

309. *Mr. Duncan.*] Where did these first drivers get their experience?—I think I was one of the first drivers in New Zealand.

310. We will leave you out of the question.—They gained their experience by having the engine to work, and by finding out the difficulties they had to contend with. The point is this, if a man has to run an oil-engine he must know all these various technicalities, and then he can do it.

311. Do you know that the Marine Department allows an engineer to go on board, and that the owners will accept this man's services with a certificate?

312. If you took a man out of one of the very small boats in Auckland, and put him on board the "Monowai," he would be nonplussed for a long time, and yet the Board of Trade, although he cannot start the freezer or hydraulic plant and similar machinery, allows him to go on board as an engineer. Do you not think there is as much gear connected with freezing-machinery as there is with an oil-engine? The same applies to a triple-expansion or compound engine driving dynamos; there is as much complication with that machinery as there is about an oil-engine?—Oh, yes.

313. And quite as much gear in an hydraulic plant for steering and hoisting as in an oil-engine?—Yes.

314. And yet they would take a man out of a small vessel in Auckland, and the owner would allow him to go on board a large vessel to work this machinery?—I do not know as to that.

315. *The Chairman.*] Is it possible that an engineer, who is able to go on board the "Monowai" and be certificated by the Marine Department would be incapable of examining drivers for oil-engines?—Yes, he could not do it. For instance, take any ordinary chief off the steamers, providing that he had not made a study of an oil-engine, I would put him on my launch, and he would not be able to work it; but it would take him a very little time to do it if I was there to tell him what to do, and to give him the theoretical information. He would then be able to do it in a jiffy.

316. *Mr. Duncan.*] In twenty-four hours?—Yes. But if I was not there to give him some tuition he would not be able to do it.

317. Do you know that the man who drove the "Mavis" had no experience, and could drive it all right?—I do not know of it.

318. Did you teach the man who drives that vessel?—No, but I presume he had tuition.

319. *The Chairman.*] Do you know the "Medora"?—Yes.

320. Do you know whether an advertisement was put in some of the Auckland papers for a certificated engineer?—Yes.

321. Do you know whether there were any applications sent in?—I believe none—that is to say, the advertisement I believe you refer to was in regard to the starting of the engine in a limited time.

322. Are you aware whether any engineers applied for the position of engineer on that boat?—I believe they did, but it is only what I have heard. It did not interest me particularly at all. In fact, it is an outside question that does not concern me very much, beyond that I would like to see the matter settled with regard to the small boats, and for a suitable examination for the others.

323. Will you explain what you mean by small boats?—Boats carrying engines up to twenty-horse power. I am strongly of opinion that those boats should be exempt.

324. Would that be irrespective of whether they were within river-limits or sea-going vessels? Of course, within river-limits they could get shore assistance.—I think it would be necessary to qualify shore-limits to a certain size, and say that it was not necessary on a twenty-horse-power boat to carry a certificated man.

325. You agree with Mr. Lane that a man should have some technical knowledge?—Precisely. I am in no way averse to engineers.

326. *Mr. Carson.*] What would you consider a satisfactory examination?—In the first place, a man should show that he is capable of using tools, and should, preferably, have had a certain amount of shop-experience. He should be able to satisfy the Examiner by a written examination and a verbal examination as well, and be able practically to illustrate his capability of doing the work if anything went wrong.

327. Would you specify any period of shop-experience, or specify that he should demonstrate his knowledge?—I think, in some cases for the smaller boats, two years' shop-experience would be any amount.

328. That is for the work he would have to do?—Yes; but I think there would be a difficulty in finding men in the shops to do the work. I doubt if any young fellow who has opportunities would go for £8 a month.

329. I understand that an engineer would qualify himself quicker than anybody else?—That is a foregone conclusion. For locomotive-driving a man who comes from the plough is best, for the simple reason that his work is very difficult to do, and he has to have a great deal of pluck to do it. If a man knows all the little technicalities of an engine he drives it very carefully, as he wonders if the tires, &c., are all right. An educated man is generally the worst driver, because he knows too much. As a rule the locomotive superintendent engineers in the Old Country express the opinion that the best driver is the man who comes from the plough-shafts; so that it does not follow that the best qualified man here would make the best driver.

330. *Mr. Lethbridge.*] I take it that if it is a sea-going vessel, you want a mechanical man; but for an ordinary launch you consider there is no necessity?—No, up to twenty-horse power. When you get larger powers the owners will look after their own interests—it is so entirely opposed to self-interest that a boy should be put in charge of engines which are worth £600 or £800 apiece.