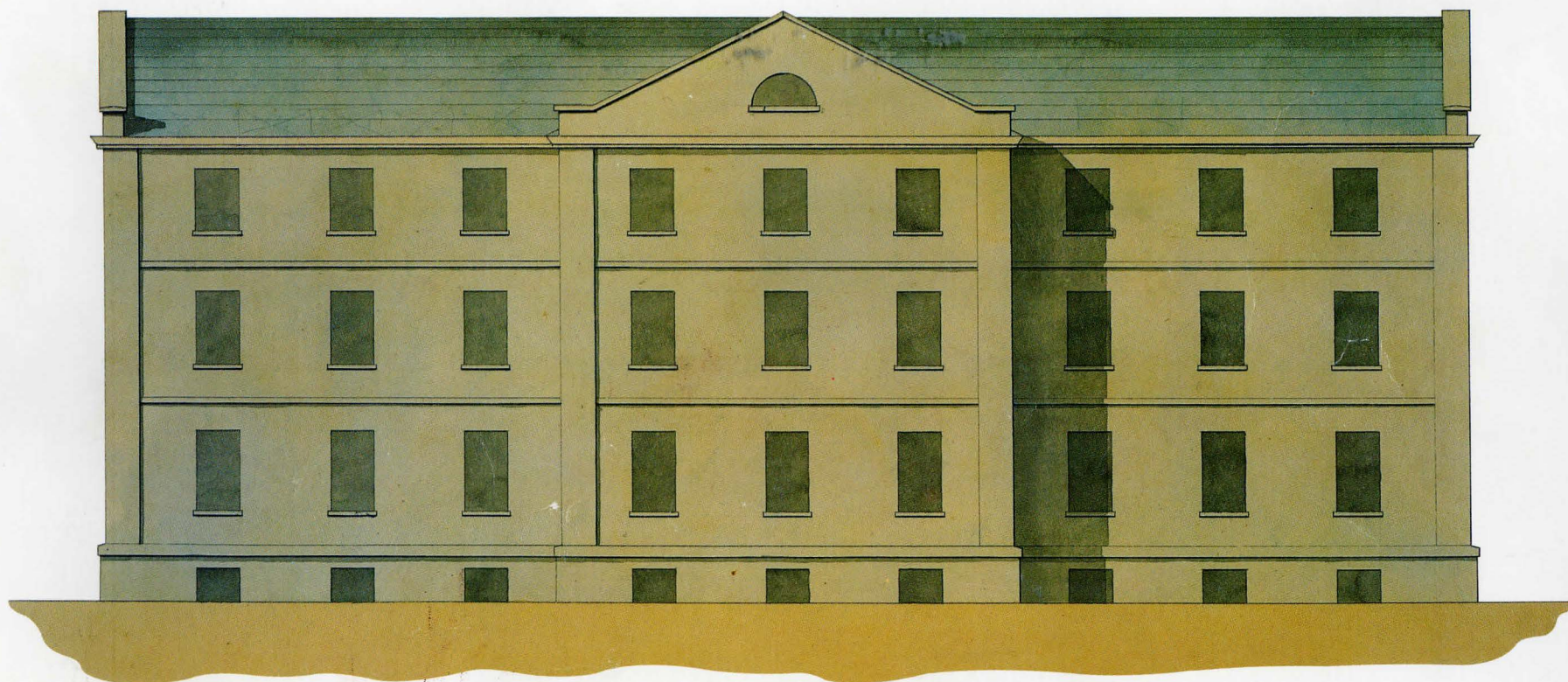
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THE KENNEBEC ARSENAL

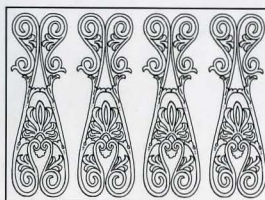
AN HISTORICAL AND ARCHITECTURAL SURVEY



BY MARIUS B. PÉLADÉAU AND ROGER G. REED

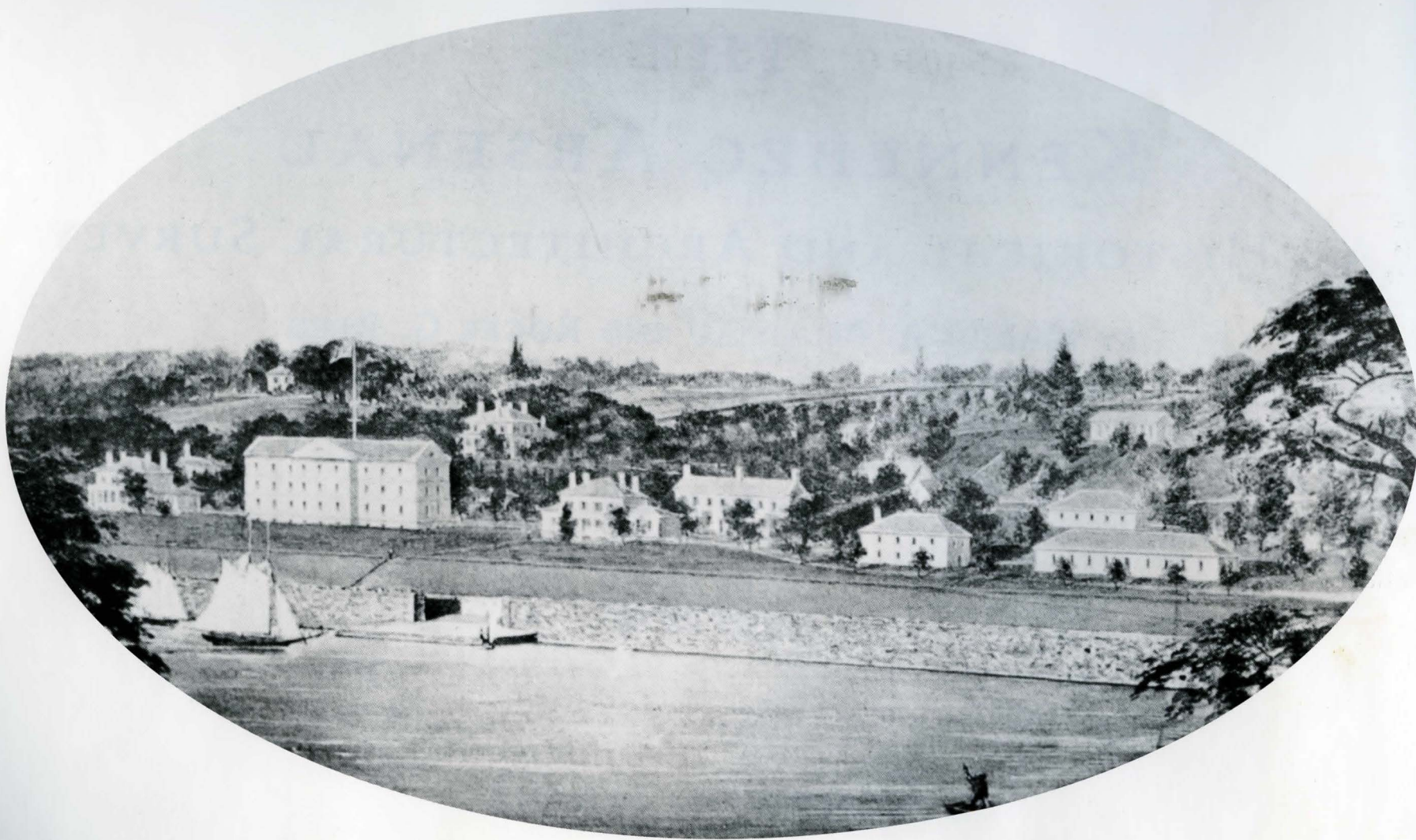
JUN 05 1997

THE
KENNEBEC ARSENAL
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BY MARIUS B. PÉLADEAU AND ROGER G. REED



AUGUSTA, MAINE

1997



A painting of the Kennebec Arsenal, circa 1880 (Maine State Library).

INTRODUCTION

One hundred and seventy years ago the Kennebec Arsenal was established in Augusta to protect Maine's new capital and its northeastern frontier. The Arsenal fulfilled its military mission from 1827 until 1905. That year the Federal government deeded the property to the State of Maine to become part of the Augusta Mental Health Institute. For the past nine decades, the Arsenal's buildings and grounds have served the needs of the hospital's patients and staff. Now, in 1997, Augusta's bicentennial year, the state and the city are examining new uses for this historic facility. To assist in this process, the Kennebec Historical Society, the Augusta Historic Preservation Commission, and the Maine Historic Preservation Commission have prepared the following study of the Arsenal's history and architecture to provide vital background information to both policy makers and the public. It is our hope that decisions about the future of the Kennebec Arsenal will be guided by a fuller knowledge of its rich and distinguished past.

David R. Dennett, President
Kennebec Historical Society

Anthony J. Douin, Chairman
Augusta Historic Preservation Commission

Earle G. Shettleworth, Jr., Director
Maine Historic Preservation Commission

A painting of the Kennebec River at Augusta, circa 1840, with the Arsenal and the Augusta Mental Health Institute at the left (Maine State Museum).



THE HISTORY OF THE KENNEBEC ARSENAL

by Marius B. Péladeau

THE NORTHERN-MOST UNITED STATES arsenal of the nineteenth century — and the one most perfectly intact today — still commands its attractive site on the banks of the Kennebec River in Augusta, Maine.¹ It is probably one of the most unchanged U. S. military posts in the nation.

Eight granite structures built in 1828-31 survive today. Only temporary wooden buildings erected over the years have disappeared. If Robert Anderson, who commanded the arsenal in 1834-35 (and later went on to national fame at Fort Sumter in Charleston Harbor at the outbreak of the Civil War) were to return to the grounds today, he would find little changed from when he was there over 150 years ago. So perfectly preserved is the arsenal complex, and so excellently does it exemplify a typical nineteenth century U. S. Army military post, that the State of Maine has nominated it to the National Register of Historic Places, administered by the National Park Service.²

Nearly all of the great U. S. arsenals of the nineteenth cen-

tury have been demolished or so completely altered that their original appearance has been lost. Students of American military history would find it rewarding to visit the Kennebec Arsenal today since it preserves the best impression possible of how a U. S. arsenal was laid out and constructed in the last century. The powder magazines, the massive arsenal building itself, the classically designed quarters for officers and enlisted men still stand, basically unchanged.

In the late eighteenth and early nineteenth centuries, Maine's location at the eastern extremity of the United States placed it in the midst of national and international developments. The British had ranged up and down the Maine coast during the Revolution and the War of 1812, and both times had occupied several strategic peninsulas and fortresses along the seacoast. The threat of invasion from Great Britain, either from across the sea or from Canada to the north, remained a very distinct possibility throughout the first quarter of the nineteenth century.

Storm clouds gathered on the northern horizon only two

Major Robert Anderson, commandant of the Kennebec Arsenal in 1834-35. Anderson later achieved national fame as the commander of Fort Sumter in Charleston, South Carolina at the outbreak of the Civil War (Janet and Bedford Hayes, *Gunsight Antiques*).



decades after the Treaty of Ghent in 1815. Disputes between Maine and Canada over the exact location of the border between the two caused conflicts throughout the “hump” of present-day Maine.³ Origins of the crisis lay in the uncertain boundary provisions of the Treaty of Paris which ended the Revolutionary War in 1783. Article II of this treaty seemed clear in its delineation of the American-Canadian boundary between the then District of Maine (a part of the Commonwealth of Massachusetts) and Canada. Yet the inability to correlate these boundary provisions with the geographic features of the area generated a long, tedious debate over the northeastern boundary which lasted until ratification of the Webster-Ashburton Treaty with Great Britain in 1842.

In the 1820s the U. S. Government sent regular army troops to the northern frontier as a possible deterrent to invasion from Canada. An outpost, with barracks, stockade and other structures, was erected on Garrison Hill, just east of present-day Houlton, Maine.⁴ The state militia was called out by Governor Enoch Lincoln, and the U. S. Government was alerted to potential border troubles.

The closest depot of military stores was at Watertown Arsenal in Massachusetts, more than 200 miles to the south. Experience from the War of 1812 showed that water transportation (the only way to move heavy stores of arms and ammunitions expeditiously in those days) could be easily cut off by an enemy fleet along the New England coast. Colonel

George Bomford was ordered north to study the situation, and he reported that a "part of the country so much exposed, and liable to become the seat of the war, required that an arsenal upon a scale adequate to furnish the military supplies for its defense should be established."⁵

In the meantime, Senator William Henry Harrison of Ohio, on January 16, 1827, reported out of the Committee on Military Affairs a bill to establish such an arsenal at Augusta. It passed both Houses of Congress and was signed into law by President John Quincy Adams on March 3, only ten days after Governor Lincoln signed a bill designating Augusta as Maine's new capital city.⁶

The act required the Secretary of War "to purchase, as soon as can be effected on reasonable terms, a site for an arsenal in the town of Augusta in the State of Maine, and cause to be erected such an arsenal as may be deemed proper for the safe keeping of arms and munitions of the United States for the northern and eastern frontier."⁷

In June, 1827, Major George Talcott of the Corps of Engineers visited the Augusta area, made surveys, and viewed a number of possible sites on each side of the Kennebec River.⁸ The Kennebec, one of Maine's principal rivers, was tidal up to and above Augusta and was deep enough to allow large vessels to navigate upriver from the ocean with no difficulty. Already Augusta and neighboring Hallowell were becoming important river ports. The arsenal location on the east bank

of the Kennebec, on a gently sloping forty-acre lot which faced directly across the river to the site of the new state capitol building, was purchased by the government. In September proposals were issued for materials to construct the arsenal buildings. Lieutenant John Hills, also of the Corps of Engineers, was placed in charge of construction.⁹

Since the arsenal was originally envisioned as a small depot for military stores to be supplied from Watertown, only \$15,000 was appropriated by Congress. However, Colonel Bomford's report, which made the point that Augusta and Watertown might be cut off from communication in case of war, caused Congress to reconsider, and it was decided finally to erect an arsenal complex large enough to fabricate military supplies and be semi-independent if war did break out. Congress appropriated an additional \$30,000, and on June 14, 1828, the cornerstone of the main arsenal building was laid. Construction commenced on fifteen buildings, ten of them made of unhammered granite, laid in ashlar courses, from the already famous nearby Hallowell quarry.¹⁰ All in a chaste and simple style, they stand today as among the best surviving examples of the military architecture of the period. As is so often the case when the government is involved, construction costs exceeded original estimates, and Congress had to supply the Corps of Engineers with an additional \$45,000 on March 27, 1829.¹¹

The entire forty-acre lot was enclosed by an iron fence,

eight feet tall, erected on a substantial granite foundation.¹² A granite retaining wall was laid along the river's edge, and work was started on a granite wharf at which vessels drawing ten feet of water could dock even when the river experienced its

lowest level during a summer's drought. The main arsenal was 100 feet long by 30 feet wide, three stories high over a spacious basement. In the first story, 2,640 boxes of National Armory muskets could be stored, 2,376 on the second story, and 2,112 on the third, giving it a total capacity of 142,760 muskets (considering the regulation 20 muskets per box).

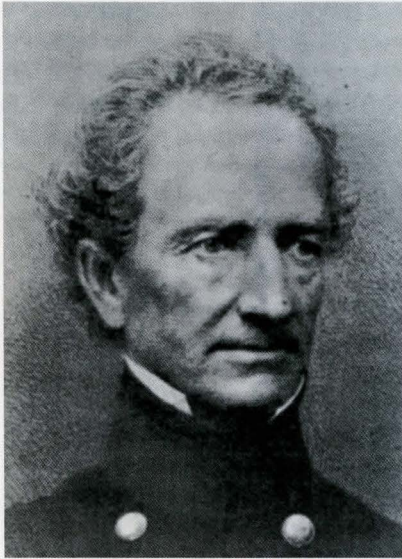
The larger of the two magazines could hold 600 barrels of powder, and the smaller one, 254 barrels. The other granite buildings were three officer's quarters (one of which was for the commander), an office (or guard house), barracks for the enlisted men, a stable, and shops for the blacksmiths, armorers and wheelwrights. By 1831 construction was substantially completed,

and Lieutenant Hills was relieved of his post on May 20th by Captain Charles Mellon of the 2nd Artillery.¹³ He continued in command until May 31, 1833, when James W. Ripley, Captain of Ordinance, replaced him. Under Ripley, who later became famous as commander of the Springfield Armory, the arsenal grew again. On his recommendation, the government

purchased an adjoining twenty-acre parcel of land to the south of the existing grounds, and additional structures were erected. The iron fence was extended to include this new property, the wharf was completed, and other improvements were made, including the addition of "laboratories" for the manufacture of fixed ammunition.¹⁴

Ripley thought that a slight "luxury" could be indulged, and so when a spring-fed reservoir was constructed in the hillside, at the center of the arsenal lot near the commander's residence, it was made large enough (100 feet in diameter) so that it could be stocked with landlocked Maine salmon and trout.¹⁵ Whether these delicacies were for the sole enjoyment of the commander and his officers, or whether they were shared with the enlisted men, is left to the imagination of the reader.

