

CAMBRIA IRON COMPANY, GAUTIER WORKS
(Cambria Steel Company, Gautier Works)
(Bethlehem Steel Company, Gautier Works)
(Gautier Steel Company)
Clinton Street and Little Conemaugh River
Johnstown
Cambria County
Pennsylvania

HAER No. PA-314

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11-JOTO,
136-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
P.O. Box 37127
Washington, D.C. 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD

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Location: Lower Works, Clinton Street and
Little Conemaugh River, Johnstown,
Cambria County, Pennsylvania
Quad: Johnstown, Pennsylvania
UTM: 17 E.677260 N.4465950

Date of Construction: Originally built in 1878; destroyed
in Johnstown Flood of 1889; rebuilt
1893-1920s.

Fabricator: unknown

Present Owner: Bethlehem Steel Corporation

Present Use: The property was recently closed by
Bethlehem Steel and is for sale.

Significance: Acquired by Bethlehem Steel in
1893, the works feature one of the
few remaining hand-operated rolling
mills, the 12" Mill, which was
closed in 1990. The buildings are
largely vacant; however, part of
the revamped 14" mill operates in
the northern end of the former 13"
mill and shear shop. Importantly,
the original Southwark steam engine
remains in place in the old 36"
plate mill, though it has not
operated since the 1920s.

Historian: Gray Fitzsimons, 1989

Project Information: The results of the study of Cambria County
were published in 1990: Fitzsimons, Gray, editor, Blair County
and Cambria County, Pennsylvania: An Inventory of Historic
Engineering and Industrial Sites (Washington, D.C.: America's
Industrial Heritage Project (AIHP) and HABS/HAER, National Park
Service). The contents of the publication were transmitted to the
Library of Congress as individual reports. Research notes, field
photos and copies of historic photos collected during the project
were transmitted to the AIHP Collection, Special Collections,
Stapleton Library, Indiana University of Pennsylvania, Indiana,
PA 15705.

HISTORY

The section of land bordered by the Little Conemaugh River and Washington and Clinton streets has been an important transportation and industrial site in Johnstown since the early 1830s. It was at this time that engineers on the Pennsylvania Canal laid out and constructed a canal-boat basin in this location to serve as a junction between the waterway's Western Division and the Allegheny Portage Railroad. In addition to warehousing, one of the earliest industries near the canal basin was S. H. Smith's iron foundry. When the Portage Railroad ceased operating in the mid 1850s the canal-boat basin declined in importance and was gradually filled in. The area was greatly transformed in 1878 when Josiah H. Gautier formed a partnership with Cambria Iron and moved his Gautier Steel Company from Jersey City, New Jersey, to Johnstown. Specializing in the production of steel barbed-wire, the mill was operated by Gautier and his two brothers until 1881 when the partnership was dissolved and the Gautier works became a department of Cambria Iron. By the mid 1880s the Gautier works--the mill retained its original name--employed 100 wire-drawers and had a capacity of 100 tons of wire per day.

The Johnstown Flood of 1889 completely destroyed the Gautier works and the site was left for over three years. Cambria Iron began reconstructing the Gautier works in 1892 with large brick and steel-frame buildings erected along Clinton Street. (These buildings along Clinton Street are the earliest extant mills at Gautier.) By 1895 the new Gautier works was in operation, producing a wide range of agricultural products, including steel shapes for plows, harrows, reapers, and cultivators as well as merchant bars.

Shortly after the Cambria Iron Company was reorganized as the Cambria Steel Company in 1898, several new mill buildings were erected at the Gautier Works. This included the addition of three bays west of the 9"-mill No. 3, with the westernmost bay housing the Rail Anchor Shop, the Fence Post Shop, and the Smith Shop. Two blocks west of these shops, near the intersection of Clinton and Matthew streets, four additional mill buildings were erected, each containing a single bay and measuring about 1,000' x 90'. These large buildings were uniform in appearance with steel frames rising three-and-one-half stories in height, gambrel roofs and full-length monitors supported by riveted-steel Fink roof trusses, exterior walls composed of brick nogging, and a

concrete foundation. The buildings housed the Shear Shop, the 36" universal plate mill, the 13" mill, and shipping and storage facilities. The 36" plate mill was powered by a double-reversing steam engine manufactured in 1905 by the Southwark Foundry and Machine Company of Philadelphia.

