

three years?—That would be a very good experience if an examination was instituted. A third engineer on a vessel legally qualified to carry passengers must have served five years for a steam-vessel.

129. *The Chairman.*] If a man were at work in a shop, engine-constructing and repairing for three years, could he not take charge of the engine in a vessel like the "Huia"?—Yes, if not less than three years' shop-service after examination.

130. *Mr. Houston.*] Then, with regard to vessels inside restricted limits, what qualification do you consider necessary for driving an oil-engine?—I have not sufficiently thought of that. That requires careful consideration. Some of our river-limits are very extensive.

131. Clause 3 of the prayer of the petition says: "That a competent Examiner be forthwith appointed to conduct such examinations." You say "That there is nothing (if an examination is to take place) that an Inspector of Machinery, who at present examines engineers, cannot undertake, and I see no reason to prevent the present Examiners conducting such examination." Do you consider the present engineers conducting these examinations for steam-engines are capable of examining men for certificates for driving oil-engines?—Yes, I should think so.

132. Do you consider that an Examiner who examines persons for certificates as engineers on board of vessels is capable himself of being an engineer and driving the machinery on board a vessel?—Yes.

133. You consider that he ought to be?—Yes.

134. Do you mean to tell me that the Examiners we have at present for examining engineers understand this oil-engine question?—I do.

135. Are you aware that an advertisement appeared in Auckland from Messrs. Briskie, owners of the "Medora," offering £10 to any certificated engineer, first, second, or third, to go down and start the oil-engine on the "Medora," and work it down the harbour?—No, I am not aware of any advertisement, but I know there was money offered.

136. Then you are aware that there was not a single engineer who accepted that offer?—I do not know that.

137. As a matter of fact, no engineer accepted the offer?—I do not think any engineer would go down on the offer of that sort. He would treat it with scorn.

138. *The Chairman.*] Why?—He would treat it as beneath his notice.

139. Why would it be beneath his notice?—Because it was a challenge from the master of a sailing-vessel, *re* machinery.

140. Do you want to amplify that?—Here is a man, the owner of a sailing-vessel, advertises for engineers to go down and start an engine: do you mean to say that any engineer of note would go down at the beck and call of any one to start an engine?

141. Suppose an oil-engine was in a vessel here, and the captain said he would give £10 to any engineer to start the engine: do you think any young man would refuse to accept the offer?—The only reason in this case was that it was considered to be downright cheek. The men stood on their dignity.

142. *Mr. Houston.*] How do you know they stood on their dignity?—I heard so. Mr. Blackwood offered on one occasion to take up a wager, but the master backed down by saying, "I did not mean you, but the other man," and it did not appear in the papers. There should be no animosity like that in the matter of trade.

143. *The Chairman.*] It is not a question as between oil-engines and steam-engines. We want you to help the Committee to come to some definite conclusion with regard to this petition. When we got your report yesterday we did not feel at all satisfied. Of course, you have given many explanations this morning which may be considered so far satisfactory, but in all questions and answers we want you to assist the Committee. If there is any injustice done to the owners of the oil-engines, we desire that there shall be some rectification.—Yes.

144. *Mr. Houston.*] Are you aware whether the present Examiners for certificates for driving steam-engines have had any experience with oil-engines?—They would have.

145. Have they now?—Yes.

146. How did they get it?—At the surveys, and at the building of these engines at Auckland, and on board these vessels. They have seen all the different parts put together, and know the principle on which these engines work.

147. You said, in part of your report, that all these engines were imported from America?—I qualified that in the beginning. I have made up from time to time a synopsis of the different features of the engines, gathered from the best sources, for the benefit of the different surveyors, and, I must say, most of the engineering men I have applied to have been very kind in giving the information. I have embodied these remarks in a paper. I say it is for the owners themselves to get practical men if they want to get the best results out of the machinery.

148. Are you aware of any vessel where the oil-engine is the sole motor-power?—Yes, there are several launches in Auckland Harbour.

149. As regards these vessels spoken of in the petition as going into the bays and estuaries and up winding rivers, are you aware whether in those vessels the oil-engine is used solely?—No.

150. Then they have sails as a motor-power?—For the simple reason that it is too expensive all the time. It is three times as expensive as coal.

151. Take a vessel running from Auckland to, say, Mangonui, 180 miles: how long do you think the oil-engine is in use during the trip?—Perhaps till it gets clear of Tiritiri and clear of the heads at Mangonui; five hours on a single trip and five hours on the return.

152. Then, it would require a certificated engineer to be on board such a vessel as that for a five hours' run?—They might make four trips a week. A smart vessel, with a big power, might do that. That was the first pretext given against carrying engineers, because the engine did so little work; but when the permit to run on since was introduced, then, the moment they started