On October 25, 1834, Ripley requested orders to perform a short tour of duty during the winter at Alleghany Arsenal in Pittsburgh. He suggested that Lieutenant Robert Anderson be temporarily detailed for ordinance duty and assigned to command the Kennebec Arsenal during his absence.¹⁶ This request was granted, and Anderson relieved Ripley on November 3rd. Anderson continued in command until Ripley returned to Augusta the following May. Little did either Anderson or Ripley realize when they were stationed at peaceful Augusta that they would someday play major roles in the defense of the Union: Ripley as mastermind of the largest armory in the nation, and Anderson as the defender of Fort Sumter on April 12, 1861.



General James W. Ripley, commandant of the Kennebec Arsenal from 1833 to 1841 (Maine State Library).

In June, 1835, Ripley was again temporarily relieved for a few months, this time by Lieutenant George S. Green. Returning, he continued in command until May, 1841, when he was appointed superintendent of the Springfield Armory.¹⁷ Ripley shepherded the Kennebec Arsenal through some of its most active years. War seemed even more imminent with Canada in the mid-1830s. The Maine-Canadian border problems flared up again. In 1837 a Maine land surveyor was arrested by New Brunswick officials for trespassing into Canada (Maine said the land was hers).¹⁸ Maine informed the national government that it expected reparations from Great Britain. After months of inaction by Washington, Maine decided to take matters into its own hands and started to run its own survey of the boundary, based on its interpretation of the Treaty of Paris. By January, 1839, the state had appropriated \$10,000 for riflemen to defend the northern "hump," and the situation became ominous. Nearly 200 Maine volunteers started for the troubled region, and New Brunswick Lieutenant Governor Sir John Harvey responded by saying that he would call out his troops. After weeks of jockeying for position, Maine Governor John Fairfield called on President Martin Van Buren to send federal

troops to "cooperate with the forces of this State in repelling an invasion of our territory." The governor sent wagons, arms, and powder north to the state troops, now numbering over 12,000, who boasted they could whip the "warriors of Waterloo."¹⁹

Van Buren, more concerned that the economic Panic of 1837 had ruined his chances for a second term, sat in Washington not knowing whether to compromise with Great Britain or follow the call of the nation to defend itself from British aggression. Congress forced his hand: in March, 1839, it appropriated ten million dollars for the president to call up 50,000 volunteers. Finally Van Buren turned to his troubleshooter, General Winfield Scott, a veteran of settling earlier Anglo-American disputes along the New York-Canadian border. If the British refused to leave the disputed area, the commanding general was to order regulars to the north-east frontier. With the militia from Maine and Massachusetts there would be enough men, it was thought, to "enforce the determination of the federal government."

Scott traveled to Augusta, met with Governor Fairfield, and soon cooler heads prevailed. New Brunswick's men were poorly provisioned, and Maine's troops, now that spring

Federal soldiers with a cannon at the Kennebec Arsenal, circa 1900 (Kennebec Historical Society).



Federal soldiers at the Kennebec Arsenal, circa 1900, with Quarters Two and the Arsenal Building in the background (Kennebec Historical Society).



planting had to be done, only wanted to go home. The Aroostook War petered out as quickly as it had started, and Secretary of State Daniel Webster was allowed to resolve the border problem over the negotiating table with Lord Ashburton, the British Foreign Minister.²⁰

But the conflict had caused a flurry of activity at the Kennebec Arsenal. Munitions were fabricated in great number, and additional arms were ordered north from Watertown. It appears they stayed there in storage up to the Civil War. Ripley was succeeded in 1841 by Lieutenant R. A. Wainwright, who remained at Augusta until December, 1846,

when he was ordered to Mexico to fight in the border war there. The Kennebec Arsenal had always been an informal post, and so no one was surprised when Wainwright's father-in-law, James L. Child, took over in his absence as military store-keeper.²¹

During the Mexican War rockets and fixed ammunition were made at the arsenal and forwarded to the front. Wainwright returned as commander in December, 1848. In September, 1851, he was replaced by another Mexican War veteran, Captain F. D. Callender. On June 10, 1855, under Callender's command, the arsenal was inventoried and appraised, and the results reported in the public press. The land and buildings were valued at

\$155,154, and the military stores at \$394,735. There were "24,313 muskets, 1,936,300 pounds of gun powder [nearly 1,000 tons], 5,411 cannon shot and shell, some 50,000 pounds of cannon powder, and 178,207 pounds of lead in pigs for use in making bullets."²²

Callender was succeeded by Lieutenant Oliver Otis Howard on December 5, 1855. A native of nearby Leeds, Maine, Howard was a graduate of West Point and was to become famous as a brigadier general at Gettysburg, as a major general commanding one wing of General Sherman's army on the March to the Sea, head of the Freedmen's Bureau

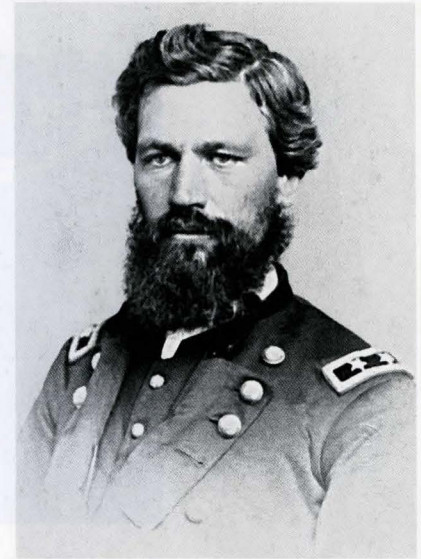
after the Civil War, and founder of Howard University at Washington, D.C., for the education of blacks. On July 18, 1856, Captain I. Gorgas replaced Howard, and the former continued in command until June 1, 1858, when he was relieved by Lieutenant J. W. Todd. On October 25th of that year Todd was transferred to another post, and Briscoe G. Baldwin of Virginia became military store-keeper. When the Civil War broke out, Baldwin was offered the command of the Virginia State Arsenal; and after he heard that Virginia had seceded from the Union, Baldwin left for the south. Benjamin H. Gilbreth of Augusta became military store-keeper on June 1, 1861, and continued in charge throughout the busy years of the war.²³

During the Civil War the arsenal became an important depot of military stores. Large quantities of fixed ammunition were prepared at the post. The demand was so great that temporary wooden buildings were erected to facilitate manufacture of paper cartridges by both men and women, young and old. Great amounts of stores on hand, as indicated by the 1855 inventory, left for the seat of war. At one time over one million dollars worth of arms were stored at the arsenal.²⁴

It was feared that Confederate guerillas based in Canada might try to burn or otherwise decommission the arsenal, and extra guards were mounted to prevent this. One dark night, about midnight, the sentinel on the wharf discovered a boat filled with men, approaching with muffled oars. They were

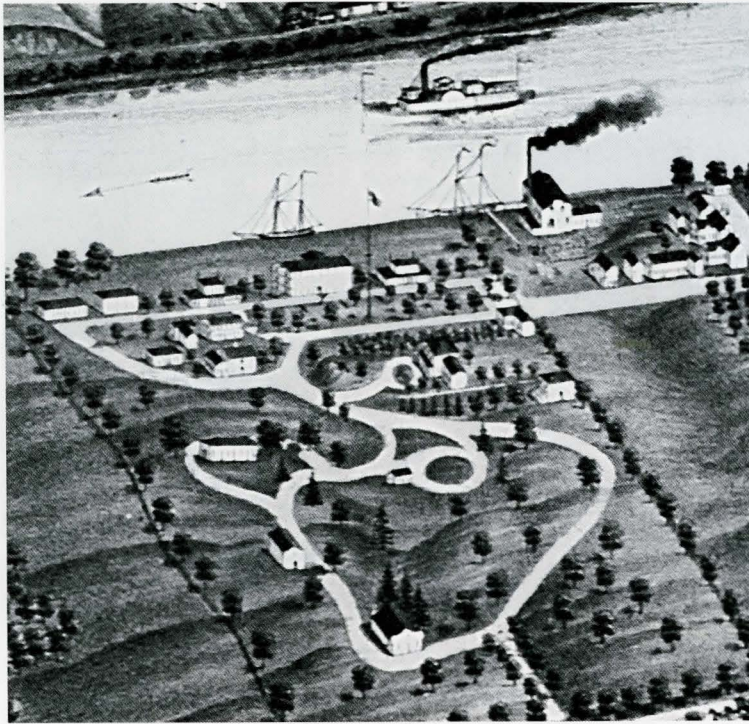
challenged and a few shots were fired, but they fled and were never seen again.²⁵ Whether this was the feared Confederate attack was never proven.

Gilbreth was relieved in 1869, being ordered to report to Benicia Arsenal in California. Major James M. Whittemore became commander, but the second half of the century saw a declining importance of the Kennebec Arsenal as the scene of national interest shifted to the western territories and peace with Great Britain seemed assured.²⁶ Some supplies at the arsenal were shipped to the front during the Spanish-American War. At this time Major John R. MacGuinness and fifteen officers and men manned the post.²⁷ In 1898 a newspaper reporter wrote that one building at the arsenal was a veritable "old curiosity shop," containing gun carriages, an old battery wagon, a combination blacksmith shop and machine shop on wheels, mortars and siege gun carriages that once did duty at Fort Popham at the mouth of the Kennebec River, and other items "that would drive a relic hunter of military materials wild." One of the old wooden buildings erected for the manufacture of cartridges during the Civil War was being used by Augusta citizens as a dance hall, apparently with the commander's permission. On the



General Oliver Otis Howard, commandant of the Kennebec Arsenal in 1855-56 (Thomas MacDonald).

The Kennebec Arsenal as shown on the 1878 bird's-eye view of Augusta (Kennebec Historical Society).



wharf were a few large Rodmans and other cannon that had been relieved from guard duty at Fort Popham.²⁸

By the turn-of-the-century it was obvious the end was near. Despite local protests the order for the abandonment of the arsenal was posted May 2, 1901, and on September 10, 1901,

the last sunset gun was fired. Through the efforts of Congressman Edwin C. Burleigh of Maine, the facilities were retained as a small U. S. military post until December, 1903, when the garrison of the post left for good and the flag was hauled down for the last time. In 1905 Congressman Burleigh introduced a bill in Congress authorizing the Secretary of War to transfer the entire property to the State of Maine for public purposes. It was signed into law by President Theodore Roosevelt, and on April 13, 1905, the arsenal was transferred to the state for use by the Maine Insane Hospital, which was located on the adjoining tract of land. On April 25, 1906, the first patients moved into the remodeled arsenal building.*

The officers and enlisted men's quarters became residences for hospital staff, and some of the other buildings were utilized for storage. The powder magazines became huge "filing cabinets" for Maine State Police records. With the change in the treatment of mental illness in recent decades, some of the buildings have been vacated by the hospital and been placed to other uses by the state. All remain in relatively good condition today, although little evidence remains of the wharf. The Kennebec Arsenal still stands on its attractive site overlooking the river as a vivid reminder of our military past.

Notes

1. The Kennebec Arsenal gained the honor of being the northern-most U. S. Arsenal by only a few minutes of latitude degrees over the Champlain Arsenal at Vergennes, Vt. See Marius B. Péladeau, "The Champlain Arsenal, Vergennes, Vermont," *Military Collector & Historian*, XVII: 69-75.
2. The Kennebec Arsenal was placed on the National Register of Historic Places on August 25, 1970.
3. For a good, modern discussion of the entire northeast border controversy see Charlotte L. Melvin, *Madawaska - A Chapter in Maine-New Brunswick Relations* (Madawaska, Maine: Madawaska Historical Society, 1975), pp. 26-62; and Howard Jones, "Anglophobia and the Aroostook War," *New England Quarterly*, Vol. XLVII, No. 4 (December, 1975), pp. 519-39.
4. Known as Hancock Barracks, the post was occupied by regular troops as late as 1847. The stockade and some of the buildings have been reconstructed in recent years.
5. Quoted in James W. North, *The History of Augusta ...* (Augusta, Maine: Clapp & North, 1870), p. 482. Hereafter cited as North.
6. Portland had been the capital since Maine gained its statehood in 1820. For details on the legislation establishing the Arsenal see North, p. 482; Joseph T. Beck, *Historical Notes on Augusta, Maine. Part Two* (Farmington, Maine: Knowlton & McLeary, 1963), p. 68; and *Augusta Centennial Souvenir booklet ... July 9, 1897* (Augusta: Kennebec Journal Print, 1897), p. 14.
7. North, p. 482.
8. *Ibid.* Talcott was to go on and enjoy a distinguished career, rising to be Colonel of Ordnance at the time of the Mexican War, with the brevet rank of Brigadier General.
9. *Ibid.*
10. *Ibid.*, pp. 482-83.
11. *Ibid.*
12. The following description of the Arsenal is taken from an examination of Plan Book 3, p. 18 (for 1838), Registry of Deeds, Kennebec County Court House, Augusta, Maine; and from a map by B. F. Perham entitled, *Plan of the Village of Augusta... 1838* (Boston: T. Moore's Lithography, 1838) in the collection of the Kennebec Historical Society, Augusta. See also North, p. 483, and Beck, p. 69.
13. North, p. 483.
14. For the growth of the Arsenal under Ripley see Plan Book 3, p. 36 (for 1851), Registry of Deeds, Kennebec County Court House, Augusta; the 1838 map cited in footnote 12 above; and North, p. 483.
15. The reservoir shows up for the first time in an 1879 map of Augusta but oral tradition dates it shortly after 1838. See H. E. Halfpenny, *Atlas of Kennebec County, Maine...* (Philadelphia: Caldwell & Halfpenny, 1879), plate 25.
16. North, p. 483, and Beck, p. 69.
17. *Ibid.*
18. Jones, p. 524.
19. For elaboration of the above section see Jones, pp. 524-30, and Melvin, pp. 45ff.
20. *Ibid.*
21. North, p. 484.
22. This data is from an article signed by the Rev. William A. Drew in the June 10, 1855 issue of the *Rural Intelligencer*, an Augusta newspaper. See also Beck, p. 69, and North, p. 484.
23. The above changes of command are outlined in North, p. 484, and Beck, pp. 69-70.
24. North, p. 484.
25. Beck, p. 70.
26. North, p. 484.
27. *Augusta Centennial Souvenir booklet*, p. 14.
28. Quoted in data sheets accompanying nomination to National Register of Historic Places, in the files of the Maine Historic Preservation Commission, Augusta, Maine.
29. *Ibid.*



A circa 1905 post card of the Kennebec Arsenal, showing from left to right Quarters Two, the Commandant's House, the Arsenal Building, and Quarters Three (Maine Historic Preservation Commission).

THE ARCHITECTURE OF THE KENNEBEC ARSENAL

by Roger G. Reed

THE SELECTION OF AUGUSTA as Maine's capital was due to its central location on one of the major river thoroughfares in the state. For the same reason this small town was chosen as the site for the only Federal arsenal in northern New England. The complex of granite structures, begun in 1828, were contemporary with several other major public buildings in Augusta, beginning with the Kennebec County Courthouse (1828), the State House (1829-32), and the Maine Insane Hospital (1836-40), all built of Hallowell granite and prominently sited overlooking the Kennebec River.

In March, 1827, President John Quincy Adams signed a bill authorizing the establishment of an arsenal at Augusta. During the following summer land was surveyed on the east side of the river. In September Lieutenant John Hills, United States Army, arrived in Augusta to purchase forty acres on behalf of the Federal government. On September 21st public notices in local newspapers requested bids from suppliers of granite and lumber for the construction of "an arsenal and other public buildings". The notice asked that proposals be

supplied in terms of price per foot for the stone of courses 10 to 16 inches in height and walls two to three feet thick. Prices for lumber were requested in linear feet.

