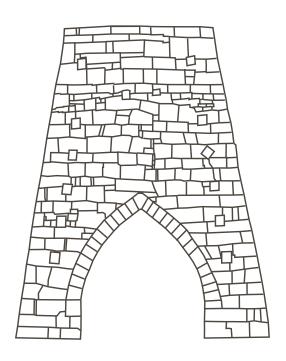
Friends of Beckley Furnace Inc. Research Report

The 1896 Fire and Subsequent Rebuilding



Prepared by: R. Paddock March 2006

The 1896 Fire at Beckley Furnace



This paper describes the result of research into the fire that damaged Beckley Furnace in 1896. The motivation for this research was evidence that the brick casting shed seen in photograph above was constructed before the 1896 fire. For some time it has been known that there was a fire that caused the furnace to go out of production in the spring of 1896. Up until now it was assumed that when the facility was rebuilt after the fire, the brick casting shed with the round iron roof shown in the photo was built to prevent any subsequent fires. This version of events was assumed accurate until the June 1896 issue of Connecticut Magazine was found to contain the above picture of the brick casting shed. Even the most optimistic assessment of 19th century building technique precludes constructing the brick shed between the April date of the fire and the June date of the magazine and thus brings up two questions:

- 1.) What did burn in 1896 and when was it rebuilt?
- 2.) When was the brick casting shed built?

This paper attempts to shed some light on the first question. A subsequent effort will try to answer the second.

Research was conducted via the D. M. Hunt Library in Falls Village which has microfilm copies of the Connecticut Western News (hereafter called the "News") that cover the period of interest. While The Lakeville Journal also provided coverage of the northwest corner of Connecticut, it did not begin publication until the summer of 1897 and thus did not cover the events of 1896.

Articles from the news are quoted below to show the sequence of events as they unfolded over the years from 1896 through 1899. The quotes are verbatim with only a small number of 21st century additions made for clarity. These additions are indicated by square brackets [].

The story of the fire begins in early spring 1896 when the News reported a cautiously optimistic view of the state of the economy for Canaan in its April 16 issue:

"In looking over the town we find it prosperous generally. The Barnum Richardson Co. at East Canaan are making pig iron, not as extensively as formerly but I think the only furnace in the Housatonic Valley in continuous blast."

The same paper, however, reports a setback in the "prosperous generally" industry at East Canaan in an article under the banner of "Iron Furnace Burned". It goes on to give the particulars as follows:

"A fire broke out at the Barnum Richardson Co's furnace, at East Canaan, known as the upper furnace, at 5 O'clock yesterday morning. [April 15, 1896] The fire was caused by the explosion of a lamp in the bridgeway connecting the coal sheds with the stock house or top house, which ignited the gas. The flames consumed the bridgeway, stockhouse, three coal sheds and the ore shed. The furnace is the only one of the three now in blast and will, of course, have to be blown out. It is impossible to say at present when one of the other furnaces will be put in blast, or rather what course will be taken by the company. Probably the lower furnace will be started up in about a week

About 50,000 bushels of charcoal were destroyed.

Loss, \$20,000; insurance: \$12,000".

There was no electricity at this time in East Canaan so the gas mentioned in the article might have been acetylene used for illumination. Small gas plants to generate such gas were not unusual during the 1890's. The News reported what turned out to be a very optimistic outlook for rebuilding of damaged furnace a week later in its April 23 issue:

"The Barnum Richardson Co. will rebuild the buildings and the portions of the upper furnace recently destroyed by fire. The lower furnace will be put in blast at an early day."

Subsequent reporting suggests that neither prediction given on April 23, 1896 came to pass and indicate the lower furnace was not ever put into production. The furnace that was running was subject to repair. The May 13, 1897 News reports that "the furnace" in East Canaan was shut down in order to build a new hearth. In the October 28 issue of the same year we get another hint as to the condition of the one operating furnace:

"Last Wednesday [October 21, 1897] sparks lodged in the rotted wood at the base of the flagstaff on the cupola of the furnace and set fire to the staff. Blaze promptly extinguished"

With respect to rebuilding the Beckley furnace there is no news for almost two years after the fire. Finally in the February 19, 1898 issue of the News we finally see the potential for action:

"It is semi-officially stated that Barnum Richardson Co. will soon rebuild the Beckley furnace, so called, at East Canaan which was destroyed by fire about two years ago. Plans have been drawn which will be a great improvement over the former structure. A switch track will be built so that cars of ore can be run directly into the top house of the furnace without breaking bulk after they leave the iron mines in Salisbury The work of rebuilding will commence as soon as the weather will permit."

