

only are examined daily and the old abandoned places occasionally. I am the only fireman in No. 5 and leave the inside for surface work at seven a. m. every morning. The surface work is such as filling powder, and assailing, at times, in the smith's shop. There is no fireman in the mine from seven in the morning. The miners have to get their rails and ties from old rooms that are finished. If there be gas in any such rooms the caution board is put up to prevent any one from entering them. It is not my place to make any complaint to Mr. Bradbury. Mr. Bruce is the responsible one and is the person to communicate to.

Mr. Bradbury—by Dr. Gamble—I wrote gas on the caution board to prevent any one from going into the exhaust room to take out rails, as the place is not finished. I didn't think gas was in the room; the word "gas" was only used there for the purpose named.

By Mr. Vickery—No workman is allowed to go into his working place if gas be found in it. If a large quantity of gas be in a room, it is not taken out in the work hours. Gas has been taken out of rooms during work hours, but the quantity was small. If the quantity of gas was large, there would be a probability of it passing into the other workings with the air-current.

William Bell—by Mr. Bowns—I have been connected with the mines since 1868 and am fireman of No. 6 mine. The ventilation was considered good prior to the explosion.

By Dr. Gamble—I cannot say what has caused the explosion; I do not know whether it was a dust explosion caused by a blown out shot, or a gas explosion. I have never seen dust fire in a mine; I have heard of a dust explosion at No. 4 U. P. mine, Almy. I have seen many blown out shots, but I have never seen any of them fire the dust. The miner has to get his rails and ties out of the old workings, if he cannot get them elsewhere. We are not in the habit of examining rooms not working, during work hours. We always see that the rooms are free from gas before the men are allowed to enter them.

William Graham, mine foreman at No. 6 C. P. mine, Almy—by Mr. Bowns—Can you give the court any information as to the cause of the explosion at the No. 5 mine on the 20th day of March?

Mr. Graham—The cause of the explosion of the mine is in consequence of the gas of the mine coming in contact with the naked lights of the workmen. I know there was gas in the mine, (1) because I have seen it; (2) because I have heard of it from others who have seen it; and in addition I know for myself that there is always gas in it—and lots of it behind the stoppings. It was not a dust explosion, it was an explosion of gas. There are no dust explosions in lignite coal mines; the coal does not possess the properties that will cause it to explode.

By Mr. Bowns—Was there not a dust explosion in No. 4?

No, sir, it cannot be called an explosion; it is true that by a runaway trip a quantity of fine dust was put in motion which was ignited at a boy's lamp and how far did it go? With all the boys that were on the spot only one boy had his hand burned.

By Mr. Bowns—Did you never see an explosion in a grist mill?

It is No. 5 mine we are talking about.

By Mr. Bowns—Did you never see a saw dust explosion?

No, sir—it is No. 5 mine.

Mr. Graham continued—It must be understood that the lignite coal is altogether different from the bituminous coal. The constituent elements of the latter bring it within measurable distance for a dust explosion, and even this class of coal has been tested so far as to prove beyond a reasonable doubt that it will not explode (as a dust in and of itself alone. In experiments made with bituminous coal by Professor Freberg, of Prussia, he subjected the bituminous coal to a rigid test in this respect, viz.: he had a large stone on the ground and covered it with fine dry dust coal; he then placed three cannons, fixed one above the other; the low cannon was fired off to lift the rock and put the fine dust in motion; the second was fired off into the floating dust, and the third was fired off into it and all failed to ignite the dust. Second experiment—Fixing his cannons as before, he diffused 1 per cent of fire-damp (methylic hydride) into the dust, and fired off his lowest cannon, which ignited the dust. Third experiment—He diffused 3 per cent of fire-damp into the dust and fired off his cannon and such was the force produced that it threw a case 700 feet into the air.

What then about the explosion of fine dust? Dust will accelerate the explosion of fire-damp but it will never explode in and of itself alone. There was sufficient air going into the mine if it was properly conducted through the working places; it is not a question as to the amount of air that is sent in and out of the mine, but whether the current in passing through the fall workings carries off the gas that is being generated from the measures with it. If fine dust will explode in a fiery mine, why should it not explode in a mine that does not generate inflammable gas? If any gentleman has seen or heard of such an occurrence it is well to know it; but I am satisfied in my own mind that no such explosion ever occurred; and I am also satisfied that this was an explosion of fire-damp and not of dust.

Robert Miller—by Mr. Bowns—I went into the No. 5 mine with the exploring party. We were in the 7th and 8th levels; there was a cave in the 8th entry of eleven feet deep, ten feet wide and forty feet in length, which was full of gas to the depth named (11 by 10 by 40, equal to 4,400 cubic feet of gas) in the furthest room in the 8th entry. It is known that gas had been cleaned out in working places previous to the explosion.

Steward Hutchinson—by Mr. Bowns—I have known Mr. Bruce a long time and considered him a good business man in the mine; but I have heard him say, more than once, they had more work on their hands than they could do. I have seen gas in the mine and in more than one room before the explosion occurred.

Orson Morris—by Mr. Bowns—I have known Mr. Bruce for many years and considered him a competent man for the office he filled in the mine. It

happened just previous to the explosion that our room was not in a safe condition and I went to see Mr. Bruce, who said he had not forgot us, but had been fighting gas all the morning.

The evidence of the following persons was to the same effect: H. Morris, I. Grantage, H. Godby, L. Rawbottom, A. Brown, I. Lohia, I. Baker, J. Clark, I. Harris, T. Scott, I. Hood, I. Crawford.

Joseph Burton—by Mr. Bowns—I have worked seven years in No. 5 mine. About 5:10 p. m. at the second room on the eighth level, two Finlanders were going into the seventh room for rails, but were prevented by the orders of Mr. Bird, who said there were hundreds of feet of gas in that room. I have seen gas got out of rooms when men have been working in outside rooms.

James Bell and John M. Glen, engineers of No. 5 mine, said before the jury that the ventilation fan of the mine was kept going at a steady speed of from 34 to 38 revolutions per minute.

Dr. Harker informed the jury that he had attended the injured men, Mr. Malby and Mr. Mason, who had since died from their injuries. He said quite a number of the men he saw come from the mine to the surface were badly burned and others died from suffocation.

Some of the injured men who were injured at the surface, Joseph F. Bell, James Makela, Thomas Butte, John Hannah, John Martla and John Crawford are progressing slowly, but are not dangerous. R. R. HODGSON.

#### THE VERDICT.

ALMY, Wyo., March 29.—The verdict of the jury in the Red Canyon explosion is that the explosion was caused by gas probably accelerated by dust. R. R. HODGSON.

#### A CORRECTION.

ALMY, Uintah Co., Wyoming,  
March 29th, 1895.

To correct some misrepresentations which have been made in reference to Beeman & Co. in their treatment of the sufferers from the late explosion at Mine No. 5, Almy, Wyoming, we, the relief committee, have investigated the matter and find that Beeman & Co., immediately after the accident, made out a list of those who were in need of assistance and placed opposite each name from \$10 to \$20, according to size of families, and gave instructions for that amount of goods to be issued to each of those families upon application. The total amount of this list is \$830.

Some of the people have not called for the goods, but we are informed that they may get them if they wish to do so, and we are requested to give them such notice.

This amount, Mr. Beeman informs us, is a donation, and no part of it will be deducted from any money due them, or that ever may become due them from any source, nor will they ever be asked to pay it.

ED. BLACKER,  
THOMAS SCOTT,  
MATTHEW MORROW,  
Executive Committee.

H. E. MORGAN, Secretary.

Five hundred olive trees were planted on a ranch near Oroville, Cal., recently.