While Lieutenant Hills was in Augusta supervising the preparations for the construction of the arsenal buildings, plans were being prepared for the various structures in Washington. Lieutenant Julius d'Lagnel, then on duty in the Ordinance Department, worked on the designs in 1827 and 1828. The preliminary plans for the first structures were completed by June, 1828, when the cornerstone of the Arsenal Building was laid. Lieutenant Hills remained in Augusta to supervise construction until May, 1831. All of the surviving buildings, except the Office, were erected during this period. Lieutenant Hills' next assignment was to establish an arsenal in Tallahassee, Florida, but he died there on February 25, 1835.

The buildings erected under the supervision of Lieutenant Hills and according to the plans prepared by Lieutenant d'Lagnel included the following: The Arsenal Building, the

The entrance and parade ground of the Kennebec Arsenal from a stereo view by A.W. Kimball of Augusta, circa 1880.



Commandant's Quarters, Officer's Quarters Numbers 2 and 3, the Barracks, the large and small magazines, the Armory, and the Carriage Shop. There was also a stable, for which plans have not been located. These designs are typical of what was being constructed on other military posts around the country, although the use of granite was unusual. Erected according to plans prepared in Washington by an engineer who, as far as is known, never visited the site, these buildings reflect the influence of late Federal Period architecture which, in much of Maine, was already being supplanted by the more monumental Greek Revival style found on the facade of the Maine State House.

The next phase in the development of the Arsenal occurred during the early 1830s when, under the supervision of the new commandant, James Wolf Ripley, the architectural character of the complex was radically transformed. Under Major Ripley's direction the Commandant's Quarters and two Officer's Quarters received Greek Revival style porticos and verandahs. An Office was built in the Gothic Revival style, along with fences and a formal entrance gate. Major Ripley obtained permission to increase the acreage on the south side and rebuilt the granite wharf on the river. He was also responsible for the construction of three small wooden "laboratories", which were used to manufacture ammunition.

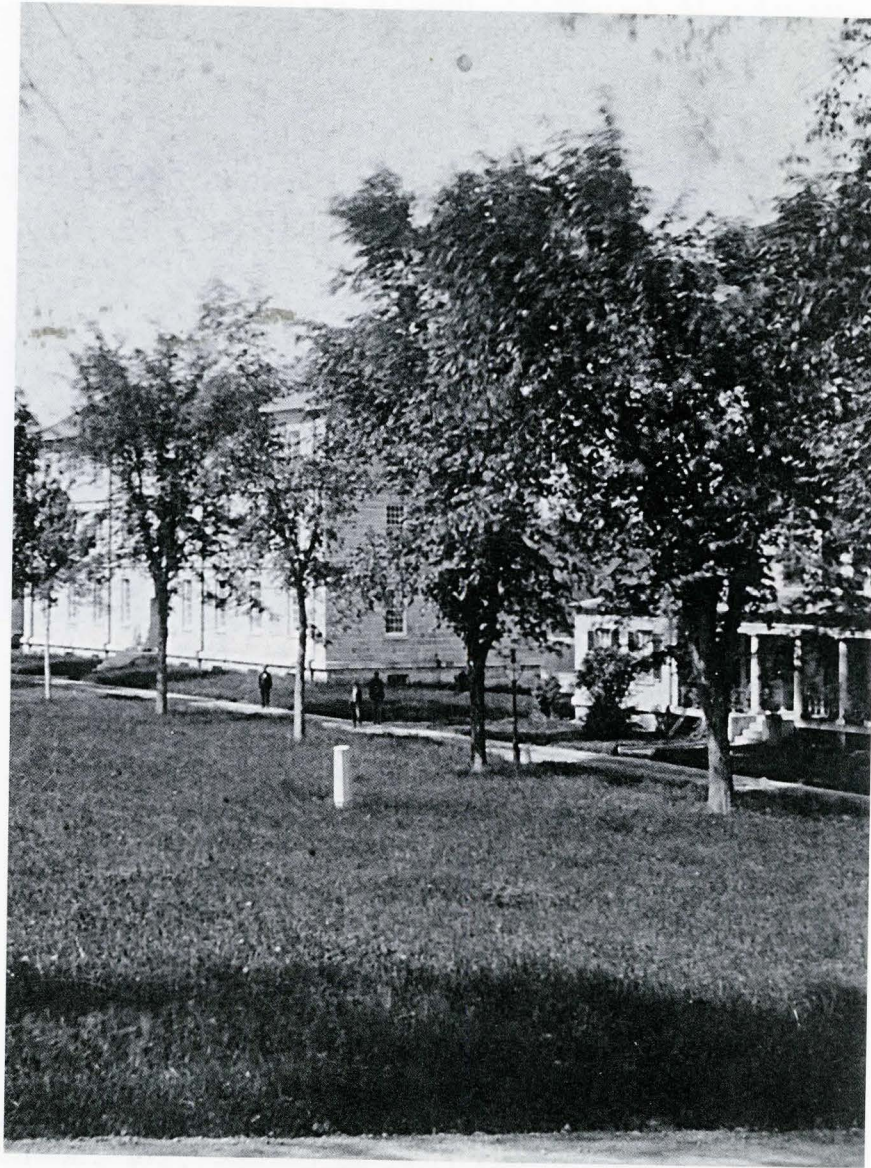
Major Ripley's successors made fewer improvements to the Kennebec Arsenal. In part this was because the arsenal

never evolved into a major munitions center as did other posts. For example, the Springfield Armory produced all of the small arms for the army. Cannon were manufactured at Watervliet in New York, gun carriages at Watertown, Massachusetts, and soldiers' equipment at Rock Island, Illinois. The Kennebec Arsenal remained a storage depot, and the next major change to the complex did not occur until 1905, when the Federal government transferred ownership of the property to the State for the Insane Hospital. This led to the first of many alterations to the buildings to conform to the site's new function as a mental hospital.

DESIGNERS AND BUILDERS

The original plans for the buildings were signed by Julius A. d'Lagnel, second lieutenant of the 2nd Artillery, then on ordinance duty. Born in New York in 1799, he graduated from West Point in 1821. He served on frontier outposts in Minnesota and Illinois before his transfer to Washington for ordinance duty during the years 1825 to 1832. During this period d'Lagnel prepared the drawings for the Kennebec Arsenal. He later served at different posts before being assigned to the New York ordinance depot where he died on May 21, 1840.

Lieutenant d'Lagnel drew the plans for the principal buildings at the Kennebec Arsenal in 1827 and 1828. He signed the drawings for a small arsenal building (drawings 2, 4, and 6,



The parade ground of the Kennebec Arsenal with Quarters Two and the Arsenal Building in the background, from a stereo view by F.A. Morrill of New Sharon, circa 1875.

The Kennebec Arsenal, showing from left to right the Commandant's House, Quarters Two, the Arsenal Building, the Barracks, and Quarters Three, from a stereo view by A.F. Morse of Hallowell, circa 1875 (Maine Historic Preservation Commission).



dated 1827), the Officer's Quarters (drawing 10, dated 1827), the first small magazine (drawing 8, dated 1827), the main Arsenal Building (drawing 5, dated 1828), and the large magazine (also number 8, but dated 1828). His proposals for the Arsenal Building and the Officer's Quarters feature roof balustrades and what appear to be cornices over the main entrances. The design for the larger Arsenal Building (drawing 5) was similar to one built at Detroit and may not have originated with d'Lagnel. This may also be true for the magazine plans he signed, as they represented a scheme used in St. Louis and appear to have been a standard solution for that type of structure.

As considerable remodeling and construction activity took place under the command of Captain James Ripley, it can be assumed that he played a major role in the design of the buildings at the Kennebec Arsenal. Not only did he undertake to improve the three officer's quarters in the Greek Revival style, but he constructed the Gothic Revival style Office and the perimeter fence. Moreover, it is known that Ripley later made major additions to the armory at Springfield, Massachusetts, which he commanded after leaving Augusta, and these improvements included architectural embellishments for which he was criticized at the time for being extravagant.

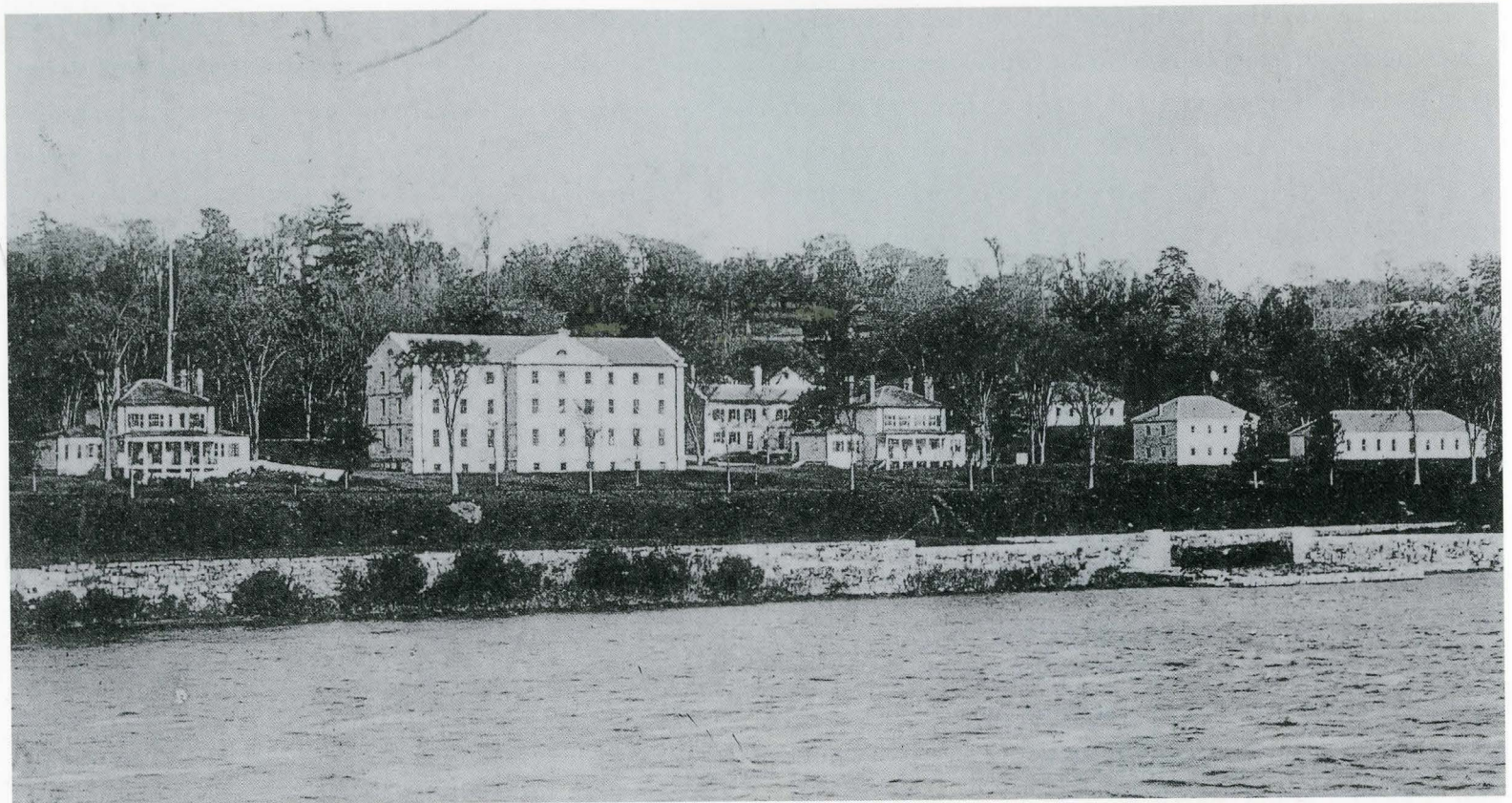
James Wolfe Ripley was born in Windham County, Connecticut, on December 10, 1794. Graduating from West Point in 1814, he was assigned to the arsenal at Sackett's Harbor, New York, on the Canadian frontier during the War of 1812. He later served with Andrew Jackson in the Seminole War. In 1832, by then a captain, Ripley was given the command of Fort Moultrie in Charleston, South Carolina, during the Nullification Crisis. From that politically sensitive position, Captain Ripley was ordered to command the new Kennebec Arsenal in Maine in May, 1832. Upon conclusion of his service in Augusta, Ripley was promoted to major. On April 16, 1841, he was selected to serve as superintendent of the arsenal at Springfield. In his fourteen years at Springfield, Major Ripley made extensive improvements to that facility. While Ripley went on to serve his country in other duties, including commanding the Ordinance Department during the early years of the Civil War, a nineteenth century biographer stated that "Springfield Armory is truly Ripley's monument". This dedicated officer served his country continuously for fifty-five years, retiring a year before his death in 1870.

While no drawings survive which indicate Captain Ripley designed the work accomplished under his command, he did return d'Lagnel's original drawings to Washington in June, 1833, before he began remodeling the houses used as officer's quarters. It is likely, therefore, that he had new drawings made which, through his training at West Point, he could have pre-

pared himself. Moreover, Ripley's record of expenses on these buildings survive; and they document what was paid to carpenters and masons, but provide no indication of anyone having been paid for architectural drawings. There is one exception to this, and its inclusion supports the theory that Ripley did not pay for drawings to be prepared. In his accounts for 1838 there is a record that Charles Keene was paid to make a draught of the pattern for the gates to the arsenal. However, it cannot be assumed that the absence of payment records for other drawings is evidence that such expenses were not incurred.

Charles Keene (1794-1870), a master carpenter residing in Augusta, may also have prepared architectural drawings for alterations to the arsenal buildings. Keene was born in 1794, possibly in Bristol, and came to Augusta at the age of eighteen. Apprenticed to a carpenter named Ephraim Ballard, Keene worked with his master on the third Kennebec River bridge in 1827. Afterwards he worked on his own as a carpenter and later became a hardware merchant. Keene was in charge of the work done in enlarging the Commandant's Quarters and Quarters 2 and 3 as well as the construction of the Office. Little is known about Keene's career, but what has been established suggests that he was quite capable of providing architectural services. He is credited with the design of two Universalist churches, one in Augusta (1835) and one in Albion (1838). The Augusta church featured lancet arched

A circa 1905 post card of the Kennebec Arsenal, showing from left to right Quarters Two, the Arsenal Building, the Barracks, Quarters Three, the Carpenter's Shop, and the Machine Shop (Maine Historic Preservation Commission).

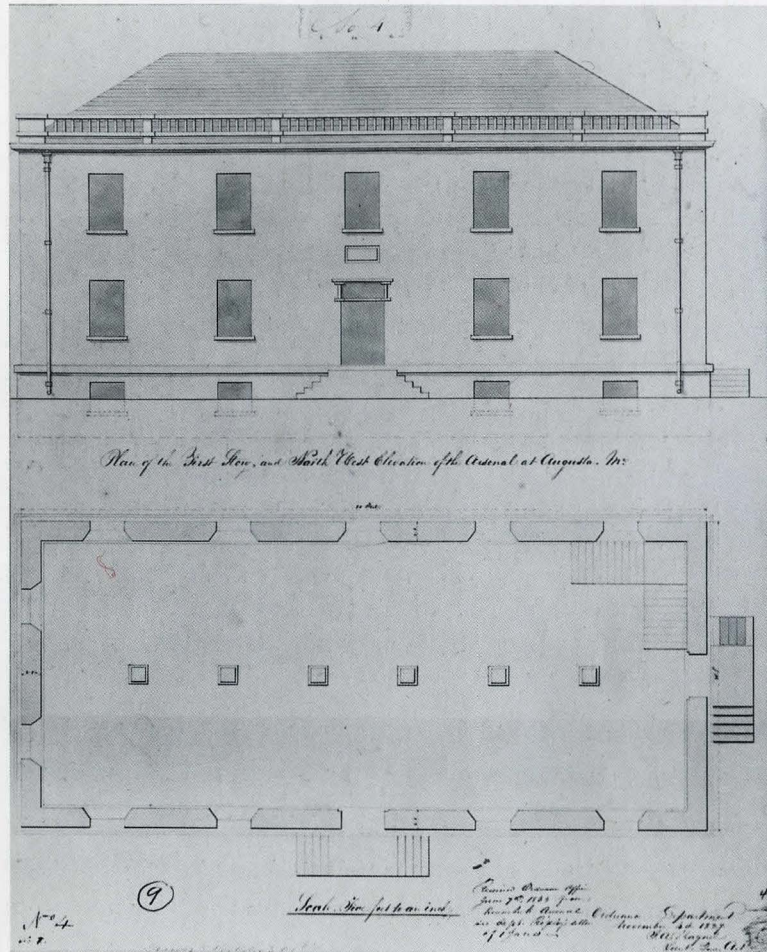


windows such as were employed for the Office at the arsenal. Keene's abilities as a builder are also documented by his having been hired to complete the construction of the Maine Insane Asylum in Augusta beginning in 1838.

