

Q. Did you hear any one else say there was? A. No, I did not.

Q. What was the condition of the mine? A. Good—the air was good.

Q. Were you in the mine that morning? A. Yes, I was.

Q. What is your opinion in regards to the condition of the mine? A. I know it was all right.

Q. How many mines have you worked in in this country? A. Nos. 3, 4 and 5, Almy, Wyo., Grass Creek and 1, 2, 3 and 4, Winter Quarters.

Q. How did Winter Quarters the morning of the explosion compare with the other mines you have worked in? A. Safer than any mine I have ever worked in; that is my opinion.

Q. Did you ever see any gas in Winter Quarters mine? A. No, there was no gas in it.

Q. How much powder did you have in the mine at one time at Winter Quarters? A. One keg; when one keg was about empty I took in another.

Q. Do you know whether any orders have been given not to fill your cartridges with your lamp in your caps? A. I do not know.

Q. Are you well acquainted with the superintendent and foreman of the mine? A. Yes, sir.

Q. Do you think they are fully competent to look after the mine? A. Yes, I do; I am sure of it.

Q. There has been no change in the method of working the mine since you have been there? A. No, sir.

Q. Do you think the sprinkling of the mine will add to the safety of the miners? A. It might.

ACCIDENT REPORT OF EXPLOSION IN NO. 4 MINE, MAY 1, 1900.

Examination of Number 4 Mine by State Mine Inspector Gomer Thomas, Assistant Superintendent H. G. Williams, Mine Superintendent Thomas J. Parmley, Robert Forester and George W. Snow.

ON NEW MAIN ENTRY.

At twenty-one in from survey plug No. 9, here a giant powder box, said to contain fifteen caps and fifty-six sticks

of giant powder, had not exploded. At plug No. 9 a mine car which was loaded was bottom side up. Alfred Bekkala says this car formerly stood near and a little bit below (out) from where the above named powder was. This car, therefore, would not have been thrown more than twenty feet. A coat belonging to Isaac Macki, not burned, was found about six feet below (out) from where the above-mentioned powder box was said to have been.

Note.—(From position of giant powder box as above given to rock face where Isaac Macki was working distance was not taken. Later it is measured and is 213 feet, and between these points there is a big cave from the roof of the tunnel.)

At a point sixty feet in from the rock face a piece of canvas brattice is jammed upon the end of a projecting rail from the inside, showing that here the blast was outward towards the mouth.

Alfred Bekkala says that Macki had fired no shot the morning of the explosion, as the rock face was the same as he had left it the day before; but Macki had drilled one hole and his drill was standing in another hole. The face is about five feet six inches high from the bottom, and is situated one hundred and two feet out from the outside rib of the crosscut, and station 29, which is the last crosscut shown on the map up to March 31, 1900.

The following is to be added to the preceding, viz.:

May 10th. Note as to remarks of Tom Eynon:

Tom Eynon says himself that the powder referred to was not moved up to the entry seventy-five feet, but that Alfred Bekkala and Isaac Macki kept their powder in the same place where he had kept it while working on the rock face—i. e., in the place herein above described, and that the statement made by Alfred Bekkala that the powder was not moved up is correct, up to the night of the day before the explosion.

Also on May 11th:—The statement is added that (in the main entry at a point below where the powder is kept) an empty car, laid off on one side on account of broken axle, was blown outward down the entry 120 yards.

At the cross-cut at station 29, distance 102 feet in from the rock face previously mentioned; on the right rib of the entry at this cross-cut is an exploded black powder

keg. About ten feet in this cross-cut is a dinner bucket, on the left hand side (going through from the main) which was in the explosion, found upside down and torn to pieces. Also parts of a coal-drill scattered around, and other evidence of a miner's box having been there. Farther inside this cross-cut, and on the right hand side, a second dinner bucket is found. Also at intersection of left rib of main with lower or outside rib of this cross-cut, and in the main entry leaning up against the rib is a drill, two hammers and a handle of a coal-drilling machine, all leaning against the rib apparently undisturbed. Note.—(My recollection is that these tools were in the main entry about two feet below the rib of the cross-cut. G. W. S.)

