

230. Is the contrast of a traction-engine and a locomotive a fair test of the efficiency of the spark-arresting apparatus?—No.

231. I would like you to explain that?—A traction-engine may be working possibly at 40- or 50-horse power with not such a heavy draft as a locomotive, and with less chance of throwing anything out, whereas a locomotive may be running at 200- or 300-horse power with 180 tons behind it. The traction-engine is soft in its exhaust, though possibly noisy; but the locomotive, running at high speed, will probably be running at 300- or 400-horse power.

232. A traction-engine never goes at high speed?—No. The traction-engine pressure was given this morning at 160 lb., but I do not know about that. We go up to 160 lb. to the square inch.

233. The circumstances are so entirely different it would be impossible to contrast the one with the other?—It would be impossible.

234. And with a threshing-machine?—That is easier still. It is ordinary, steady work, and there is nothing to lift the fire. In some of the threshing-engines they burn straw.

235. Have you anything else to say on the general nature of the spark-arresting appliances?—I think a false impression exists in the minds of the public on the question of what are called sparks. They see them coming out at night from the chimney, but what they see is not all of the nature that will set fire to a country. Some of it is simply fluff and flame that will not set fire to anything. Anything to set fire to the country must be cinder. There is a great deal of stuff that comes through that has no life in it.

236. You could not use on the locomotive the same chimney that there is on the traction-engine?—No.

237. Occasionally when there are severe grades the engine works heavier than at other times, does it not?—Yes.

238. And there may be a propensity to throw out sparks?—Under some conditions.

239. Can it be guarded against in a better way than you guard against it at the present time?—No, it cannot.

240. Coming to the question of the wattles, you examined the locality shortly after the fire took place in 1896?—Yes.

241. Can you say whether or not there is an unbroken connection between the fire in the swamp and the fire in the plantation?—No, I cannot.

242. Can any one say that at the present time?—No.

243. I think you went over the ground with Mr. Young senior on the 29th December, 1896?—It was a short time after the fire.

244. One object was to see if you could trace an unbroken connection?—Yes.

245. And you could not get through the swamp far enough to do so?—I tried it for a short distance, but dared not do it.

246. Did you form an estimate of the acreage that was damaged?—It spread over an area of 400 acres.

247. You could not form any idea of the value of that area?—No.

248. Have you in your own personal knowledge known of fires caused by gum-diggers in the swamps along the line?—Not from my personal knowledge.

249. So far as the regulations for the prevention of fires are concerned, can you say that, as far as you know, they are carried out on the Auckland Section?—Yes, we have strict regulations on the point.

250. I may take it, then, that everything the department can do, consistent with the efficient working of the railway, has been done to prevent injury to property?—Yes. I may also say that the waste water from the injectors is led into the ash-pan to drown the ashes.

251. Is there anything further you would like to say on the matter?—No.

252. *Mr. Oliphant.*] Can you remember about the year 1896 whether it was not stated publicly by the Public Works Department that the engines had run down—had been worn out—and that a great many of them were not fit for work? The Minister said £200,000 would be required for new engines. Is it not a fact that the engines were run down?—I believe if such a statement was made it did not refer to the actual working of the engines, but to the fact that the colony was short of locomotive-power.

253. Did the Minister not apply for £200,000?—If so, it was to get extra engines. I remember that.

254. To get good engines?—To get extra engines. I know the circumstances. On account of the rush ahead of the settlement of the country and the increase of traffic more locomotives were wanted than the shops could turn out.

255. Did you get any of those new locomotives on the Auckland Section?—No.

256. You have received no new locomotives?—No.

257. You know that some were bought?—Yes. They were distributed on other sections. We did not get any.

258. You are still using the locomotives you had in 1896?—Yes, with others sent to us from different parts of the colony.

259. Locally made?—No, not necessarily. As other sections received new engines they sent some of their engines to us. Some of the engines in use in other parts of the colony would be too heavy for this section.

260. You are using the old class of locomotives, then?—Oh, no. The general efficiency of the engines is not impaired at all. As parts wear out they are renewed. They are kept up to the state of efficiency in which they were originally.

261. As to the question of coal, is it not a fact that if the hard coal were used there would be less danger from sparks?—Possibly there would be.