Yet another possibility is John D. Lord (1797-1888), the architect of the Insane Asylum. Lord's name does not appear in any records related to the arsenal, but he clearly was

acquainted with James Ripley. Lord moved to Springfield in 1840 to work on the arsenal there at the same time that Captain Ripley was undertaking his major improvements to that post. This evidence is circumstantial; but Lord's abilities as an architect, and his later association with Ripley make him a candidate for designing the work at the Kennebec Arsenal.

BUILDINGS



ARSENAL BUILDING

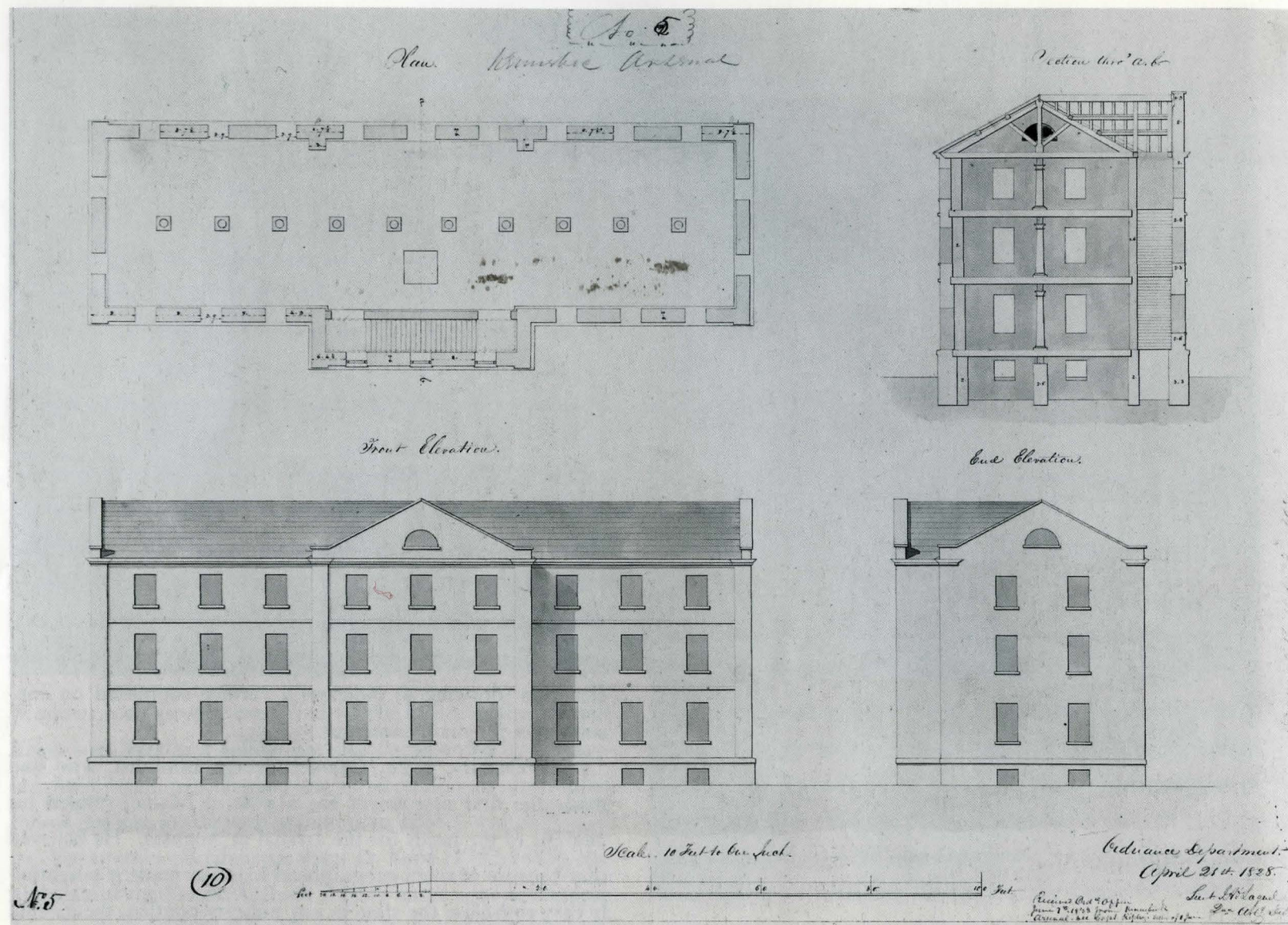
This structure was the main building of the arsenal. The other structures provided support facilities, either in the storage and manufacture of munitions or in the housing of personnel and animals. Accordingly, the preliminary schemes for the structure, which are signed by d'Lagnel on November 4, 1827, bear the earliest date. A bill to authorize the establishment of an arsenal at Augusta was signed into law on March 3, 1827, and initial cost estimates led to an appropriation of \$15,000. Based upon this first appropriation, d'Lagnel prepared plans for an arsenal building, indicated as sheets 2, 4, and 6. The design for this small building is five bays wide, two stories high, and hip roofed. The entrance is in the center of one facade, and a roof balustrade appears on all four elevations. Although the drawings are not clearly detailed, a side elevation (drawing 6) indicates a cornice supported on consoles over the main entrance.

In February, 1828, Colonel George Bomford, who had made the first assessment for a post in Maine, revised his analysis of the needs for the arsenal at Augusta. He believed that because Maine's geographical location made it potentially easy to isolate the state in any military conflict, the arsenal

“Plan of the First Story and North West Elevation of the Arsenal at Augusta, ME.” Dated November 4, 1827, this drawing represents Lieutenant Julius A. d'Lagnel's first proposal for the Arsenal Building, which remained unbuilt because it was superseded the next year by plans for a larger structure (National Archives).

22
THE KENNEBEC ARSENAL

"Plan, Section, Front
Elevation, Kennebec
Arsenal." Dated April
21, 1828, this drawing
by Lieutenant d'Lagnel
shows the Arsenal
Building as constructed
that year (National
Archives).





West elevation of the
Arsenal Building in 1947,
showing the porch added
to the first story in 1905
(Maine Historic
Preservation Commission).

would have to be more self-sufficient and not rely, as originally intended, upon support from the arsenal at Watertown, Massachusetts. This new assessment led Congress to the appropriate an additional \$30,000 for the Kennebec Arsenal. Accordingly, in April, 1828, d'Lagnel produced a second sheet of drawings for a much larger structure, the one that was actually built. This scheme is shown on two nearly identical drawings, labeled numbers 3 and 5. Drawing number 3 is undated and unsigned, but there is a notation that it is identical to the new arsenal in Detroit, except that the latter building featured a roof balustrade and pilasters. Drawing number 5, dated April 21, 1828, and signed by d'Lagnel, shows the executed plans for Augusta.

The cornerstone was laid on June 14, 1828, and the larger building had nine bays on the principal elevations, was three stories high, and featured a gabled roof. In the plans there is only one gable roofed pavilion for the staircase, and the location of the main entrance is not clearly shown. A doorway, presumably the main entrance, was located in the center of the east elevation. The 1878 bird's-eye view of Augusta and a photograph taken in 1875 provide the only nineteenth century images of the east elevation and confirm the lack of ornamental treatment for that facade.

The purpose of a pavilion on the west side was to contain the staircase and leave each floor open for maximum storage for armaments. This open space was interrupted only by

columns running the length of the building parallel with the gable roof. The roof is supported on king post trusses. Constructed of ashlar granite, each floor was delineated by a water table and two belt courses. The corners of all the gable ends project beyond the plane of the walls, suggesting classical pilasters. This classical motif is strongest in the roof level, which consists of heavy projecting cornices that originally contained built-in gutters. The gable ends have lunettes and terminate in shallow steps, features associated with Federal Period architecture.

The Arsenal Building is prominently situated near the bank of the Kennebec River in close proximity to the wharf upon which it depended for the loading and unloading supplies. The army surveyors were careful to site the building 211 feet from the river, well above flood levels. The storage capacity for small arms was 2,640 boxes of rifles on the first floor, 2,376 boxes on the second floor, and 2,112 boxes on the third.

The major alterations to the Arsenal Building took place in 1905 when the building became part of the Maine Insane Hospital. Lewiston architects George M. Coombs and Eugene W. Gibbs prepared plans for a conversion that included a second gable end pavilion on the east elevation to match the one on the west side. This new pavilion became the main entrance and included a neo-classical portico. On the west side a first story veranda was added to the length of the building.

The interior of the Arsenal Building was completely gut-



East elevation of the Arsenal Building in 1947, showing the central entrance pavilion added in 1905 to match the original one on the west side (Maine Historic Preservation Commission).

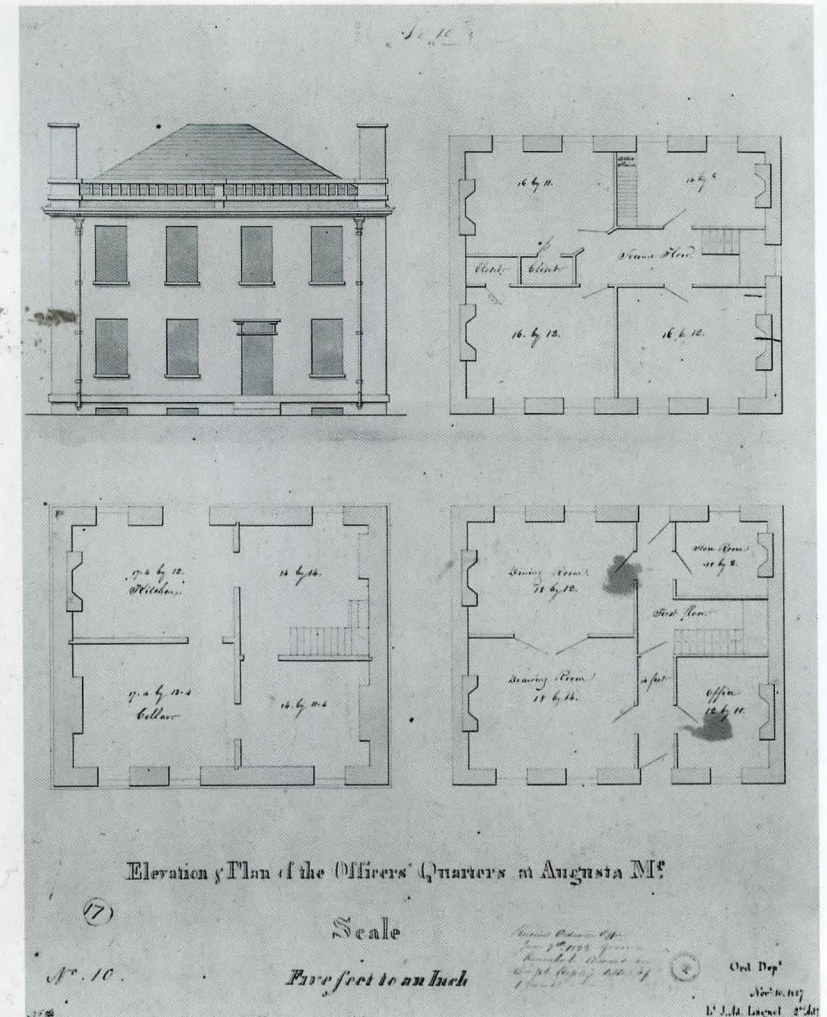
"Elevation & Plan of the Officer's Quarters at Augusta, ME." Dated November 10, 1827, this drawing by Lieutenant d'Lagnel shows Quarters Two and Three as originally built in 1828 (National Archives).

The interior of the Arsenal Building was completely gutted. There were new concrete floors overlaid with hardwood planks as well as plaster walls consisting of wire lath covered with adamant cement. The sash were replaced, and new iron staircases constructed. In the basement was the dining room and the kitchen. On the first floor was a sitting room for the patients and four small rooms for attendants. The second and third floors were sleeping rooms for patients, although large open wards meant the lack of partitions characteristic of the arsenal was maintained. The attic space contained apartments for night attendants.

With the removal of patients, the Arsenal Building became a storage facility for the Maine State Museum. In recent years the building has stood empty and has been allowed to deteriorate. Terrien Architects was hired in the 1980s to prepare plans for converting the building into state offices, but the project was not implemented due to lack of funds.

OFFICER'S QUARTERS NUMBER TWO

This building and Quarters Three were identical in design, but were not always used for the same purposes. Both buildings were constructed according to plans by d'Lagnel labeled number 10 and dated November 10, 1827. Quarters Two was used as a residence from the beginning. The early date on the drawings suggests that this was intended to serve as the commandant's quarters in the original





East elevation of Quarters Two in 1947, showing the porch and wings added during the 1834-38 reconstruction under the direction of Captain James W. Ripley (Maine Historic Preservation Commission).

West elevation of Quarters Two in 1947, showing the porch and wing added during the 1834-38 reconstruction under the direction of Captain Ripley (Maine Historic Preservation Commission).



scheme for a smaller arsenal. When the decision was made to enlarge the facilities, new plans were prepared for a separate commandant's quarters in 1829. The design shown on plan number 10 is in keeping with d'Lagnel's treatment for a small arsenal building with its classical balustrade on the roof and cornice over the doorway. In plan the house is very similar to the room arrangements delineated by d'Lagnel for his 1829 commandant's quarters. The kitchen was in the basement below the dining room on the first floor. The first floor also had a drawing room and an office, with a staircase off the hallway.

With the decision to build a larger arsenal in 1828, there was need for a commandant's house and two officer's quarters. As far as can be determined, the two quarters flanking the Arsenal Building were constructed in mirror plan following the 1827 designs. When Captain Ripley began his remodeling of the complex, he enlarged both quarters, adding one story wings linked by a porch on one side and a piazza facing the river on the other. This was done in 1834, but in August of that year Quarters Two burned and was later rebuilt. In a report to his superiors, Captain Ripley informed them that the north and south walls remained intact; but there were large cracks in the east and west walls, and the cornice was "wholly ruined". The estimate for making the building weather-tight, which included rebuilding walls, new doors and win-

dows and a slate roof, was \$2,189.50. The work began in September. Mr. Brooks was the mason hired for both quarters, and Charles Keene served as head carpenter. Keene's repairs, which were dependent upon approval from Washington, continued until as late as 1838. It is through Captain Ripley's reports to Washington that original features now lost are documented. For example, in January, 1836, Captain Ripley wrote to provide a justification for replacing the marble fireplace mantels in Quarters Two, stating that they were lost in the fire. Unfortunately, these mantels are no longer extant, although Quarters Two does contain more original fabric than Quarters Three. The original floor plan of the 1827 design appears to be intact, and the woodwork in several rooms dates from the Greek Revival period. In contrast to the moldings in the Commandant's Quarters, this woodwork represents more strongly profiled trim, which was characteristic of the mature Greek Revival style.

The columns on the east porch are Tuscan and constructed from single trees. The railing is cast iron and employs the same Asher Benjamin design that was used for the Commandant's Quarters. On the east elevation the building has not been significantly altered, although the small pediment over the porch is not original. The west elevation, however, lost its veranda with the addition of a one story shed roof wing in the 1970s.

East elevation of Quarters Three in 1947, showing the porch and wings added during the 1834-38 remodeling under the direction of Captain Ripley (Maine Historic Preservation Commission).





West elevation of Quarters Three in 1947, showing the porch and wings added during the 1834-38 remodeling under the direction of Captain Ripley (Maine Historic Preservation Commission).

OFFICER'S QUARTERS NUMBER THREE

Although constructed as a dwelling and enlarged for that purpose by Captain Ripley, early records and maps indicate that Quarters Three was used for storage throughout the 1830s. Charles Keene worked as head carpenter for the remodeling, as he did on Quarters Two. By 1851 the number of personnel had increased sufficiently to require a second officer's quarters. However, this building's use continued to vary over the years. For example, the 1875 map of the arsenal indicates that Quarters Three was reserved for "single men", while the Barracks was occupied by "married men".

The interior of Quarters Three has been extensively remodeled, probably in the 1920s or 1930s, and there does not appear to be much evidence of its nineteenth century construction. The exterior, however, has been less altered than number two in several respects. Most importantly, the veranda on the west side survives, although the original columns have been replaced with metal ones, and the railing is not original. On the east side there have been two small pediments added, and a door has been made out of a window on the north wing. The north wing also has a small one story addition on its west side.