FACE OF MAIN ENTRY NO. 4.

Here and there is a hole about three feet six inches deep; a man's cap was found close to the face, and a pick leaning up against the face within a foot of the hole above referred to, is apparently undisturbed.

In the last cross-cut next to the face of the main (which is 142 feet in from outside rib of the preceding cross-cut referred to at station 29, and which is also 50 feet back from the face). In this last cross-cut are found the remnants of a powder can and a battered mine cat stands square across (and about in the middle of) it.'

On the side of the car next to the main back entry (and away from the main entry) designated as side A, some light pieces of wood were jammed against and above the wheels and a plank from the side A was found over on the opposite of the car on main entry side designated as B, lying near the car between B and the main entry, while some car irons were found against the rib of the main back entry on the other side opposite to the cross-cut.

MAIN BACK ENTRY NO. 4.

On the lower rib of room No. 3, on main back entry, a battered powder can was found. Very strong fire in this room clear down to floor. Blaze has extended to within twenty feet from face. Room is in fully eighty feet, and burned or coked coal is driven into some of the props.

Note.—(This is a “dead-end” room—that is, there is no cross-cut from it to room No. 2.)

ROOM 2 OFF MAIN BACK.

In this room about seventy-five feet there is a cross-cut to room No. 1. There is an exploded powder box near cross-cut, and soot in this room. Could not reach face account caved.

In cross-cut to main between rooms 2 and 3, near station 28, on the end of cross-cut nearest to main back, remnants of an exploded powder box were found. Mr. Parnley says the force came through this cross-cut from the main entry side. We found three exploded powder cans in main back, just below this cross-cut.

ROOM 1 OFF MAIN BACK ENTRY.

Badly caved at face and in cross-cut between this and room O, powder and powder boxes for rooms O and I, exploded and destroyed, i. e., two powder kegs exploded in the cross-cut between rooms O and I, and very heavy deposits of soot are found there.

Room O: This is the room at the end of the cross entry from main back (survey stations 20, 21 and 30) to the inner ends of the levels now opened out and to be driven beneath the second and third levels of the first rise entry above the fault. In room O coal in loaded car twenty feet back from face was burned by flames, which went also to the face of the room. The body of George Langsta was found in this room badly burned.

Room OO: This is the only room opening off the inner end of the third level of first rise (see explanation as to this third level under heading “Room O.” At the mouth of room OO there is an empty car, and powder box of men working here could not be found here. The powder box for this room is about forty feet from this room in a cross-cut towards room No. O, where exploded powder and destroyed box is found. There are large deposits of soot in this room and a drill was found in a hole where a man was probably drilling at the time of the explosion. H. G. Williams says at least three powder cans exploded in the cross-cut between rooms O and OO and OO and 1, with strong blasts towards dead ends of rooms and entries.

In the entry leading to rooms O and OO and to the inner ends of the second and third levels, the coal was caved. The force of the explosion seems to have gone in on the third level and back on the second level, and a car on each of these levels is smashed up by the explosion.

The force of the explosion on these levels was very strong and but little signs of fire.

On the third level fifty feet out from the cross-cut a coat was found. In the main back entry at the mouth of the cross entry, leading to above second and third levels, there is a wheel for letting down cars; the blast was outward from the cross entry toward the wheel; a piece of brattice cloth against the wheel post appears to have come from up the main back entry, while the side of the post next to the above described cross entry appears to have received blast from that direction (i. e.—direction of the cross entry.) The blast coming down (outward from main back appears to have been the stronger of the two.

MAIN BACK ENTRY AND 4TH RISE.

At junction between main back entry and fourth rise very little heat and very little soot shown (and there was no soot shown outward on first level and first rise from this point). At drum at head of fourth rise it shows a little fire on the left side, with some force. Some decided effects of force were shown on two cars near head of fourth rise and near drum. Of these, the lower or empty car was standing in cross-cut between main and back at stations 8 to 18, and was thrown over near the rib.

ROOM NINE OFF MAIN BACK.

(Counting from rooms on first level.)

