Professor DIXON recalled.

232. *Mr. Napier.*] Do you produce a bottle containing coaldust portion of which you tested in Wellington, and which you have referred to in your evidence?—Yes, this bottle contains coaldust a portion of which Dr. Maclaurin and I tested in Wellington.

233. There is an inscription on this bottle, "Taupiri Coal, Ralph's Mine, Mr. Reed's sample": can you say whose handwriting that is?—Dr. Maclaurin's.

234. He is the Dominion Analyst at Wellington?—Yes. [Bottle put in—Exhibit No. 1.]

235. And you received that from Dr. Maclaurin's Department?—We opened one of the boxes containing coal from this mine and ground it up. We made certain tests of the dust, and this is a portion of the same material. This was solid coal which we ground up.

236. Do you remember the Sengennydd disaster in South Wales?—Yes, I remember it.

237. That accident was attended, I believe, with terrible loss of life?—Yes, I think the greatest loss of life in any British explosion in a coal-mine.

238. How long is it since that happened?—About a year ago.

239. Was that mine watered?—Yes, water was being used.

240. I think the coal in that mine is a bituminous coal?—Yes.

241. And much less inflammable than the Taupiri coal from Ralph's Mine?—Yes, it is less easy to ignite it.

242. Would that coal be one of the best as far as non-inflammability of the dust is concerned?—I cannot speak positively on that.

243. Do you know if there was an inquiry into the cause of that disaster?—There was a Home Office (Government) inquiry.

244. Do you know what the report stated the principal cause of the disaster to have been?—Yes; it was stated that the probable cause was an ignition of firedamp that had come down, probably with a fall, and that the firedamp had been carried along an intake road and was then fired, the firing of that body of firedamp then producing the dust-explosion.

245. The dust being gathered up by the ignited gas?—The explosion of the air and gas causing an intense flame, and the concussion stirring up the dust, the cloud of dust was fired and propagated the explosion through the workings.

246. And was it discovered how the gas was ignited?—The only way it appeared to be probable for the gas to have been ignited was by an electric spark from signalling-wires. It was found that the bell employed used with a similar current to that used in the mine gave a spark sufficient to fire firedamp and air.

247. The mine, of course, had been duly inspected by the Government officers?—I presume so.

248. Do you know what the report says?—I do not know of my own knowledge.

249. As far as the report came out?—I cannot say. Nothing was said as to any negligence on that point.

250. *Mr. Wilford.*] I understood you to say yesterday that the sample of dust you examined was the one sent by the Minister of Mines?—I meant to say by the "Ministry" of mines. Perhaps I should have said "Mines Department."

251. Why did you say yesterday that the sample was sent by the Minister?—Because I thought it had been sent by or through the Minister.

252. What did you base that opinion upon, any foundation or none at all?—Yes, because Dr. Maclaurin said he had got it through the Minister of Mines, but whether he said "Minister of Mines" or "Department of Mines" I cannot remember.

253. I think you said you helped Dr. Maclaurin in the test of the dust?—Yes, we did it together.

254. What became of the "grabbed" sample you took out of the coal-scuttle in the hotel here?—I do not remember.

255. I think you said you could produce it?—No, I was referring to the two small pieces I brought out of the mine.

256. Did that get into Dr. Maclaurin's possession?—I do not know.

257. What became of the sample of coal which you took from the coal-scuttle in the hotel here?—I believe it is there, inside or outside the hotel.

258. Did you take it to Wellington?—I do not think so.

259. Could you not be sure whether it was thrown outside or taken to Wellington?—It was too big for me to carry with my luggage.

260. Did you make any test of it at all?—No.

261. You told us that you were informed that it was Taupiri coal?—Yes, I was.

262. You, of course, know that there are many samples of Taupiri coal differing as far as their inflammability is concerned?—Possibly. I do not know that of my own knowledge.

263. Do you know that there are any differences in them?—No.

264. And it was only from information given to you in Huntly that you came to the conclusion that it was Taupiri coal?—I said I should like to have a sample of this coal to take Home, and I believe somebody in the room said that that was Taupiri coal in the scuttle.

265. Now, you know probably all about a Commission which presented its report in regard to the Camerton Colliery disaster in 1893. It was a Royal Commission. I have here a text-book by H. R. Hughes, published in 1904, and on page 435 I find this quotation from the report of that Commission: "We have no hesitation in expressing our opinion that a blown-out shot may under certain conditions set up a most dangerous explosion in a mine even when firedamp is not present at all, or only in infinitesimal quantities; and while we are prepared to admit that the danger of a coaldust-explosion varies greatly according to the composition of the dust,