

507. Is that the general custom?—That has been the custom since I have been on the West Coast of this colony, and I think it is a fairly good regulation.

508. Who supplies the powder?—We get the powder, and the miners buy it.

509. Could there be any possibility or danger of the miners going into the mine with more than the regulation quantity of powder?—No; I do not think so, or that any of them ever desired to do that.

510. What was the system of blasting adopted in the mine?—Each man was permitted to fire his own shot, unless in the case of their being firedamp. In special places it was the fireman's duty to fire the shots—wherever firedamp was, or a suspicion of firedamp.

511. What was the custom with regard to deputies' reports?—The fireman's book was kept at the cabin underground, in order that he might fill in his report as soon as he examined, and there was a copy sent up to me during the forenoon. If I did not happen to be in the mine, a copy was sent out.

512. That would be a daily report?—Yes, of the fireman's examination.

513. What was the deduction from the fact that the men had been working one hour and a half on the morning of the explosion?—It was that the mine had been found quite safe, and that the fireman had admitted the men in the usual way.

514. You have heard the evidence given by Messrs. Cochrane, Lindop, Scott, and Hayes. Do you, as an expert, agree with the theory that a blown-out shot was the cause of the explosion?—The theory advanced by the experts is not inconsistent with the appearances that are shown in No. 4 bord. In my opinion there has been a shot fired there, and that the place has been set on fire. From that point the explosion has originated.

515. Would you say, set on fire by the coal-dust having been ignited?—The coal on the sides and on the roof, and any dust that may have been about the place has been ignited. There is evidence of slow burning all around the neighbourhood of that hole. In my opinion, it was caused by the blown-out shot igniting the coal-dust; and a blown-out shot such as this would be quite sufficient to account for the appearances.

516. I suppose you know that this opinion has been backed up by considerable authority during late years, particularly in the case of the Blackwell and Albion Mines' explosions. Is not that so?—The Albion was different. I thought it was a dust-explosion under very dissimilar circumstances. It was a shot used in quite a different way.

517. It was similar in this respect: it was the ignition of coal-dust caused by a blown-out shot?—There was more than coal-dust ignited in the case of the Brunner, which is shown by the firing, because the shot had been sufficient to set fire to the coal around. The place has been slowly burning for some time. It was no passing flame that made the appearances we observed in these particular places.

518. *The Chairman.*] You say "burning for some time." How long?—For two or three minutes, for such a show of coking cannot be produced instantaneously by a passing flame, I take it. I put in here a collection of specimens of dust and coking and coal taken from different parts of the mine after the accident. [Exhibit 13 put in.]

519. *Mr. Beare.*] You say that the fact of this blown-out shot would account for the explosion. Are there any other circumstances which would make you come to the conclusion that it could have been caused by anything else?—I did not see anything else that would have caused it. I searched every place where there was likely to be an accumulation of gas, and I saw nothing to prove that any accumulation could have existed.

520. Speaking as an expert, could you say if the effects of a gas-explosion and coal-dust explosion would have been the same, as far as the burning and charring are concerned?—I think that there would have been less charring with a gas-explosion simply, and had the explosion really originated from gas it would not account for the fact that in many of the places we saw the successive indications. I think gas would have expended itself within a shorter distance, and we should probably have lost no lives at all.

521. That is your experience as far as the gas extends?—In the case of a gas-explosion, if you had 10 cubic feet of gas, it would make only 80 cubic feet of explosive mixture. Had there been a gas-explosion it would have been confined to a limited area.

522. *The Chairman.*] Would not the gas have set fire to the coal-dust?—I think it would have been too quick in its action to have done that.

523. *Mr. Beare.*] You heard the evidence of Messrs. Russell and Robinson with regard to the direction the force appeared to go in. They said that it appeared to have come from the lower workings. Have you anything to say in reference to that?—I do not think the indications are such as to warrant that opinion. I inferred from the evidence that they looked upon the blast as having started in the level in the sump neighbourhood. If so, I think it would have taken the most direct line up, and have gone straight up the main incline, where we should have seen the greatest effects, instead of in No. 2 incline.

524. Would you go so far as to say that the men in these bords would have escaped?—I think we should have lost very few men if it had been a gas-fire only; but if there had been a large accumulation of gas, there might have been after-damp formed sufficient to have killed two or three men; but I think the bulk of them would have escaped.

525. In your opinion, could there have been any place in the mine where there could have been an accumulation of gas?—No.

526. Was there any danger of an accumulation anywhere?—In no place more than another; supposing there had been any gas.

527. Who was in charge of the machinery at the time?—We had an engineer in charge of the engine.

528. I suppose there were sufficient men employed to work the machinery?—Yes.

The Commission adjourned at 4 o'clock.