

South Side FACTS

Watch out! It's hot!

Imagine liquid glass or liquid steel flowing like the Monongahela River—but at 3,100 degrees Fahrenheit! That's hot! Years ago, glass, iron, and steel-making made the South Side famous throughout the nation and world.

In the early 1800s, thousands of South Siders worked in glass factories. By the 1880s, thousands more were working in iron and steel works. Although these industries have all but disappeared locally, it is important to remember that these industries once fueled the South Side's—and Pittsburgh's—growth and helped make this region the "Workshop of the World."

Glass Houses on the South Side

The South Side was once a major glass-making center. At the industry's height in 1876, there were 76 glass factories in operation in the neighborhood! Over

65% of all glassware made in the United States came out of Pittsburgh and Allegheny County factories. These factories produced all types of glass: goblets, decanters, gas lampshades, window glass, bottles, and tableware.

The basic ingredients of glass are sand, potash (or soda), and lime. The sand for the first factory on the South Side came from a sand bar that used to be in the middle of the Monongahela River. Later, sand came from tributaries of the Allegheny and Monongahela Rivers: French Creek and the Youghiogheny River. Potash is simply the ashes left after burning wood or other plant material. Soda is crushed flint. Flint is one of the rocks in the hills of Pittsburgh. Limestone is a soft rock that is dug out of quarries and crushed to make lime, a powder-like substance.

Here's a bit of trivia: the most expensive glass, used in railroad-warning lanterns, was colored a dark red. The glass maker added pure gold to the mixture of sand, potash, and lime to produce the red glass!

James O'Hara and Isaac Craig opened Pittsburgh's first glass factory in 1797. It was located on the South Side, near where the Duquesne Incline parking lot at Station Square is today. The workers made glass for windows and bottles.

By 1850, another 25 glass houses were operating in Pittsburgh. The most famous one was Bakewell's; it opened in 1808. The Pittsburgh Flint Glass Works and the Cunningham Glass Factory were also well known. In 1891, fifteen glass companies formed a conglomerate known as the United States Glass Company (U. S. Glass), whose headquarters building still stands on Bingham Street on the South Side. The building is now used by the Salvation Army.

Pittsburgh glass, with a majority being made on the South Side, was recognized throughout America and Europe as the finest in the world. Presidents Andrew Jackson and James Monroe ordered their glass and table ware from Pittsburgh companies.

Glass is no longer made on the South Side.



The Salvation Army building at Bingham Street and S. Ninth was once the United States Glass Company headquarters building.

GLASS WARE. 37

THOS. BAKEWELL, JOHN. P. PEARS,	BENJ. P. BAKEWELL, BENJ. B. CAMPBELL.	
------------------------------------	--	--

BAKEWELL, PEARS & CO.

Flint Glass Manufacturers,

Nos. 31 AND 33 WOOD STREET,
CORNER OF SECOND,
PITTSBURGH, PA.

W. CUNNINGHAM, D. IHMSEN,	D. CUNNINGHAM,	R. CUNNINGHAM, G. DUNCAN.
------------------------------	----------------	------------------------------

CUNNINGHAMS & CO.

PITTSBURGH CITY GLASS WORKS,

Warehouse, No. 109 Water St., and 140 First St.
PITTSBURGH, PA.

MANUFACTURERS OF

PITTSBURGH CITY WINDOW GLASS,

Druggists' Glass-Ware, and American Convex Glass,
FOR PARLOR WINDOWS, CHURCHES AND PUBLIC BUILDINGS.

F. & J. M'KEE,

MANUFACTURERS OF

CUT, MOULDED AND PLAIN

FLINT AND FANCY COLORED

GLASSWARE.

AND DEALERS IN

VIALS, BOTTLES AND WINDOW GLASS,

No. 23 Wood Street, Pittsburgh, Pa.

PENN GLASS WORKS.

FREDERICK R. LORENZ,

(Successor to Lorenz & Wightman,
Manufacturer of all kinds of

VIALS, BOTTLES,

AND WINDOW GLASS,

63 WATER, AND 65 FRONT STREET.

N. B. Particular attention paid to odd sizes of Window Glass and private moulds
for Vials and Bottles.

An excerpt:

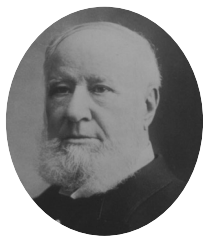
From Harris' Pittsburgh Business Directory, for the year 1837 including the names of all the Merchants, Manufacturers, Mechanics, and Professional Men of Business of Pittsburgh and its vicinity. Pittsburgh: Published by Isaac Harris 1837. Pg 146.

