another opening. The system of mining in former years, the ventilation and drainage have not been up to the standard of the requirements.

Yough Slope.—Slope opening, Pittsburg low seam. Ventilation and drainage satisfactory, but the means of egress does not meet the requirements, I have brought the matter before the coal company, and they have decided to open a new hoisting shaft to be equipped with modern appliances, and use the present slope for a traveling way, and when such improvements are completed it will place the mine in the list of the best in the State, as the present inside workings as well as the coal field are favorable for a first class mine.

Euclid.—Shaft opening, Pittsburg high seam, ventilation and drainage fair. A slight creep has developed in a portion of the mine which has caused the loss of a portion of two butt headings. A new shaft is being opened for the purpose of ventilation and drainage, which will add very much to the improvement of the mine.

Port Royal Nos. 1 and 2.—Shaft openings, Pittsburg high seam. These two mines are located as follows: No. 1 hoisting shaft on the east side of the Youghiogheny river, and on the line of the Baltimore and Ohio Railroad. No. 2 hoisting shaft, and also the ventilating shaft for both mines are located on the west side of the river, and they are directly connected by three tunnel entries passing under the river, also by several openings in the abandoned parts of the mines. In No. 2 mine some time prior to June 10, a creep or squeeze had developed between Nos. 21 and 25 butt entries, and adjacent to No. 5 face heading side track. On the morning of June 10, the mine was examined by Wm. Gleason, the regular fire boss, and no danger was reported, but a small quantity of explosive gas in two or three headings, at the faces, also the progress of the creep was reported, and danger boards placed at the entrances of Nos. 24 and 25 entries, in which places the creep prevailed, to prevent persons from entering the same. After an examination by mine foreman, Dennis Wardley, and assistant Samuel Hadley, the danger boards were removed and the mine was operated during the day as usual with open lights in all portions. Four persons namely, John Peebles, Anton Stickle, Frank Davenport and Jerry Daley, were set to work erecting cribs in No. 35 room off No. 21 butt entry, and adjacent to No. 5 face side track, to arrest the progress of the creep in that section, the material was taken in by way of a cross-cut between the side track and the room, which had been made at some previous time, perhaps for ventilation. The mine was operated throughout the day, the shift closing at 4 P. M.

Between 5 and 6 P. M., the same four persons re-entered the mine for the purpose of continuing the erection of the cribs, also two other

persons, machine runners, entered and went into the straight main headings to cut coal. At 6.15 P. M., an explosion occurred which alarmed those in charge of the machinery at the shaft top; the mine foreman, and other officials were notified and a rescuing party was formed and entered the mine, other persons arriving later also entered, until they numbered about twenty. When they reached the entrance of No. 20 butt entry they observed two lights approaching from the straight main headings, which proved to be the two machine runners, who said that they had felt a concussion, but thought it to be the result of a fall, and they continued to work until the air pressure was shut off, and upon coming to the crosscut they observed smoke and dust and concluded to come out. This proved to the exploring party, that beyond all doubt, the explosion occurred in the No. 25 face section, so pushing on in that direction they reached the cribs, and there they found the bodies of Anton Stickle, Frank Davenport and Jerry Daley, but on account of the density of the after damp, they were unable to remove them, and as three of their number became stupid from the effects of the damp, they were compelled to again retreat to the entrance of No. 20 entry, and those who were overcome by the damp were taken out by others of the party. When on their way out they were passed by some other persons who proceeded to join the party inside. Nothing further is known of what occurred inside until 10.15 P. M. when a second explosion occurred which resulted in the death of all who were in the mine except two, who were only a short distance from the bottom of No. 1 shaft, and three others who were rescued by a party a short time after, and removed to the McKeesport Hospital on the following morning, where two died on that date and the other one on June 15, thus increasing the death rate to nineteen. No further attempt was made to explore the mine on that night.

Inspector Callaghan, of the Ninth District, having received notice, arrived at the scene about 9 A. M., June 11, and forming an exploring party entered the mine, some of the party engaged in removing the bodies which were found on the main tunnel, and had removed that of Taylor Gunsallus, Sr., and were bearing that of Wm. McCune, when a third explosion occurred, about 10.30 A. M., the flame of which reached over and beyond some of the party, burning them slightly, the entire party retreated, leaving the body of McCune behind.

A short time after a party entered the mine and recovered the body of McCune. I had not received notice of the disaster, but seeing the account of it in a morning paper, I proceeded to the scene. A party was formed consisting of George Santmyer, superintendent of Washington Run mines; Charlton Dixon, Inspector of Mines, Pittsburg Coal Company; John W. Hindmarsh, now superintendent Port Royal

Division; Matthew Labon, formerly assistant mine foreman Port Royal No. 1 mine, and myself. We entered the mine and made an examination of the return air way and from the indications and realizing that two after explosions had occurred, we were satisfied that there was fire in the mine, and that beyond doubt the victims were all dead; we returned to the outside, and a conference was held at which it was decided to make no further attempt to explore the mine, but to place a watch to report any changes, but as it was known that there was still one body on the main tunnel, about 10 P. M., a party was formed which entered the mine and recovered it, which proved to be that of David James.

