

Rock Island Arsenal
Shop E
(Building 106)
Rodman Avenue between Second Street
and Third Street
Rock Island
Rock Island County
Illinois

HAER No. IL-20H

HAER
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, D.C. 20013-7127

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HISTORIC AMERICAN ENGINEERING RECORD

ROCK ISLAND ARSENAL

SHOP E

(Building 106)

HAER No. IL-20H

Location: Rodman Avenue Between Second Street and
Third Street,
Rock Island Arsenal,
Rock Island,
Rock Island County, Illinois
UTM: 15.704940.4598880
Quad: Davenport East

Date of Construction: 1871-1874

Present Owner and Occupant: U.S. Army

Present Use: Administrative offices

Significance: After taking command of Rock Island Arsenal
in 1865, General Thomas Jefferson Rodman
devised a master plan for the installation
calling for the construction of ten large,
Greek Revival, manufacturing shops, five on
each side of the island's major east-west
thoroughfare. Under construction from 1871
to 1874, Shop E was the third to be
completed. With its companion facilities
completed under the Rodman plan, Shop E
forms a cohesive architectural statement,
which, in terms of both scale and style, has
no counterpart among government installa-
tions in the Midwest.

In addition to their architectural
importance, the Rodman shop buildings are
the administrative and technological core of
Rock Island Arsenal, one of only two
"old-line," nineteenth-century arsenals
still in operation for munitions production.
The buildings are vital for understanding
the history of American ordnance development
and manufacture from the Spanish American
War to the present. Shop E is part of the
Rock Island Arsenal National Register
Historic District.

Historian: Jeffrey A. Hess, February 1985

Architectural Historian: David Arbogast, February 1985

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: According to Colonel Daniel Webster Flagler, who succeeded General Thomas Jefferson Rodman as the arsenal's commandant in 1871, the building site was selected by Rodman in February 1866 (Flagler, p. 118). In June 1871, Flagler took drawings of the building to Washington for War Department approval (Flagler, pp. 285-286). Excavation began that same year; the building was completed in 1874 (Flagler, p. 270). A datestone in the northwest corner of the north facade bears the inscription, "Begun 1871 Finished 1874."
2. Architect: Initial plans for the building were prepared in the late 1860s by General Thomas Jefferson Rodman, who served as the arsenal's commandant from August 1865 to June 1871. These plans were refined in the summer of 1871 by Colonel Daniel Webster Flagler, who succeeded Rodman's command and supervised the arsenal's construction program until 1886 (Flagler, pp. 116, 261, 286-287; Nothstein and Stephens, pp. 154, 176-177).

Born in Salem, Indiana in 1815, Rodman graduated from West Point in 1841 and was assigned to Allegheny Arsenal in Pittsburgh as an officer of the Ordnance Department. During the next two decades, he developed techniques for hollow casting cannon and for producing perforated propellant, which revolutionized the manufacture and use of artillery (Zabecki, pp. 55-56; Flagler, pp. 262-266).

As commandant of Watertown Arsenal near Boston from 1859 to 1865, Rodman was responsible for designing a machine shop for the installation, which was a simplified, brick version of the Greek Revival stone manufacturing shops he subsequently planned for Rock Island Arsenal (Baylies and Bahr, p. 37). Rodman assumed command of Rock Island Arsenal in 1865; he died of illness at the installation in June 1871 (Flagler, pp. 116, 261).

Like Rodman, Flagler was a career officer in the Ordnance Department. Born in Lockport, New York in 1835, he graduated from West Point in 1861, and was appointed a second lieutenant in the Ordnance Department. Brevetted lieutenant colonel for distinguished battlefied service during the Civil War, Flagler served as commandant of Augusta Arsenal from 1866 to 1871, and of Rock Island Arsenal from 1871 to 1886. After fulfilling command responsibilities at Frankfort Arsenal and Watertown Arsenal, he

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was appointed Chief of Ordnance in 1891. He served in that capacity until his death in 1899 (Nothstein and Stephens, p. 605).

3. Original and subsequent owners: U.S. Army.
4. Builder, contractor, suppliers: Stone was supplied by W. A. Steel of Joliet, Illinois, "at \$11.85 per actual cubic yard of stone work in the building when completed, excluding all openings and all builder's other technical or constructive measurements" (Flagler, p. 286).

