88. Would not that be a most desirable thing to have your air-crossing in the solid?—Yes, if you had coal seams like they are in England. There you can project you your shafts and work accordingly. You can afford to go to every expense. There you can project your workings after you sink

89. You say that your firemen fire the shots now. Do you know that that has been the case for a long time in a large number of mines in England?—No; I do not know what the custom has

been for the last few years in England. It is in fiery mines that the distinction is drawn.

Mr. Joyce produced a copy of the English rules. Rule 1 states that the firemen are to fire the shots.

90. Sir J. Hector.] It is not necessarily a deputy, but also a miner of sufficient experience who might be authorised to fire a shot?—Yes.

91. I understand from your evidence that you attributed a good deal of the serious results of that blown-out shot to the fact that it was directed downwards at a certain angle, so that it hit the floor of the drive?—Yes.

92. Would it be expedient in your opinion to make provision for controlling the angle at which the shots should be put in, or is it sufficient to leave that to the judgment of the deputy?—I think that, with proper supervision with regard to holing and cutting, to have a blown-out shot would be very rare indeed.

93. Are the deputies you employ sufficiently aware of the extreme danger there is in the shot striking the floor when one blows out?—Yes, that has been pointed out. We have told them of the

risk of coal-dust explosions, and we have taken the steps I have mentioned.

- 94. I understood you to say that if it had been a horizontal shot striking the coal on the opposite side of the bord, probably there would have been no fatal result?—That is my opinion; it was the angle that caused it.
 - 95. Mr. Joyce.] Do you think the shot struck the floor?—Yes.

96. Then the angle was pointing to the floor?—Yes.

- 97. Some of the miners who examined the shot are not of that opinion; that is why I asked you ?-Yes.
- 98. Mr. Skellon.] It is not always necessary to hole the coal?—No. If there is a parting on the floor, that is as good as holing. The men use their discretion.

99. Mr. Park.] Did you see the tramway in No. 4 bord?—There was a tram laid down.

100. Was it past that point [indicated on plan]?—Yes.

101. Do you verify this plan of the blown-out shot [Exhibit No. 8 produced]?—Yes.

- 102. Did that tram appear to be a relaid one?—I would not say that.

 103. Sir J. Hector.] The tramway must have been right through the middle of the level, and this particular part must have been a relaid one?—Yes.
- 104. I mean it does not occupy the position of the original tramway used in making that bord? Of course it would not, because the men would not take coal from that point [indicated.] It has been laid in evidently to strip that pillar [indicated.] 105. Mr. Park.] That is your opinion?—Yes.

106. Mr. Beare.] How many men could have the power of taking powder into the mine?—Only those working in the bords—two miners in each bord. They would take sufficient for one day's work—a tinfull between them.

107. From your examination of the Brunner Mine, would you say that a miner of experience would have any difficulty in finding the return-airway in case of accident?--No miner of average

intelligence would have any difficulty; he would follow the wind.

108. Mr. Skellon. Does the air follow the return straight through ?—Yes; the air comes in the intake in the main level. The west level portion goes down this place here [indicated] and runs up the back incline and through an undercast and away to the east [indicated.] I should say that it divides at this point [indicated.] The other portion runs along the bottom level, and comes back up this incline [indicated] runs along the face, and joins at the same place again [indicated.] And then the combined body goes away to the outlet.

109. Mr. Beare.] Have you been through the return yourself?—Yes.
110. Mr. Skellon.] From the mid-level?—Yes, when I say that a miner of average intelligence could follow it; but if you knew the mine you could take a short cut and get into the return, but only those could do this who are familiar with the place.

111. It was a straight course from the mid-level right through to the extremity of the workings?—Yes, right through to the extreme end. [Witness further explained from the plan the

course of the air.]

- 112. Supposing that there was an explosion, and the lights went out: you say that a miner could find his way out in the dark. What about the turnings?—[Witness explained from the plan the course a man would probably take, the position of the airway, and the course of the air over the dam.]
- 113. I think there would be trouble in following it in the dark. If there are any turnings in a mine, a man in the dark is not likely to get out, but to be lost. Is not that so?—I would not get lost; I would follow the air.
- 114. Sir J. Hector.] Is there any particular reason for leading this airway [indicated on the plan] through each of the pillars?—Mr Bishop wanted to ventilate the bottom level, and that is why he ran it down there.
- 115. Mr. Skellon.] Would it not be better as a means of egress for men to get out of the mine if the airway was straight, especially if it happened that the men were in the dark? -I suppose so.

116. I suppose you do not know why it has not been made straight?—No.

117. Mr. Beare.] In your opinion, as an expert, it would not have made a material difference in the men getting out?—It would not make any difference, except that it might shorten the distance. That is the only thing I can see.