On the following date June 12, the coroner of Westmoreland county, held an inquest on the body of William McCune, and the jury rendered the following verdict: "We find that William McCune, came to his death by an explosion of gas in Port Royal mine No. 2, of the Pittsburg Coal Company, on June 10, while attempting to recover the bodies of four men who had been killed by a former explosion occurring about 6 P. M., of the same date, the second explosion was likely caused by the ignition of some inflammable material from the first explosion."

On the same date a consultation was held by the officials of the company, Inspector James Blick, of the Seventh District and my self, when the question of flooding the mine was considered, but it was decided to await further developments.

June 17, a conference was held by the officials of the coal company, and Inspectors Blick, Louttit, Callaghan and myself, at which it was decided to seal up all that part of the mine, in which it seemed probable that fire existed. This work was placed in charge of Charlton Dixon, Inspector, and Benjamin Ferredy, division superintendent of the Pittsburg Coal Company, until the bodies had all been recovered on September 17, except that of John Peebles, which thus far has not been recovered.

As the sealing up of the fire district in No. 2 mine had been completed and the company was desirons of reparing No. 1, mine preparatory to operating it, I summoned Inspector Callaghan, and on July 17, we inspected all stoppings in No. 2 mine which enclosed the fire district, also the general workings of No. 1 mine, after which we issued the following letter:

Connellsville, Pa., July 17.

Mr. John Hindmarsh, Superintendent of Mines, Pittsburg Coal Company, Smithton, Pa.:

Dear Sir: After making a careful inspection of your Port Royal Nos. 1 and 2 mines, we believe that with extra care you can continue operations in No. 1 mine.

It is expected that you will have two first class fire bosses ex-

amine the mine every day before the men enter it, and the stoppings in No. 2 mine are to be examined at least twice every day by some official, and that safety lamps be used in all places giving off explosive gas. We believe with such care exercised every day, that your mine is practically safe for men to work in.

(Signed)

BERNARD CALLAGHAN, Mine Inspector, Ninth District. W. J. MOLLISON,

Mine Inspector, Eleventh District.

But I requested that when the mine was repaired, that I should receive notice so that I could again inspect it before the miners commenced work.

Having received notice I again inspected No. 1 mine on July 24, and found the conditions such that I issued the following notice:

Scottdale, Pa., July 24, 1901.

Pittsburg Coal Company, Mr. J. W. Hindmarsh, Division Superintendent, Smithton, Pa.:

Dear Sir: After a thorough inspection of your Port Royal mine No. 1, I deem the same safe to work only with the use of locked safety lamps in all parts, except in the main inlet air current to the present hauling side track, to which point open lights may be used; hoping that this will prove satisfactory and that you will comply strictly with the same, I am,

Yours truly, W. J. MOLLISON,

Mine Inspector, Eleventh Bituminous District.

July 25, operations were resumed in No. 1 mine. August 23, by request accompanied by Superintendent Hindmarsh, and Mine Foreman Charles McKay, we made an examination of the conditions at the different stoppings enclosing the fire district of No. 2 mine, to decide upon the practicability of opening the same for the purpose of making an attempt to recover the bodies that were entombed, and after a consultation we decided that it would be reasonably safe, realizing that there would be a certain amount of risk to be taken regardless of the length of time it had remained closed, and on September 7 operations were suspended in No. 1 mine.

September 9, the stoppings were removed and the vetilation permitted to work on the entrance, and on September 10, the exploring party began their search for the bodies. September 11 the party reached the inner end of No. 20 buttentry and at the junction where the same intersects No. 5 face heading and near the end of the hauling side track, at which seven bodies were recovered, being those of

Dennis Wardley, John Keck, Michael Roy, William Allison, Peter Marchando, John Conto, and Taylor Gunsallus, Jr.

Upon receipt of notice I visited the mine on September 13, on which date three other bodies were recovered, being those of Frank Davenport, Anton Stickle and Jerry Daley, victims of the first explosion.

September 17, two other bodies were recovered, being those of Samuel Hadley and Barney Bald, thus completing the entire list, except the body of John Peebles, which thus far has not been recovered.

September 23, a conference was held by the officials of the coal company, Inspector Blick and myself, to determine whether or not it was practicable under the prevailing conditions to make further attempt to recover the body of John Peebles, and after hearing the statements of those in charge of the searching party, and considerable discussion, it was again decided to seal up that part of the mine, and endeavor to recover the body at some future time when the prospects might be more encouraging; soon after the work of sealing began.

October 9, I issued the following notice:

Scottdale, Pa., October 9, 1901.

Mr. John W. Hindmarsh, Superintendent of Mines, Pittsburg Coal Company, Smithton, Pa.:

Dear Sir: You will please not set any person to work in Port Royal mine No. 1 except for the purpose of repairs, until you have substantially sealed off all workings on the east side of main tunnel in No. 2 mine.