This room shows comparatively (with what follows) little fire. Room not more than forty-five feet in; props lying down on floor at mouth show comparatively little fire. Ribs at mouth of room show less fire than at mouth of room 8 (to follow), while from this room in, over ground already described, there is greater force than here, but no fire, while the force there has been very strong.

Room 8—At the mouth of this room coal appears almost to have been blazing, while some timbers lying on rib of entry opposite to the mouth of this room are thrown down but not burned. On a prop about thirty-five feet in this room, lying on the floor, coked coal sticks to and has been driven into the wood, while on the prop still standing this is absent, but the standing props are burned.

Note.—Near room 8 there is an angle in the main back, and from here out this entry is called first level of first rise or first level.

Room 7—First level: Shows fire in about fifty feet and face of room is in about seventy-five feet. A prop on the inside rib shows burns on side towards the room, but not on the side toward the entry. Prop on the outside of mouth of this room shows burn all around, while props in the entry opposite mouth of this room do not show any signs of burning, and the caps of the timbers in this entry, between this room and room 8, do not show any signs of fire at all.

Room 6, First Level—This room is in about seventy-five feet and shows fire in about fifty feet; shows great heat and charred wood at mouth. At mouth a pick stands upright near corner of inside rib, held so by a piece of coal on the steel. Between this and the next room, a pile of timbers, a dozen or more, are thrown down in the entry. None of these timbers are charred by fire.

Room 5, First Level—At mouth of this room it appears to have been hotter than at any of the following ones, that is, the heat appears to have been stronger here. Fire in this room was up to the face, which is estimated at from fifty to sixty feet in. At mouth of this room the coal appears almost to have been coked. Opposite this room there is an incline down to first and second rises. The force here went downward through this incline. Later it would appear that the force through this incline was forced through a cross-cut from second to first rise and exhibited its effects more deadly in room 2 (as numbered upward from the new main entry):

Room 4, First Level—Splinter on ties at mouth of this room not burned, while ten feet in the room there are badly burned chips and charred sticks lying on the floor. There are signs of heat along the rib of entry at the

mouth of the room, while props on the floor of the entry, between this and room 5, show no signs of burning.

Room 3, First Level—No props standing in this room. In the mouth there are signs of great heat clear down to the floor. In general, in passing in on the first level backward over ground already described, the heat appears to have been stronger and lower down.

Room 2, First Level—T. J. Parmley says there was no one at work here at the time of the explosion; also, that the props were taken out of this room for use elsewhere. The fall in this room is an old one made from taking out props.

Room 1, First Level—At a tool box found about twenty-five feet in this room, the box, clothing, paper and props are all scorched and burned, while a keg of powder was scorched on top, but did not explode, although it sits alongside a tool box on top of which is burned and scorched paper. The fire limit in this room is about sixty-five feet, while face of the room is about 120 feet in.

Room 4, off First Rise Above Fault—Fire extended in 95 feet to 100 feet, no signs of force. A full keg (nearly) of powder 110 feet in this room did not explode.

Room 23, off First Rise, Above Fault—Fire extended in about seventy-five feet; room is in about 175 feet; no signs of force. A keg containing unexploded powder found at the end of the fire limit, as above explained. An undisturbed empty car stands on the track about twenty feet from the face.

Room 2, First Rise, Above Fault—Jacob Anderson was working here alone on the day of the explosion and came out alive.

Two-thirds of a keg of powder set in a slight offset in the right-hand pillar about 100 feet from the center of first rise entry. The fire limit is shown by the ashes on the props, and is about seventy-five feet from the entry. This room is in about 160 feet, and a loaded car stands at the face. All the props are intact.

Room 1, First Rise, Above Fault—Props have been on fire while the powder in the tool box about six feet away from fired props did not explode. Fire extended into this room about seventy-five feet, where evidences of fire ceases.

Cross-cut near Room 1, on First Rise—(Survey Station 13 to 26).

In this cross-cut the canvas door was on fire, and it appears to have been slightly heated. At the first rise end a car was thrown from the track, and there is evidences of strong heat. Against the inside end of this car some brattice material is piled, thrown from above.

