

duces a ventilating pressure of five-tenths of an inch of water-gauge, and 83,620 cubic feet of air per minute. The engine is 12" x 18", connected directly. This makes the second fan on this colliery.

*Mill Hollow Colliery.*

This colliery has completed the second opening in the Red Ash seam, a distance of 1,600', to the old workings on the mountain. A new Guibal fan, 24 feet in diameter, was erected on this opening, to take the place of the old one, which was not capable of supplying sufficient ventilation. The amount of air exhausted by the new fan is 100,000 cubic feet per minute, with a working speed of 60 revolutions. The engine driving the fan is 18" x 30", directly connected.

Simpson, Watkins and Company are sinking two new shafts through 100' of quicksand, close to the borough of Wyoming, on the west side of the Susquehanna river. Sooy Smith & Co., of New York, have the contract for sinking them to the rock. One shaft has been sunk by the pneumatic process, and the other is undergoing the freezing process at this writing. Understanding that these are the first shafts which have been sunk by this process in the anthracite coal field, I shall give a full account of the process in my next annual report.

WATER BURSTING IN.

In the **Hunt** shaft, operated by the Delaware, Lackawanna and Western Railroad Company, a new rock plane was started from the foot of the slope in the 11-foot vein, to the 6-foot, or lower Baltimore, with the intention of opening up the 6-foot vein. A bore-hole was put down in advance of the plane to the 6-foot vein, to test the covering above it. The hole gave a test of 100' of wash and sand, and 48' of rock slate and fire-clay over the seam. The plane cut the 6-foot on October 27, when a rush of water came down, driving the men out of the shaft and filling the lower workings with water, they were nearly a month getting the water out, and when about to start again, on November 24, another rush of water came, much stronger than the first, and completely filled the workings and came a considerable distance up the shaft. They tried hoisting the water out in tanks, taking out about 2,000,000 gallons in twenty-four hours, but only lowered the water in the shaft about one foot in two weeks. They have abandoned hoisting the water for the present, as no progress was made.

coal trade, which has been such as to cause considerable distress and suffering among the toilers of the mines. On an average the breakers of this district worked only a few days over half time for the year. The miners in many instances do not make a day's work when the breaker does by reason of not getting sufficient cars to load their coal. There are several reasons for this, the principal one being the overcrowding of the collieries with miners, especially in the collieries where the coal seams are low and of an inferior quality. Then, again, delays are caused by unavoidable breaking of some part of the machinery in the breakers, which causes a delay of from an hour to two or more, as the case may be; all of which has a tendency to shorten the hours of work for the miner.

#### The Burning of the Maltby Breaker.

On April 2, 1897, the Maltby breaker of the Lehigh Valley Coal Company, located at Maltby, was discovered to be on fire. Strenuous efforts were made to save the structure, but they were of no avail. It was completely destroyed, with all the machinery, in a few hours.

A new breaker has been erected on the site of the old one, which started to prepare and ship coal on Saturday, July 17. This is the quickest work on record, as the plans had to be drawn and lumber and machinery provided. The structure was completed in 106 days.

#### The Burning of the Hunt Breaker.

The **Hunt** breaker, located at Maltby, and owned by the D., L. & W. R. R. Company, and leased to the Wyoming Coal and Land Company, in June, 1895, was totally destroyed by fire early on Friday morning, May 28, which caused a suspension of the mine until a breaker could be built on the company's land close to the mine opening. The new breaker was commenced on August 7, and commenced to prepare and ship coal in December, 1897. The capacity is 800 tons per day and the breaker is so arranged that the coal from the pockets can be drawn into the cars on two separate tracks under the breaker. A new branch of the Lehigh Valley Railroad was constructed from their main line to the breaker, a distance of a mile, on which company's road the coal will be shipped to market.

#### Colliery Improvements for 1897.

Lehigh Valley Coal Company.—The Henry hoisting shaft was re-timbered from the rock to the surface, 83 feet, with the best 12x12 yellow pine timber. New buntons and guides were also put in, which puts the mine in first class condition.

At the Maltby colliery two new horizontal tubular boilers of 150 horse power each were erected at the shaft, and the old cylinder boil-

### Laurel Run Coal Company.

A tunnel was driven in the Laurel Run slope from the Hillman to the Rock seam a distance of 70 feet to be used for the transportation of coal.

### Miner Mines Colliery.

This is a new colliery opened in 1894 by William B. Miner. The opening consist of a drift in the side of the mountain on the outcrop of the Red Ash seam and located about three quarters of a mile southwest of the old Everheart or Boston colliery in Jenkins township, Luzerne county.

A small breaker with a capacity of 300 tons per day was completed and started in January, 1895, to ship coal to market. The mining of coal was suspended after working eleven days in January and remained so all the year.

### Westminster Coal Company.

This company opened a mine on the outcrop of the Red Ash seam in 1894, about one and a half miles southwest of the Miner colliery. It is located in Jenkins township, Luzerne county. It is comprised of two openings driven in the side of the mountain, one of which is used for transporting the coal, the other for ventilation which is furnished by a furnace.

An electric plant is located at the Miner breaker to furnish the power for the locomotive which hauls the coal to the breaker where it is prepared for market. This colliery operated the breaker 161.85 days in 1895. A new underground slope was sunk 600 feet with an area of 60 feet.

### Crescent Colliery.

This is a new colliery which was opened by the Crescent Coal Company in 1895. The openings consist of four drifts being driven to the Red Ash seam located south of the Westminster openings in Jenkins township. A new breaker was completed and fully equipped with machinery ready to prepare and ship coal.

### Hunt Colliery.

This new colliery was opened by the Wyoming Coal and Land Company and commenced to ship coal in June, 1895. The opening consists of a tunnel driven to the Marcy seam a distance of 450 feet; area, 7x16 feet. An underground slope was sunk 500 feet in the Marcy, and headings and airways were started. The tunnel is situated close to the borough of Wyoming and the coal is taken by a small locomotive to the old Hunt breaker and prepared for market. A new 16 foot fan was erected on a shaft sunk for the purpose of ventilating the workings.