"The roof frame . . . was procured from Messrs. Carnegie & Kloman, by contract dated August 14, 1871. . . . The iron was furnished by Messrs. Carengie & Kloman, from their works in Pittsburgh, and was shipped to N. S. Bouton & Co., of Chicago, who manufactured the roof frame and shipped it to the arsenal" (Flagler, p. 286).

5. Original plans and construction: On February 7, 1866, Rodman submitted to the War Department a schematic site plan of the arsenal, proposing the construction of ten manufacturing shops, five on each side of the arsenal's main east-west thoroughfare (later named Rodman Avenue). The plan was published in 1877 (Flagler, Plate I). It delineates the ten buildings, including Shop E, as U-shaped structures with a crossbar connecting the legs of the "U" at midpoint. According to Flagler, the configuration of the buildings was almost immediately changed. "To add strength to the walls [and] beauty to the architecture," two porticos were added to the front and to each of the sides of the buildings. Also, the crossbar between the legs of the "U" was removed "to leave the courtyard clear for teaming purposes" (Flagler, p. 123). The revised plan was published in 1877 (Flagler, Figure 1, inset on Plate I). The Rock Island Arsenal Engineering Plans and Services Division has an original, undated "Plan of Show E," signed "D. W. Flagler," that is identical to the 1877 plan (see HAER Photo No. IL-20H-10).

After taking command of Rock Island Arsenal on June 15, 1871, Flagler immediately began to prepare final construction plans for Shop E, which was scheduled for groundbreaking that summer. As he later explained:

In June, 1871, I went to Washington to confer with the Chief of Ordnance respecting plans for . . . the arsenal. At that time drawings, showing the proposed elevation for Shop E, were taken to Washington, submitted to the Chief of Ordnance,

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and were approved by him. . . . Shop E is the forge shop and foundry for the arsenal; and the plans which had been adopted previously required that this shop, which was to be the center shop of the [south] row of shops, and shop F (see HAER No. IL-20C), which was to be the forge shop and rolling mill . . . and also the center shop of the [north] row of shops, were to have the same ground plan as the other shops and to be only one story high; but the elevations and thickness of walls had not been fixed. It was determined at the same time to put peak hoods [i.e., monitors] on these two shops, for ventilation and for conducting away smoke" (Flagler, p. 286).

The Rock Island Arsenal Engineering Plans and Services Division has an original, undated elevation of the northwest portico, signed "D. W. Flagler" (see HAER Photo No. IL-20H-12). The drawing does not show the monitor. But the same collection has another drawing, dated August 27, 1873, that gives a cross section of the monitor (see HAER Photo No. IL-20H-18). These details of original construction are documented by a bird's-eye view of the arsenal published in 1877 (Flagler, frontispiece). The building's present configuration conforms to the original construction, except that the west elevation of the east wing has received two concrete-block additions and one concrete-and-brick addition.

6. Alterations and additions: Between 1878 and 1898, a brick chimney was added to the roof between the pavilions of the west wing. The chimney does not appear in the 1877 birds-eye view (Flagler, frontispiece), but it is documented by a photograph published in 1898 (Tillinghast, p. 52). A copy of the 1898 photograph is in the picture collection of the Rock Island Arsenal Historical Office (see HAER Photo No. IL-20H-9).

Between 1898 and 1944, the chimney was removed. It does not appear in a 1944 photograph in the picture collection of the Rock Island Arsenal Historical Office. The photograph is captioned in part, "73 A / Looking northeast at Shop 'E,' Building #106 / 1 November 1944."

Before 1956, a one-story concrete-frame structure with brick infill was added to the northeast corner of the west elevation of the east wing. The addition appears in a 1956 photograph in the picture collection of the Rock Island Arsenal Historical Office. It is captioned, "765-53208 / Shop E (Foundry), Bldg. #106 / Court, looking north / April 27, 1956."

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After April 1956, two one-story, concrete-block additions were added to the west elevation of the east wing. These additions are not shown in the 1956 photograph cited immediately above.

B. Historical Context:

After assuming command of Rock Island Arsenal in August 1865, General Thomas Jefferson Rodman devised a master construction plan for the installation, which he submitted to the War Department on February 7, 1866. In its general outline, Rodman's plan called for the construction of ten large, stone, manufacturing shops, five on each side of the arsenal's main east-west thoroughfare (later named Rodman Avenue). The establishments on the south side of the avenue were called "arsenal shops," which meant they were to be devoted to the manufacture of general ordnance items. Those on the north side were called "armory shops," because they were intended for small arms production. All ten shops were designed in a Greek Revival style, which Rodman had previously used in designing a machine shop at Watertown Arsenal near Boston. Although none of the shops was completed before Rodman died of illness in June 1871, all ten were eventually finished by his nineteenth-century successors (Flagler, p. 118; Nothstein and Stephens, pp. 153-157).

