

971. *Mr. Joyce.*] Did you examine the slit in the low side of No. 4 bord? Did you notice where the explosion had burst itself?—It was most difficult to say in which direction the blast had gone.

972. Did you notice the prop in the slit being charred or burnt?—I did not notice it. There was a part blown that way and this way [indicated] towards No. 2 incline and part in the opposite way to No. 3 where the blast had thrown the coal-dust into the roof or stone fall and buried it from 18in. to 2ft. deep.

973. On which side of the prop, the high side or the low side?—The charred dust on these props was very thick. They were in a line with the blown-out shot.

974. On the high side or the low side?—I do not quite understand you, because that bord seems to be driven on the level. I am strongly of opinion that the charred dust has just licked the prop.

975. It was on the low side?—It would be in line with the blown-out shot.

976. That would be the side nearest the blow-out?—Yes.

977. Was there indication of much force near those props?—No.

978. Following down that low side of the slit, you do not know which way the force exerted itself?—I cannot say exactly. It is more than probable that it went down. [Witness referred to his notes]. I have it here, that "The prop opposite the low slit is strongly capped with dust on the low side."

979. And the lower side would get the back-lash?—Yes.

980. *Sir J. Hector.*] What was on the lower side?—Charred coal-dust unconsumed.

981. Was there anything on the upper side?—No. The prop is slightly charred on the high side, as the force going in line here would strike heavily there [indicated], and the rebound would char this dust and coke it. The coke-dust I am referring to now is not like coke. It seems almost in a plastic state—sufficiently distilled to make it cohesive.

982. *Mr. Joyce.*] Do you know whether there was any water in the low-level at the time of the disaster?—I really could not say. There was a certain amount of water when we were examining it.

983. Assuming there was water in the low-levels, and the force of the blast went down that slit, would it not have expended itself in the water?—No; it would go round with terrible force, and strike the pillar on the other side.

984. Assuming the water was there?—The water would not be sufficient to prevent it striking the wall on the other side, but I repeat the water was not there when the explosion took place. It was after the explosion took place. That is proved by the boy being found there, and the fact that he was actually taking coal through there at the time he was killed. The water must have accumulated after the explosion.

985. You have not been in the lower level? I was not in the level where the boy and horse were found, but Messrs. Cochrane and Bishop were. I was down to the lowest level, but not in it.

986. You were not down below that?—No, there was no place to go down below.

987. There are these two bords [indicated]?—I was not there; that is the exploring-drive.

988. Would it not be possible for gas to make in one of these bords?—I do not think so. Gas was never seen there; and in the long prospecting-drive itself there was no gas found.

989. Would it not be possible for gas to accumulate?—I cannot say what would be possible. All I can say is that it did not accumulate gas after the explosion.

990. Assuming gas had been accumulating in the working-places to the east, and the air-current had been coming back to that No. 4 bord, do you not think it might have brought the mixture of gas and air with it?—It might have, but it did not.

991. How can you say it did not?—Because it would not produce the same results if it had been a firedamp explosion.

992. If the explosion in the Brunner Mine had been started by firedamp, would it have produced the same effects as an ordinary coal-dust explosion?—Yes, but it would not have produced the same results as a blown-out shot in that particular place. There is no other place in the mine that shows the same results as round the blown-out shot. The conditions are peculiar to that place. I have seen four or five explosions: one shortly before I left Home, one at Wallsend, and another in the Brunner Mine sixteen years ago. None of these explosions showed anything like the same conditions that this blown-out shot shows. I would not have known this was a blown-out shot if I had not had the experience of three blown-out shots at my own mine.

993. Assuming you had fire there, must not there have been rather slow combustion in No. 4 bord to have produced the coking?—The heat was very intense and rapid for a few minutes.

994. How is it that you did not get the heat running down the slit?—Is it at all likely that it would go down that way when it can come up this way [indicated on plan].

995. You only saw the marks of inflammation in No. 4 bord?—The explosion took place afterwards. What the blown-out shot would do would be to cause a very sudden compression. The air would sweep up the airways, and of course would set in motion clouds of coal-dust; and so long as there was sufficient oxygen this combustion would be continued.

996. Could not the same conditions exist with an explosion of firedamp accelerated by coal-dust?—They do not. In this case there is no other bord which will produce the same conditions.

997. What is the difference in the conditions of other bords outside of this blown-out shot bord and the conditions which would exist in the case of a firedamp explosion accelerated by coal-dust?—There is more coking of coal and coal-dust, showing that a greater heat has been produced.

998. If you had sufficient heat to roast the coal-dust after the explosion, would not you have exactly the same symptoms as now?—No; on account of the intense burning being so much in one place.

999. You mean that at any lower temperature, coal-dust would not have exploded in the same degree?—In that bord?