USE IS FOUND FOR LIFELESS IRON ORE ABUNDANT HERE

Large-Mouthed Shovel Scoops Up Ton of Ore at Irondale

to be Shipped to Insulation Makers

Introduction**:** The Morning Press*, a Bloomsburg newspaper, published the following article on February 22, 1938, describing the iron business in Columbia and Montour Counties. It provides an overview of a very important industry in the local economy during the mid-1800s. The article contains information about the discovery of iron ore in the area, early iron furnaces, Bloomsburg's iron furnaces, thriving iron industry during the Civil War, and iron making in the Danville area..*

For years thousands of tons of iron ore stood as reminders of a long-abandoned industry, one which had employed hundreds from this entire region, and except for being used here and there as road filler was of no use.

More than a hundred years ago, when furnaces were first burned, little did men dream that the lifeless ore would some day be used in the production of any product.

But today the stacks of iron ore are rapidly coming into use, being utilized by insulation corporations, with thousands of tons being shipped yearly from this immediate vicinity.

At Irondale, a large-mouthed shovel is scooping up tons and tons of the ore whch is run through machinery and broken up to be shipped by rail to large centres. The large pile, visible as one goes down Cherry Street, is also being utilized largely by the town in making fills and road improvement.

The mineral productions of Columbia County, particularly iron, were once of considerable value for the people, and during the operation of the iron furnaces at Bloomsburg and other points the production of this metal was the most important business in the county.

Where It Came From

All of the ore came from the sides of Montour ridge and was of a fossiliferous character. Near the surface the ore was like loose soil, but below the layers became harder and filled with limestone and many

fossils. Below the fossiliferous horizon the ore was poor and the cost of working it prohibitive. For this reason the mines of the county were gradually abandoned as fast as the upper layers of ore became exhausted.

The discovery of iron ore in Columbia county dates back to 1822 by Robert Greene, a farm labored employed by Henry Young, of Hemlock township, while plowing a field near the end of Montour ridge, on the bank of Fishingcreek. He opened a drift and demonstrated the value of the vein. For twenty years the ore was mined and transported to the Esther and Penn furnaces, across the Susquehanna.

Before the discovery of ore in the northern part of the county the Catawissa furnace was built in Main township on Furnace run, near Catawissa creek, by John Hauck in 1815. The ore was first produced from the neighborhood of Bloomsburg, but after discovery of the deposits in Hemlock township most of the raw material came from the latter source.

For several years this was the only furnace in the county. The product was sent to Reading to be forged and the finished iron returned for home consumption. This was changed by the construction in 1824 of a forge near the furnace by Harley and Evans and the double handling done away with. Both furnace and forge were operated until 1883, when the distance from the mines and the cost of fuel caused their abandonment.

The grading of the stage road to Reading through Locust township caused the construction of the Esther Furnace by Michael and Samuel Bittler. It was located on the land originally patterned to Samuel Shakespeare in 1773, on Roaring creek, "nineteen mules from Fort Augusta," now Sunbury.

There was neither iron nor limestone near, but an abundance of wood. Most of the ore came from the Fishing creek region after the opening of the canal along the Susquehanna in 1832 made the Catawissa the main shipping point of the county and the furnace was abandoned.

The Irondale Furnaces were built by the Bloomsburg Railroad and Iron Company in 1844 and were lined-up and blown-in in 1845 by James Ralston, a native of Glasgow, Scotland. A railroad was built around the hill along Fishingcreek to connect the furnaces with the canal. At that time iron ore was found in great quantities in the hills all around the town and the canal offered a cheap means of transporting the coal and finished product. During the Civil War there was a mint of money in the iron business, and the furnaces were kept running constantly, turning

out about thirty tons of pig iron a day, the price going up at one time as high as $40 a ton.

2 Furnaces in 1886

The plant in 1888 consisted of two furnaces, a waterpower house and steampower house, a large store, a mansion house, twenty-three tenement houses, comprising the settlement known as Morgantown, and a narrow-gauge railroad from the furnaces to the Lackawanna and Bloomsburg Railroad. The company also had leased on many thousands of acres of ore lands in the county.

