

COAL FATALITY BURNETT, WASHINGTON SOUTH PRAIRIE COAL COMPANY DECEMBER 7, 1904

An explosion occurred in No. 5 west, South Prairie Coal Company's mine at Burnett, Dec. 7, at about 3 p.m., by which the following named persons lost their lives:

<i>Name</i>	<i>Age</i>
<i>Andrew Matson</i>	39
<i>Matt Kustia</i>	29
<i>O. Lina</i>	30
<i>Justus Elson</i>	26
<i>M. Pura</i>	34
<i>M. Erickson</i>	35
<i>John Lewis</i>	36
<i>E. Loma</i>	42
<i>J. W. Forsyth</i>	39
<i>John Burke</i>	38
<i>James Chapman</i>	19
<i>George Barber</i>	20
<i>J. S. Taylor</i>	45
<i>Charles Hill</i>	22
<i>John Luma</i>	22
<i>O. Luoma</i>	18
<i>O. Mukara</i>	

The inspector was notified by C. H. Burnett, superintendent (over long distance phone), at about 8 p.m. I, in company with Coroner E. M. Brown and Deputy C. C. Mellinger, left Tacoma on a freight train at 1 a.m., December 8, arriving at the scene of the accident at about 7:30. At that time eleven bodies had been recovered. Immediately after arriving I went into the mine in company with Fire Boss David Reece, General Foreman David Watkins, and a rescue party were endeavoring to restore the ventilation on the south side on the eastern dip. This part of the mine was not disturbed by the force of the explosion, except on the upper air course counter. Those that lost their lives in this part of the mine were suffocated by after damp. We first attempted to advance on the main airway but were driven back by the damp. General Foreman David Watkins was overcome to such an extent that he had to be taken out of the mine. It was then thought best to make an attempt to restore the ventilation through the upper air course counter.

We advanced up No. 2 travel-way to the air course. This we found caved for a

distance of about 600 feet. We managed, however, to advance with difficulty over caves (carrying the air with us for a distance of about 200 feet), at which point we met obstacles that had to be removed. While thus employed, we were joined by a rescue party from the Carbon Hill Coal Company's mine. This party consisted of D. P. Davies, general foreman; D. F. Reece, John D. Bowen, Christ Smith, James Powell, Abe Prichard and D. J. Morris.

On reaching the end of the air course the chute through which the air passed to the working place on the south side of the mine was found to be blocked by lagging and debris, that had been carried along the air course by the force of the explosion. After the obstruction had been removed, the air circulation was restored to such an extent that we were able to advance down the pitch in the working places. We had advanced in No. 30 chute to about the 5th crosscut. At this point we came upon the bodies of Geo. Barber and J. S. Taylor; also found Jas. Chapman's cap.

Until this time the air had been good, but when we had advanced a short distance below this point, the air reversed, bringing the damp from the inside and upper workings back in our faces, and we were forced to retreat for our lives. Fire Boss David Reece, D. F. Davies, and the writer were in advance of the rest of the party almost 60 feet when the air reversed.

Mr. Reece and Mr. Davies had felt the effects of the damp and were scarcely able to walk without assistance. My lamp had been extinguished by the damp, and I felt myself being overcome by gases and called on the boys who were above me. Mr. D. F. Reece, J. D. Bowen, and others came to my rescue. By this time I was practically helpless, and was carried and dragged up to the pitch by the Carbonado miners, who themselves, were nearly overcome before we were able to reach the upper counter, where the circulation of air was baffling back the after damp. The party made their retreat over the caves and through the air shaft to the surface. In this connection I wish to express my gratitude to the Carbonado miners, who so nobly came to my rescue and for their service in general.

It was then about 4 p.m. On returning to camp, we consulted with Mr. Burnett. It was thought best to let the fan work on the damp until morning before a further attempt to recover the bodies that were in the mine. On entering the mine on the morning of the 9th it was found that the damp had been removed, and the bodies were easily recovered. In the afternoon I made an inspection of the west side, where the explosion had occurred, in company with General Foreman David Watkins, Fire Boss David Reece, and a party of miners, to restore ventilation. On the gangway very little disturbance was found, except at 23 chute, which was blown out. Advancing up No. 30 man way, to the first counter, where six of the bodies were found between 25 and 27 chutes. There was very little damage done, except in 24 chute, which was wrecked by the explosion. We were able, however, to reach the face of this chute, which was about 60 feet from the first counter and 20 feet above the first cross-cut. It was plain to be seen that there had been a heavy shot placed the face of the chute, and also one in the cross-cut immediately below the face of the chute. The face of the chute was cone shape,

showing that there had been a heavy shot placed in the center of the chute and in a distance of 5 or 6 feet

From the face of chute No. 24 the force of the explosion was expended down the pitch to the gangway and through the air course on the eastern dip, there being very little disturbance except in these lines of the least resistance. The upper counter on the eastern dip was wrecked and caved for a distance of about 600 feet. The traveling way had been blown out of chute 24 to the first counter; and chute 23 was blown out from the first counter to the gangway. There evidently had been a shot fired in the cross-cut which was driven in a distance of about 7 feet from the chute and about the same distance below the face. I made an examination of all parts of the mine that were accessible after the ventilation had been restored, and was unable to find a trace of gas.

Several witnesses before the coroner's inquest (which was held Dec. 9 by Coroner M. E. Brown) stated that from 30 to 90 seconds prior to the explosion there was felt a very heavy concussion as of a blown-out shot, extinguished lights on the east side of the mine.

