

174. *Mr. Dowgray.*] Is it not a fact that the coaldust theory has been engaging the minds of mining men for a considerable number of years?—Yes, in England certainly.

175. And also in America; the American professors have been studying the matter almost to the same extent as those in England?—Yes, they are testing on a large scale—more elaborate perhaps than ours.

176. You stated that on your first view of this mine, so far as the dust was concerned you did not consider it dangerous?—What I meant to convey was that it would not be described in and ordinary parlance as a dry and dusty mine.

177. But after making the test, what is your opinion now: do you consider the mine a dangerous one by reason of the character and amount of dust there?—I now consider it a dangerous mine as far as the dust is concerned. I did not analyse the dust itself—I only tested it for its inflammability. May I add, about the specimen which I tested, that it was sent to the Dominion Analyst by the Minister of Mines.

178. Do you think it was part of the duty of the manager of the mine, which is certainly dusty, to analyse the dust?—Analyses had been made and published by the Dominion Analyst of the dust of the Taupiri Mine, and I imagine any one reading that analysis would not be drawn to consider it was a very dangerous mine, for the dust contains over 12 per cent. of water.

179. Would you consider a mine like this, where, when men bored holes to fire their shots, gas was given off and could be lit up, to be a gassy mine?—I have not understood that gas has been found in a borehole—a shot-hole.

180. Yes, in a shot-hole bored to fire a charge gas was found?—Yes, I should call that a gassy mine.

181. You would not consider that a mine where naked lights should be used?—Unless the finding of the gas was quite an exceptional circumstance.

182. If gas were found in ordinary shot-holes, say, two or three times in three months?—I should certainly forbid the use of naked lights.

183. Did you go through the place in the stone drive to the main haulage-way—to Dooley's dip?—I do not remember the name; I do not think so.

184. You certainly visited the fall referred to?—Yes.

185. There was gas making from there?—Yes.

186. There was an extraordinary amount of gas there?—Yes, there is certainly gas in the roof; it is now coming out.

187. So it must have come out of the strata?—Yes.

188. One counsel said that if there was satisfactory ventilation it would take away the gas. Do you think that method of ventilation would keep the workings entirely free from gas—bords worked up to 20 ft. and over?—I think the explosion has proved that the ventilation could not have been adequate for such a system.

189. One of the counsel questioned you as to whether a deputy could examine for gas without a ladder if he knew where it was to be expected: is it not a fact that a deputy presupposes gas exists all over, and examines accordingly?—That I understand is the ordinary practice in a mine—that the deputy examines all along the roadways, goes into the working-places, and examines carefully.

190. *Mr. Brown.*] Do you think it is a necessary precaution for deputies to be examined to test their eyesight before they are appointed to the position?—I think they ought to be tested to determine whether they can see and recognize a cap on the lamp-flame.

191. Has it been brought under your notice in Great Britain that a large percentage of these men cannot see a cap?—I think a large percentage cannot see a small cap—a cap you would get with anything less than 2 per cent. of firedamp.

192. Were there not a number of men tested in Scotland last year who failed to see a cap showing 2½ per cent.?—I do not know of my personal knowledge.

193. Do you think that all examining deputies should have their eyesight tested in that respect—for gas-testing?—Yes.

194. Is inert dust used largely in Great Britain?—It is used in some large mines; I think about twelve mines are now using it.

195. Was it a recommendation of the Mines Commission to the Government?—Not by the Mines Commission that I know of. It is a recommendation of the Executive Committee, who are reporting separately to the Government.

196. Now, in regard to breathing-apparatus: I think you stated in your evidence that all mines should have this apparatus for use, and men trained in its use?—What I said was that life-saving apparatus should always be within reach.

197. Does it not require a great deal of training to make these men competent?—It takes some time.

198. Would it not be positively dangerous for men inexperienced in the use of such apparatus to go underground with it where noxious gases existed?—Yes.

199. Assuming that there were no mines with these noxious gases present, how would you train the men?—In England we have small galleries made for the purpose, and the men have to go through them, and they are watched through glass doors.

200. And in many cases do these men not collapse in these galleries?—I have known a man to collapse at one of the trials.

201. Do you think it is the duty of a company to provide these galleries?—I think there should be one such station in New Zealand.

202. Just so?—Some central station where miners might be trained.

203. Would Ralph's Mine have been considered in Great Britain to be a dry and dusty mine?—I think not, although portions are dry and dusty.

204. But, generally speaking, it would not have been considered dry and dusty?—I think not.