

filled the dome and overflowed upwards first. There is reason to believe that firedamp was given off at one or both of these falls; consequently the dome of one or both of these falls filled first. The gas then entered the three bords and accumulated. The gas at the blind or highest end of the bords would no doubt be very pure. If Martin opened the door, as miners do not stand long with the door in their hands, there would perhaps be introduced 100 cubic feet of oxygen into that 68,000 cubic feet of gaseous mixture which Martin ignited. I have taken it as 68,000 cubic feet, but the company's surveyor makes it 78,000 above Martin's head in those three parallel connected bords. The oxygen which Martin could introduce would render the conditions more dangerous because firedamp when present in greater proportions than 16 per cent. is not explosive and it is reasonable to assume that at that higher point it would be greater than 16 per cent.—at any rate, for a short distance. Therefore, the oxygen in the atmospheric air which Martin might have admitted by the door would dilute that rich CH_4 and produce an explosive mixture to be ignited by his cap lamp; if so, that would be the point of origin of the explosion. But I have more to say, and will show that he could not have entered bord No. 6 by the door. You have it in evidence that his coat was found in my presence. We looked for it at a certain point, about 10 ft. or so up the bord from his body.

152. Who found the coat?—The acting-manager, Mr. Penman, who was with me. I said, "What things he had with him will have gone up the bord," and Mr. Penman went along a little bit and found the coat on the ground covered with dust at the place where we expected to find it.

153. You expected to find his coat?—We said, "We will find his coat," and we had found it there within two minutes. Mr. Penman found it.

154. What did that tell you?—That the coat had been blown away from him. He had carried it on his arm. It had been blown up by the force of the explosion towards the door, being a light article. It was not burnt. Martin was apparently walking up the bord when he walked straight into the gaseous mixture. Having a naked light he could not detect gas until the explosion occurred. He walked into this gaseous mixture, which was at first non-explosive, but it got richer and richer as he ascended, until his lamp entered the 5·6-per-cent. mixture, when the explosion took place. His body was not carried a great distance. He was not very much injured. A piece of coal was embedded in his head, but the upper part of his body was uninjured. This supports Redmayne's statement that the explosion is not so great at the point of ignition. Even his hair was not burned. His lower extremities were shattered, and very much injured. I have told you, I think, that I measured 68,000 cubic feet of gaseous mixture above his head. That would be explosive when increased in volume by the richer gas towards the roof. There would, however, be more than 100,000 cubic feet of explosive mixture owing to the plus CH_4 contained in the roof. That is not strange considering that between the day of the explosion and the following Friday I measured 350,000 cubic feet in the vicinity. I also subsequently tested the gas with others, and we all got plenty at the big fall. I went up that fall, and had great difficulty in coming back owing to excessive gas in my lungs.

155. You have got gas there since?—Yes. They put brattice up, but notwithstanding the brattice Mr. P. G. Morgan, Mr. Penman, and myself went up to the end of the brattice at the fall on Friday last; and Mr. Penman got gas at the end of the brattice, where there was a considerable volume of air passing. An explosion took place there and put his light out, and this happened after the ventilation had been well restored and a perceptible current was flowing close to where the gas in the lamp exploded.

156. Did you see any rails in the region where Martin's body was found?—Mr. Morgan, Mr. Penman, and myself saw a pile containing some rails near the place.

157. Mr. Penman has told us that he saw two rails about 10 ft. out from the fall, and that they may have been 5 ft. or 8 ft. in it?—I could not say anything about the number of rails which were sticking out. They were protruding a foot or two above the ground, and I assumed naturally there was a pile.

158. But there were rails there?—Yes, certainly.

159. Would the line W—X on plan be about the spot?—Yes, about it. They were put at the end of the fall.

160.—Mr. Penman puts them at A P?—Somewhere there.

161. In No. 5 bord?—Yes.

162. That is about half a minute's walk from where Martin's body was found?—Yes.

163. If those were the rails that Martin was sent for that morning he was within half a minute's walk of them?—Yes.

164. What kind of an incline was he walking up?—The incline is about 1 in 11.

165. Should not the place where Martin had passed to have got there have been inspected that morning before he went there, and chalked?—If he was to work there it should have been inspected with a safety-lamp; the law requires that all working-places must be inspected before the men enter them. As to chalking, they only chalk the faces where the men are working; they would not of necessity chalk along the travelling-road.

166. Should not the place where Martin passed to get those rails have been inspected that morning?—Yes, that is compulsory.

167. From what you know now, from your observation and from what you have heard others testify, is there any doubt that if an inspection had taken place gas would have been discovered in that bord that morning?—Yes, certainly, it would have been found that morning.

168. That is, if it had been properly examined?—Yes.

169. That is to say, if the company had provided an efficient inspection of bord No. 6 on the morning of the 12th September by a man with a safety-lamp, these lives would not have been lost?—That is true, absolutely. Nobody can contradict it.

170. Did you make an air-test measurement on your last visit?—Yes, with Mr. Morgan and Mr. Penman.