I made an inspection of this mine on October 7. Sixty men were at work in the mine on that date. I registered at that time 25,600 cubic feet of air per minute passing at foot of down cast air shaft. This air is split to ventilate the east and west dip, and is carried down through the working faces to and along the gangway to the fan drift. Also registered 960 feet of cubic feet per minute at inside chute, return on western dip, and 626 cubic feet on return in last chute from face of gangway on eastern dip.

The ventilation was amply sufficient to render harmless all marsh gas that transpires from the vein of coal, which is 3-6 thick of solid, clean coal, between firm walls. It is not a formation in which acculuded gases would be liable to be found, as is often the case in large, dirty veins and a broken formation.

The jury impaneled by Coroner E. M. Brown was taken into the mine before the inquest and as near the seat of the explosion as possible. They were accompanied by Jas. Anderson, chief engineer Pacific Coast Co. and Mr. Evan Louis, former general foreman for the Carbon Hill Coal Co. Mr. Anderson and Mr. Louis examined the conditions, and each gave expert testimony before the jury. Their opinion and testimony was to the effect that the explosion was caused by two shots being fired in chute 24, and from the conditions created thereby. The bodies of A. Matson, O. Makan, J. W. Forsyth, mine foreman, were found on the first counter between chutes 23 and 24.

Mr. Forsyth was taken out alive, but died Dec. 9 from injuries received. O. Lura, J. Ellon, Jno. Louma and O. Louma were found at the bottom of 30 man way on first counter. M. Oura was found under 30 chute on gangway. M. Erickson was found 50 feet from rock tunnel on gangway. Jno. Lewis was found under 29 chute on gangway, and E. Louma bottom of air chute of rock tunnel on gangway.

The above, with the possible exception of E. M. Erickson and E. Louma, were undoubtedly killed by the force of the explosion. The following, who lost their lives on the eastern dip, were suffocated by after damp. James Chapman was found in 30 chute, southeastern dip; Geo. Barber and S. Taylor in chute 30 about 4th cross-cut; Sali Hill

600 feet inside of room 34; John Bambo about 20 feet inside of 23 chute on upper counter.

The following is the text of the verdict of the coronor's jury:

"BURNETT, WASHINGTON, DEC. 10, 1904.

"We find that all of the miners named came to their death, or were killed, on the 7th day of December, 1904 (with the exception of J. W. Forsyth), in the mines of the South Prairie Coal Company, at Burnett, Pierce county, Washington, as a result of an explosion of coal dust, caused by heavy blasting or shooting.

"We further find on an investigation into said mine, and by evidence produced, that the ventilation, circulation and sanitary conditions of said mine are first-class in every respect, and no blame attaches to anyone for the result of said accident.

Signed:

"J. B. KEENER.

"DR. S. J. STEWART.

"J. S. WILLIAMS.

"J. B. WILLIAMS.

"O. B. LEEN.

"SYDNE M. BOHL."

As there is a diversity of opinion among mining men in regard to the conditions and circumstances necessary to bring about an explosion in a coal mine, many maintain that fire damp is the initiatory factor in such explosions. After a careful consideration of causes that brought about this explosion, I am confident that fire damp was not a factor. Have, therefore, mailed the following to all coal mine operators in the state:

Circular to manager and superintendent in charge of bituminous coal mines, State of Washington.

Gentlemen: The explosion that occurred in the South Prairie coal mine at Burnett on December 7th last has, in my judgment, demonstrated beyond doubt that a disastrous explosion can occur from a blown-out shot, regardless of the presence of fire damp in connection therewith. The vein in which this explosion occurred is 3-6 thick, very compact and of a rich bituminous character; but it has never been demonstrated that there are osculated gases that might be thrown off in bursts, as is very often the case in large veins containing more or less quantities of dirt and foreign bituminous matter and in a loose and broken formation.

The ventilation in this mine was amply sufficient to render harmless the marsh gas that would transpire from the coal. In the section of the mine where the explosion occurred there were six chutes being advanced. The miners were working with open lamps and ignited their shots with the same. There had not been any gas reported in that part of the mine for a long time previous to the explosion; in fact, when the working force were advanced too far ahead of the air, carbonic acid gas would accumulate. At the time of the explosion the miners had all lighted their blasts and were on the first counter preparing to leave the mine for the day. My examination of chute 24, where the

explosion undoubtedly took place, convinced me that there had been a very heavy shot placed in the face of this chute, also a shot placed in cross-cut a short distance below. Several witnesses before the coroner's jury stated that there had been a heavy concussion, which was felt in all parts of the mine, in from 30 to 90 seconds preceding the explosion.

From the evidence submitted, and my knowledge of the previous condition and ventilation of this mine, together with my investigation after the explosion, I deduct the following conclusion:

That a very heavy shot was placed in the face of chute 24 and a lesser shot in the cross-cut immediately below; that both shots were lighted at the same time. The heavy blast in face of chute was a blown-out shot, which pulverized the coal to a powder. This, together with the dust raised at the same time, was left in suspension with the proper amount of oxygen and powder gas to form an explosive mixture, and that the second shot exploded it. I do not think fire damp existed in this part of the mine at the time of the explosion, nor was it a factor of this explosion. The knowledge gained from this explosion must not be lost sight of. To further protect the lives and property under your care you should issue orders prohibiting the lighting of two shots at the same time in any working place where the local conditions are such that it might be possible for an occurrence as above stated to take place.

Respectfully submitted,
C. F. OWEN,
State Inspector of Coal Mines.

Tacoma, Jan. 1st, 1905.