Top of First Rise—Apparently no fire and no blast.

In third level off first rise a keg of powder is found intact, in a sack; also seventeen and one-half sticks of giant powder and some caps at the beginning of this third level off first rise are found intact. There are evidences of less heat at the beginning of the first level off first rise than in the four rooms last above named. This last statement is, however, open to question, as the roof here is glazed in places by heat.

On first level off first rise, there is an entry running about ninety feet to the face; at the face of this entry there is a hole where a shot appears to have blown out on the wrong side, breaking through into the second rise. Where the break-through occurred the rib is about three feet thick. At the mouth of this entry it is about fifty-five or sixty feet to the nearest rib of the first rise.

Room 1, first rise below fault, is just opened out.

Room 2, First Rise Below Fault—Opposite this room is a cross-cut; through this the blast from the incline down the first level passed and entering this room charred the props.

Room 3, First Rise Below Fault—In this room the props are not charred.

Second Rise—At the drum at the head of this rise there are no signs of fire.

Rooms A and B, off New Main, Between the Faults—No signs of flames in this entry leading to these rooms.

In Room A—The first appearance of fire is on the right rib near mouth of room, and on a loaded car standing in the neck of the room. A man was found about thirty-five feet in this room near car. All timbers been on fire in this room up to ninety feet from its mouth, and three-quarters of a keg of powder standing near scorched box about forty feet in this room did not explode, although the flames extended in beyond the powder. This

room is in about 140 feet, and the fire "tails out" on the left-hand side going out.

In Room B—This room is on the direct line of the entry coming from No. 4 main. Fire begins in this room about thirty feet in. The air in this room evidently acted as a cushion to receive the force.

Third and Fourth Rise and Farrish Level—At top of fourth rise near No. 4 main, the sides and top appear polished, but no fire. Here and for some distance below shows extreme heat, but no burning. About seventy yards above room 2 a lantern frame belonging at the drum at the top of this entry was found, and another piece of the same was found about twenty-five feet lower down. Twenty feet below room No. 1 an empty car, which could not get away on account of being attached to the rope, was badly wrecked and almost in splinters. About twenty-five feet below this car was another, a loaded car, badly demolished, with sides split out. This car had served as protection for another loaded car coupled to it on the lower side, and the latter was in fairly good condition. These two loaded cars were just below the lowest cross-cut to third rise, and were about thirty-five feet above the Farrish level. The fourth rise below the Farrish level is badly caved, and the men taken out of here were badly burned, but had no fire on their clothing.

On the third rise the blast came through the cross-cut from the fourth rise. The upper end of third rise was filled with debris, probably before the explosion.

Rooms 1 and 2, third rise, show no signs of fire. Heat chippings have fallen from the roof since the deposit of soot.

Room 3, on Third Rise—There has been no fire here, but there has been heat enough to stew a little sap from the props.

Room 4, third rise, shows considerable force and some heat, but no fire.

Room 2, fourth rise, shows strong heat at mouth. Fire on props and strong force about thirty feet in. About half the props are knocked down. Standing props show burning and slight heat effects are shown on the coal. The fire ceases about thirty feet in.

Room 1, Fourth Rise—In the mouth of this room is

a damaged empty car, which seems to have been set aside temporarily for repairs. The side of this car appears to have been smashed by the explosion. No flame effects are shown on the props, upon some of which there is a coarse dust deposit, indicating the current into and out of this room, which is connected through to room I, off the Farrish level. The Farrish level back from the fourth rise is caved. Here the blast went outward toward first rise; the props on the left-hand side were broken by the force pushing outward; a switch stand was also bent outward, and a loaded car standing at the bottom of third rise was blown over and upset against the outside rib. There are evidences of extreme heat, but no fire.

On Farrish level, between fourth rise and first room, three empty cars stand on the right hand side (going in), the first car is most damaged, the second car next and the third is the least damaged. The blast going in here appears to have been met by another from the fourth rise coming around through room 1, fourth rise, through room 1 of this level. This is evidenced by two loaded cars in the Farrish level, just inside the three cars above referred to, as well as another car in the cross-cut of this level, which seems to indicate a current opposite to that entering direct from the fourth rise.

