

1820. And it shallows to what?—It comes down to 14ft. 6in. sometimes in the winter time. That is about the lowest. There are more vessels jammed outside coming in than going out.

1821. Why is that?—Owing to the danger of being thrown on to the tip-heads. They will not steer in broken water.

1822. It is owing to the want of steerage-way?—Yes, due to the break.

1823. What do they do when they are compelled to stand off?—Very often they have to anchor.

1824. Is there a good anchorage?—Very good anchorage.

1825. In what depth?—From 10 to 15 fathoms.

1826. In what depth have you seen a break?—I have seen a break in 13 fathoms.

1827. You said it was good solid holding-ground?—Yes, very good.

1828. Have there been any accidents to vessels anchored there?—No, very rarely. The only danger is of breaking their windlasses in the heavy surge.

1829. *Mr. Brown.*] Has that occurred at all in your experience?—Yes; a good few of them have broken their windlasses here, particularly the steam-windlasses they have got now. They are very easily broken.

1830. *The Chairman.*] Is that when they are trying to lift the anchor?—Yes; the vessels do not ride heavy.

1831. You have nothing to do with the wharf-fronting now?—I merely shift the vessels.

1832. Could you describe how: do you generally slue them?—It all depends upon the vessels. The larger-sized ones have got to be slued before they are loaded.

1833. Do you do that?—Yes.

1834. Do you encounter any difficulty in sluing them under the present arrangements?—No; but it depends upon the current: if there is much current it is pretty difficult to get round. We have to wait until nearly high water if there is much of a run in the river.

1835. Does high water check the current?—Yes.

1836. Even in heavy freshes?—Yes.

1837. How high up does the water come?—The water backs up 9ft. 6in., and it will go down to 2ft. or 3ft. on the gauge. It will run like a mill-race at low water.

1838. How far does it ordinarily run up when there is no fresh in the river?—I do not know how much above the wharf it checks. The current always runs down.

1839. How long are the vessels ever stuck up, afraid to cast off to slue?—Sometimes they are detained perhaps five or six hours.

1840. Never a day's length?—I will tell you where there is some delay too. If they are loading shipping at the fixed cranes, and want to shift place to suit the hatches at low water, they cannot if there is any run in the river.

1841. This delays loading?—Yes.

1842. Is there any obstacle in the river, or any danger to vessels sluing, from these groins?—No; there is no danger with an ordinary crew if you do not try to swing them with too much fresh on.

1843. It would not be damaged at all with these training-walls on the north side?—Not at all; it shallows too much; she would ground too soon. A vessel could not shoot; she would take the shingle first before she would reach the stone walls.

1844. Have you seen much improvement in the harbour in your time?—Yes; a good deal more water during the last five years.

1844A. Are the stoppages less frequent?—Oh, yes! it is only the weather now we have got to contend with. There is another thing I would bring under your notice. There is never more than 8ft. in the river below low-water zero. Whatever the depth of the bar, this part of the river never alters. I mean the water on the river-bar, abreast of the lagoon.

1845. What about freshes or droughts?—There may be, perhaps, 6in., but it is quite independent of the bar.

1846. That is therefore the limitation to the port, no matter how deep the outer bar was?—Yes. The depth of water on the bar at springs is 18ft. 6in., and at neaps 16ft. 6in. A few go, say, 19ft.

1847. This is really the workable depth of the port?—Yes.

1848. What is the draught of vessels entering here?—It is 16ft., but they could not come in if there was any sea on; they would only be detained in the roadstead. There is not more than 16ft. at the wharves, average low water. They would be aground.

1849. With 16ft. entering the bar, what about the water inside by the wharves?—As I tell you, there is always a foot of water on the gauge. It would never go down to zero, except in very fine weather.

1850. What is the largest vessel that has ever been in here?—The steamer "Pukaki," 843 tons register, draught 16ft. 9in., carried 1,711 tons of coal, and the barque "Mersey," 963 tons register, draught 13ft. 6in., carried 212 tons of coal and 839 tons of coke. The "Mersey" was a very light draught, but she was very long.

1851. About the question of tugging: how does the tug-work? have you any difficulty?—No. Of course the tug is getting used less every year.

1852. There is no chance of a vessel sailing in?—No.

1853. How do you manage with sailing-vessels?—They are getting less and less—dropping off, in fact—not worth talking about.

1854. *Mr. Brown.*] The tug is only for sailing-vessels?—Very few steamers tug here, only large ones. It is chiefly for sailing-vessels.

1855. *The Chairman.*] Is that in coming in or going out?—They must tug them both ways.

1856. What are the charges for the tug?—The large boats £15, and for small ones so much a ton.