357. Have you inspected any vessel where the driver was not a certificated engineer?—Yes, the "Toroa" and another.

358. In examining those vessels, how did those men compare with those who had certificates?—The man in charge of the "Greyhound" is a mechanical man, and I might say that mechanical genius is like that of poets and statesmen. Some do not require to be made—they are born; and I think that man was a born tradesman and very clever.

359. As you say you are thoroughly conversant with the construction and working of oil-engines, do you think the driver of such should be a certificated engineer, or a man having mechanical knowledge and experience?—A man with mechanical knowledge seems to get on very well with the oil-engine, with experience.

360. Would he be as competent as a marine engineer?—The men I have come in contact with—I think there are perhaps a dozen and a half—with the exception of the man in the "Toroa," have all been third-class or river certificated men. They had steam certificates and there seemed to be no trouble at all. Steam experience seems to suit them thoroughly well.

361. Take the "Greyhound": was he a certificated man?—He was a mechanical man, but held no certificate. But, as I said before, he is a genius—a very clever man with tools. I dare say he could true-up a piece of iron and file it as accurately as a lathe could do it, but it would take a long time.

362. As the result of your experience, do you think these drivers of oil-engines should have some knowledge of tools, as well as experience in driving, before they are permitted to have charge of an engine?—I do not think a driver wants much experience in driving, because it is very simple; but he should have some experience of tools, and be able to do little repairs.

363. What experience?—He should be able to use the hammer, chisel, and file, and these steamers should always have a good kit of tools for these men.

364. *Mr. Symes.*] You say you have been sixteen years in Government employ, and fourteen years as an Inspector of Machinery?—Yes.

365. You have had experience both of oil-engines on these boats and gas-engines on shore?—Yes.

366. Is there any difference between the two?—The mechanism is very much the same. They both have pistons, and are very nearly related.

367. There is as much danger with one as the other?—With the engine I should say there is.

368. Danger to what?—Danger to life and property with the engines.

369. As a matter of fact, is there much danger with either, if any?—Not under a competent man; very little danger.

370. I would like to know what you call a competent man?—A competent man is a man who should thoroughly understand his business. Of course, all engineers are not competent in their profession; they may degenerate as years go on.

371. You heard a man here, in evidence, say that his child, nine years of age, could start and work one of these oil-engines?—Yes.

372. You would think he would have more concern about his own child than a hired man?—Yes.

373. He said he would allow her to drive an oil-engine before he would allow her to drive a buggy with a pair of restive horses?—Yes, I should say so. I would prefer an oil-engine to frightened horses.

374. How long do you think it would take a man of ordinary intellect to learn to start and stop an oil-engine?—In a quarter of an hour an ordinary man could understand it all. If shown about twice how to turn on the air and oil, and to use the battery all right, you would be able to do it yourself.

375. What are oil-taps?—It is the supply, just like turning on the steam in a steam-valve. There is just one oil-tap and the air-tap.

376. Would it be absolutely necessary for the broken parts of one of these engines to go to a workshop?—With a novice on board it would. With a mechanical man having the tools on board it would not.

377. Supposing he had the tools on board, of course, he could make pins, bolts, and nuts, if he had a set of dies?—He could do a lot. It depends greatly on the art of the man.

378. Did you have to carry material on board as an engineer?—You can very often find that on modern ships you can make rods up to 3 in. diameter. A practical man who can handle his tools can do wonders on board ship.

379. We had it in evidence this morning that a marine engineer—third-class, I think—had been six weeks on board one of these vessels, and had not been able to work the engine; he rubbed his hands with cotton-waste, and looked very wise?—It was a second-class engineer.

380. Can you give us any reason why he should be six weeks on board, and yet not be able to work one of these engines?—I can give no reason. He simply did not want to work it. There is nothing to work; but if there is a flaw or defect, an engineer can notice it in time. If an engineer wants to do anything he does not do it at sea; he does it in port. All work that is done at sea is caused through accidents. An experienced man can see defects and prevent accidents. While the engine is going he can read his book.

381. The man spoken of was absolutely incompetent, although he held a certificate?—Well, he simply did not want to work the engine.

382. Do you not think it is a great hardship to people that they should be compelled to hire a man like that at so much per month?—They are not compelled to take that man.

383. But how are they to know? They have certificates issued by the department, and in this case it was a second-class certificate held by a wooden man?—They should not have had him without inquiry. The "Aotea" had a man with a first-class marine certificate who was quite