

value of the harbour for landing cargo?—I think in ordinary weather small vessels and steamers could lie there, if the breakwater were run out to *F F*. They could land cargo with safety during five days out of the seven. I do not think it would be safe for a sailing-ship to go in there and be moored. Sailing-ships could, of course, go in in fine weather, and land their cargoes, but I doubt whether a ship of any size could go in in bad weather, in fact I am pretty sure it would require more water.

696. *Mr. Weston.*] What would be the effect if the breakwater were carried out another 400 feet from *F F*?—That would lessen the “range” by half, and it would actually make the harbour half as big again.

697. Would or would not vessels lie alongside the breakwater with as much ease if that were done?—Yes; with much greater ease. But I doubt if sailing vessels would be safe, if the breakwater were carried out to the lighthouse.

698. In a south-west wind, how far could a vessel lie distant from the breakwater, with safety?—It is the north-west winds we have to fear.

699. How often during the year, do you suppose, a steamer would be unable to approach the breakwater, if it were completed to *F F*?—I should think about three times a month.

700. *Mr. Moss.*] It is not a breakwater which is being put up there, but a wharf, which would be suitable for vessels in ordinary sea?—Yes; that would only apply to vessels that were prepared to leave at any moment.

701. Could a steam-tug lie there safely?—No; unless she lay in the Waitara she would not be safe in bad weather.

702. Could a tug-boat run into the Waitara when it would be too rough to lie under shelter of the breakwater?—Yes.

703. *Mr. Pitt.*] Would that breakwater be available for a vessel loading for London from New Plymouth?—No; unless there was a steamer lying alongside ready to tug her off.

704. Supposing the breakwater were extended to *F F*, what would be the benefit?—I think there would be some benefit.

705. Without this eastern mole?—Yes; I think coasting steamers would use it five or six days out of the seven.

706. *Mr. Barron.*] You are sure that steamers lying there would have to be prepared to go away at any moment?—Yes; but coasting steamers never lie at Taranaki except during the day, and with heavy north-west weather they could not lie at the breakwater; but, fortunately, the north-west winds do not last very long.

707. What shelter is there at Opunake? Has that port any advantage over New Plymouth, as a place for shipping?—It has not at present; but it could be improved by running out stone-work. I dare say in a hundred years' time it will be a great port. We could get better port accommodation at Opunake than New Plymouth for about one twentieth the cost.

708. *Mr. Weston.*] Can you give any information with regard to the Waitara Harbour? Could vessels the size of the “Hawea” be enabled to get there?—I do not think so; the sands shift to the extent of thousands of tons in one day. I do not think any money would make a satisfactory harbour at Waitara.

709. What vessels could get into Waitara?—Those drawing about 7 feet or 8 feet are about as much as can be depended upon.

710. Would vessels drawing 7 or 8 feet experience any delay in entering or getting away from that place?—No; except that which you would experience at ordinary bar harbours.

711. Can any of the Union Company's steamers get into Waitara Harbour?—None.

712. Could the Waitara be made available for the Union Company's steamers?—I do not think so; it would cost too much money.

712A. How does that effect the channel in the river—has the channel been dredged at all?—I believe it has been dredged in one place, but all the rest of the river is much deeper than the bar.

713. Then the river is likely to remain in the same condition as it is now—that is to say, it is not likely to become less useful?—It is not likely to become less useful unless there is less rain. The Manawatu, Otaki, and other rivers on the coast are becoming less useful in consequence of the want of flood-water from rains. But if the Waitara goes on for the next fifty years as it has been going on for the last twenty years, it will be of very little use.

714. Then the value of the Waitara River is by no means a matter of certainty?—It may not decrease in usefulness during the next fifty years at the rate which it has decreased during the past twenty years.

715. *Mr. Moss.*] There is another harbour on the West Coast called Kawhia; is that a good harbour?—That is the best on the West Coast, except Kaipara.

716. Is it a harbour that you think would make a good harbour of refuge?—Yes; in olden times it was always considered a harbour of refuge.

717. Why is it not so considered now?—Probably the Natives would frighten away anybody who went there. I may say that about once a year, during the last ten years, I have taken soundings at Kawhia. I sounded there about six months ago.

718. What is the depth at the entrance?—Fourteen feet at low water; but you could always depend upon 10 feet added to that at high water, at the least. I have never found it shift; it is a sandy harbour, but the sand has never shifted.

719. There is limestone country around it, I believe?—Yes. I know it is a really good harbour.

720. Could a vessel of any size enter the harbour?—A vessel drawing 16 feet or 17 feet could enter Kawhia Harbour in any weather, at high water.

THURSDAY, 4TH AUGUST, 1881.

Captain ROBERT JOHNSON, Nautical Adviser to the Marine Department, examined.

721. *The Chairman.*] What is your official position, Captain Johnson?—My present official position is Nautical Adviser to the Marine Department.