Room 1, Farrish Level—A fall occurred here where this room intersects room 1 on the fourth rise. The cave looks as if the slabs were hanging and blast got up under them, bringing the rock down. In this room, post and floor seems changed. There appears to have been a hot blast through here, but little fire, probably none; charring done by some probable distillation of gas, but no flames. Props scorched on the upper side. A prop in Farrish level, about 12 feet out from room 1, shows coke dust on inside and sooty dust on outside. A coat on the entry, opposite the mouth of this room, was not burned.

Farrish Level, Rooms 1 and 2—Here cloth and wood was found on the floor not burned.

Room 2, Farrish Level—No fire shown on the few standing props. This room was finished and caves occurred before the explosion.

Room 3, Farrish Level: Heat shown in the mouth of this room, particles of dust and frayed canvas blown

against the props; no fire; signs of great heat on the rib of the cross-cut to room 4, but no signs of burning.

Room 4, Farrish Level: Signs of heat on the rib but no fire; that is combustion.

Farrish Level Between Rooms 4 and 5—The deposits on props appear to be coarser, a kind of sooty, dusty deposit.

Room 5, Farrish Level—Stringers of soot are on the timbers in this room, and resin is stewed out of the props. Signs of heat on the ribs covered with soot; slight signs of burning near the end of the room.

Room 6, Farrish Level—On the prop against the rib, on the entry at the mouth of this room, there is evidence of two blasts. Greater evidences of heat at the mouth of this room than in room 5. Here was a powder box containing a keg of powder, which exploded. The box appears to have been locked. There are signs of great heat on the rib near the face of this room, but no fire or burning. Two men were taken out of here.

Note.—(This is the place where a pillar was cut through to find two men.

Room 7, Farrish Level—Force entered this room from the fourth rise, across the end of the pillars of the previous rooms. This room is badly caved.

Room 8, Farrish Level—Opposite cross-cut to fifth rise from No. 1 mine; slight evidences of heat at the mouth of the room. No signs of powder in rooms 7 and 8.

Note.—(On all these rooms where the explosion came around the pillar more heat is shown at the face than at the mouth.)

Room 9, Farrish Level—Shows heat on the ribs; been very hot but no fire or burning. No powder found in this room.

Room 10, Farrish Level—This room was undoubtedly hot, but so much soot, can not tell much about heat. Keg of powder exploded on right rib.

Room 11, Farrish Level—Pieces of powder box and scattered tools found, and a keg of powder exploded. Can near face smashed to pieces. Soot very plentiful on the ribs. This room was open on the pillar around to room 10. Considerable heat chippings have fallen out but there are no signs of burning.

Room 12, Farrish Level—Powder exploded here, no

signs of heat; a very decided blast gone up above the cross-cuts, and car knocked about by explosion, but the car was in good condition.

Room 13, Farrish Level—Keg of powder exploded; excessive soot on the props. This is a dead-end room above the cross-cut and the props have been on fire. Coal Coked on the upper part of the room. Everything shows signs of intense heat. Fifty feet back from the face no sign of fire. Between cross-cut and face a maximum fire effect shows, and where the destroyed powder box was found the maximum heat effects show. In this room there is coked coal on the props above the cross-cut.

Room 14, Farrish Level: No signs of fire on the props at cross-cut at room 13. Above cross-cut and near room face the props were burned and the coked coal was driven into the props from the face of room. This room appears to be up about one hundred and fifty feet from the cross-cut, and there is very little soot but intense heat in the face of the room. Burning commences twenty feet above the cross-cut and ends fifty feet from the top of the room. From the cross-cut to the entry in this room it is about one hundred and fifty feet. This room is different as to soot from any room we have seen. A keg of unexploded powder was found about forty feet from the top of the room.

We also find the disposition of things in the top workings of No. 1 mine about the same as above.

OFFICE OF THE PLEASANT VALLEY
COAL COMPANY,
SCOFIELD, UTAH,
May 25, 1900.