It seems that good weather was not enough to get things going because real progress was not reported until the September 15, 1898 News in which we find the following article describing activity seen by the editor of the News when he rode his bicycle through East Canaan:

"Barnum Richardson Co. were rebuilding the Beckley furnace which was partly destroyed by fire over two years ago. They are adding two more steam boilers, and have the coal shed and ore sheds erected, also the bridge across the highway. Hereafter the coal, ore and limestone will be hauled by steam power across said bridge to the trundle head, the charging carts to run on an inclined railway, and deposit their contents directly into the trundle head, and it is expected the furnace will be making iron again before November."

November, it seems, was also overly optimistic for we find the furnace still not up full production in the April 27, 1899 News.

"About three years ago the Beckley furnace, so called, at East Canaan, owned by the, Barnum Richardson Co. was destroyed by fire. Last season the furnace was rebuilt on what was considered the latest and best plans, the most improved method, of making pig iron. However it did not work satisfactory and after a few weeks the furnace was blown out and some changes were made and the furnace put in blast again. Last week it was blown out again to make still further improvements. Soon as this furnace works to their satisfaction B. R. Co. will blow out their other furnace at East Canaan and make extensive repairs on it. The demand for pig iron will require that both furnaces be run to their utmost capacity."

The need for production capacity in East Canaan and thus the motivation for getting the Beckley furnace back in service becomes clear from this report published in the November 1, 1899 News where we hear the demand for iron is high:

"The iron business is booming and the demand is so great that Barnum Richardson Co. have sold and shipped every ton they had on hand, including even the large stock of low grades or low numbers of iron that had been accumulating for several years at their furnaces. It is reported that they have also booked orders for many thousand tons to be manufactured in [the] future - one report says 600,000 tons. We think 6000 tons would be nearer the correct figures because it would require nearly fifty years for the two furnaces at East Canaan to make 600,000 tons."

Note also that the article hints at a considerable inventory having existed prior to the rise in demand. Indeed that inventory may have included higher grades as well. If so that would explain the lack of urgency in rebuilding Beckley.

The only other issue to be settled is which furnace was used to replace Beckley during the three years it was out of service. The original 1896 article suggested it was the old Forbes furnace (the lower furnace or number one). The following item from the July 14, 1898 News issue suggests that was not the case however:

"The chimney at the lower furnace, 80 feet high and weighing 100 tons, is down to stay. It was felled like a tree on Monday [July 11, 1898]".

Then the April 27, 1899 issue reports further demolition of the lower furnace:

"Barnum Richardson Co. are taking down the old furnace at East Canaan which formerly belonged to The Forbes Iron Co. The furnace stood on the bank of the river. It has been idle a number of years, and was in a dilapidated and unsafe condition. The tophouse, the oven and chimneys have been removed but the 'stack' or stonework still stands. The writer is not sure whether Squire Forbes or Samuel Adam originally built that furnace."

If the lower furnace had been idle "a number of years" it is unlikely that it was operating as late as 1896. Since there was a furnace operating in East Canaan according to the April 27, 1897 article above, it must have been number 3. Further evidence of furnace operation in East Canaan between April 1896 and April 1899 is furnished by this item in the December 29, 1898 News. Note that by this time the chimney on the old lower furnace was already gone and Beckley was still being "improved" so the only one that could be in production is number three.

"Last week Wednesday. afternoon while Henry C. Stevens, foreman for the Barnum Richardson Co. at the East Canaan furnaces, was opening a hopper bottom car of ore the wrench slipped and it is supposed struck him on the back of the neck knocking him down an incline. At that moment

the car opened and Mr. Stevens was buried up to his ears in the ore. The workmen quickly dug him out and he was taken home. Dr Lee was called and found that Mr Stevens was severely bruised about the head and neck and that his spine was injured. He sat up for the first time since the accident on Sunday and is now recovering steadily. N. S. Stevens, his son who has been severely ill with the grip, has nearly recovered. The illness of both gentlemen required the attendance of a nurse last week."

The most reasonable explanation is that a somewhat dilapidated furnace number 3 has been in production for the three years it took to rebuild Beckley. It does not sound like the production was continuous either, as there are numerous notes in the News about starting and stopping "the furnace" during those three years. All that came to an end with the rise in demand in 1899 and both furnaces probably did get into full production in 1900. No research has yet been done to determine how long the demand remained high.

In summary this research brings to light some new information about the Beckley furnace:

- 1.) The facility was out of production for approximately three years from April 15, 1896 until at least April 27, 1899.
- 2.) Steam boilers likely were present in April 1896. Their use is not given but it seems clear they were not used to transport raw material.
- 3.) The brick casting shed with its metal roof was indeed constructed prior to the 1896 fire and apparently survived as the casting shed is neither listed as one of the buildings damaged in 1896 nor rebuilt in 1898.
- 4.) There was flammable gas used in the facility, probably for illumination.
- 5.) There may have been steam powered transport of raw materials after the 1898-99 renovation.