

236. But might not there be a large proportion of firedamp present previous to this explosion?—I do not think it is reasonable to argue on that assumption.

237. Still, you would not like to say it was not firedamp?—There was the distinct evidence of the explosion.

238. From your own opinion, can you say there was no firedamp?—I saw firedamp after the explosion, but it was in such small quantities as not to be wondered at, considering that ventilation had been disarranged for several days.

239. From the appearance of the mine would you say there was not, in your opinion, any large quantity of firedamp? Would the appearance of the mine enable you to swear that?—We went through the various places and tested for firedamp, and found none of consequence.

240. I am not asking you about the firedamp you found afterwards. Can you swear, from the appearance of the mine after you made your inspection, that there was not any large amount of firedamp as the primary cause of the explosion?—I think I have answered that question already. In regard to sufficient evidence, I cannot say definitely what the circumstances were before the explosion from the appearances afterwards. The mine would be very different after the explosion from what it was before.

241. I take it that there may have been a large quantity of firedamp as the cause of the explosion?—I do not think it is at all likely.

242. Do you not know that the artificial explosions they have had of coal-dust have been produced under circumstances that are not very likely to occur in that mine?—Yes; that is quite true. There are very few coal-dust explosions in mines at all.

243. I think the majority of experts state that we can hardly expect these conditions to occur in mines without gas?—No; only on very rare occasions.

244. From your inspection of the Brunner Mine, would any of these conditions be likely to take place?—If you indicate the conditions, I can deal with them individually.

245. Did you notice if there was any very fine dry dust?—There was a moderate amount of fine dust.

246. Was it sufficient to create an explosion?—It is becoming clear that small amounts will cause disastrous explosions.

247. And you found a moderate amount of fine dust in the mine?—And very small coal.

248. It must be exposed to a body of flame to produce an explosion?—Yes.

249. And the temperature of that flame must be very high?—Yes.

250. Could not these conditions be very well produced in the Brunner Mine?—No; there are other conditions required to be fulfilled. The dust requires to be very fine and very dry—quite fine. There was a certain amount of small coal along with the dust, otherwise I should have taken steps to have it removed. I got the coal moved off the main incline.

251. In reference to this blown-out shot, might not the shot have been put in when the bord was being constructed?—Yes.

252. Because there is another shot-hole alongside, to mark where the explosion appeared, in the midst of the same line?—Yes; it is a frequent thing to see, immediately the shot falls, half a hole, the rest having been blown off.

253. In just the same line as the blown-out shot?—Yes.

254. You cannot say whether that shot was put in when the bord was being constructed or not?—I have said already that there was evidence of an explosion on that blown-out shot.

255. If it had been put in when the bord was being constructed—that was some time before the explosion—then the explosion could not possibly have occurred?—I think it was driven a long time before, possibly a year before the explosion.

256. You mean the bords; but I am talking of the blown-out shot. If the charge had been put in two or three days before, no explosion would have occurred in that particular portion of the bord?—If the blown-out shot had occurred two or three days before it would have caused an explosion two or three days before. Now you can see the blistered coal perfectly on the line of force, and small coal driven into the end of the wood—coal charred and dropping from the roof, and blistering all round.

257. Could not these evidences have been produced by an explosion elsewhere?—I do not think they could be the same at every point; they will not fit in with direction.

258. Will that shot fit in with the various directions?—Yes.

259. The explosion went right across the air-current?—That is the custom in every explosion, to keep the supply of oxygen from the air. This explosion went both sides from the blow-out shot, up and down.

260. Gathering intensity as it went along?—Yes; a gas-explosion would be otherwise.

261. A gas-explosion would lose its force as it proceeded?—Yes, unless it met further quantities of gas.

262. You have remarked that you saw Worthley's place, and you remarked that you thought at first that the explosion occurred in that portion of the mine?—I did not say so. I saw there was evidence of an out-flame, and props were scattered, and the top end was charred; but those evidences did not fit in with direction, and it was not to be expected that that would be the point of ignition.

263. You say that the mine was perfectly safe; but we have had evidence to the effect that the return-airdrive, in case of accident, would have been filled with poisonous gas. Is there no way of rendering a mine safe, in case of accident, in the way of keeping the air pure?—Supposing, instead of the return going out, it had gone right up to the goaf, the after-damp would have been sucked up all the same.

264. You think that as soon as the explosion appeared, both the main-drive and return-airway would be full of poisonous gas?—In this case it would, because the seat of the explosion has been near to the return. It is a question of relative distance and relative speed.