

reported to exhaust 30,000 cubic feet of air per minute while running thirty revolutions.

Parrish Coal Company.—This company erected a new fan on their slope. It is twenty feet diameter, running forty-five revolutions per minute and exhausting 68,000 cubic feet of air per minute.

A. J. Davis.—At the Warrior Run colliery a new air-shaft was sunk, effecting a second opening to the new tunnel. It is 9x9 feet and 206 feet deep, and connects with the Baltimore seam. The main slope is being extended also to a further depth of from two to three hundred feet.

Hanover Coal Company.—The Maffet shaft of this company is being extended from the Ross to the Red Ash seam. It was down a distance of 185 feet below the Ross at the close of the year, and when completed it will open an extensive lift of good coal. A number of other improvements were made during the year.

Coal Breakers Consumed by Fire.

On Sunday, January 16, 1887, between one and two o'clock A. M., the Boston breaker of the Delaware and Hudson Canal Company, at the upper end of Plymouth, took fire and was totally consumed. It is not known how it originated, but everything in and about the breaker was destroyed. By November 3rd, a new breaker was erected near the Boston shaft, about a mile and a quarter north-east of the site of the old one. This is a great improvement on the old one. They began to pass coal through it on the date mentioned. They worked eight and one-fourth days before the old breaker took fire and forty-one and three-fourths days with the new one before the close of the year.

Burning of the Parrish Coal Company Breaker.

At about ten o'clock P. M., January 25, 1887, the breaker of the Parrish Coal Company, at Plymouth, was discovered to be on fire, and although strenuous efforts were made to prevent its destruction, it was completely destroyed in a short time. It was comparatively a new breaker, having been in operation only since December, 1884, about a month more than three years. Preparations were immediately made to erect a new one, and on July 7 it was completed and started to prepare coal for shipment to market. The new one is a fine structure, larger than the old one, and has the best appliances for preparing and separating coal.

Burning of the No. 10 Breaker.

The No. 10 breaker of the Lehigh and Wilkes-Barre Coal Company, at Sugar Notch, took fire from a passing locomotive early Monday morning, May 2, 1887, and it, with every building within a radius of two hundred feet was completely destroyed. The engine-house and slope head house on the old No. 10 slope was burned, and the cage

loaded with burning embers went down and set the slope on fire. Thus the destruction of this mine was completed. The pumps and everything in the mine were lost, and the workings had to be abandoned and filled with water. This mine had not been in operation since December, 1884. A tunnel had been driven through the rock from the upper lift connecting with the No. 9 colliery, and upon concluding to abandon the workings of No. 10, a water-dam was erected on this tunnel to prevent the water running into the No. 9 workings. A timber dam was placed at a distance of thirty feet back from the brick dam, in which a small hole was bored to let the water through. The timber dam is submerged in the water, and in case the brick one should give way under the pressure, it would prevent the water from rushing into the No. 9 workings too suddenly. When the mine fills there will be a head of over two hundred feet or a pressure of more than 12,500 pounds on every square foot of surface. The brick dam is carefully built of the best brick obtainable, laid in the best cement. It is seven feet thick, curving on a radius of nine feet, and resting on deep hitches in the rock on each side. No one has the slightest doubt as to its strength to sustain the pressure with perfect safety.

of the new tunnel. The said shaft is to be twenty-six feet by twelve feet, and will probably be seven hundred feet in depth. A large fan, of the Guibal pattern, is to be erected over or near it, of thirty-five or forty feet diameter, and no work, except taking out the water and what work will be necessary to make the connection, will be done in the old shaft workings until the said fan is erected and in operation; at least, that is what is now in contemplation. In the meantime, a bore hole is being put down to tap the condensed air from the air chamber, or dome, of the anticlinal, which kept the water from reaching the fire when the water was in the mine the first time. This will insure perfect safety from any possibility of a fire being in there when they have taken out the water next time.

I would state that, up to the time of the mine fire, no permanent system of water supply to extinguish a fire had been arranged; but a temporary supply was secured when the mine took fire in May, in a few hours after it was discovered, by using the gas pipes employed by Mr. Robert Looney, to convey air to his receiver and machine rock-drills from the compressor on the surface, by connecting to the pump column. The pressure was so great that the receiver was exploded, and several other mishaps occurred, which helped to delay the getting of a supply of water. The balance of this subject will be treated under the head of the accident.

Diamond Colliery.

On the 9th day of May, a fire took place in the above mine, in the face of the west No. 3 gangway, and not having any water works to operate on it, it took several days and nights of labor to quench it, with all the force they could bring to bear upon it, having to haul water from the shaft foot in barrels, and forcing it on, sometimes by a hand pump, then again by using pails or powder kegs, as best they could.

As soon as the fire, which was started from a feeder igniting from a blast, got very strong, the air current was affected so much that a large quantity of gas had accumulated along the top part of the gangway. This was caused by the air traveling in the wrong direction, being forced first through the chambers, and returning through the air-way below the gangway.

Mine Caves.

Many caves have taken place in this, like every other mining district during the last ten years; some to the extent of twenty or thirty acres of surface, others bringing in the canal, &c., but on the 23d day of April, 1879, a caving in of the **Sugar Notch, No. 10, colliery's** slope workings took place, when seven human beings were entombed, which created great excitement, and which did not abate until the glad tidings of their almost incredible rescue was received and the prisoners permitted to relate their awful tale of suffering and experience under the strange circumstance. It occurred as follows:

The seam operated is known hereabouts as the Abbott seam, and by others as the Kidney seam, being the next workable seam overlying the