Around 1906, Cambria Steel erected another group of buildings at Gautier between the Rail Anchor Shop and the Shear Shop. One of the new structures, a two-story two-bay steel-frame and brick building, housed the 22" and 20" mills along with a finishing shop. Although a few other minor buildings were erected in the 1910s, no additional large-scale expansion occurred at the Gautier Works until the 1920s when Bethlehem Steel acquired Cambria.

Presently the buildings at the Gautier Works, dating from the late 1890s and early 1900s, are largely vacant; however, part of the revamped 14" mill operates in the northern end of the former 13" mill and shear shop. Importantly, the original Southwark steam engine remains in place in the old 36" plate mill, though it has not operated since the 1920s.

Soon after Bethlehem Steel purchased Cambria in 1923, the company conducted a study of all facilities at Franklin, the Lower Works, and Gautier. At that time the Gautier Division extended nearly one-half mile along the Little Conemaugh River and contained three 8" mills, two 9" mills, one 10" mill, two 12" mills, one 13" mill, one 14" mill, one 20" mill, one 22" mill, one 24" universal mill with shear shop, one 36" universal plate mill, a disc shop, a rake shop, and a rail-anchor shop. Bethlehem Steel management decided to modernize and expand the Gautier Division, commencing work in 1924. The company built several new steel-frame and brick mill buildings in the westernmost section of the Gautier mill complex, relocating the 8" mills, installing a new 14" structural mill. This latter mill was among the largest additions at Gautier. It comprised five stands of 18" and five stands of 14" rolls, hot saws, hot beds, a straightener, shears, and assembly cradles. The 14" structural mill produced a range of structural steel shapes, including angles, rails (up to 45 pounds per yard), and "Z" bars.

Other mills revamped by Bethlehem Steel in the 1920s and 1930s included the 13" bar mill, the 10" bar mill, which was a Morgan-patented bar mill, and 9"-mill No. 2. The mid-1920s at Gautier also witnessed the construction of a new warehouse building, and a new machine and roll shop. While several old mills were taken out of service including the 14", 10", and 13"

mills, dating from 1900, the two 9" mills, dating from the 1890s, and the 12" mill, dating from 1895, were retained and electrified.

In the late 1920s, Bethlehem Steel added two other notable buildings at Gautier, a two-story office building and an adjacent one-story laboratory building. Both structures contained brick exterior walls and concrete foundations. The steel-frame office building was constructed with a gable roof, and the laboratory contained a hip roof. As with many of the mill buildings at Gautier, the windows of these two structures have been infilled with brick and glass-block masonry. The roofs have been covered with corrugated metal or asphaltic material. Nonetheless, the office building, laboratory, shops, and mill buildings retain their original size and shape with only a few minor additions. Presently, Bethlehem Steel operates only the 14" mill, the 9" mill No. 2, and the 12" mill, along with roll shop, office building, and laboratory.

Presently, Bethlehem Steel operates only the 12" mill; the 9" mills were removed in the 1960s and 1970s. The 12" mill consists of two-high and three-high Blaw-Knox roll stands dating from the 1920s. Importantly, the 12" mill continues to operate much as it did in the 1920s and is one of the nation's few hand-operated rolling mills in a large steel works. Associated with the 12" mill is the gas-fired furnace used for heating the billets. A straightener and shear are used prior to shipping the rolled steel, and a spur of Bethlehem Steel's Conemaugh & Blacklick Railroad extends inside the eastern section of the 1890s building.

All of the other rolling mills and steel product mills of the Gautier Division have been scrapped. Much of the vast interior space of the mill complex is either empty or used for storage. The mill buildings of the Gautier works, however, built between 1893 and 1895, remain largely intact and have been only slightly modified. The structures are two-and-one-half stories in height, contain four bays, a steel frame with brick nogging along the exterior walls, riveted-steel Fink roof trusses, full-length monitors, and an ashlar stone foundation. In addition, several of the multi-light windows remain in place.

SOURCES

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