Situated in the center of "arsenal row," Shop E was the third shop completed. Excavation began in 1871, and construction concluded in 1874. From the time of its completion to the present, Shop E has operated as a foundry. Until the end of World War I, it also served as a forge and backsmith shop ("General Course," pp. 27-34). After World War I, the metal working operation was moved to a newly constructed forge shop in the Field and Siege Building (see HAER No. IL-20AA). During the nineteenth century, Shop E's principal responsibility was fabricating materials for the arsenal's own construction program. "This included . . . brass castings [for] hinges, roof straps, window pulleys, door knobs, etc. and the iron work, frogs, beams, girders, stairways, grating, water and sewer pipes, [and] hangers and boxes for shafting of the various shops" (History of Rock Island Arsenal," p. 8). As the arsenal increasingly became involved with the manufacture of artillery vehicles and small arms after the 1890s, Shop E eventually produced "all manner of iron, bronze and aluminum castings" (Nothstein and Stephens, p. 396). The shop's original equipment included two cupolas and a variety of "smith's forges, chimneys, steam and power hammers and other forge shop fixtures," ("History of Rock Island Arsenal," pp. 7-8). None of this machinery survives. Most of the building's current equipment,

which includes electric-arc furnaces, postdates World War II (for additional documentation, see HAER No. IL-20).

Prepared by: Jeffrey A. Hess
MacDonald and Mack Partnership
February 1985

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The building is a massive, late Greek Revival style, U-plan, limestone structure. It is one-and-one-half stories in height with a gabled roof. It forms the center of a set of symmetrical buildings along the south side of Rodman Avenue, which is mirrored by an identical set on the north side.
2. Condition of fabric: The building is well-maintained and is in good condition, despite intensive industrial use.

B. Description of Exterior:

1. Overall dimensions: The main (north) block of the building (HAER Photo No. IL-20H-1) measures 210' x 60' (19 bays on the north elevation and 9 bays on the south elevation). Two wings (HAER Photo Nos. IL-20H-2 and IL-20H-3), each measuring 240' (28 bays on their exterior elevations and 22 bays on their courtyard elevations) x 60' (5 bays on their north elevations) stretch south from the east and west ends of the main block. Near each end of the outer, long elevations of the wings are projecting pavilions measuring 60' (5 bays) and extending 15' (1 bay) from the wing elevations. The building is one-and-one-half stories tall with no basement or attic.
2. Foundations: Coursed, rock-faced ashlar limestone measuring 3'-0" thick below a dressed ashlar limestone water table. The north face of the northwest corner block of the water table carries the inscription, in block lettering, 'BEGUN 1871". Unfortunately, asphalt paving obscures the bottom part of the inscription, which is assumed to read, "FINISHED 1974".
3. Walls: Coursed, rock-faced ashlar limestone (HAER Photo Nos. IL-20H-1, IL-20H-2, IL-20H-3, IL-20H-4 and IL-20H-5). Colossal rock-faced ashlar limestone pilasters (HAER Photo Nos. IL-20H-1, IL-20H-2, IL-20H-3, IL-20H-4, and IL-20H-5) rising from the water table to the entablature divide the elevations into a regular bay system. The dressed limestone entablature (HAER Photo Nos. IL-

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20H-1, IL-20H-2 and IL-20H-3) carries a projecting dressed limestone cornice. The pedimented gable ends (HAER Photo Nos. IL-20H-1, IL-20H-2, and IL-20H-3) are rock-faced ashlar limestone with dressed limestone cornices. There is a carved limestone block above the central entrance of the front (north) facade bearing the date 1874.