The Flint glass house has in operation 2 steam Engines, of 15 horse power, and 5 horses; consumes annually 60,000 bushels coal; employs 4 principals, 4 book keepers, 3 clerks, 2 engravers, 3 moulders, 2 pot makers, 12 blowers, 37 assistants, 15 glass cutters, and about 35 packers, laborers, etc. The productions are cut, plain, and Pressed Flint Glassware, worth about \$100,000 to \$120,000 per annum.

The main offices and showrooms of the glass companies were in downtown Pittsburgh. The factories were on the South Side.

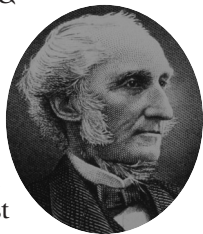
Iron and Steel on the South Side

Benjamin Franklin Jones and James Laughlin became business partners in 1854 when they formed the American Iron Works (which became Jones & Laughlins Limited in 1883 and then Jones & Laughlin Steel Company in 1902).



B.F. Jones

In 1860, Mr. Jones and Mr. Laughlin built their first blast furnace and named it "Eliza." Blast furnaces purified the iron needed to make rails for railroad tracks and heavy hardware, such as bridge beams and locomotives. The furnaces were "tapped" every four hours and the pure iron was removed.



James Laughlin

Iron ore was one of three basic ingredients needed to make iron. Coke (purified coal) and limestone were also needed. J & L brought iron ore from mines on Lake Superior and purified this iron at the Eliza furnaces. The coal came from mines in Western Pennsylvania, and the limestone came from quarries in Central Pennsylvania. J & L used the rivers to bring in the raw materials—and to ship out the finished products.

In 1873, steel was made at the J & L South Side Works for the first

time. Pure melted iron from the Eliza blast furnaces was transported across the Monongahela River on the Hot Metal Bridge. A few other ingredients (such as carbon, nickel, or titanium—depending on the kind of steel that was needed) were added to the iron to make steel. Then, after a 15-minute "blow" in a Bessemer converter, pure steel was poured out. By 1949, J & L Steel covered over 100 acres along the south shore of the Monongahela River and employed about 15,000 men.

Working in a steel mill was a difficult and dangerous job. In the winter, especially, workers were likely to develop pneumonia because the contrast was so great between the heat in the mills and the cold outside. After working a 12-hour shift, the men would go outside in their sweat-soaked clothes, and sometimes get sick and die. The men worked seven days a week, and were only given one holiday a year: the Fourth of July, Independence Day!

In the 1960s, the steel industry in general began to experience problems. In 1986, the last facility at the J & L South Side Works was shut down. All the buildings were demolished.

Now, on the site of the former mills, new buildings are being constructed and hundreds of people are again working at the site. The Three Rivers Heritage Trail provides recreational opportunities for people along the river where, for 100 years, the blast furnaces and Bessemer reigned supreme.

Questions

1. When did James O'Hara and Isaac Craig open the first glass house on the South Side?

2. What ingredients do you need to make glass?

3. Why is red glass so expensive?

4. What does the "J" stand for in the name J & L Steel?

5. What ingredients do you need to make steel?


6. What one holiday were steel workers given each year?



A view of J & L's South Side Works around 1948. The old Brady Street Bridge is in the foreground. In the distance, on the opposite shore of the Monongahela River, you can see the Eliza furnaces of J & L.

The Pittsburgh Steelers

In 1933, Art Rooney purchased an NFL franchise for \$2,500. He brought the team to Pittsburgh and called it the Pittsburgh Pirates. It was not until 1941 that the team changed its name to the Steelers, to reflect the strength of steel and play off the hometown symbol.

In the 1950s, U. S. Steel created the logo now used by the Pittsburgh Steelers. U.S. Steel wanted to educate people about the importance of steel in everyday life. The shapes  are called "hypocycloids," and the colors symbolize some of the materials used in the steel-making process: yellow represents carbon; orange represents iron; and blue represents steel scrap.



This fact sheet is based on research by Megan Heilmann, an intern with the Pittsburgh History & Landmarks Foundation. The fact sheet was designed for students participating in educational programs offered through the Neighborhood Assistance Program/Comprehensive Service Program. The Commonwealth of Pennsylvania's Department of Community and Economic Development sponsors the Neighborhood Assistance Program in partnership with the South Side Local Development Company and PNC Bank. For details call the SSLDC at 412-481-0651.



Help us protect the places that make Pittsburgh home.

For more information about our education programs and membership opportunities call 412-471-5808 www.phlf.org