H.-15B.

by trawling, lining, and other means, and its value as a payable fishing-ground proved; and the vessel would have an opportunity each year of earning part, if not the whole, of the cost of her upkeep, and also assist in supplying the market with fish at the season when it is scarcest and most in demand.

I do not think that there is any necessity for obtaining the service of a marine biological expert from another country, as I think we should utilize the services of our own scientists and students in carrying out the work. This would not only save a considerable amount, but would also develop interest in parine his leviced marks are proported in the service of a marine biological expert.

interest in marine biological work amongst our Professors and University students.

The experimental trawling expeditions of the "Doto" in 1900 and 1901 and the "Nora Niven" in 1907 and 1908 did valuable work, but neither vessel was at all suitable for carrying out the work scientifically; and what was attempted was more in the way of making a "flying survey" of the coastal fisheries, and an attempt at discovering offshore banks. Although carried out in this way, several valuable fishing-grounds were discovered and much valuable knowledge acquired of the coastal waters.

3. There are a considerable number of fishermen throughout the Dominion who do not own their own boats, but obtain them either by hire or on time payment, generally from some of the fish-merchants; and in most cases the fish caught are sold to the merchant who owns the boat. These fishermen are thus dependent on the merchant for his boat, for which he pays a fairly high rent or rate of interest, and for a market for his fish. I have frequently been told by fishermen that the energetic man who owns his boat can do very well, but as a rule the man who leases a boat or has it on time payment very seldom "gets out of the bit." The system is a very unsatisfactory one for the fisherman, and there are instances where good fishermen, not being able to make any progress, have had to abandon

fishing and take to other occupations.

I would recommend that the Government advance money to fishermen for the purchase of suitable boats in a similar way to that which the Fisheries Boards of Scotland and Ireland have been doing for some years. Although the Fisheries Board of Scotland have lately discontinued advancing money for this purpose, it is still in force in Ireland; and from the information supplied by that Board, and which is forwarded with this report, it would seem that the system is working satisfactorily. The security taken for the repayment of the loans would be in this country, as in Scotland and Ireland, largely personal; but by advancing only to fishermen of good character and ability, and besides the security of the boat make it necessary that one guarantor should be provided, I think there would be very little risk of loss by the Department. Fishermen would thus be able to procure their boats on much easier terms, they would be encouraged to go in for a better class of vessel, and they would be free to sell their fish in the best market. There is no doubt but that it would mean a considerable increase in the number of fishermen, and, as a natural consequence, in the quantity of fish brought in.

I would also recommend that the Government should supply benzene and lubricating-oil to fishermen at an increase in cost price sufficient to pay transport and handling expenses. This would mean a very large saving to fishermen, and they would, as necessary, be able to go farther afield for their fish, and be encouraged in trying new grounds. Arrangements might be made for supplies to be delivered through the Customs at each port. As fishermen have to pay cash for these necessaries, there would be no risk of loss, and it would be the greatest help and encouragement to every fisherman in the

Dominion.

4. One of the most extensive and prolific fisheries in New Zealand waters is that in Foveaux Strait and round Stewart Island; and I do not know of any fishery capable of such development and of such benefit to so large a section of the population of the country as this one is. In its waters are to be found over a dozen varieties of our best market fishes, and only one of these has been caught to any extent. As things have been up to the present there has been very little outlet for any of the other kinds; so that practically as far as fish (other than blue-cod) is concerned this may be considered virgin fishing-ground. The reasons assigned for the neglect in the development of this fishery are as follows, viz.: (1) Want of proper transport facilities from the Island to the Bluff; (2) lack of proper railway facilities for the quick transport of fish from Bluff to Dunedin, Christchurch, and other markets; (3) want of a freezing plant at Stewart Island to preserve the fish caught.

As things are at present, with only a weekly steamer service, fishermen, even in favourable weather, can only fish about two days a week, in order to ensure their fish arriving at Bluff in good condition, and should the weather be unfavourable the two days before the steamer day, they lose the whole week; and I am assured that it is not an infrequent occurrence for the steamer to miss a day, and when this occurs, the fish, owing to the want of cool storage, are lost. It will thus be seen that as things are fishermen who are dependent on getting their fish away by the weekly steamer can at the most fish only two days a week, whereas with cool storage they could fish full time, and save every fish they caught, even if the steamer failed to come for several days. The quantity of fish caught would, on an average, be more than double what it is now, and the fishermen's earnings would be

largely increased.

I am convinced that a fish-freezing, oil, and fertilizer-manufacturing plant erected at Half-moon Bay would immediately result in a very large increase in the quantity of fish caught and sent from the Foveaux Strait and Stewart Island fishing-grounds; and also that the works can be made to more than pay interest on the cost of construction, depreciation, and working-expenses. The cost of a freezing and ice-making plant suitable for this fishery would not exceed £4,000, and the cost of oil-extraction and fertilizer-manufacturing plant would probably amount to another £500, making a total of £4,500 for the plant required, and working-expenses, interest, and depreciation would amount to about £600.

According to the report received from Stewart Island, the quantity of fish on which wharf dues was collected for the twelve months ended the 31st December, 1912, was 650,000 lb., so that even allowing for no increase in the quantity handled during the first twelve months, the