4. Structural systems: Limestone bearing wall. The floor is a poured concrete slab on grade. The roof system is iron Fink trusses.
5. Chimneys: There are a large number of chimneys (HAER Photo Nos. IL-20H-1, IL-20H-2, and IL-20H-3) located randomly throughout the building. None of these appear to date from the original construction. Although most protrude through the roof, a number exit through windows and upward along the walls. Virtually all of the chimneys are round sheet metal flue pipes.
6. Openings:
 - a. Doorways: Principal doorways (HAER Photo Nos. IL-20H-1, IL-20H-2, IL-20H-3, and IL-20H-4) are centered in the pavilions, the wing ends, the third bays from each end of the north elevation, and the first and sixteenth bays from the north end of the courtyard elevations of the wings. Each has a rock-faced limestone segmental-arched head with a rock-faced keystone, and rock-faced limestone jambs with large semi-circular base blocks projecting into the doorway. Most of the original limestone sill blocks have been replaced with poured concrete sills. The south doorways contain modern overhead doors, as does the doorway in the northeast pavilion addition. The wing end and northwest pavilion doorways contain pairs of modern, slab doors with upper glass panels. A similar, single door surrounded by concrete block infill is in the southeast pavilion doorway (HAER Photo No. IL-20H-4). The southwest pavilion doorway contains a set of three, original, four-light-over-single-panel, wood doors with transom. The doorway at the south courtyard end of the west wing contains a modern, steel, double-hung door with six-light saab in its upper section and two panels in its lower section. The principal doorway to its north contains a pair of modern slab doors with upper glass panels and transom and sidelights. The doorway at the south end of the courtyard elevation of the east wing contains a modern, overhead door. The doorway to its north has been obliterated by later additions. A narrower doorway (HAER Photo No. IL-20H-1) is located in the center of the north elevation. This opening is identical to those of the principal doorways, differing only in width. It contains a pair of original wood doors with six lights over a single panel with a

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transom. In the fifth and seventh bays from the north of the courtyard wing elevations are narrow doorways matching those of the windows, except in length. The south doorway of the west courtyard elevation contains a modern slab door with upper glass panel and transom. The doorway to its north contains an original nine-light over single panel wood door. The two east doorways have been obliterated by later additions. To the west of the eastern north elevation doorway an original window opening has been lengthened to contain a one-light over three panel wood door. North of the principal doorway at the west courtyard elevation another window opening has been lengthened to contain a modern slab door with upper two-light sash. In the north elevation of the concrete block extension of the northeast pavilion is a modern slab door with upper glass panel in a simple masonry opening.

- b. Windows: Typical first-floor window openings (HAER Photo Nos. IL-20H-1, IL-20H-2, IL-20H-3, and IL-20H-5) contain six-over-six-over-six, triple-hung wood sash, and have rock-faced limestone jambs, cut limestone sills and flat lintels. Attic window openings (HAER Photo Nos. IL-20H-1, IL-20H-2, IL-20H-3, and IL-20H-7) contain small, single-light, pivoting, wood sash and are typically arranged in pairs of small openings in the building entablature with sets of four centered in the gable ends and sets of three in the centers of the south and north main block elevations. These window openings have rock-faced limestone jambs and sills and lintels formed by the entablature and frieze. The gable ends (HAER Photo Nos. IL-20H-1, IL-20H-2, and IL-20H-3) have paired window openings containing six-over-six, double-hung, wood sash, with rock-faced limestone jambs, segmental, rock-faced limestone arches and keystones and dressed limestone sills. The monitors (HAER Photo Nos. IL-20H-1, IL-20H-2, and IL-20H-3) contain window openings corresponding with those below. The original sash of these openings have been replaced with corrugated fiberglass panels. All surviving wood sash are painted white.

7. Roof:

- a. Shape, covering: The roof (HAER Photo Nos. IL-20H-1, IL-20H-2, and IL-20H-3) is a cross-gable form with a cross-gable monitor. Both the roof and its monitor are covered with asphalt shingles.
- b. Cornice, eaves: The cornice and eaves (HAER Photo Nos. IL-20H-1, IL-20H-2, and IL-20H-3) are cut limestone. The interior metal gutter system is tied to exterior metal leaders which lead to an underground drainage system.

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8. Ancillary structures: In the northeast corner of the courtyard is a one-story, concrete-frame addition with a flat, concrete roof. Its south and west elevations have tan brick infill in the rectangular openings of the frame.

Directly south of this addition is a later concrete block addition, also one-story with a flat roof.

Extending from the center of the northeast pavilion is a one-story concrete block entrance addition. Its unpainted exterior walls contain single window openings in the north and south elevations with modern ten-light steel sash.

North of the southeast pavilion is a narrow, two-story, concrete block addition with a flat roof. Its exposed east elevation has sets of modern industrial steel sash set in plain concrete block window openings.

