

When the present company took charge they restricted all the operations to the development of the headings, which they worked day and night. I have been informed by the superintendent that probably the mine will be abandoned, and coal taken out through the Smock mine which adjoins it, as better hauling facilities can be obtained, and the coal handled at the latter place more economically. In short, by consolidating the two mines the production for both will be cheapened.

Eleanor.—This mine on account of insufficient power to produce ventilation was very poorly ventilated.

A small furnace with a very shallow shaft, was not competent during the summer months to overcome natural ventilation, consequently there was no air in circulation around the workings.

As I had repeatedly called attention to this condition of affairs, and no remedy resulting, at one of my visits I ordered the mine foreman to at once withdraw the persons employed in the mine, and not to permit them to return to work again until there was a lawful volume of air kept in circulation in the working places.

This had the desired effect, for steps were at once taken to procure a fan, which was soon put in place and the mine resumed operations, when ample ventilation was afforded. The other conditions as to healthfulness and safety are good.

Grindstone.—When visited last this mine was in good condition. The ventilation was ample and well carried up to the face of the workings. The headings evolve explosive gas and are worked with locked safety lamps.

The air current is carried up to the face by means of brattice cloth from the last cut-throughs and usually the headings are kept free from standing gas. I did not detect gas in any portion of the mine on my last visit. This condition did not maintain however at all times during the year.

On July 24th an explosion took place in the mine whereby five men lost their lives and two were very severely burned.

From the testimony given at the coroner's inquest it appeared that the fire-boss found gas in room 23 on No. 10 entry. This gas reached back 108 feet from the face of room and would average one foot in depth, the width of room being 24 feet.

The fire-boss put up danger signals at the cut-throughs and at the mouth of the room, and reported gas as being found in this room in the record book, but did not make a verbal report of this fact to the mine foreman. The men who worked in room No. 22 were allowed to work with open lights, no gas having been found in room 22. One of the men who worked in room 22 for some unexplained reason went into No. 23 room, through the cut-through between 22 and 23 rooms, disregarding the danger signals placed at said cut-

through by the fire boss, and up to near the face of room 23 and ignited the gas, thereby causing an explosion by which he was killed, also four other persons, and two men were severely burned. His cap and lamp were found by me 30 feet from face of room 23, and his body was found 123 feet from the face of room. His cap and lamp were identified by the men who worked with him in room 22 who miraculously escaped.

Very little damage was done to the mine except by knocking down of the doors and stoppings in the immediate vicinity of the explosion, but unfortunately the explosion occurred at a time when a number of persons were on the entry proceeding to their work, who met the full force and some were thereby killed.

The direct cause of the explosion was that Geo. Hutnack ignited the gas in room 23. The indirect cause was allowing standing gas in room 23 by the mine foreman and fire-boss. They each knew of its presence there, and it had been reported for several days.

The gas could have been removed very easily by the erection of a check door on the entry, and carrying of some canvas up into the room, and if it had been done the lives of five men would not have been sacrificed.

Hanna.—This mine was found in fairly good condition at each visit. The ventilation was good in every part except in one entry, where there were three places working ahead of the air-current, which I at once ordered to be stopped until the air was carried up to them. The drainage and other conditions were good.

W. J. Rainey's Mines.

Paul.—Is in good condition in all parts, the ventilation is ample and well distributed. The drainage is excellent except at a few places on the manway where water falls from the roof which keeps it muddy.

Elm Grove.—Was found in excellent condition at each visit. The ventilation, drainage, and other conditions are all that can be desired. A new manway has been made beside of the slope which has improved the volume of air, as well as shortened the distance to travel of persons to and from their work.

Mt. Braddock.—The general condition of this mine is good except that the air-current is not carried up to the faces of the working places on the right side of the slope.

The useful effect of the fan is hindered by reason of the fact that a great portion of the air passing through it never travels around the mine, but is taken in through crop-falls and from old workings of the adjoining Percy mine.