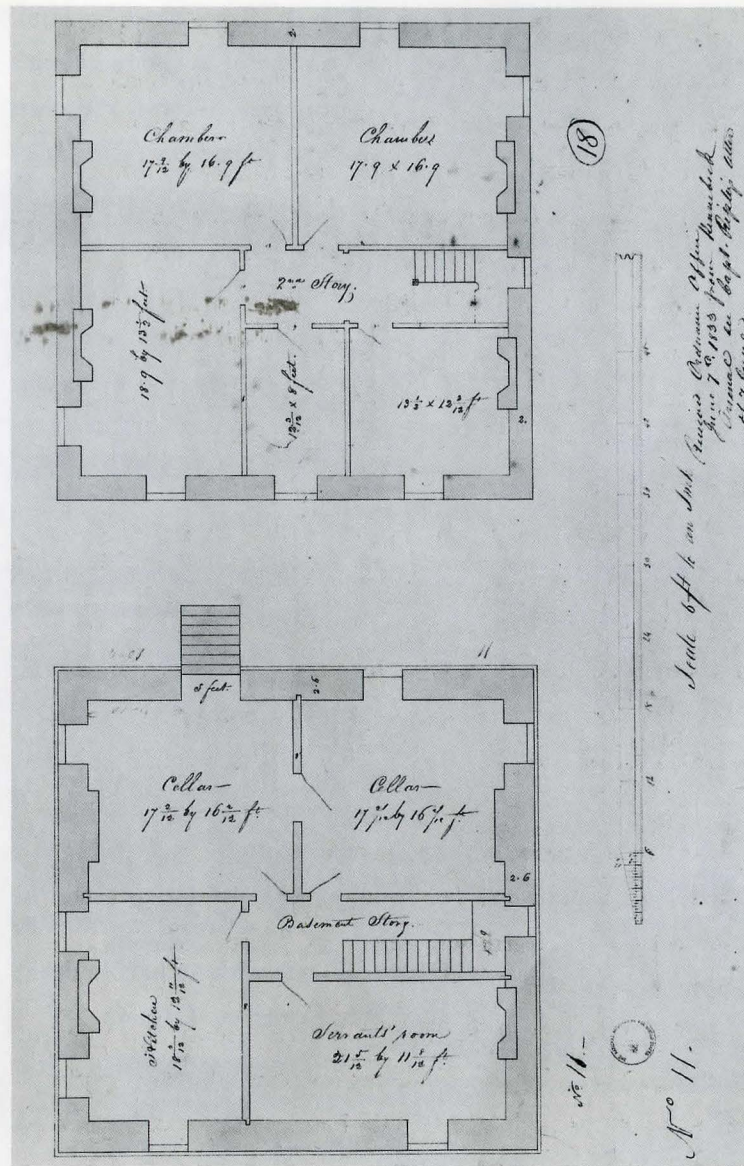
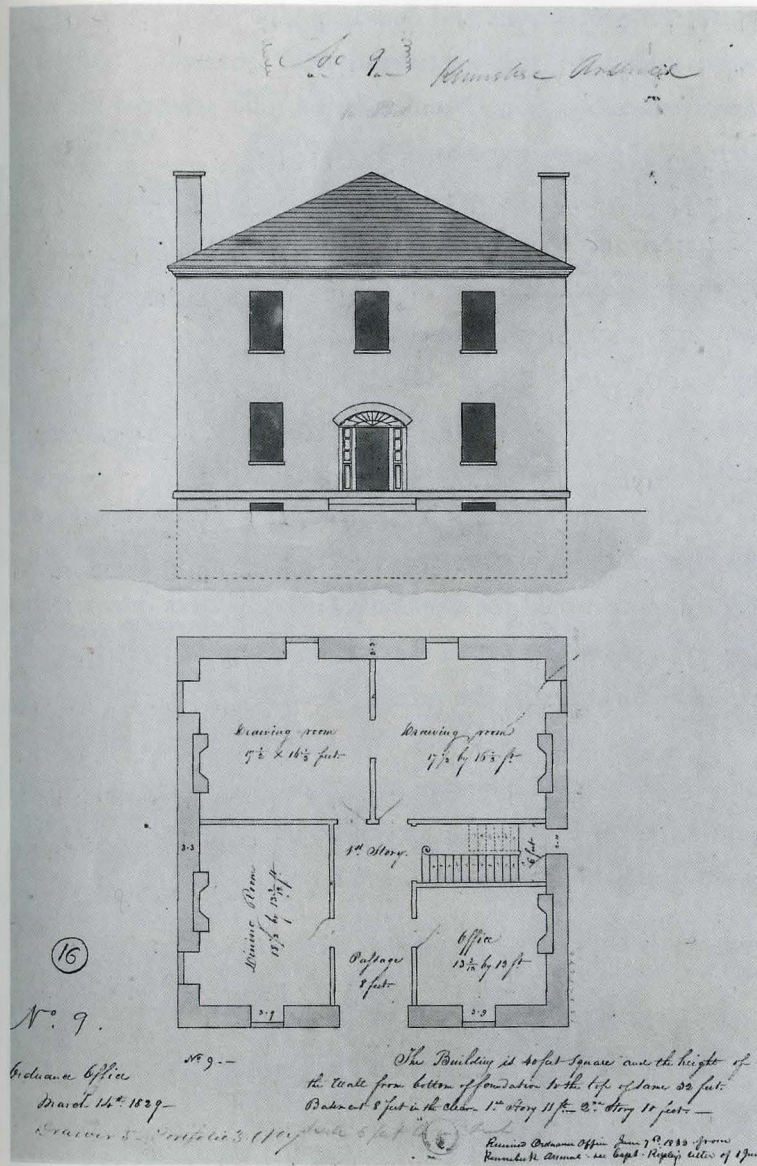
In 1905 when the building was converted for use by the Insane Hospital, the porch railings on both sides were replaced with a wood paneled railing. This has not survived, but for the east porch it was replaced with an iron railing like that on

Quarters Two. Presumably, this came from the veranda which was removed from the west side of Quarters Two.

COMMANDANT'S QUARTERS

The decision to build a larger quarters for the commandant of the arsenal apparently was made in conjunction with increased appropriations. Plans for this structure, which are not signed, are dated March 14, 1829, which was shortly before Congress authorized an additional \$45,000 on March 27. The elevation drawing (plan number 9) shows a simple Federal style residence, almost square, with a three bay facade. There was a hipped roof, two end chimneys on either side, and a segmental arched doorway with side lights and a leaded glass fanlight.

The first floor contained a dining room, two drawing rooms, and an office off a central hall. The staircase to the upper floor and basement was also off the hall. Each of the four rooms had a fireplace. Although not dated or identified, except as plan number 11, the basement and second floor plans are on another sheet. This sheet shows four rooms in the basement, including a kitchen under the dining room and a servants room with a fireplace. The kitchen in the basement was not practical in New England without a summer kitchen, nor was locating a servant in the basement, notwithstanding the fireplace. The second floor contained two chambers and three smaller rooms not identified as to their use.



Left: Dated March 14, 1829, this drawing shows the facade elevation and first floor plan of the Commandant's Quarters as built that year (National Archives).

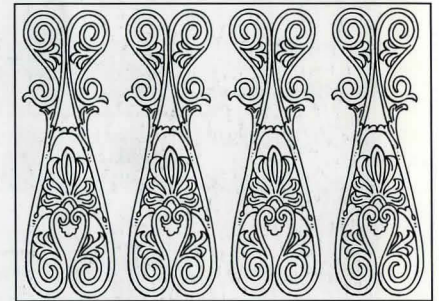
Right: This drawing shows the second floor and basement plans of the Commandant's Quarters as built in 1829. (National Archives).

Captain Ripley, who was, after all, from New England, clearly viewed this house as inadequate for a commandant's quarters. In September, 1833, he proposed to build a kitchen wing on the east side of the house and to correct deficiencies in the chimney flues. The kitchen wing is no longer extant, but its dimensions are evident from shadow lines of the roof flashing on the exterior wall. It is also evident that this addition was in the Greek Revival style. Ripley was compelled to request funds to finish the cornice, which was in a style similar to the main body of the house and painted to imitate granite, noting that "the resemblance is so perfect that at a little distance the difference is scarcely perceptible".

The records also include an estimate of expenses for a Doric Piazza, dated August 11, 1834. The company returns for October, 1834, mention a "porch". This was probably the small portico over the main entrance, because the documentation for the piazza on the west side clearly shows that work was carried out under Charles Keene's supervision in 1837. At the same time the windows off the piazza were enlarged, and a hot air furnace was installed.

Captain Ripley transformed the house into a fashionable interpretation of the Greek Revival style with archaeologically correct detailing. Either Charles Keene or Captain Ripley could have made these changes following a builder's guide such as *The Practical House Carpenter* by Asher Benjamin, first published in 1830. Benjamin's book provided examples

of correct proportions and details for the Doric style such as were added to the Commandant's Quarters. Another Benjamin publication, *The Builder's Guide*, featured the pattern for the cast iron Greek Revival railings found on the piazza of this house. The original Federal style doorway may have been altered by Captain Ripley, but this cannot be documented due to a subsequent remodeling.



With its prominent siting on the hill above the Arsenal Building, the two officer's quarters, and the barracks, Captain Ripley transformed the Commandant's Quarters into a striking example of the Greek Revival style design which clearly could be identified as the primary residence in the arsenal.

The first story plan was changed by removing partitions and combining the dining room and northwest drawing room into a double parlor with French doors off the piazza, which was fashionable during the Greek Revival period. The rooms in the double parlor have molded door and window trim with corner blocks, and there are Greek Revival style fireplace mantels. However, the moldings in the two parlors are different, as are the patterns in the corner blocks. Clearly there was an attempt to produce a fashionable interior, although not at great expense. A circa 1875 photograph of the south entrance



The Commandant's Quarters from a stereo view by F.A. Morrill of New Sharon, circa 1875. This photograph shows the 1834 entrance portico and the 1837 side porch added under Captain Ripley's supervision (Maine Preservation Commission).

shows blinds on the windows and what appears to have been a small conservatory attached to the ell.

The house underwent some remodeling about 1905 when it became part of the Insane Hospital. Pressed metal ceilings were added in several rooms, and the staircase received a new balustrade and staircase finish for the landing. Other parts of the house, such as the present kitchen, were remodeled more recently with all the historic fabric removed.

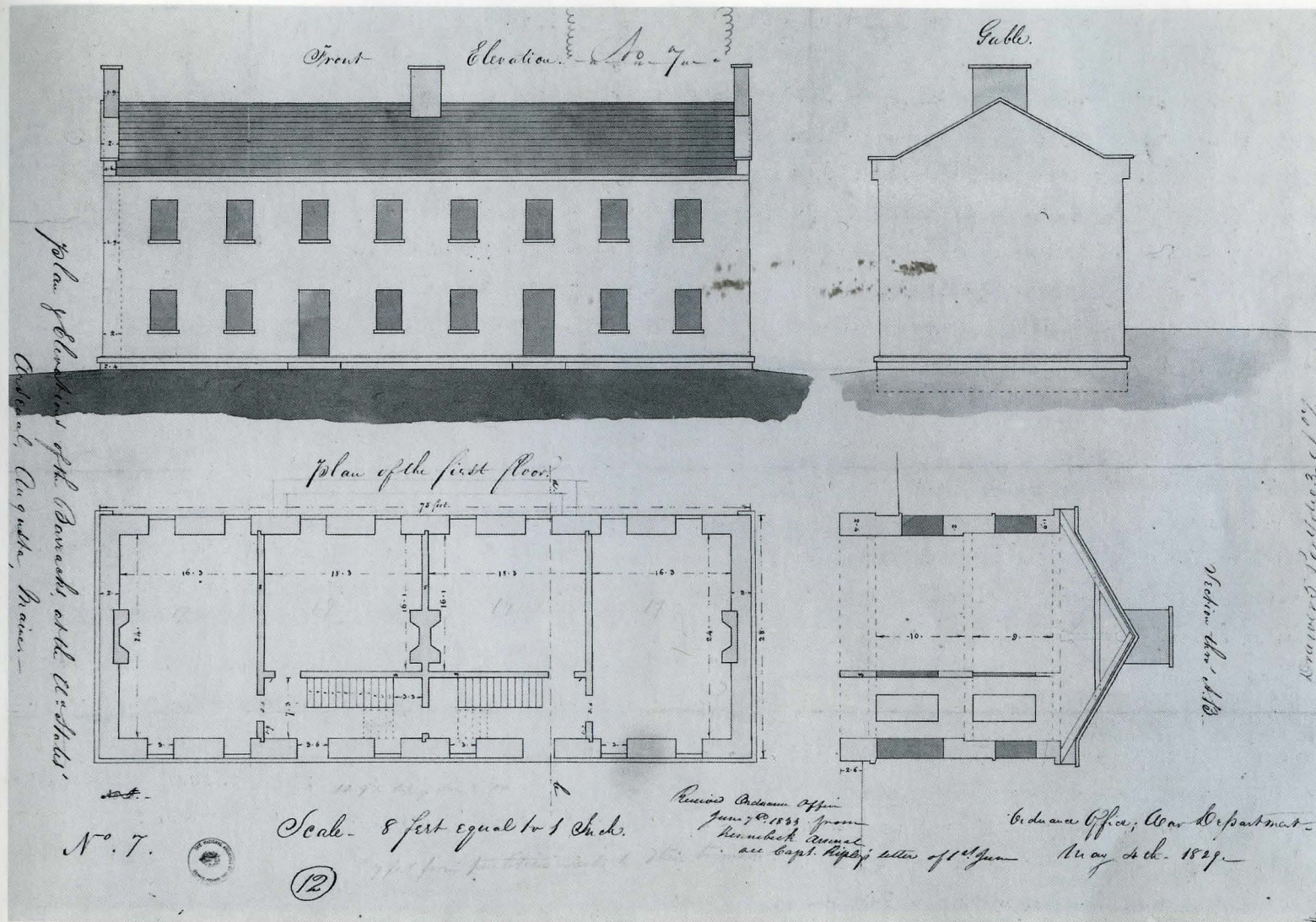
At an undetermined date, probably during the 1920s or 1930s, the kitchen ell was razed and replaced by a Colonial Revival style garage. This wood structure had match board siding and two large segmental arched garage doors. The garage was extensively remodeled and covered with synthetic siding during the past twenty years.

Behind the garage of the Commandant's Quarters is a small brick storage building about which no information has been uncovered. This structure is similar to the oil houses built for light stations to store highly flammable kerosene. It is, however, architecturally distinctive, for it supports a gable roof with wide overhanging eaves ornamented with verge boards. Moreover, the soffits of the eaves have ventilated openings which are cut in decorative floral patterns. Finally, there is a single blind window on the west side. Both this window and the door have the suggestion of a shallow ogee arch.

THE BARRACKS

The decision to build a barracks on the grounds of the arsenal was apparently not made until increased appropriations were granted in the spring of 1829. Drawing number 7, which is dated May 4, 1829, shows the design for the granite barracks. This two story gable roofed building was entirely functional in design. According to a newspaper item in August, 1865, the barracks was destroyed by fire in the spring and was being rebuilt. As the barracks was entirely gutted and remodeled sometime in the last fifty years, there is no evidence of either the 1829 or 1865 interiors. The only information regarding its original configuration is the sheet of 1829 plans. They show one floor plan, which appears to be the ground story of a building divided into two sections, each having an entrance, a staircase, and two rooms with fireplaces. The second floor may have been an open area for cots or bunk beds.