In 1889 the stock of the Bloomsburg Iron Company was purchased by Colonel S. Knorr and L. S. Wintersteen, and the management changed. But iron continued to decline in price, and upon Colonel Knorr's death, occurring soon after, the furnaces were shut down. In 1893 the Bloomsburg Iron Company sold the property to H. C. Pease, who tore down the furnaces and began the erection of a stone building for manufacturing purposes. This operation was **slated** by injunction, and the executrix of Colonel Knorr's estate, making an accounting, petitioned the court for the appointment of a receiver, which was granted, H. A. McKillip being appointed. After proceedings in court Pease reconveyed the property to H. A. McKillip, receiver, and the property was sold at public sale to the Bloomsburg Water Company on June 11, 1896.

In 1852 an agreement was entered into by William McKelvey, William Neal and Jacon Melick to erect and operate an anthracite iron furnace, taking ore from the farm of the latter, east of Fishingcreek. In 1853 seventeen acres were purchased from Daniel Snyder and Joseph Hendershott on the canal, east of the town of Bloomsburg, and in April 1854, the "Bloom" furnace was blown-in. In 1873 the firm name was changed from McKelvey, Neal and Company to William Neal and Sons. Up to 1875 the gross product of this furnace was 17,698 tons, but later the yearly product was greatly reduced. By 1883 the ore deposits near Bloomsburg were exhausted and the furnaces in the vicinity were supplied from mines in New Jersey.

All of these furnaces were abandoned in 1892, the property sold and the furnaces torn down.

Two other furnaces were built at Light Street between 1844 and 1850 by General Matthew McDowell and Samuel Bettle. Both were shortlived, their greater rivals at Bloomsburg getting the advantaged in shipping and receiving facilities. One of these furnaces was operated by Peter Ent and stood just above the upper mill. The B. & S. railroad ran through the

center of the slag heap. The other furnace stood at the lower end of the town.

Montour County Furnaces

The first charcoal furnace was built by Eli Trego in 1837, near the crossing of the Reading railroad at Mill Street, Danville, and the first anthracite iron furnace in Montour county was built by Burt Patterson near the mouth of Roaringcreek, in Mayberry township, in 1839. The furnace passed from the picture shortly after 1857 when it came into the possession of Simon P. Kase.

Michael and John Grove were the first successful furnacemen after anthracite coal was adopted. They built two furnaces, one in 1840 and the other in 1859, on Mahoning Street. About seventy-five men were employed before the plant closed in 1880.

Chambers and Biddle built two furnaces in 1840 and another in 1845. A rolling mill was added in 1844, and the plant took the name of Montour Iron Works. Here the first T rails in the East were made, U rails having been previously the chief product. A foundry and machine shop were added in 1852 and in 1857 a new rail mill was added. This foundry during Civil war cast many of the cannon and mortars used by the Union forces. It had cast in 1842 the first cannon in the United States made of anthracite iron.

In 1880 the works came into the hands of the Philadelphia and Reading Iron Company.

Last in Montour

The last furnace built in Montour county was the Chulasky furnace, on the line of Northumberland county, in 1846. Its capacity was 6,500 tons of soft gray forge iron per year. It was idle after 1893.

The early furnaces average twenty-five feet in height by seven feet across the "bosch" or widest part of the interior. The fuel was strictly charcoal and the blast was cold, being driven by leather bellows through a "tuyers" into the mass of charcoal and ore. Later on wooden "tubs" were used to create the blast, somewhat like short cylinders, with a piston working horizontally, the power coming from a water wheel in the nearest stream. These "tubs" were used as late as 1878, even after the introduction of anthracite coal as fuel.

The product of these charcoal furnaces was from ten to twenty-five tons of pig iron a week, which sold at the furnace at fifteen dollars a ton. Some of the furnaces in later years, produced stoves, pots and plows.

In filling the old anthracite furnaces, alternate layers of ore, coal and limestone were used about three tons of ore making a ton of pig iron. The furnaces were run continuously, being filled from the top as fast as the iron was drawn from the bottom. Casting was done twice a day.

During the years when iron mines of the two counties were in operation, the annual production was an average of 20,000 tons. For each tom of pig iron required 3.25 tons of ore, 2.05 tons of coal and 1.59 tons of limestone were used.