

20. Your idea, I take it, is this: If the work may be considered at a future time it should be done by fresh legislation altogether?—Yes. I would say that at the public meetings held with regard to the question, at Gisborne, there has been a great difference of opinion about this work. There has been a strong protest on the part of people in Gisborne, as well as those along the coast, against this work.

21. *The Chairman.*] With regard to the Government taking charge of this unexpended balance, would it not be better that the Government should refund the money and let the yearly interest accrue, not with the view of relieving the district, but of ultimately paying the loan off?—What I would ask for the petitioning district is that if any money be left over they would have a claim to have that money set aside to free them from liability.

22. It appears they took £25,000 out of the loan to form a sinking fund?—Yes. And the Act of last session condoned this; and also authorised the sum of £14,941 for an old debt besides.

[Mr. Graham was proceeding to explain that the old debt was to be repaid by annual sums from the general to the special account, when the Chairman suggested that Mr. Graham should make a separate statement.]

23. *Mr. Allen.*] How much of the part of Cook County petitioning is in the rating district? What proportion of the whole rating district?—I should not think it was very considerable as compared with the whole rating district. It is a very sparsely settled district. I do not suppose there are more than four hundred or five hundred people in it. You can easily obtain that from officers of the Board.

24. *The Chairman.*] Do you wish to have any witnesses examined?—I do not know whether the Committee would like to hear Sir George Whitmore or not. He is a property-holder in that district.

Mr. JOHN THOMSON, B.E., Engineer to Gisborne Harbour Board, examined.

*Mr. Thomson:* I am Engineer to the Gisborne Harbour Board. When I came to Gisborne, three years ago in July, I was told to make a survey of the bay and report upon the best site. It appears there was some dissatisfaction with Sir John Coode's plan. I made the survey, and prepared plans, and submitted them to the Board, and then I took them down to Wellington. I was here for several days, and went over them carefully with Mr. Blackett, the Government Engineer. I returned to Gisborne, and then I prepared a second set of plans—what is known as the Stony Point scheme—and sent them down to Wellington, so that the Government had both schemes before them at the same time. By-and-by we received notice that the Government had approved of what is called the river scheme—the work we are now carrying out. When I went to Gisborne I was told there was a great easterly drift of sand going from the west side to the easterly side of the bay along the Waikarāe Beach. When I was told this I did not believe it. Sir John Coode's plan, in order to provide for this drift, provided for the construction of a large viaduct, and then he intended to build a concrete wall with two arms to it, at a cost of about £245,000, including the arms. We made sections all along, and took observations of the tidal currents, and everything of that kind, and never got the slightest indication of any current going in this direction. It was on this account that I pointed out there was no occasion for an open viaduct, and advised the construction of a solid structure. The drift of the sand was in the opposite direction to what Sir John Coode was told.

25. *Mr. Whyte.*] Is the drift very considerable?—No. Compared with similar places on the west coast of the North Island, such as Patea and Waitara, there is no drift of sand at all, comparatively speaking. I have been on that coast several years. I have seen it gather 14ft. high, and make 18in. in an hour.

26. *Mr. Ross.*] Can you explain why you abandoned the iron viaduct in favour of a solid structure? Does the change of position account for that?—Well, I took this because I wanted the river-current to scour along the pier and keep it clear of sand.

27. *Mr. Whyte.*] Is there any sign of the bar shifting further out?—No. When I went there in 1885 the bar was further out than it is now. [Witness indicated on the map the position of the bar at the mouth of the river, and indicated how it had shifted. He also produced the approved plans of the harbour work.]

28. *Mr. T. Thompson.*] If carried out to the extent proposed, will it be any good to shipping?—I do not think there is any doubt about that.

29. *Mr. Whyte.*] What depth of water would there be at the end of the extension?—13½ft. at low water, spring-tides, on the sand, not the rock; the rock is 4ft. to 5ft. below that.

30. Have you any reasonable expectations of the sand clearing away?—I had some soundings made three months ago 500ft. ahead of the present works, and at only one point on the line was there the same depth of water that there was in 1885. It varied from 1ft. to 2ft. deeper, so that the sand is clearing out.

31. Is the work already done any good at all to the district?—No good whatever.

32. What do you expect to gain by the extension of the works?—To allow vessels to come alongside the wharf which have at present to be attended to by lighter. From 4s. 6d. to 6s. per ton is the rate at present charged for lighterage.

33. *The Chairman.*] What class of steamers could come alongside the pier?—In a report I made to the Board on the 12th October, 1886, I had a table indicating the approximate draughts of vessels. These draughts were—"Manapouri," 18ft. 6in.; "Wakatipu," 17ft.; "Hawea," 12ft. 6in.; "Penguin," 13ft.; "Australia," 11ft. This pier will take us out into a depth of 13ft. 6in. at low water, spring-tide; at neap-tide there will be from 12in. to 18in. more water.

34. What is the greatest depth of water a vessel could draw and remain at the pier in moderately rough weather?—About 9ft. 6in. in rough weather at dead low water.

35. *Mr. Tanner.*] How, then, do you make out the "Australia" could lie alongside in such weather as you indicate?—Here is my report, which gives the explanation. This vessel, the "Australia," could lie alongside the pier for 250 days in the year, because of the percentage of fine weather.