*Gomer Thomas, Esq., State Inspector of Coal Mines,
Salt Lake City, Utah:*

Dear Sir:—In addition to the various verbal reports heretofore made to you, I submit the following written report of the explosion in Winter Quarters Nos. 1 and 4 mines at Scofield, Utah:

At about 10:25 on the morning of May 1, 1900, an explosion occurred, apparently originating in No. 4 mine, by which, according to the latest count, after the most careful checking, one hundred ninety-nine men lost their lives and seven were wounded.

The following is a list of the names as nearly as can be ascertained of those who lost their lives. All of these bodies have been recovered and identified as closely as possible under the circumstances. The last of these was recovered on May 12th.

Joseph Anderson,	Herman Kivicht,
Victor Aho,	Leander Louma,
Andrew Adamson,	Gust Louma,
Ralph Burns,	Wm. A. Louma,
Andrew Bintala,	Henry Louma,
Matt Bintala,	Alex Louma,
Guy Brennan,	Abe Louma,
Henry Bernard,	Oscar Lindback,
John Q. Davis,	John Lahey,
David John Davis,	Chas. Lobbe,
Eric Erichson,	Christian Lakso,
Jos. N. Graves,	John Lundgreen.
Matt Hundus;	A. A. Louma,
Nicholas Hutula,	Isaac Macki,
Elias Hutula,	J. C. Martin,
Andrew Hauta,	Andrew Macki,
John Heikkila,	Maknus Niemi,
Alex Heikkila,	Oscar Niemi,
Chas. Honkala,	Victor Ojan,
John Honkala,	Leander Ojan,
John T. Jones,	Richard Pack,
John Johnson,	John Pesola,
Matt Jacobson.	R. D. Reese,
John Koski,	Thos. Ramage,
Mike Kangas,	Thos. Riley,
John Korpi,	Wm. Silo,
Chas. Koski,	Wm. Samuels,
Leander Klemola,	Jacob Silien,
Antti Klemola,	Danial Skersies,
Westeri Klemola,	John Thomas,
Matt Koski,	Wm. Tomlinson,
Alex Kangas,	Eric Uppa,
Henry J. Louma,	Alfred Warila,
Alex Ketola,	Herman Erickson,
Jacob Keraner,	Nicholas Walkama,
John Krook,	Geo. W. Coulthard,
John Korbela,	M. Voen Duer,
Frank Kolson,	Wm. Davis,

Roger B. Davis,
 Daniel Davis,
 Wm. P. Davis,
 Richard T. Davis,
 David T. Evans,
 John N. Powel Davis,
 Leon Gordin,
 Gus Gordin,
 Edw. M. Hardee,
 Thos. J. Hardee,
 Levi Jones,
 Wm. G. Jones,
 Edw. Jones,
 Mathias Pattinson,
 Meshick Pitman,
 Wm. Pugh,
 Wm. C. Reese,
 F. D. Thomas,
 Evan D. Thomas,
 Jos. S. Thomas,
 Jos. P. Thomas,
 Louis Leyshon,
 Morgan Miller,
 John Miller,
 John O. Davis,
 Wm. Parmley,
 Jas. W. Gatherum,
 D. D. Davis,
 Robt. Langstaff,
 S. J. Padfield,
 Willie Wilson,
 Sandy Wilson,
 Nicolo Anselmo,
 G. Finari,
 John Hunter,
 Henry Wilson,
 James Wallace, Sr.,
 George Wilson,
 Ed. Street,
 John M. Burns,
 Peter CoClet,
 J. Delklef,
 Robt. Ferrish,

Wm. Good,
 James Good,
 J. X. Lloyd,
 John R. Price,
 Thos. H. Reilley,
 John Webber,
 Llewellyn Williams,
 Robert Williams,
 Deter Southerland,
 Thos. Brogden,
 Harry Betterson,
 James Ferrens,
 Robt. Ferrens,
 James Jenkins,
 Martin Cassidy,
 Wm. Jacobson,
 Thos. Webber,
 Wm. Webber,
 Ben Lloyd,
 Jos. Lacasse,
 H. A. Miller,
 Isaac A. Miller,
 Richard P. Thomas,
 Thos. Farrish,
 Robt. T. Farrish,
 A. J. Franklin,
 Robt. D. Wilstead,
 Wm. Wilstead,
 W. B. Dougal,
 John Muir,
 Daniel Muir,
 George Muir,
 Gunner Bearnson,
 David Wilcox,
 A. E. Watson,
 V. R. Miller,
 Wm. A. Nelson,
 Clyde Law,
 Deniel Williams,
 Daniel Pitman,
 John D. Pitman,
 Evan E. Evans,
 W. K. Douglass,