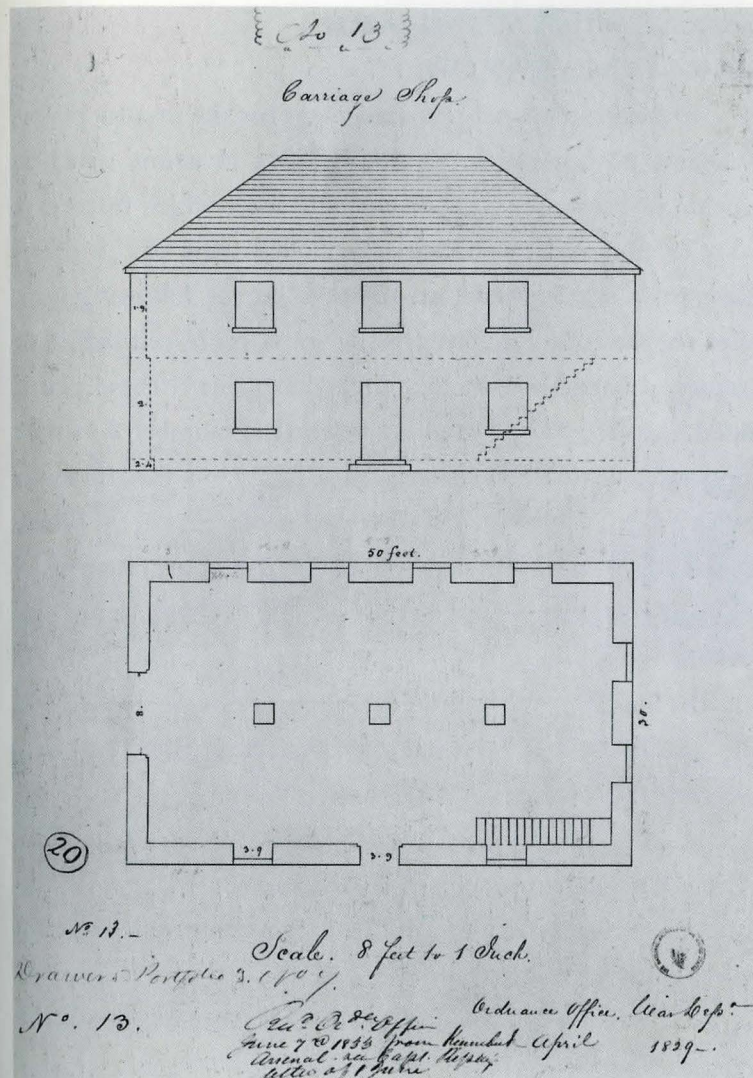
The exterior has not been substantially altered, except for the removal of one center and two end chimneys. Small porticos have also been added over the doorways on the west elevation, and fire escapes on the east elevation. The doors and windows were all replaced after 1947, the original sash having been six over six.



"Plan & Elevations of the Barracks at the U. S. Arsenal, Augusta, Maine." Dated May 4, 1829, this drawing shows the Barracks as built that year (National Archives).

West elevation of the
Barracks in 1947 (Maine
Historic Preservation
Commission).





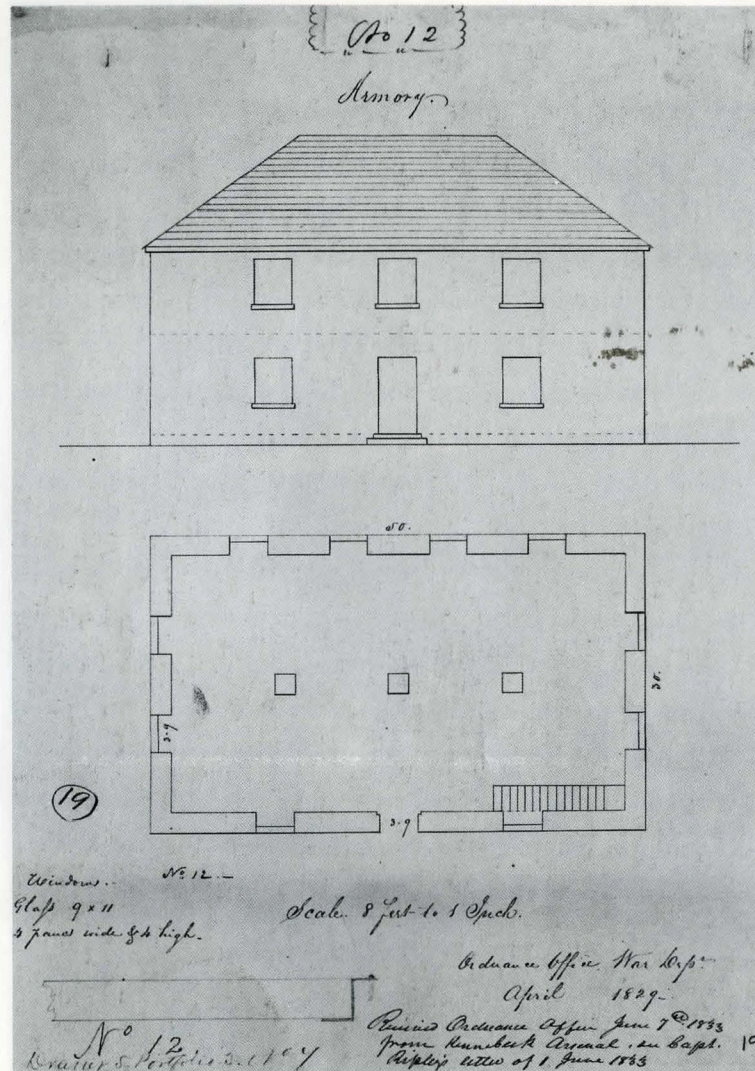
CARRIAGE (WHEELWRIGHT) SHOP AND ARMORY

These two granite structures were located on the eastern edge of the arsenal near Eastern Avenue. Drawings numbers 12 and 13, dated April, 1829, but not signed, were produced by the Ordnance Department for the construction of two nearly identical buildings. Both were two stories with a hip roof and three bay facade. The only difference was that the Carriage Shop had large double doors instead of two windows on one side elevation. These structures were built in 1829-30 as part of the decision to enlarge the operations of the Kennebec Arsenal.

The Carriage Shop and Armory stood on their original sites until February, 1877. At that time they were razed and rebuilt on new sites south of and in line with the Arsenal Building on the river. Based upon early photographs, it can be determined that one of the structures was rebuilt exactly as it was originally. This was used as a Carpenter Shop. The other structure was rebuilt with only one story, but was larger. This was used as a Machine Shop and Storehouse. According to an 1898 newspaper article, the latter building became a depository for a great variety of weapons and military equipment representing the history of the arsenal. Neither structure appears to have survived the transition for use by the State Hospital.

"Carriage Shop." Dated April, 1829, this drawing shows the facade elevation and first floor plan of the Carriage Shop as built that year (National Archives).

"Armory." Dated April, 1829, this drawing shows the facade elevation and first floor plan of the Armory as built that year (National Archives).



SMALL MAGAZINE AND LARGE MAGAZINE

Lieutenant d'Lagnel prepared plans for the smaller magazine on November 10, 1827. This structure, which is labeled plan number 8, is on a single sheet which features a plan, section and two elevations. It was part of the initial plans for a small arsenal at Augusta. In the following year, after the decision had been made for a more self-sufficient armory, d'Lagnel designed a larger magazine. These plans, dated May 20, 1828, are also labeled sheet number 8 as they supplanted the 1827 scheme. A notation on the drawings indicated that they were also used for the arsenal in St. Louis. As two magazines were required for Augusta, the drawings for the large magazine served as the basis for the small magazine as well.

The magazines have granite walls and brick barrel vaults, one containing one bay and the other two. Both are surmounted by low pitched gable roofs. Wall cavities with small slits on each side were part of the technique in which the force of an accidental explosion would be diffused. The large magazine had a capacity for 660 barrels of powder, while the small one could hold 254 barrels.

Both buildings have survived on the hill to the east of the other structures.



The Small Magazine in 1947 viewed from the southwest (Maine Historic Preservation Commission).

The image contains four architectural drawings of a magazine:

- Top Left:** A cross-section of the magazine showing its internal structure, including two large arched openings and a central door. Dimensions are provided for various parts, such as the height of the arches and the width of the openings.
- Top Right:** An elevation of the magazine showing its exterior profile, including a central door, two arched windows, and a gabled roof.
- Bottom Left:** A plan view of the magazine, showing its rectangular layout. It includes a central corridor and several small rectangular openings along the walls. Dimensions are given for the overall size and the width of the corridor.
- Bottom Right:** A side elevation of the magazine, showing its profile from the side. It features a series of vertical lines representing the magazine's structure and a small arched opening at the top.

Handwritten notes and labels are present:

- Top Left:** "10 ft. 8 in. length" (written vertically).
- Bottom Left:** "30 feet" (written vertically), "80 feet long in the clear" (written vertically), and "10" (written horizontally).
- Bottom Right:** "15" (circled), "Magazine", "Scale Five feet to one Inch", "No. 8 (3)", "Section a separate", "May 20th 1898", "Mr. Stone", "Mr. Lee", "Mr. Carson" (written vertically), "from General's Office", "for the purpose of the plan", "General's Office", "1898".

M. 1022.1

Scale Five feet to one Inch

New York
 June 7th 1855
 Dear Friend
 I have received your letter of the 6th inst.
 and am glad to hear from you.
 I am well at present.
 Yours truly,
 Wm. Lloyd Garrison

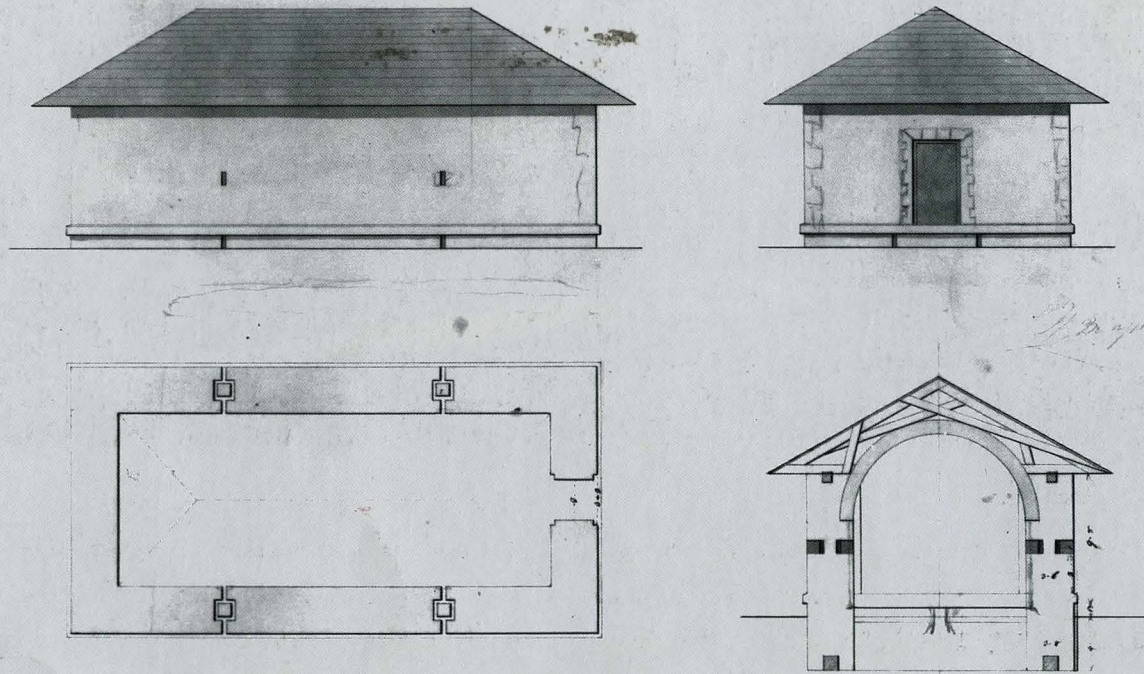
Card. in a Department
May 20th 1828
St. Louis
Exp. Card



The Large Magazine in 1947 viewed from the southwest (Maine Historic Preservation Commission).

"Ground Plan, Elevations and Sections of the Magazine at Augusta Arsenal, Maine." Dated November 10, 1827, this unbuilt design by Lieutenant d'Lagnel for a small magazine was replaced by a plan which resembled the Large Magazine (National Archives).

Ground Plan, Elevations and Sections of the Magazine at Augusta Arsenal, Maine.



N^o. 8. 10

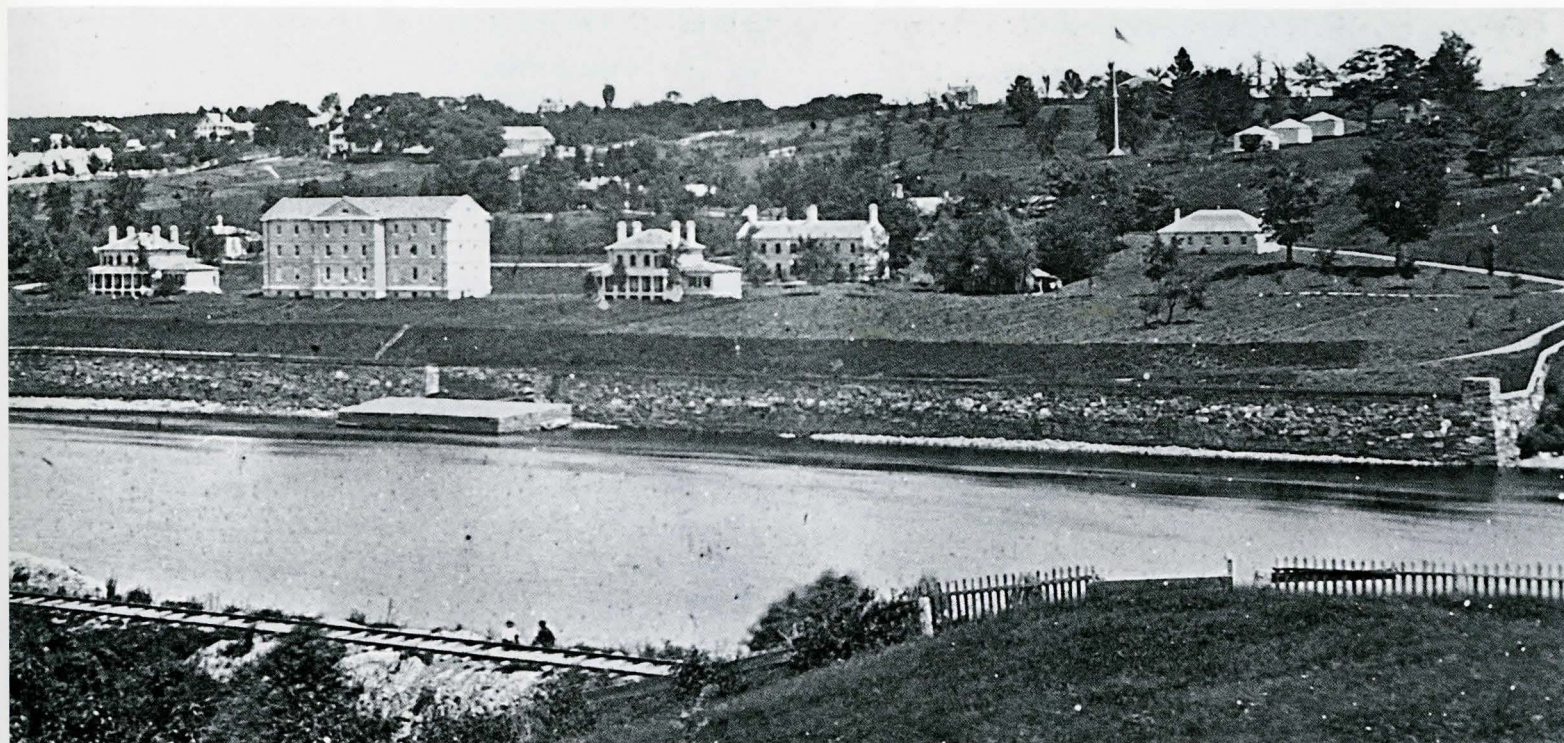
(13)

Scale
Five feet to an Inch.

Approved & Ordered
June 7th 1833
Kennebec Arsenal
by Capt. Bishop
of Maine

Ord. Dep^t

Nov 10. 1827
J. d. Lagnel



Taken by Simon Wing of Waterville in 1858, the earliest known photograph of the Kennebec Arsenal shows the row of three wooden laboratory buildings on the hillside in the background (Maine Historic Preservation Commission).

LABORATORIES

Originally there were three wooden laboratory buildings constructed by 1836. Government records at that time document that Charles Keene was hired to make benches, boxes, and tables for use in the laboratories. These small structures were located in a row on the hill between the Small Magazine and the Barracks. Their function was to provide an isolated location for the fabrication of munitions. The three buildings were replaced by a single larger laboratory in 1877.

This one story hip roof building was constructed with an iron frame, which was sheathed in wood. The theory behind its design was that should an explosion occur the sheathing would be blown away and the frame would remain intact. According to one source, this building was at the Centennial Exposition in Philadelphia before being assembled in Augusta. During the final years of the arsenal, the Laboratory was used as a dance hall.

OFFICE (GATE HOUSE) AND FENCE

Captain Ripley had demonstrated an awareness of current architectural fashions in his efforts to remodel the existing buildings at the Kennebec Arsenal. This sensitivity to contemporary architecture was even more evident in the construction of the Office, also known as the Gate House, and the fence on the north and south boundaries of the property, which are Gothic Revival in style.

