

86. *The Chairman.*] You speak of the cost varying from £25 to £60 per ton. Do you mean to say that the quality of the boats, apart from the fittings, would make that difference?—Oh, no. There is another item which controls the cost very much. It depends upon the rules under which you have the boat built, whether it is under the Board of Trade, British Corporation, or under Lloyd's. For instance, some people are satisfied with fewer bulkheads than others.

87. What would be the difference, apart from the upholstering, between the cost of a low-class vessel and a high-class vessel?—I could not tell you nearer than I have done. £60 a ton is the extreme. That was paid for a yacht for an American millionaire.

88. Do you know the "Rotomahana"?—Yes.

89. Do you consider her an up-to-date boat?—I could not say. I believe she is an old boat; but, as far as the hull is concerned, a matter of ten years does not make any difference. It is the engines. We have a vessel on the Atlantic now which has been running for twenty-five years, and she runs faster now than she did at first, owing to a change in her engines.

90. Are you acquainted with the character of the engines and boilers of the "Rotomahana"?—No; but if they are compound engines they are certainly not up to date.

91. *Mr. J. Hutcheson.*] Do you think there would be any difficulty in getting a steamer of sufficient capacity to steam twenty knots under favourable circumstances, and which would have sufficient reserve horse-power to insure her making the passage at all times at the rate of sixteen knots an hour?—No difficulty whatever.

92. Then, as supplementary to that question, what do you think, from the economic point of view, would be the necessary horse-power to have in reserve over and above the sixteen-knot capacity to insure sixteen knots being maintained in a 2,000-ton vessel of the most modern type, with whaleback decks both fore and aft, and everything favourable to the non-resistance of wind and weather, such as they have at Home?—I should say sufficient horse-power for another two knots.

93. *Mr. Buchanan.*] That is, you require an eighteen-knot boat to insure sixteen knots?—Yes.

94. *Mr. J. Hutcheson.*] Had you in your mind the fact that there were Government railways at both ends, and the possibility is that it will be a Government service connecting them and conveying mails?—No; I did not think of that. I was thinking of a private company.

95. And you do not think the present actual service utilised as it is is out of date?—No; not at present. I will qualify that by saying that if the Government owned the steamers that ran it, it would be to their interest to make them more economical. If I am rightly informed, the engines that are running now are compound, and they should be triple-expansion.

96. *Mr. Buchanan.*] When you were asked whether a boat calculated to run sixteen knots would burn more coal than a vessel capable of steaming twenty knots but running only sixteen knots you said that the twenty-knot boat would burn less coal?—Yes.

97. Would not that apply more to the boilers than to the engines; so if you had boilers calculated to give steam for eighteen-knot engines, then the sixteen-knot boat would take just as little coal as the twenty-knot boat?—The economy is chiefly in the boilers.

98. And has nothing to do with the engines?—Oh, yes, it has, for as soon as you reduce the speed you can economize in the cylinders. Instead of carrying the steam to the half-stroke, you can cut it off, say, at the quarter-stroke. In the "Ionic," with quadruple engines, we expand down from 200 lb. boiler-pressure to 6 lb. in low-pressure valve-casing.

WEDNESDAY, 3RD AUGUST, 1898.

Mr. JOHN BONE sworn and examined.

1. *Mr. Buchanan.*] You are captain of the s.s. "Ruahine"?—Yes.

2. I suppose you are aware of what the Committee have generally in view—namely, the best means of connecting Wellington with Lyttelton by a fast line of passenger steamers. How long have you been in the New Zealand trade?—Twenty-eight years.

3. No doubt you are pretty well aware of the steam traffic between Wellington and Lyttelton, as also the average weather to be contended with?—I cannot claim to have any knowledge of the passenger trade, but I do know something about the weather.

4. Perhaps the most convenient way would be if you would give the Committee your idea of the class of steamers that would be required to run a sixteen- or eighteen-knot service to connect the two ports, taking the average weather?—You mean that you would require a steamer to run sixteen knots on the average, or do you mean a steamer with a trial speed of sixteen knots which would run day by day at a lower speed—do you mean that or do you mean that you desire a steamer which would run more than sixteen knots?

5. Two or three different speeds have been mooted by the Committee, and it would be more to the point simply to deal with the speed which the steamer would be expected to keep up between the two ports so as to keep the time-table arranged for unless in very exceptional weather?—Then you think sixteen knots would do. Is that what you mean?

6. Take a basis of sixteen knots?—Then you would want a steamer which would do at least eighteen knots on her trial trip. You would always want to have a little speed in hand. I think taking it altogether that is the margin of speed allowed on the Atlantic liners, and also in the case of two special steamers which have been lately built by the P. and O. Company to run between Brindisi and Port Said. They are vessels of about 1,800 tons, 300 ft. long, and they run at twenty knots. They have twin screws. Then again you have the type of steamer of the Great Eastern line running between Harwich and Holland. They are 300 ft. long with a beam of 38 ft.