P. S.—And you will please not set any persons to work in No. 2 mine, except for the purpose of repairs, until it has been thoroughly inspected by myself or other inspectors, after having received due notice from you that it is in readiness to be operated, hoping that you will observe the same, I am

Yours truly,
W. J. MOLLISON,
Mine Inspector, Eleventh Bituminous District.

At Smithton, Pa., October 7, Coroner Wynn, of Westmoreland county held an inquest on the death of Frank Davenport, one of the victims of the first explosion, when the jury returned the following verdict: "We find that Frank Davenport, came to his death by an explosion of gas in Port Royal mine No. 2 of the Pittsburg Coal Company, in Rostraver township, on June 10, 1901. We find that the gas was likely given off from a creep or squeeze in that part of the mine where he was working that day, and the gas was likely ignited by the light of John Peebles, who was employed with deceased building a

crib. The responsibility for the explosion rests upon the mine foreman and his assistant, and we recommend that hereafter safety lamps be used in this mine, especially where gas is likely to be developed suddenly.

"C. A. WYNN,
"Coroner."

Jurors: Alex. Watkins, Jacob S. Morrow, Eli S. Sager, Thomas T. Frances, Joseph A. Smith, Lorenza H. Young.

October 15, having received notice that No. 1 mine was in readiness to be operated I inspected all stoppings along the enclosed district of No. 2 mine, and I issued the following inspection report, I consider Port Royal mine No. 1 safe to operate only with the use of locked safety lamps in all parts, except in the main inlet air current to the interior end of the present hauling side track, to which point open lights may be used, as heretofore instructed.

W. J. MOLLISON, Mine Inspector, Eleventh Bituminous District.

November 29, I inspected the workings of No. 1 mine and found them in reasonably fair condition for the number of persons employed, and I gave the following inspection report: "Ventilation fair, drainage satisfactory and at the close of this report No. 1 mine continue in operation with the use of safety lamps as stated. I am unable to make any statement as to the condition of these mines previous to June 10, as I never had visited them previous to that date.

In concluding my report of this lamentable disaster, I am unable to make a positive statement as to who was responsible for it. I have examined the mine as far as practicable, and have obtained all the information possible, and I am unable to state in which exact section of the mine, and under what circumstances the gas was ignited, and I consider that the discovery of the body of John Peebles (which thus far has not been accomplished) would be the only evidence which could assist in arriving at a satisfactory conclusion. It may rest upon the mine foreman as stated by the coroner's jury, but if so, he was merely following the precedent established for many years in Port Royal as well as in many other mines in the Pittsburg seam. And as to when and where safety lamps should be used, there may be divided opinions, and also there may be very divided opinions as to whether or not explosive gas is likely to be carried through certain parts of mines, and as the conditions at mines very often change from one day to another, that in many cases it is difficult for the mine foreman to decide at what exact point it becomes absolutely necessary to change from the use of open lights to safety lamps, and I hope that this subject will receive the careful consideration of all persons interested, and that we may be able to define the line of safety so as

to avoid a repetition of the Port Royal disaster, or perhaps something worse.

Waverly.—Shaft opening, Pittsburg high seam, ventilation and drainage satisfactory. A new fan diameter sixteen feet, has replaced the old one formerly in use, which has greatly improved the ventilation.

Eureka.—Drift opening, Pittsburg high seam, ventilation and drainage satisfactory.

Spring Grove.—Drift opening, Connellsville coking seam, retreating with ribs, stumps and pillars, ventilation and drainage satisfactory.

Sterling No. 2.—Drift opening, Connellsville coking seam, retreating with ribs, stumps and pillars, ventilation satisfactory, drainage fair when the pumps are running regularly.

Jimtown.—Drift opening, Connellsville coking seam, retreating with ribs, stumps and pillars. Ventilation in some portions are not fully up to the requirements; drainage fair.

Mines on and Near the Mt. Pleasant Branches.

Rist.—Slope opening, Connellsville coking seam, ventilation and drainage satisfactory on all visits.

White.—Drift opening, Connellsville coking seam. On my first visit the ventilation was defective in some portions, and the air was so contaminated with black damp that it was almost impossible to keep a light, and the means of egress did not meet the requirements. I complained to those in charge, in reference to the condition, and I am pleased to state that it has been very much improved. On my last visit the mine was in fair condition.

Eagle.—Drift opening, Connellsville coking seam, retreating with pillars and stumps, has been exhausted and abandoned during the year, condition fair when visited.

Summit.—Drift opening, Connellsville coking seam, ventilation and drainage fair.

Franklin.—Drift opening, Connellsville coking seam, ventilation and drainage satisfactory.

Tip Top.—Drift opening, Connellsville coking seam. On my first visit the ventilation and also the drainage was defective, but since that time the location of the fan has been changed, and the ventilation as well as the drainage improved, and on my last visit the condition was satisfactory.

Scottdale.—Drift opening, Connellsville coking seam, ventilation and drainage satisfactory on all visits.

Dexter.—Drift opening, Connellsville coking seam. On my first visit the ventilation was very defective, and the air contaminated by black damp, which was produced in old abandoned workings,