

true Taupiri coal does not smoulder. It is not a hard cinder, and the life is beaten out of it, so that it is merely fluff that comes away. Some of the coal—some that came from the South—had a hard glow in the centre that would remain when it fell on anything. That was not so with the Taupiri coal, which seemed to burn clean away. When an engine returns to the shed there is very little to turn out. The coal is so clean it burns right away.

313. But if it does go out in cinders, will it not smoulder?—But it does not go to cinders: it goes to dust.

314. *Mr. Oliphant.*] Will the cinders of the Taupiri coal not live for hours in a box?—No, not if they are properly put out. The action of householders is similar to what we do when we bank a fire. If they throw water on the ashes on the top they probably leave a lot of live ashes underneath, and hence the trouble. When we bank a fire we put green coal on top, and let it remain till morning, when by stirring a good fire is obtained.

315. *Mr. Brookfield.*] But there must have been cinders falling on Mr. Wallace's to cause the fire. Assuming them to be Taupiri-coal cinders, is it not more dangerous than hard-coal cinders?—The soft-coal cinder is lighter than hard-coal cinder, and there is more chance of it being dragged through.

316. And there is more chance of it smouldering?—We find, as I have said, that the coal goes to dust.

317. The reason for using Taupiri coal has been from cheapness only?—Yes, and the cry always to encourage local industry. It is the best class of brown coal I have seen, and I have seen most of the brown coal used in the colony.

318. Your experience with the hard coal up to the present has been rather in favour of the hard coal?—Yes. The country has been burned off, or a great deal of it, and I cannot say how much is due to the coal, or to the fact of there being no more rubbish to burn.

319. But, whatever the cause has been, there have been less fires?—Yes.

320. And the cost would be £1,000 a year more?—Reckoning for six months in the year, that would be about it.

321. But if there is more traffic in the summer it would keep up the cost, would it not?—Yes. There is really no dead season in Auckland, as there is in the South. We are busy all the year round. In the winter there is coal to carry, and in the summer the wool and general harvest.

322. The cost would be proportional, then?—Yes.

323. Mr. Wallace, like Mr. Young, also noticed cinders lying near the Papatoitoti Station the other day. Where do you say those cinders or ashes came from?—The ashes are thrown out at the station where the engine stops. What he saw was the cinder from the hard coal mixed with soft. I dare say the fireman had been cleaning his fire there.

324. That would be a proper place to do it?—Yes, at the station; and the man is supposed to put a bucket of water on the cinders.

325. Mr. Oliphant spoke to you of the locomotives in use in 1896. He asked whether you got any of the new ones. Were the new locomotives, so far as the spark-catching apparatus is concerned, an improvement on the engines you are using here?—I do not think so. I have not seen them, but from what I have heard they are not.

326. *Mr. Oliphant.*] How does it happen that it is generally as the engine is running up a hill that the sparks come more into evidence than at any other time?—Because she is working hard then.

327. *Mr. Poynton.*] How often are the appliances examined?—Every day.

328. At the end of the day?—Both at the beginning and at the end of the day. The ash-pans are also examined. We have special regulations in regard to that matter. They are these:—

322. The ash-pans and dampers of all locomotives must be maintained in a perfectly safe condition, so that live ashes cannot fall on the permanent-way.

323. The chimneys in spark-arresters of all locomotives must be kept perfectly clean. Enginemen neglecting this must be reported.

324. The apparatus used for preventing the emission of sparks must be kept in perfect order. All cases of defect must be reported and immediate action taken to remedy them.

329. Does the soot accumulate sometimes above the plate?—Yes, and they take it out when they come to the shed.

330. Some of that would ignite at times and be carried out, would it not?—It might be lifted, but an improvement has been brought in that would bring it back into the smoke-box.

331. Have you tried any of the new spark-arresters on this line? They are experimenting with them in Dunedin?—No, we have not.

332. If you were using hard coal for some part of the year you would have to put a screen in the locomotives?—Yes, we would have to put in a perforated plate.

333. The cost would not be heavy?—No, it would not be heavy.

334. What would it cost for a locomotive?—A few pounds for each engine.

335. How many engines are you using on this section?—About thirty-five. At present we are burning hard coal, at a disadvantage to ourselves, because the engines are baffled with soft-coal appliances.

336. Do you find in your experience that the regulations are observed?—Yes. We are always on the lookout for that, and at the beginning of the season a warning is given to all the men to see that the appliances are in good order.

337. What about surfacemen: are they instructed to report on any fires?—Yes.

338. *Mr. Brookfield.*] How many complaints do you get in a season about fires?—Over what period?

339. Say, for the last five years?—I could not give any idea.

340. *Mr. Poynton.*] You will prepare a report to show the number?—Yes, I will do so.