C. Description of Interior:

1. Floor plans: The building originally contained no interior partitions, aside from small, enclosed offices in some of the pavilions. The floor plan remains essentially open with some enclosed offices and restrooms, typically located in the pavilions. In the northwest corner of the building a mezzanine level has been added extending southward into the west wing.
2. Stairways: There is a wooden stairway at the south end of the mezzanine, having plain wood treads, landings, risers, open stringers, rails and posts. It dates from the construction of the mezzanine. Steel ladders (HAER Photo No. IL-20H-8) in round cages lead to steel catwalks around the building.
3. Flooring: Primary flooring is poured concrete with a sealer applied to it. The mezzanine level has pine board flooring.
4. Wall and ceiling finishes: Outer walls (HAER Photo No. IL-20H-8) are painted rock-faced asblar limestone. Interior partition walls are painted concrete block and painted corrugated steel. The main ceiling is open with the underside of the roofing exposed. Beneath the mezzanine the ceiling is formed by the exposed wood joists and flooring.
5. Openings:
 - a. Doorways and doors: In the northeast pavilion an original principal exterior doorway (HAER Photo No. IL-H-8) survives as an interior doorway. It contains a set of three original,

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two-light over two panel wood doors below a transom. All other doorways are of relatively recent vintage appropriate to their respective partitions.

- b. Windows: There are no window casings. Window openings (HAER Photo Nos. IL-20H-7 and IL-20H-8) are formed by the adjacent limestone in the lower walls and by the framing of the monitor walls above.
6. Hardware: Although most of the hardware in the building is of relatively modern vintage, original hardware does survive in conjunction with the original exterior doors noted above. This hardware consists of heavy cast-brass plate hinges and pulls with "RIA" cast into their faces.
 7. Mechanical equipment:
 - a. Heating, air conditioning, ventilation: The building is abundantly heated by the excess heat produced by the industrial processes, so that there is no need for additional heating. There is no air conditioning. Forced ventilation of the excess heat and noxious gases is through the numerous chimneys and flues discussed above.
 - b. Lighting: Artificial illumination is by means of fluorescent, sodium vapor (HAER Photo No. IL-20H-6), and a few incandescent electrical fixtures. No evidence remains of original artificial lighting systems.
 - c. Plumbing: No original plumbing fixtures survive.
 - d. Machinery: No original machinery survives. For security reasons, no information on existing machinery was available.

D. Site:

1. General setting and orientation: The building is centered between Second and Third Streets on the south side of Rodman Avenue, the arsenal's principal street. To the east is Building 108, a printing plant, and to the west is Building 104, an administration building. The interior courtyard is paved and contains a number of sheet metal structures serving the building, two additions, and Building 113, a sand bin. South of the building runs South Avenue. The relatively level site slopes gently to the south.
2. Outbuildings: Near the center of the courtyard is Building 113, a sand bin. It is a modern structure with a concrete block one-room base supporting a complex, large, round, riveted steel tower.

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Near the center of the east elevation is a small, one-story, flat-roofed concrete block building.

Prepared by: David Arbogast
Architectural Conservator
February 1985

PART III. SOURCES OF INFORMATION

A. Original Architectural Drawings:

The Rock Island Engineering Plans and Services Division has the following original drawings, signed by D. W. Flager, which detail the building's construction in 1817-1874:

"Shop E / North West Portico," N.d., R.I.A. 454, D400766 (see HAER Photo Nos. IL-20H-12; IL-20H-13).

"Plan of Shop E," N.d., D40076 (see HAER Photo No. IL-20H-10).

"Roof for Shop E / Common Rafter," February 5, 1872, RIA B106-B4, D40076E (see HAER Photo No. IL-20H-17).

"Roof for Shop E / Plan of Rafters & Purlines," February 5, 1872, RIA B106-A5, D40076A (see HAER Photo No. IL-20H-11).

"Roof for Shop E / Details for Opposing Rafter," N.d., RIA B106-B7, D40076H (see HAER Photo No. IL-20H-15).

"Hood for Shop E," August 27, 1873, D400767L (see HAER Photo No. IL-20H-18).

"Shop E / Details for Valley Rafter," N.d. RIA B106-B6, D400766 (see HAER Photo No. IL-20H-16).

B. Early Views:

A bird's-eye view of the arsenal documenting the basic details of Shop E's original construction was published in 1877 (Flagler, frontispiece). In addition, the picture collection of the Rock Island Arsenal Historical Office has the following photographs:

Photograph of the west facade of the west wing, originally published in 1898 (Tillinghast, p. 52). Captioned, "The Blacksmith Shop and Foundry," the view documents the addition of a chimney on the roof between the two pavilions of the west wing (see HAER Photo No. IL-20H-9).

