In the Consolidated Amended Regulations relating to the Examination of Masters and Mates (which will shortly come into force, and which became necessary by the new Shipping and Seamen Acts), provision has been made by the Hon. the Minister of Marine for allowing the time served in vessels trading in the extended river limits to count as sea service towards qualifying for a certificate as an officer in vessels trading on the New Zealand coast. In my last report attention was drawn to the unfair position in which the deck hands of vessels trading in extended river limits were placed by being practically precluded from promotion in the vessels they served in. This position will in future be rectified by the amended regulations.

When consolidating and amending these regulations advantage was taken of this opportunity to make some small alterations and additions in the home-trade examinations as follows :—

" Second mates and mates will be required to find the distance from a point or light by the methods shown in the 'New Zealand Nautical Almanacs' of 1904 or 1905, on pages 119 and 120, or on pages 79 and 80 of the A, B, and C Azimuth Tables published by the Marine Department.

" A mate will be required to know the general tide, bar, harbour, and storm signals to be used at all New Zealand ports, as given in the 'New Zealand Nautical Almanac.'

" Master.—(*a.*) To find by means of Table F on page 121 of the 'New Zealand Nautical Almanac' of 1904 or 1905, or by Table H on page 81 of the A, B, and C Azimuth Tables, the distance from an object when abeam by the distance run between the beam-bearing and any other bearing before or abaft the beam.

" (*b.*) To set the course when at a known distance from an object to pass any required distance from it by aid of the traverse table. (See example on page 121 of the 'New Zealand Nautical Almanac,' or on page 81 of the A, B, and C Azimuth Tables.)

" (*c.*) To find the true bearing of the sun and deviation of the compass by time azimuth tables.

" (*d.*) In working the problem marked (*b*) and (*f*) in the new regulations (correction to apply to soundings, and to find latitude by meridian altitude of the sun) the 'New Zealand Nautical Almanac and Tide-tables' will be used, all the examples of soundings being set in future for places on the New Zealand coast.

" (*e.*) The problem for finding the deviation of the compass from the observation of the sun when on the meridian will in future be discontinued, as it is impracticable in these latitudes."

The problem for finding the deviation of the compass from a bearing of the pole-star (Q. 10 in Appendix L of the Regulations) was dropped out of the syllabus when setting new examination-papers after my arrival in Wellington, as it could not be put into practice in this colony.

The new problem for second mate, and those mentioned as (*a*) and (*b*) for master, are very simple, as will be seen by a reference to the A, B, and C Azimuth Table-book, on pages 79 to 81, where the problems are explained and illustrated. So far as the mates are concerned, the principal work of the problem is to convert an interval of time into distance according to the speed of his ship. In problem (*a*) for master, he must multiply this distance by a decimal factor taken from a small table, " H," in the book. Problem (*b*) for master is taken out at sight from the traverse table.

The officer can thus find his distance from a point of land, or a light, or set his course to pass the required distance off, without leaving the deck, or reference to any chart.

For problem (*c*), the Marine Department have lately published very complete Azimuth Tables for the moderate price of 3s., under the title " A, B, and C Azimuth Tables." By the aid of this work the true bearings of the sun, moon, planets, and all the bright stars may be found at any hour of the day or night by the use of only about half a dozen figures. Candidates will be allowed to use this work or any other tables that will solve the problem within half a degree.

When masters of home-trade vessels have made themselves acquainted with this last-mentioned problem they should have no difficulty in checking the deviation of their own ships' compasses, by bearings of the sun at any time of the day when the altitude is suitable.

The above-mentioned changes will come into operation on and after 1st September, 1906. They have already been published in the *New Zealand Gazette*.

I have, &c.,
H. S. Blackburne.

Acclimatization of Salmon and Whitefish.

Sir,— Petone, 9th December, 1905.

The fish you have submitted to me is without doubt a young specimen of the genus Oncorhynchus, which represents the genus Salmo on the North Pacific coast of North America and Eastern Siberia, and of which genus some of the species are popularly known in the market as the Californian salmon.

It is a male fish, passing into the grilse stage, and has evidently been to the salt water, as it has cast its smolt scales and acquired a brilliant silvery dress, bluish-grey on the back, and pure silvery-white on the sides and beneath, the fins being pale olive-brown, margined on the upper edge with black. The dorsal fin has thirty faint spots, and on the sides are a few black X spots above the lateral line and in front of the dorsal. It is a very elegant fish, with a conical, slightly blunt, and tumid head and snout, devoid of scales in its present stage. The body is only slightly compressed, and is deepest and widest just before the dorsal fin. The run of the tail is beautifully tapered, and expanded to form the base of the caudal fin, which is deeply cleft. These last characteristics at once distinguished this fish from any of the trout I have seen in New Zealand as far as external appearance goes; but the possession of sixteen rays in the anal fin and the presence of a soft, free, scale-like appendage in the axil of the ventral fin and more than half the length of the fin removes it from the genus Salmo to that of Oncorhynchus. It is almost impossible to determine the species in the grilse stage, as the information on the subject