There are so many old workings, and the pillars are so crushed and shattered that it is impossible to prevent leakage of air.

to see whether any weak points or laxity in the management there may not also be present at your own mine. Enough, I think, is now known to indicate the usual causes—open lights in gas, neglect to properly fence off danger, when discovered, by the fire boss, unlocked safety lamps, and, perhaps, insufficient ventilation. I wish you would again go over these matters carefully with your mine officials. Look well to your ventilation—not alone the volume, but its distribution as well. If your ventilating appliances are insufficient, they will be strengthened. Is your system such as to render defective or unlocked safety lamps in the mine impossible? Do you know that the fire bosses complete their examinations as nearly as possible to the time of starting the pit? The presence of danger for any length of time is liable to breed carelessness—we become accustomed to it. Be sure that your vigilance is constant, and not spasmodic.

“If you know of any safety appliances that are not now a part of your equipment, and which, in your judgment, would tend to improve the conditions at your mine, or add to the safety of those employed therein, we will not hesitate to supply the same. One explosion such as Braznell would pay ten times over for all the appliances and precautions that could possibly be required.

Very truly yours,”

The inquest by the coroner of Fayette county continued for three days, in endeavoring to find the parties who were responsible for this terrible accident. This inquest brought out a mass of valuable testimony, which should have been kept as a matter of record. With this in view the Inspector of the District was instructed to have a good stenographer present to take down all the evidence submitted. The stenographer was there, and the evidence was taken down, but to this date I have failed to get a typewritten copy of the same. The Inspector and myself have both made efforts to get this typewritten copy, but have failed. Why the stenographer fails to reduce his notes to manuscript, I am unable to explain. The excuse given by him was sickness. The testimony taken at the inquest was a revelation, showing gross general neglect on the part of the foreman and fire boss, incompetency on the part of the superintendent, and a general tendency on the part of the operator (who had been the acting superintendent to within a few months of the accident) to have as cheap labor as possible in every capacity, irrespective of qualifications, especially in the hiring of engineers, firemen and fan runners.

The evidence taken before the jury that investigated **the accident that occurred at Grindstone, July 21, 1899**, by which five men lost their lives by an explosion of gas, shows equal carelessness and lack of system on the part of the mine foreman and fire boss.

The fire boss testified before the coroner's jury that he had reported

the condition of the mine to the mine foreman every morning except on that of the accident.

The following is the testimony of the two officials at the coroner's inquest:

"The fire boss was first sworn. He had been at this mine nearly two years and had a certificate. He made a regular examination of the mine Monday morning, and put up danger boards at rooms where gas was known to exist. He found gas in rooms 35 and 36, on entry 9, and 23 and 30 and 31, on 10 entry, and a little in 13 and 14, on entry 11. The men had worked in entry No. 23 two or three days last week. The danger board was written in English. Gas in No. 23 raised in a volume, but was too high up to pass through out into room 22. He permitted the men to use open lamps in room 22, because he never found gas there, and considered it safe. Witness had been fire boss at this mine two years and reported all danger at all times to the mine foreman, except Monday morning."

"The mine foreman was next sworn. He said he received no report from the fire boss Monday morning, although it was his custom to do so, but he was in a hurry to get the work started. 'I did not go to the lamp shanty for a report and did not examine the fire boss' report book before going down into the pit. I signed the report about eight o'clock, after the accident had occurred. I did not know the amount of gas in room 23. The danger board was up. It meant that any men outside should stay outside. I had found gas in room 23 about a week ago, 10 inches deep on the face, and would not have allowed the men to work in 22 with open lamps had I known there was so much gas. I failed to receive a report from the fire boss on that morning. I went past the lamp house, but did not stop, and the fire boss did not stop me to give me the report.'"

THE PRODUCTION OF COKE.

The coke trade of 1899 was by long odds the greatest in the history of the Connellsville coke region. The trade of 1898, to quote *The Courier's* annual review at that time, was "the biggest and best year's business the region ever knew," yet the output of 1899 exceeded it 20 per cent. Prices, too, were much better, the average being above any previous year, and the aggregate gross income of the Connellsville operators was fully 50 per cent. greater than the greatest year on record. In short, all previous records have been broken and far outclassed.

The result, however, was not wholly unexpected. *The Courier* advised its readers that the coke output for 1899 would reach the enor-