GAYLORD CO T. Co PANY.—This company has begun the sinking of the new shaft located near the slope, and which had been commenced by the Lehigh and Wilkes-Barre Coal Company several years ago, and operations suspended during the panic. The said new shaft is to be continued to the red ash seam, which will be reached about the same vertical depth as that of the Nottingham shaft, where the same seam is being worked, and it is probable that the second opening, required by law, may be secured by driving to and connecting with the said Nottingham workings, which have already been driven a long distance eastward from the Nottingham shaft. The same company is erecting a large and convenient coal breaker at the said colliery, on the site of the old one which was destroyed by fire. The new breaker is intended to clean and prepare the coal from the slope and the shaft, and will be a great assistance to the already large and thriving business of the town of Plymouth.

Kingston Coal Company.—The most interesting part of their improvements, has been the sinking of a new shaft, located near No. 2 shaft, which is to penetrate the red ash seam, and is to be used as hoisting and ventilating shaft. This shaft is down at present below the Baltimore seam. both splits, and from present indications will be completed early next year, A large fan, twenty-five feet in diameter, has been partially erected at the head of said new shaft. The writer endeavored to have the superintendent, Mr. Daniel Edwards, to erect a larger fan—not less than thirty feet diameter—but for reasons best known to himself, decided upon the size above mentioned, which no doubt will answer all purposes for a few years at least, unless a very large quantity of explosive gas should be met with there. The same company contemplates the sinking of another shaft soon, near the No. 1 shaft, also to the red ash, when a connection will be made between the same and the one at No. 2 shaft.

Waddell, or Raubville Colliery.—What was formerly known as the Ellenwold colliery, has been divided into two parts, and is being operated by two separate parties. The western part, better known as the drifts, has been leased by Messrs. Waddell & Walters. At the said drifts a small breaker has been erected to prepare the coals from the same. There being four of them, two on the red ash and two on the Ross seams.

The new company commenced to ship coal in June, and shipped about thirty thousand tons.

I did expect to have been able to report the erection of one or two fans at this colliery, as the officers and operators had promised to do so faithfully; but I am sorry to say, that they did not live up to their promise, although the condition of the workings required it, and only through the tolerance of their workmen, could they expect to work, together with the promise of improvements to the inspector, which he, like the workmen, depended upon, to be once more disappointed. It would appear that fair promises, to be disregarded at these drifts, are contagious. I hope we may soon have a change, and that by the time another report is due a better state of

#### The Gaylord Coal Company.

A new air-shaft constituting a second opening to the Red Ash vein was sunk from the Ross seam, a depth of 120 feet, having an area of  $10 \times 12$  feet. They also made two new planes, one in the Ross and the other in the Red Ash seam. Their lengths are 500 and 400 feet, respectively, on a grade varying from 13 to 18 degrees.

#### A. J. Davis.

At the Warrior Run colliery a new tunnel was driven from the D to E vein, a distance of 120 feet, and another is in progress from the D to B or Red Ash vein.

# W. G. Payne & Co.

At the East Boston mine of this company, a new air-shaft was sunk convenient to the main workings, a depth of 150 feet, having an area of 10×15 feet, from the surface to the Cooper and Bennett veins, and the fan was removed from the old shaft and placed upon this. The ventilation of the mine has been greatly improved by this change, and is produced at less cost.

### Haddock & Steele.

This company bought the Black Diamond colliery from J. C. Hutchison, and took possession March 1, 1882. Since then they have graded the underground slope, and made considerable improvements in the work.

## The Red Ash Coal Company.

This company completed their second colliery ready to begin shipping coal on the 1st of March, and mined 69,204 tons of coal by the end of the year. All the coal, yet mined, is above the level of the breaker, and the Ross and Red Ash seams have been cut by a tunnel, through which the coal is brought out. A new slope was sunk, reaching a lift of coal below the level of their No. 1 colliery, from which a considerable quantity of coal can be very conveniently obtained.

#### Waddell & Walter.

This company completed their shaft at the Raubville colliery, and effected their second opening by connecting with the workings of the Black Diamond mine. The shaft was 170 feet to the Bennett vein. A new fan was erected to ventilate the workings, a description of which can be seen elsewhere in this report.

# Waddell & Company.

The Bennett shaft,  $10\times20$  feet, was completed, and cut the Bennett vein at a depth of 320 feet; also an air-shaft for the same mine. The breaker was set in operation in May, 1882, and during the remainder of the year they mined 26,226 tons of coal. This colliery is situated in Plains township, east of Mill Creek. A new fan was erected to ventilate the colliery, having a diameter of 22 feet, which is producing a ventilation of about 80,000 cubic feet per minute.

### The Ringston Coal Company.

The No. 4 shaft, sunk by this company, reached the Red Ash seam at a depth of six hundred and sixteen feet. This opens a very wide extent of territory and is expected to produce a large supply of coal. The second opening will be effected by opening into the workings of the No. 3 shaft of the same company.

# The Franklin Coal Company.

Important improvements are in progress at the Franklin colliery. A new slope is being driven down across the measures to cut the Ross and Red Ash seams, and it has reached a depth of six hundred and ninety-three feet on a grade of thirty-three degrees. Eventually, when the slope cuts the Red Ash, a new breaker will be erected, from which all the coal of this colliery will thereafter be shipped. The ventilation of the old slope mine was considerably improved last year by enlarging the air-ways and by some modifications in the construction of the fan.

