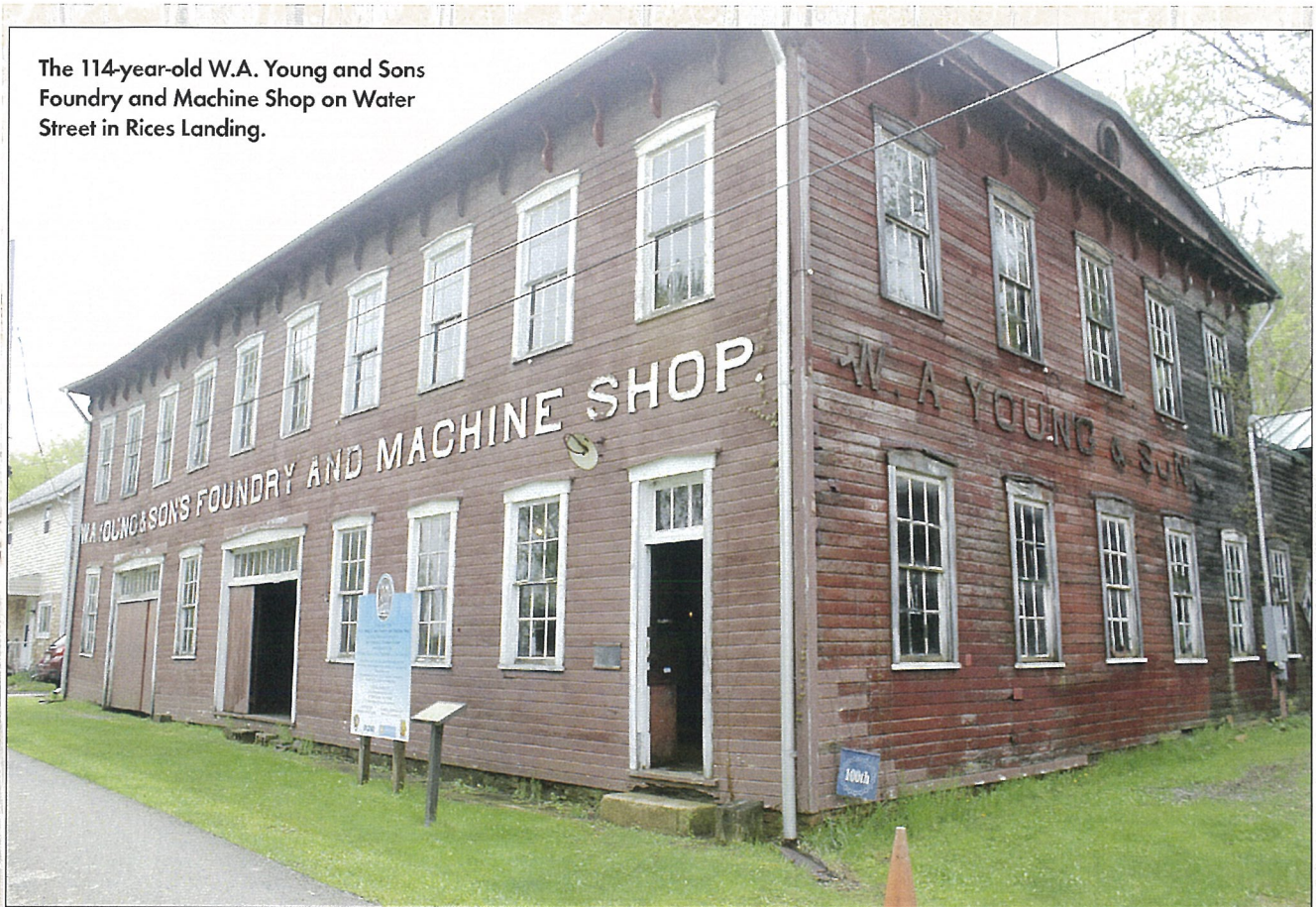


The 114-year-old W.A. Young and Sons Foundry and Machine Shop on Water Street in Rices Landing.



