

tanks. There also came with these some beautiful specimens sent by Count Yanagisawa from his private ponds.

In the floor pool (8 ft. by 15 ft., 2 ft. 6 in. deep) large brown and rainbow trout were exhibited.

The water-supply was obtained from a deep strata artesian well (422½ ft.), which was put down specially for the aquarium by Messrs. J. W. Horne and Co. The flow of water from the well was about 3,000 gallons per hour, and was delivered into a distributing-tank at a height of 22 ft. from the ground. The average temperature of the water was 54° Fahr., and it proved to be very suitable for aquarium work, as the fish remained in healthy condition throughout the term of the Exhibition.

The other exhibits consisted of American whitefish and shad hatching jars, and tidal boxes for hatching sea-fish eggs, in operation; mounted specimens of English, American, and Canadian market and sport fishes, and also New Zealand trout; models of steam trawlers, nets, &c., and a variety of fish products.

In conjunction with the aquarium, three hair seals and a sea-lion, brought by the Government steamer "Hinemoa" from Campbell Islands, were on exhibition. They were confined in an enclosure which took in a portion of Victoria Lake, and, although they were kept entirely in fresh water, and at times subjected to a very high temperature, yet they continued healthy, and were liberated at the close of the Exhibition in better condition than when they arrived from their native home in the southern islands.

I have, &c.,

GEORGE ALLPORT.

Secretary.

The Hon. the Minister of Marine, Wellington.

The CHIEF INSPECTOR OF FISHERIES to the SECRETARY, Marine Department.

SIR,—

Wellington, 4th April, 1907.

I have the honour to supply the following report on the recent shipment of fish-eggs brought over by me from America. On arrival at San Francisco I communicated with the Commissioner for the Bureau of Fisheries at Washington, and within a few days information was received from him that all the fish-eggs would be forwarded to San Francisco in time to ship by the "Sierra," sailing from there on the 7th February.

The whitefish eggs and also the lake-herring eggs were despatched from east on the 29th January, and arrived at San Francisco on the 4th February. Mr. Lambson arrived in San Francisco with the quinnat-salmon eggs on the morning of the 6th. The whitefish and salmon eggs were very nicely packed, and were in splendid condition on arrival. All the fish-eggs were placed in the upper starboard cool-chamber of the "Sierra" on the afternoon of the 6th February. At the same time I also put on board 1½ tons ice for use on the voyage.

The shipment consisted of nine cases of quinnat-salmon eggs and nine cases of whitefish eggs for your Department, four cases lake-herring eggs for the Tourist Department, one case of 50,000 Atlantic-salmon eggs for the Northern Tasmanian Anglers' Association, and one case Atlantic-salmon eggs for the Christchurch Acclimatisation Society.

The Commissioner of Fisheries at Washington wired on the 2nd February that he found that no landlocked-salmon eggs could be supplied in time to go by the "Sierra."

The "Sierra" sailed from San Francisco at 12 a.m. on the 8th February.

The temperature of the cool-chamber in which the eggs were stowed was kept at an average of 36° Fahr. until the 18th, when, owing to an accident to the steamer's boilers, the engines and refrigerating machinery were stopped for twelve hours. During this time the temperature of the chamber rose to 48°, but with the use of the ice I put on board at San Francisco I was able to keep the temperature of the inside of the egg-cases from rising above 42°. When the ship got under way again on the 19th I had the temperature of the chamber lowered to 34°, and this temperature was maintained until the steamer arrived at Auckland.

Owing to the "Sierra" arriving at Auckland five days late a bad steamer connection was made to Wellington. The eggs had to be kept in cool-storage at the Auckland Freezing Company's Works until Monday, the 4th March, when they were shipped on board the "Takapuna" at Onehunga for Wellington. Arriving at Wellington on the 6th the salmon and half the whitefish eggs (a million) were transhipped on to the "Mararoa," which sailed for Lyttelton that evening. The other half of the whitefish eggs were put into a cool-room at the Fresh Food and Ice Company until the steamer for Greymouth sailed on the 9th.

The quinnat salmon and whitefish eggs for Lake Tekapo went south by the 11.55 a.m. train from Christchurch on the 7th. This train arriving in Oamaru too late to connect with the Hakataramea train, the salmon eggs had to remain at Oamaru until next day, and did not arrive at Hakataramea until the evening of the 8th. They were unpacked next morning, and turned out in first-rate condition (see Mr. Dean's report attached).

The whitefish eggs sent to Lake Tekapo arrived at the hatchery at the head of the lake on the 8th March. They unpacked in very good condition, but a number of these were so close to hatching that they hatched out within an hour of being put into the jars.

The whitefish eggs for Lake Kanieri were taken on by me from Wellington in the "Arahura" on the 9th March. Arrived at Greymouth on the morning of the 11th, they were taken on to Hokitika by the morning train, and from there to Lake Kanieri the same afternoon by special conveyance. The next morning they were taken across the lake to the hatchery in the Acclimatisation Society's launch, and were all unpacked by 2 o'clock that afternoon. With the exception of three trays this lot unpacked in very good condition, but, like the Lake Tekapo lot, a number of the eggs commenced to hatch out almost as soon as they were placed in the hatching-jars.