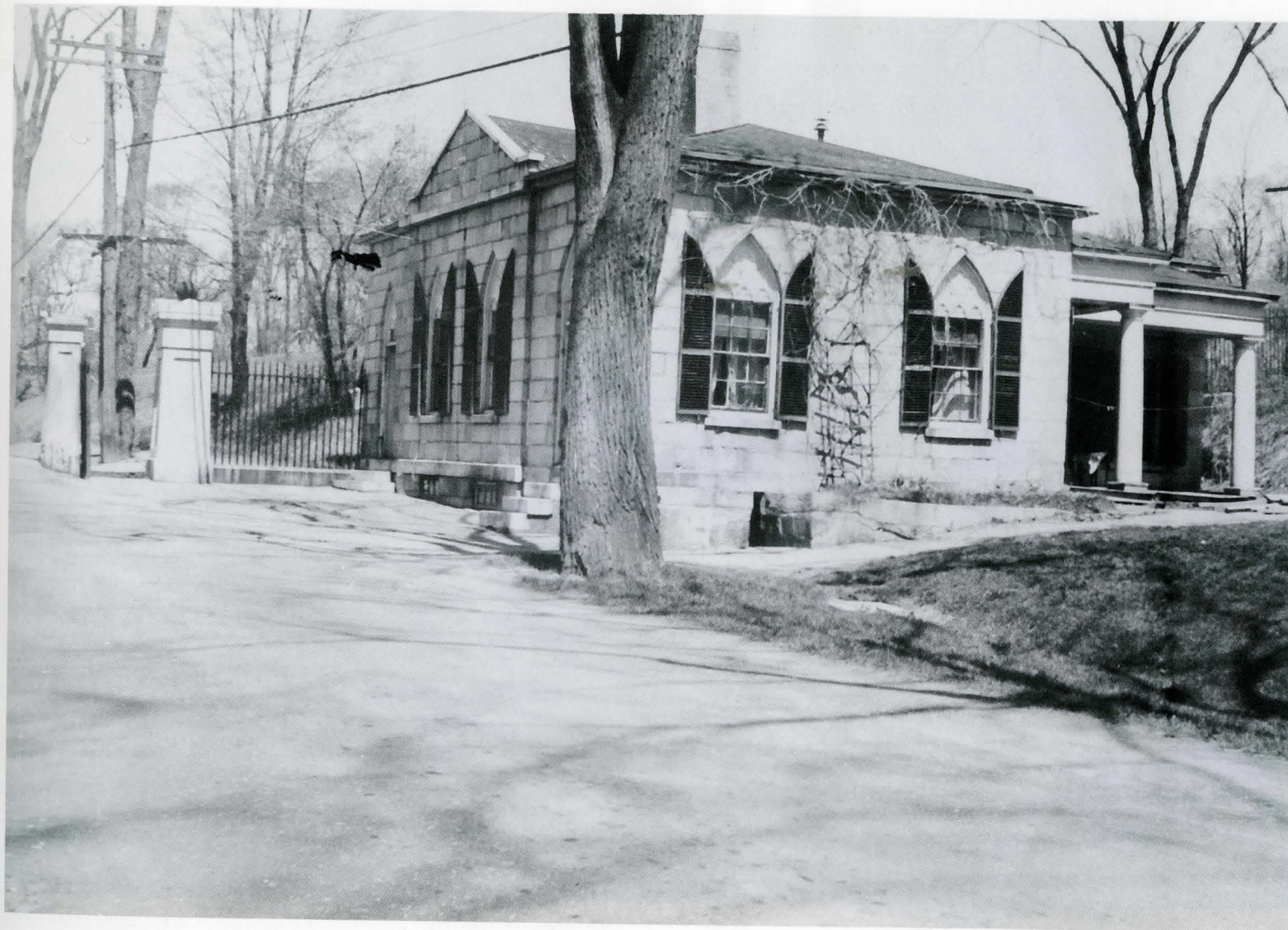
As early as 1833 Captain Ripley had proposed the acquisition of land on the north side of the property to improve the entrance to the arsenal. He also requested permission to erect an eight foot picket fence. Ten acres of land were added in 1836. In March, 1837, Captain Ripley reported that he had favored a masonry fence but was convinced by a mason that an iron fence would be better and cheaper. Accordingly, he obtained estimates for the one erected in front of the State House. He then requested permission to visit the arsenal at Watervliet to procure draughts and patterns for a fence. Not mentioned in his official communication was the design for an iron gate he obtained from architect Richard Upjohn, then in Boston. Upjohn's design survives but is not dated. It shows a small gate house which was not built and thus must date from prior to the construction of the Office. This design was quite elaborate, and Ripley must have made the decision that his superiors would never accept the expense.

In June of 1837 Ripley proposed that the stable be

demolished and the stone used to construct an office for the entrance to the arsenal. As with the fence, this is another indication that his ambitions would be frustrated unless cost-saving measures were adopted. Authorization was received on June 14, and the masons presumably began work that summer. By October, 1837, Charles Keene started the carpentry work on the Office, which he continued into 1838.

The Office is an L-shaped building with distinctive lancet arched windows that give the building its Gothic style. Above the standard double hung sash of the windows and the entrance are pointed arched wood panels pierced with trefoil patterns that include small acorn pendants. Originally there was one door on the principal facade which led into the office itself. To the right as you enter is a parlor with a fireplace which still retains its original Greek Revival style mantel. In the hearth is a cast iron grate which was added later in the nineteenth century. Sometime prior to 1947 a second doorway was cut out of a window which leads directly into the parlor.

On the rear of the Office was an L-shaped porch. The only record of its design is the 1947 photo of the building. This view shows a porch supported on Tuscan columns occupying the same footprint as the modern frame and metal addition. The photograph also shows the lancet arched shutters that were on the windows. Other alterations were the replacement of the six over six double hung sash and the removal of gutters.



The Office in 1947
viewed from the southwest
(Maine Historic
Preservation Commission).

The Arsenal Street
entrance in 1947
viewed from the south
(Maine Historic
Preservation Commission).



At the same time that work had begun on the Office, Captain Ripley procured a pattern for the cast iron fence to run on the north and south property lines. With the construction of the State Hospital to the south of the arsenal, this security was no doubt considered a high priority. The fence, set into granite piers laid on their sides, consists of cast iron pickets. Each section has a post in the form of a clustered column capped by a finial. At the base extra support is provided by braces which curve out in the shape of an animal's foot. The pickets are square with pointed tops but set at forty-five degree angles. Although Ripley had mentioned in his early communication with Washington that a fence similar to the one around the State House was considered, the one which was built was far more elegant. Unfortunately, only portions of the fence survive on north property line, and it is entirely gone on the south side.

Of the gate itself, the only evidence is the four granite posts, two of which survive. Originally there were entrances for both vehicles and pedestrians. The two inner columns were removed for road widening. The surviving posts consist of a plinth, paneled shaft, and cap with Greek Revival molding profiles. Surmounting each post is a cannon ball. The designer for this gate was probably Charles Keene, because Captain Ripley had instructed him to make a plan in August, 1838.

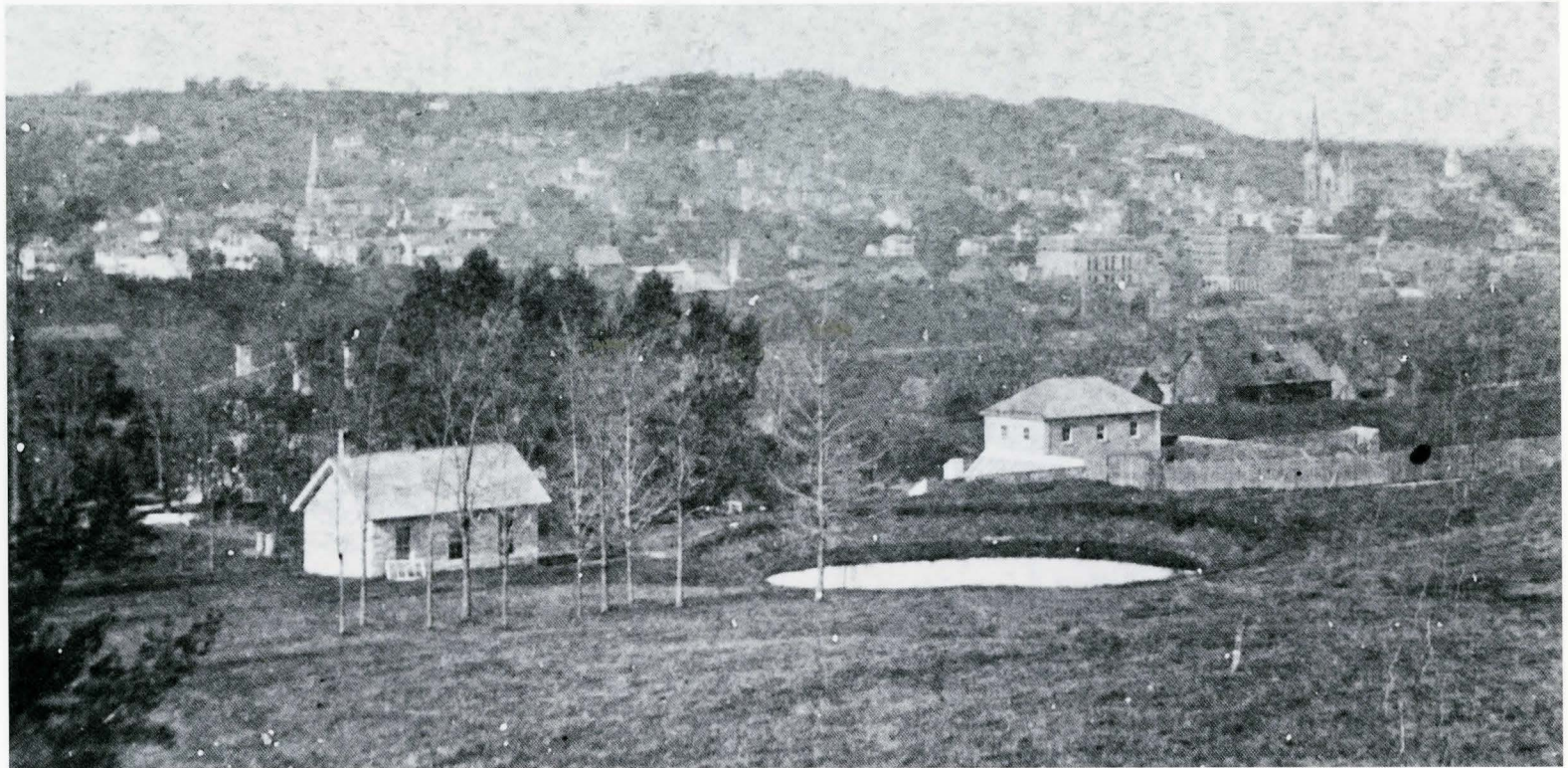
STABLE

There have been several structures used as stables, the first being one that Captain Ripley reported was razed to provide stone for the Office. A new wooden stable was built in 1839 by Eben Sawyer. This structure was located along the north property line just east of the Office. According to the 1875 map of the arsenal and a photograph taken about the same time, a building half the size of the 1839 structure occupied the site. According to the map, it was called the "old stable".

GUN HOUSE

This early building is poorly documented. Apparently of wood construction, it is recorded that Charles Keene was hired to make repairs in 1835 for use as a carpenter's shop and stable. The structure was located just east of the Barracks as a gun house on the 1838 map, but the 1851 map records its use as a carpenter's shop. On the 1875 map it is indicated as a hospital, and by 1898 it was used as a stable.

The Engine House, Reservoir, and Stable from a stereo view by Henry Bailey of Augusta, circa 1875 (Maine Historic Preservation Commission).

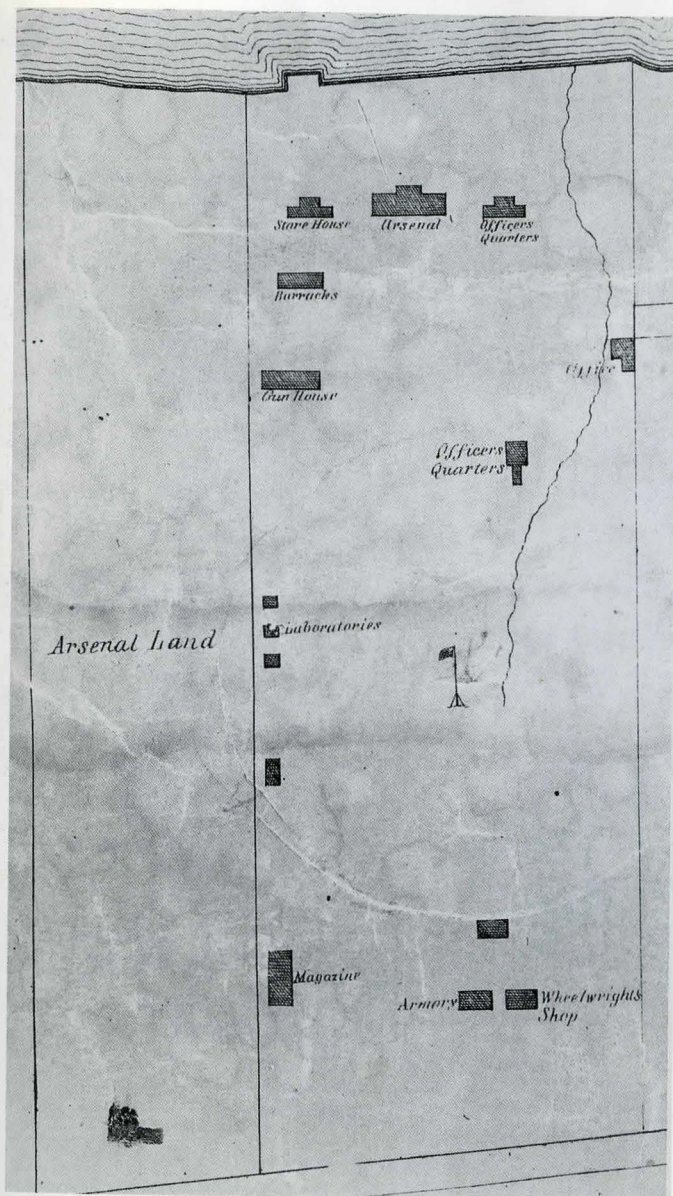


OTHER BUILDINGS

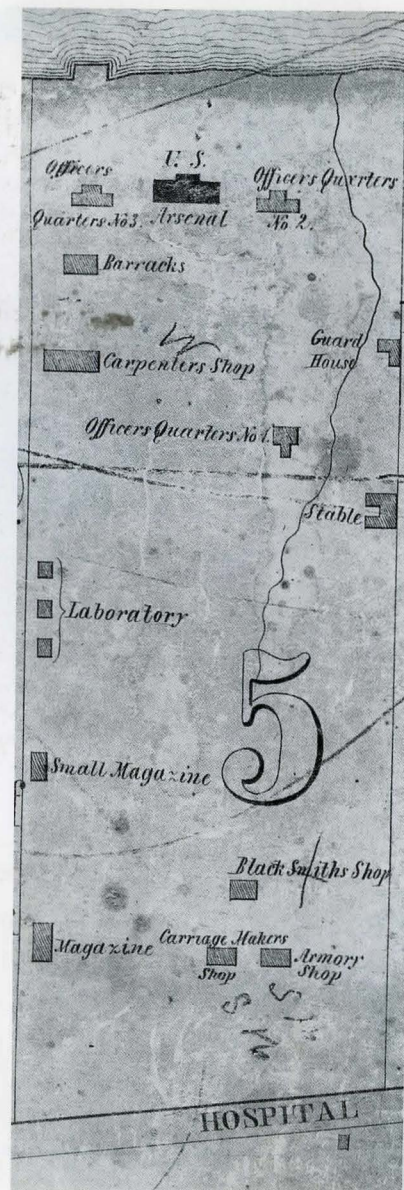
Other improvements were made in the nineteenth century, but these are less well documented. The same circa 1875 photograph which shows the old stable also includes a view of the Engine House located near the reservoir in about the center of the arsenal. This held the fire-fighting

equipment and first appears on the 1875 map, along with the reservoir. By 1898 this had become a pond and was stocked with salmon and trout. A forge shop and another wood quarters building were built sometime between 1851 and 1875 just south of the Barracks. All of these structures were removed in the early part of this century.