### W. G. Payne & Company.

The East Boston shafts of this company were extended to lower seams. The main shaft to the Red Ash, a depth of three hundred feet, and the air-shaft to the Ross seam, a depth of two hundred and thirty-four feet. This improvement opens a large area of good coal for this company. The size of the main shaft is  $11'\times22'$ , and of the air-shaft  $10'\times18'$ .

# Haddock & Steel,

A new air-shaft is in progress at the Black Diamond colliery of this company, and it has reached the Cooper seam at a depth of one hundred and fifty-two feet. Its sectional area is 12×12 feet. A tunnel was also driven on a rise of seventeen degress from the Bennett to the Cooper seam, by which a large piece of good coal is intended to be mined from a point some distance below the old Cooper workings.

# The Red Ash Coal Company.

The new tunnel reported last year as being driven from the surface to the Red Ash seam by this company is completed. It cuts through the Ross seam at a distance of nine hundred and nineteen feet, where the coal was found to be nine feet thick. The Red Ash was reached at a distance of eleven hundred and ninety-seven feet, and the coal is of excellent quality. This tunnel drains all the workings of this company, and relieves them of the cost of pumping water. The slope was extended to the level of the said tunnel, and opens a new lift, of about five hundred feet in length, in both seams.

#### Thomas Waddell.

The Raubville shaft was extended from the Bennett to the Ross seams, a depth of two hundred feet. They are now driving a second opening.

six hundred feet. The sectional area is  $8 \times 12$  feet; gradient, fourteen degrees. These slopes are intended to maintain the present production of the colliery.

# Butler Coal Company.

At the Boston Colliery, two tunnels were driven from the Red Ash vein to Red Ash, a distance of four hundred feet; one tunnel to transport coal, the other for ventilation. They have, likewise, sunk two slopes on same vein, one six hundred and fifty feet, the other one hundred and fifty feet, which open up some good coal for this company, as some time ago this colliery was considered to be worked out.

## Butler Coal Company.

At the Butler Colliery a new slope was sunk on the Pittston vein, a depth of one hundred and fifty feet, for the purpose of robbing or taking the pillars out.

### Haddock & Steel.

A new air shaft was sunk by this company from the surface to copper vein, a distance of one hundred and sixty feet. Size of shaft,  $16 \times 16$  feet. A new twenty-foot Guibal fan was erected thereon; face of fan, eight and one half feet. Two side inlets, diameter eight and one half feet, working speed sixty revolutions per minute, giving ninety thousand cubic feet of air exhausted per minute, with one and a half inches of water gauge. The gearing is direct. This fan was started July 26, 1885, taking the place of the old fan.

## W. G. Payne & Co.

A new twenty-five-foot fan, of the Guibal pattern, was placed in position at the East Boston Colliery, in place of the fifteen-foot fan which was done away with. The new fan is placed over the same shaft as the old one was, giving a result of one hundred and twenty-three thousand three hundred and eighty-six cubic feet of air exhausted per minute, with a water-gauge of eight tenths of an inch, with a working speed of forty revolutions per minute. It was started December 2, 1885. It is direct in gearing. This colliery has the means now to give their men all the fresh air they will want.

# Waddel & Walters.

A new shaft was sunk in the Bennett shaft, from the upper to the lower split of the Baltimore vein, to a depth of two hundred feet. Size of slope,  $6\times18$ . Gradient of fifteen degrees. Likewise, a new gravity plane was driven in the lower split, three hundred feet, with a sectional area of  $6\times18$ , and a gradient of twelve degrees, which will open up some good coal, and enlarge the company's shipment from this colliery.

4 MINES.

split of the Baltimore vein to top split, length 90 feet, to be used for transporting coal.

Butler Coal Company.

At the Mosier colliery, a new shaft was sunk to the Red Ash seam, a distance of 375 feet, sectional area, 120 feet, to be used as a second opening to the Mosier shaft.

### Waddell & Walters.

At the Bennett colliery they have extended the old slope in the top split of the Baltimore vein 520 feet.

At the Raubville colliery, the second opening has been completed a distance of 2,000 feet, sectional area, 60 feet, to a drift on the mountain. They have placed a new fan, 16 feet in diameter, in position in the opening, with direct gearing working speed of 45 revolutions per minute. Amount of air exhaused, 50,000 cubic feet per minute. A new Pale pump was put in with 8-foot stroke, 14-inch working barrel, also three new steel boilers,  $40 \times 45$  feet, and a pair of first-motion engines with conical drum on their hoisting shaft.

# Clear Spring Coal Company.

At the Clear Spring colliery, a new inside slope was sunk in the Pittston vein, a distance of 500 feet, sectional area, 126 feet, with a grade of 10 degrees.

# Elliott, McClure & Co.

The Sibly breaker of Elliott & McClure was burned down on the morning of February 6, 1886. They immediately rebuilt, and started their new breaker on July 20, 1886.

# State Line and Sullivan Railroad Company.

At the Bernice colliery, Sullivan county, a new shaft was sunk to the vein now working, a distance of 69 feet, sectional area, 120 feet. They are going to place a fan on this shaft for ventilation to take the place of a furnace which does not give satisfaction. A tunnel was driven 604 feet from the bottom seam to top seam for transporting coal.

# W. G. Payne & Co.

At the East Boston colliery, a tunnel was driven from the Red Ash to the Ross seam, a distance of 457 feet, sectional area, 84 feet. This tunnel opens a large territory of good coal for this company.

# Wyoming Valley Coal Company.

The Forty Fort breaker of this company was burned down in 1885. The coal was taken to their Harry E breaker, about one mile distant, until the breaker could be rebuilt, which work was started immediately and finished July 25, 1886.

# 4 MINES.