

CAMBRIA IRON COMPANY, MERCHANT MILL
(Bethlehem Steel Company, Axle Turning Shop)
Cambria Iron Works
Lower Works
Johnstown
Cambria County
Pennsylvania

HAER No. PA-109-G

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
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HISTORIC AMERICAN ENGINEERING RECORD

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Location: Lower Works, Johnstown, Cambria
County, Pennsylvania

Date of Construction: ca. 1872

Fabricator: unknown

Present Owner: Bethlehem Steel Company

Present Use: Fabricated Structural Products

Significance: Originally contained four heating
furnaces and a bar mill for the
production of a variety of iron
bars and plates. The east facade
is highlighted by the original
common-bond brick walls and
multi-light windows, and the
building retains its original
wrought-iron, pin-connected Pratt
roof trusses.

Historian: Gray Fitzsimons, ed.

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 Cambria Iron Works erected its first rolling mill in Johnstown in 1853-54. A fire in 1857 completely destroyed the brick cruciform-shaped building, but it was quickly rebuilt. A second fire in 1872 destroyed much of the reconstructed mill, however, Cambria Iron again quickly rebuilt it, adding a merchant mill to the eastern wing. By 1878 the Merchant Mill wing contained four heating furnaces and a bar mill, and produced a variety of iron bars and plates. The Merchant Mill continued to produce iron and steel bars and plates until about the 1920s, when Bethlehem Steel converted much of the old rolling mill into the Axle Plant. Although none of the original equipment survives, part of the 1872 Merchant Mill still stands. Housing part of the Axle Turning Shop, the building was abandoned in 1982 when Bethlehem Steel ceased manufacturing axles in Johnstown.

When Bethlehem Steel last operated the Axle Plant in 1982 it contained four principal shops: (1) the Axle Forge Shop, (2) the Axle Turning Shop, (3) the Finishing Shop, and (4) the Steel Car Truck Assembly Shop. The Axle Plant is housed in several adjoining buildings the earliest of which includes the Steel Rail Mill (ca. 1867), now called the Steel Car Truck Assembly Shop, as well as the Merchant Mill (ca. 1872), now part of the Axle Turning Shop.

The Axle Turning Shop occupies most of the old Merchant Mill, which is now enclosed on all but the east side. This east facade, containing five symmetrical bays, each of which is framed by brick pilasters, retains much of its original appearance. In addition to occupying most of the interior of the old Merchant Mill, the Axle Turning Shop extends to the north into an adjoining steel-frame and brick building erected by Bethlehem Steel in 1938. The western end of the former Merchant Mill is part of the Axle Forge Shop. Measuring approximately 200' x 75', the Merchant Mill has been altered most extensively along its south facade where sections of the original brick walls were removed to provide access into an electrical substation and the Axle Finishing Shop, a steel-frame building constructed in the 1960s. Its north facade was altered as early as the 1870s when an extension for the Rod Mill was built. Nothing remains from the wire mill since Bethlehem Steel tore it down in the 1930s to make room for the 1938 addition to the Axle Plant.

Importantly, the old Merchant Mill retains its original pin-connected, wrought-iron Pratt roof trusses, sections of its original brick walls, multi-light windows, and its distinctive clipped-gable roof. It is about two-and-one-half-stories in height. Machinery that remains from the Axle Plant includes

three shaper lathes and a Snyder finishing lathe. Re-heating furnaces from the Forge Shop stand in the extreme western end of the old Merchant Mill.

SOURCES

Beer, D.G.; Goodhue, J.H.; and Roe, F.B. Cambria County, Pennsylvania. (Philadelphia: A. Pomeroy, 1867).

"Cambria Rails Won Praise." Johnstown Tribune-Democrat. 31 January 1953.

Holley, A.L. and Smith, Lenox. "American Iron and Steel Works: Works of the Cambria Iron Company," Engineering: An Illustrated Weekly Journal. Vol. 26, (July 12 1878), 21-24.

"Key Plan, Johnstown Plants: February 16, 1923; revised January 26, 1927, March 29, 1930, and February 13, 1939," (copy available at the Canal Museum, Center for Canal History and Technology, Easton, Pennsylvania).

Sanborn Map Company, Johnstown, Pennsylvania. New York: Sanborn Map Company, 1891 and 1911.