After 114 years Young Foundry remains... A 'Hidden History'

Though the W.A. Young and Sons Foundry and Machine Shop in Rices Landing has been documented by the Smithsonian Institution and the National Park Service, it is still considered one the area's most under-appreciated historic sites.

From its metal lathes and milling machines, some dating back to the 1870s, to its overhead belt system that powers each piece of equipment from a single engine, the shop has remained pretty much unchanged since the days it served the riverboat, railroad and mining industries.

George "Bly" Blystone, the volunteer caretaker of the shop, refers to the 114-year-old clapboard building and its contents as a "hidden history."

Photos and story by Bob Niedbala

"People didn't know what went on here," he said, speaking of the shop's relative obscurity, which he attributes to the lack of information about the shop itself as well as the riverboat industry it served when it first opened for business.

The building's significance, however, has not been completely overlooked.

"The Smithsonian has said it's the only machine shop of this nature left," Blystone said.

A survey of the building conducted in 1992 for the Historic American Engineering Record by the National Park Service called the machine shop "a pristine example" of a 20th century machine shop.

Its tools, clientele and the structure of its operations show influences of both a blacksmith shop and modern machine shop, the study said. "[T]his shop represents a transition between the village blacksmith of the eighteenth and nineteenth centuries and the large machine shop of the twentieth."

People who visit the 2014 edition of the Rices Landing Riverfest will have a chance to tour the building on Water Street, a short walk from the lock wall of the former Rices Landing Lock and Dam where festivities take place.

The shop will be open during the festival from 4 p.m. to closing on Friday, June 13, and from 11:45 a.m. to closing Saturday, June 14, and feature blacksmithing demonstrations.

The machine shop was built by William A. Young, a local carpenter and farmer, in 1900 and was expanded in 1908 to include the foundry.

"This was primarily made to service paddle wheelers on the river and then, of course, the coal mines came and it got involved in repairing coal mine equipment and locomotive parts," Blystone said.

"It did mostly repairs. They would repair a shaft that was torn up or gears that were broken; of course as it got bigger, they did casting."

The metal lathes, drill presses, grinders, saws, planers and shapers that fill the machine shop are all original and date from between 1870 and 1920.

The machines are run by an intricate system of leather belts and wooden pulleys mounted to the ceiling that was powered originally by a single steam engine and is now run by a gasoline engine.

The foundry, with its dirt floor, still has the original coke-fired furnace, metal ladles and the traveling overhead crane.

Wooden patterns that were used to make the

cast-iron parts also are found in this part of the building. Cast iron items were made by placing a wooden pattern, made in the shape of the item to be cast, into casting sand to form a mold, Blystone explained. The pattern was then removed and molten iron poured into the mold.

Young crafted the patterns himself from either a sketch or from an existing part. His work is spread throughout the foundry and includes patterns of gears, grates, railroad switches, machine parts and wheels of various sizes. A large pattern believed to have been created for a gear on a river lock hangs on the foundry wall.

Not all of the patterns have been identified. "We don't know what a lot of them are," Blystone said. It's possible some might have been important parts for the engine room of a riverboat. However, "We don't know what the engine room of a paddle wheeler might have looked like," he said.

The shop made parts for riverboats and grates, locomotive wheels, flanges and shafts for area coal mines, including the nearby Crucible and Nemaquin mines. It also did work for

smaller concerns that included decorative ironwork, toys, tractor parts and later, car parts.

The shop normally employed about six people, perhaps a few more when it was casting metal, Blystone said. Women also worked here, he said, pointing to a women's restroom constructed in the shop. This was during World War II, when Young participated in the war training programs.

A hardware store was eventually added and is still intact on the second floor. Blystone pulls a few nuts and bolts from a box on the shelf; all were made in the shop downstairs. As more people began to own cars the shop also started to do auto repairs. A grease pit was constructed in part of the foundry.

Change came, however, and the shop could no longer keep up.

The growth of large scale foundries in Pittsburgh made it no longer cost effective for Young to make his own metal castings, according to the study completed for the Historic American Engineering Record. The foundry was closed in the 1930s.



George "Bly" Blystone, caretaker of the foundry and machine shop, adjusts a part on a large engine lathe.