MAPS



1838



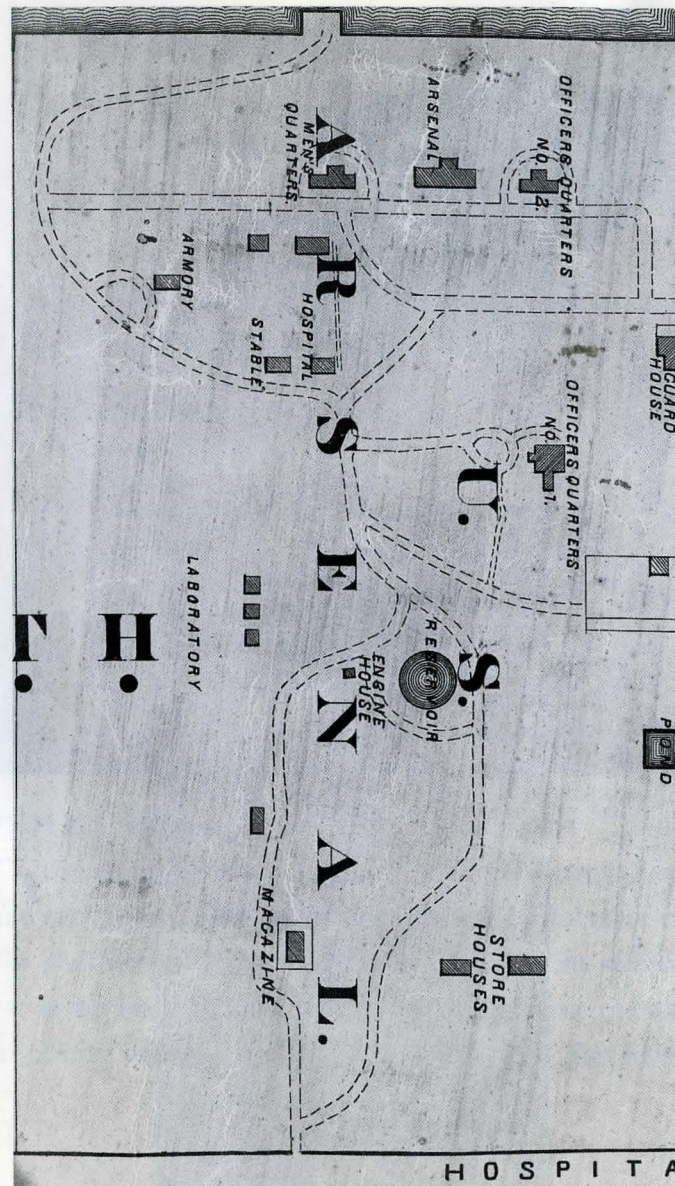
1851

Left: The Kennebec Arsenal in 1838 from "Plan of the Village of Augusta, Maine by B.F. Perham, Civil Engineer, Boston" (Kennebec Historical Society).

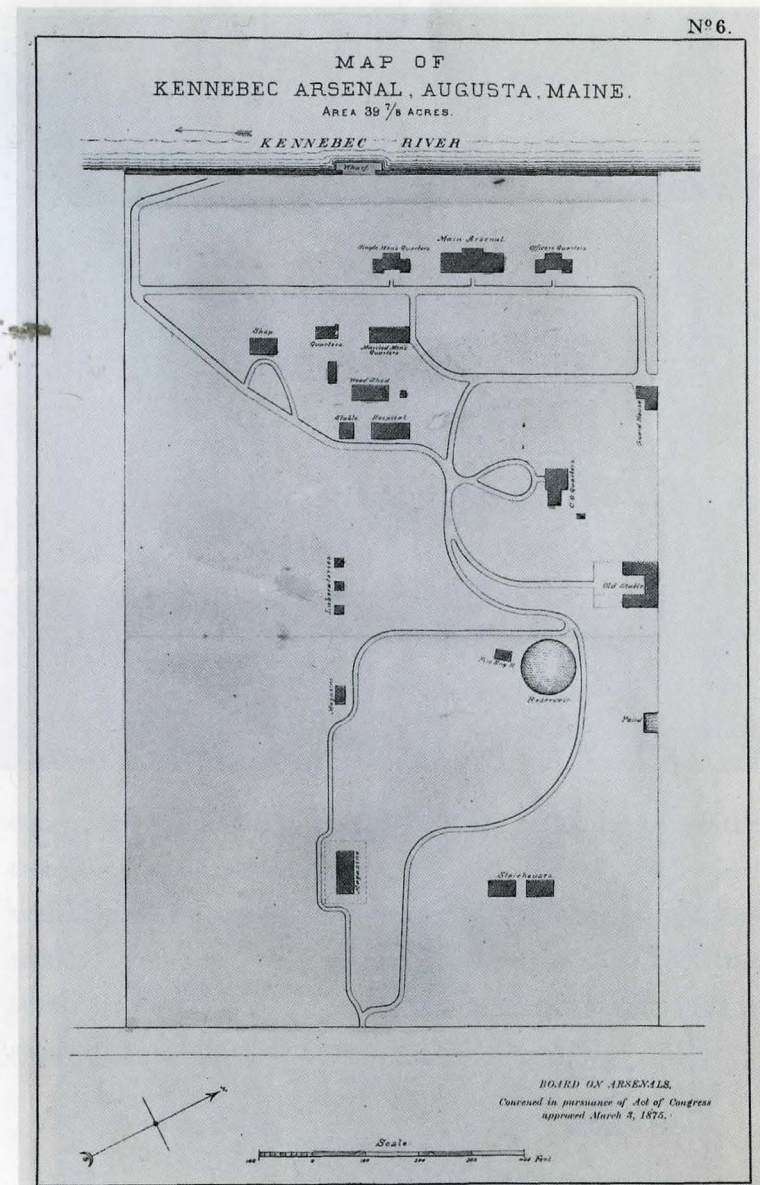
Right: The Kennebec Arsenal in 1851 from "Map of the City of Augusta (by) Henry F. Walling, Civil Engineer" (Kennebec Historical Society).

Left: The Kennebec Arsenal in 1875 from "Map of the City of Augusta (by) W.A. Sherman" (Kennebec Historical Society).

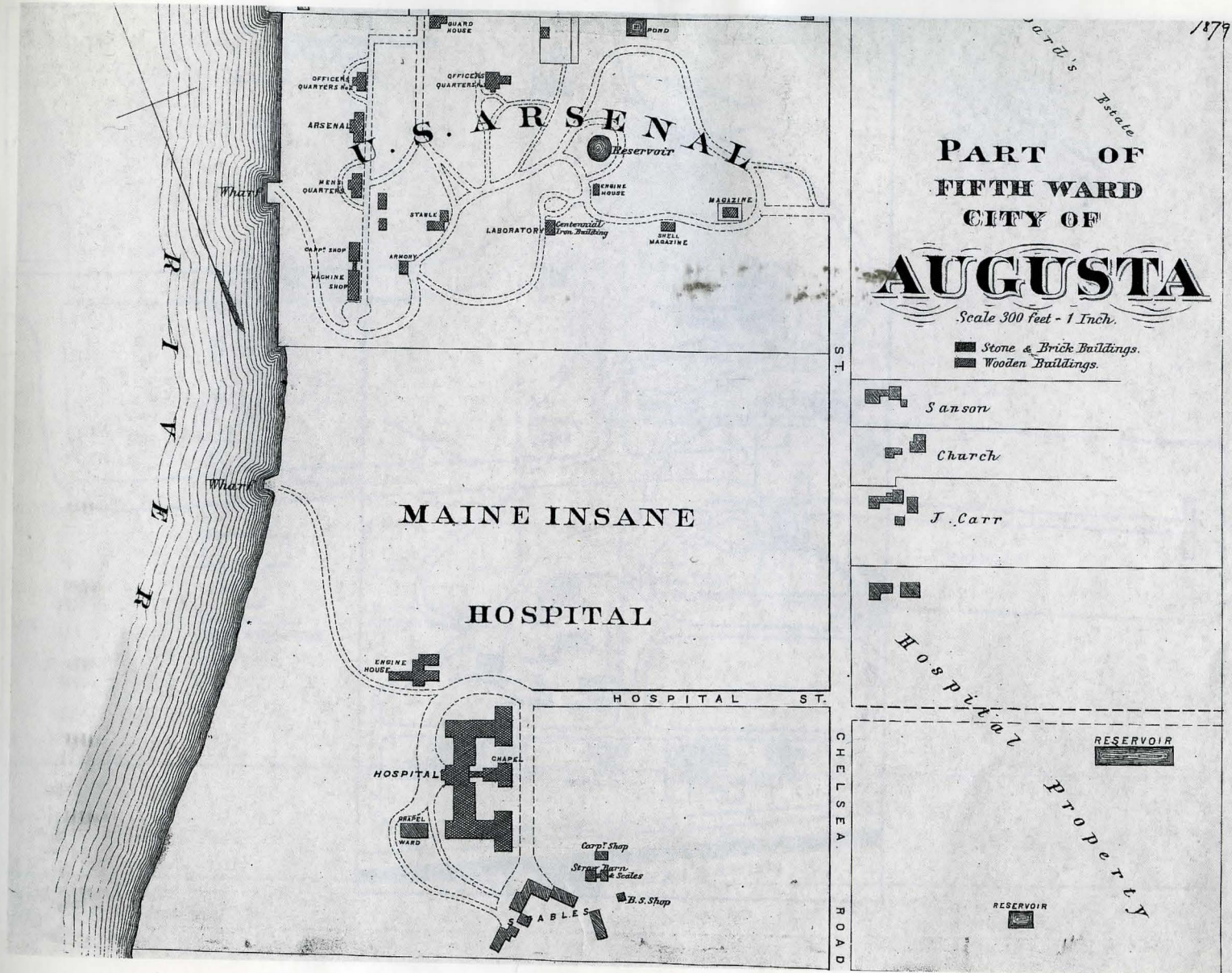
Right: The Kennebec Arsenal in 1875 from "Map of Kennebec Arsenal, Augusta, Maine, Board of Arsenals, March 3, 1875" (Maine Historic Preservation Commission).



1875

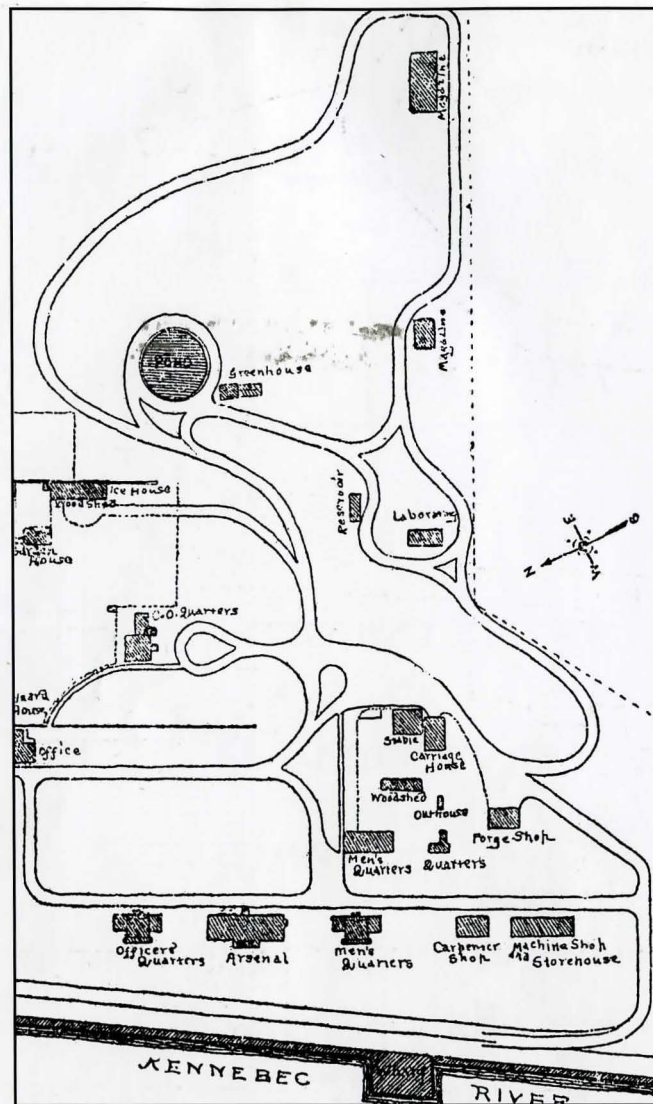


1875

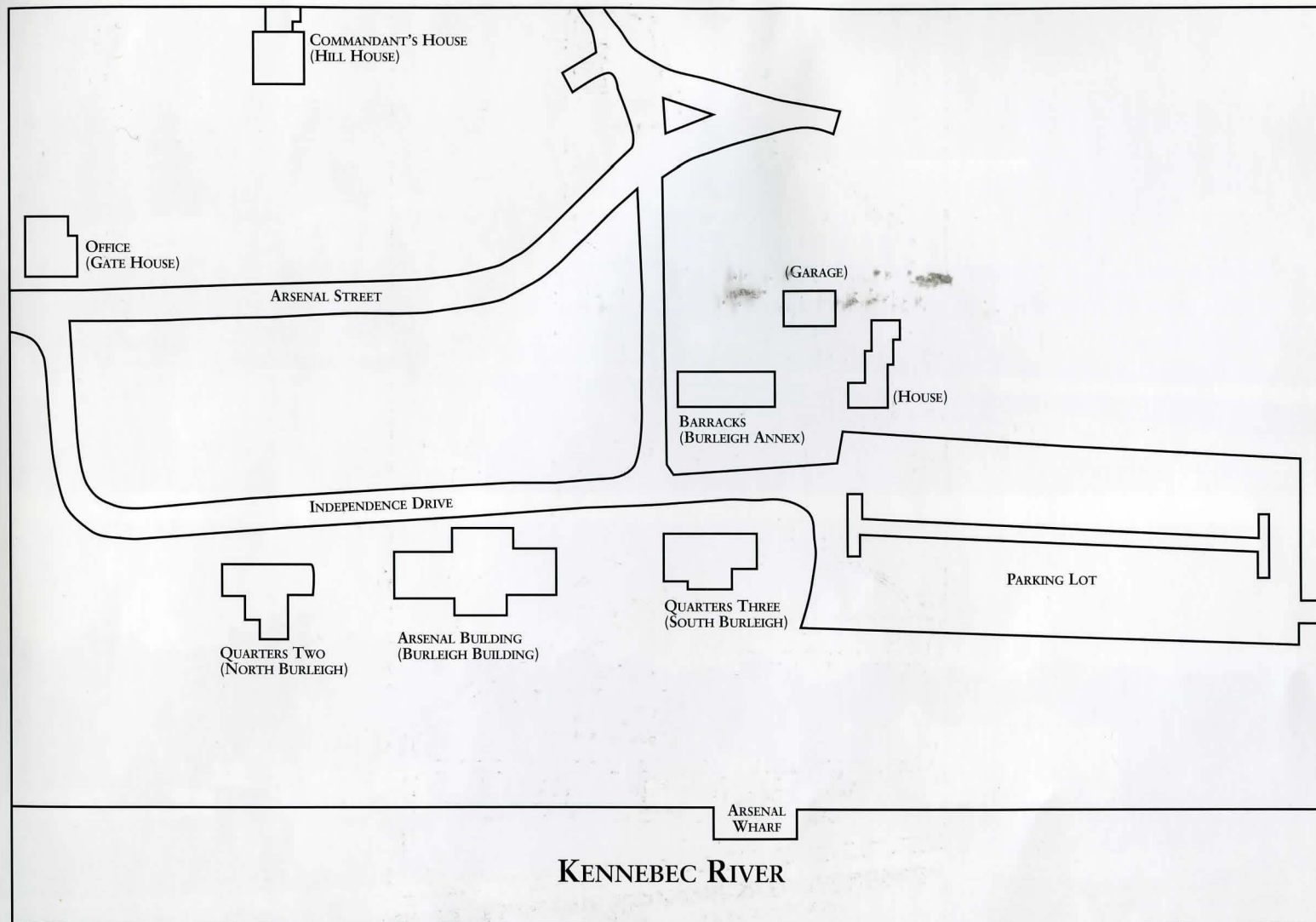


The Kennebec Arsenal in 1879 from "Atlas of Kennebec County, Maine" by Caldwell and Halfpenny (Maine State Library).

The Kennebec Arsenal in 1898 from the *Kennebec Journal*, November 19, 1898, (Kennebec Historical Society).



1898



The Kennebec Arsenal in 1997, with buildings identified by both their historic and current names (Maine Historic Preservation Commission).