H.—15.

So far the Department has no proof that the attempt to introduce the American whitefish has proved successful, but there have been reports that persons have seen strange fish in the lakes in which they were liberated. It would be advisable to net the lakes during this year to see whether the fish are in them.

Portobello Marine Hatchery.—A report received from the Hatchery Board shows that during the year two shipments of live lobsters were received from England by the s.s. "Kaipara," but that they have been only a partial success. The Board, however, considering the experience gained warranted such a course, has arranged for another shipment by the same vessel. There are now nine lobsters alive and healthy in the ponds at the hatchery.

The Board has been in correspondence, direct and through the High Commissioner, with various authorities in the United Kingdom on the subject of sea fish, their mode of propagation, transport, &c., and Dr. Allen, Scientific Superintendent at the Marine Biological Laboratory, Plymouth, and Dr. T. Wemyss Fulton, Scientific Superintendent to the Scottish Fisheries Board, are now engaged in making experiments in regard to the above matters in the interests of the Board.

Several millions of ova of New Zealand food fishes, principally soles and flounders, have been fertilised and hatched out at the station and liberated in Otago Harbour. In connection with this, the Board states that it is under considerable obligation to Mr. F. J. Sullivan, who has allowed the members of the Board and the hatchery curator the use of his trawling steamers and appliances, without which very little could have been done in the way of obtaining deep-sea fish and their ova for observation.

The station has three large salt-water ponds, a concrete tank holding 17,000 gallons, a suitable building containing hatchery, laboratory, aquarium, workshop, and other conveniences, a cottage for the curator, and a jetty. There is also a full supply of the most modern hatching-boxes, jars, and other scientific and practical appliances, together with means for filling, emptying, and aerating the ponds and tanks, and a very complete system of water-supply. The laboratory has been fitted with the necessary apparatus for making and recording observations.

The High Commissioner in London having been requested to make inquiry as to the feasibility of introducing herring and one other kind of fish, either cod, haddock, or turbot, into the colony, he has arranged with the Fishery Board of Scotland for Professor T. Wemyss Fulton, its scientific Superintendent, to make experiments as to whether the development of herring ova can be retarded sufficiently long to enable them to be brought to the colony. If possible he will also arrange for similar experiments to be made with either cod, haddock, or turbot ova.

Proceedings were taken against a person for trawling within prohibited limits outside Lyttelton, when he was convicted, but no fine was imposed. The Magistrate stated that if the defendant came before him again on a similar charge, and with a similar defence, which was that he was not trawling, but was running into the bay to lift the trawl net, he would, if the offence was proved, impose the full penalty. Six persons have been prosecuted for not painting the numbers of their boats on their mainsails. Five of them were convicted and fined, and one case was dismissed owing to there being insufficient evidence. Six persons have been fined for using set-nets in the Aparima River. Two persons have been fined for assaulting an Inspector of Fisheries, and two for stalling.

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Oysters.—The oyster-beds in the Auckland and Northern fisheries have been inspected by the Chief Inspector of Fisheries in company with the local Inspectors, and as the result of his inspection and report it has been decided to keep all the beds in the Northern fishery, which extends from Whangaruru Harbour to the North Cape, closed this season, and open only a portion of the Auckland fishery. Some of the parts of the Auckland fishery which were opened last year were so denuded of oysters that it will take some years for the beds to recover. It is found practically impossible, under the present system of picking, to prevent the beds being overpicked, and the only effective way of preserving them appears to be for the Department to undertake the picking itself. If this were done the beds would be conserved, and a regular supply of oysters would be available for the public.

The annual fee for a license to take oysters in the North Island has been increased from £1 10s. to £2.

There have been a few prosecutions for illegally taking oysters in the Auckland and Northern fisheries, and fines have been imposed.

The oyster-beds in Foveaux Strait are yielding a good supply of oysters. The quantity exported to Australia from these beds during the year ended the 31st December last was 326,655 dozen, valued at £2,728.

Aquarium.—The Department had an aquarium at the New Zealand International Exhibition at Christchurch. The building was constructed and fitted under the direction of Mr. L. F. Ayson, Chief Inspector of Fisheries, and was under his charge for three weeks after the opening, when, as he had to go to San Francisco for fish-ova, it was placed in charge of Mr. C. L. Ayson, Manager of the Hakataramea Salmon Station. It proved to be of great interest, and was visited daily by a large number of people.

The main building was 24 ft. by 60 ft., with a manager's office and attendant's room attached. The accommodation for live fish consisted of sixteen wall tanks, two floor stand tanks, seven balanced fresh-water aquaria jars, floor pool, also hatching-boxes in which were exhibited trout and salmon fry. The aquarium wall tanks were designed and erected after the plan of the most recently constructed American aquaria, and consisted of ten with 60 in. by 30 in. glass front, four 48 in. by 24 in., and two 42 in. by 24 in. respectively. In these were exhibited Atlantic, quinnat, and landlocked salmon of various ages; Lock Leven, English brown, rainbow, American brook, and Machinaw trout: perch, tench, carp (silver and golden), catfish, and eels.

A variety of the beautiful Japanese goldfishes was kindly sent from Tokio by Dr. T. Nishi kawa, who visited the colony a few years ago, and these were exhibited in two large floor-stand