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Photograph of the west facade of the west wing and of the south facades of both wings, captioned in part, "73A / Looking northeast at Shop 'E," Building #106 / 1 November 1944. The view documents that the chimney addition had been removed by November 1944.

Photograph of courtyard, captioned "765-53208 / Shop E (Foundry), Bldg. #106 / Court, looking north / April 27, 1956. The view documents the construction of an addition to the west facade of the east wing.

C. Bibliography:

1. Primary and unpublished sources:

Baylies, Libby and Bahr, Betsy. "Historic American Buildings Survey of the United States Materials and Mechanics Research Center, Watertown, Massachusetts." 1982. HAER No. MA 20, HABS/HAER Collection, Prints and Photographs Division, Library of Congress. Discusses Rodman's architectural work at Watertown Arsenal.

"General Course of Instruction for Officers Assigned to Rock Island Arsenal." Rock Island, 1918. Rock Island Arsenal Historical Office. Describes building's role as a foundry and smith shop during World War I.

Hess, Jeffrey A., and Mack, Robert C. "Historic Properties Report Rock Island Arsenal, Rock Island, Illinois". Prepared by MacDonald and Mack Partnership, and Building Technology Incorporated for the Historic American Buildings Survey/Historic American Engineering Record, National Park Service, U.S. Department of the Interior, 1985. The report, with accompanying inventory cards, is filed as field records in the Prints and Photographs Division, Library of Congress, under HAER No. IL-20.

"History of Rock Island Arsenal Called for by O.O. 23501-D-195." N.d. Rock Island Arsenal Historical Office. Good description of the building's manufacturing program during the nineteenth century.

Real Property Cards, Engineering Plans and Services Division, Rock Island Arsenal. Briefly describes building's structural characteristics and provides sketchy history of maintenance operations.

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2. Secondary and published sources:

Completion Report Covering All Construction Projects Accomplished Under Supervision of the Construction Division, U.S. Army at Rock Island Arsenal. Rock Island Arsenal, 1919. Rock Island Arsenal Historical Office. Discusses planning and construction of connecting building between Shops A and C.

Flagler, D[aniel] W[ebster]. A History of the Rock Island Arsenal from Its Establishment in 1863 to December 1876. Washington, D.C.: Government Printing Office, 1877. The most detailed account of the building's construction, written by the arsenal's commandant from 1871 to 1886.

Nothstein, Ira O. and Stephens, Clifford W. A History of Rock Island Arsenal from Earliest Times to 1954. Rock Island: U.S. Army, Rock Island Arsenal, 1965. 3 vols. Rock Island Arsenal. The best account of the arsenal's general operation and construction, with specific references to Shop E's manufacturing program during the nineteenth and twentieth centuries.

Zabecki, David T. "Father of the Rock Island Arsenal." Field Artillery Journal, 49 (January / February, 1951), 55-56. Discusses Rodman's pioneering work in cannon and propellant design.

E. Likely Sources Not Yet Investigated:

Record Group 156 at the National Archives contains correspondence on the construction and operation of Rock Island Arsenal from 1871 to 1903. This material is also available on 216 reels of microfilm at the Browning Museum, Rock Island Arsenal.

PART IV. PROJECT INFORMATION

This project was part of a program initiated through a memorandum of agreement between the National Park Service and the U.S. Department of the Army. Stanley J. Fried, Chief, Real Estate Branch of Headquarters DARCOCOM, and Dr. Robert J. Kapsch, Chief of the Historic American Buildings Survey/Historic American Engineering Record, were program directors. Sally Kress Tompkins of HABS/HAER was program manager, and Robie S. Lange of HABS/HAER was project manager. Building Technology Incorporated, Silver Spring, Maryland, under the direction of William A. Brenner, acted as primary contractor, and MacDonald and Mack Partnership, Minneapolis, was a major subcontractor. The project included a survey of historic properties at Rock Island Arsenal, as well as preparation of an historic properties report and HABS/HAER documentation for

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38 buildings. The survey, report, and documentation were completed by Jeffrey A. Hess, historian, Minneapolis; Barbara E. Hightower, historian, Minneapolis; David Arbogast, architectural historian, Iowa City, Iowa; and Robert C. Mack, architect, Minneapolis. The photographs were taken by Robert A. Ryan, J Ceronie, and Bruce A. Harms of Dennett, Muessig, Ryan, and Associates, Ltd., Iowa City, Iowa. Drawings were produced by John Palmer Low, Minneapolis.