Wm. Miller,
 John T. Davis,
 Geo. O. Davis,
 Thos. Gatherum,
 Wm. W. Gatherum,
 Geo. Langstaff,
 John Kitton,
 David Padfield,
 James Wilson,
 Christ Johnson,
 Giuseppe Maio,
 Antonio Rollo,
 David Hunter,
 Wm. Hunter Paterson,
 John S. Hunter,
 James A. Hunter,
 Frank F. Strang, Jr.,

Chas. Edwards,
 Richard Dixon,
 Wm. Clark, Jr.,
 John James,
 George Clark,
 S. W. Clark,
 Jas. C. Hunter,
 Adam Hunter,
 Robt. Hunter,
 Frank Strang, Sr.,
 Richard Stewart,
 David Illingsworth,
 Wm. Ulerthorn,
 Geo. Jos. James,
 Wm. H. Clark,
 Thos. Padfield,

Similarity of names and the fact that many of the Finnish miners go under two names, leaves the question still in doubt as to whether the body of John Pitman has been taken out and not properly identified but buried under one of the names in the above list. This uncertainty is still being investigated.

The names of those injured are:

Alexander Wilson,
 William Livsey,
 Harry Taylor,
 Thos. Sellers,

John Wilson,
 William Boyter, Jr.,
 Thos. Livsey.

all of whom are rapidly recovering.

The cause and origin of the explosion are not yet definitely known. Investigation is still pending. The fact that the mine foreman and most of the men that were in No. 4 mine at the time of the explosion were killed, makes it difficult to get exact evidence. No explosive gas is known to have been seen in any of the Winter Quarters mines either before or since the explosion. The methods of mining at the time of the explosion were the same as have been in practice for the past twenty years in Winter Quarters No. 1, 2, 3 and 4 mines, which are all on the same vein of coal. Investigation thus far leads to the supposition that the explosion probably originated from an accidental discharge of black powder and was aug-

mented by coal dust. The explosion seems to have spread from the upper part of No. 4 mine entirely through that mine and through into the rise entries of No. 1 mine, the after-damp extending some distance beyond the force of the explosion. Many of the deaths in No. 1 resulted from this after-damp. From the lower levels in No. 1 mine about one hundred and three workmen escaped uninjured.

Yours truly,
(Signed.) H. G. WILLIAMS.
Asst. Supt. P. V. Coal Co.

The Grand Jury of Carbon county attached the blame of the explosion to no one. The jury had been three days investigating the cause of the explosion, and on the evening of June 13th made their report, in which they say there is no blame attached to the Pleasant Valley Coal Company.

Ten employees were witnesses before the jury, among whom was Walter Clark, who had two sons killed in the explosion. His testimony was strong against attaching blame, as was that of the others, all of whom came from Winter Quarters and Scofield.

The Coroner's inquest held on the bodies of the men killed in the explosion held that no one was to blame.

The following are the names of the Justice and jurors who sat in the case: William Hurst, Justice; William Potter, Frank Mayweather and A. Green, Jurors.

Accompanying this report will be found a sketch of the Scofield mine No. 4, where the explosion of May 1st occurred, showing location of seat of explosion and the direction in which the blast shot.

C. B. SPRAGUE, Chemist,
360 Center St.

Salt Lake City, Utah, August 1st, 1900.

Gomer Thomas, State Mine Inspector, City—

Dear Sir: Enclosed are copies of my analysis of the materials taken from Winter Quarters mine No. 4, after the explosion of May 1st.

These materials invariably consist of mixtures of coal and coke; and it was found to be impracticable to