19 H—15

Appended to this report is a statement of the number of candidates examined at each examination centre for the year ended 31st March, 1947, showing the number of successful and unsuccessful candidates.

STAFF

The entire staff of the Department have carried out their duties and responsibilities in a splendid manner, notwithstanding the added burden of post-war reconstruction and the shortage of staff, particularly typists.

At the end of the year the Assistant Secretary, Mr. G. H. Tanner, retired after approximately forty-three years of faithful service in this Department. His particular knowledge of the Department's work was an asset which will be missed, and the name of Tanner will be for a long time associated with Marine Department affairs.

One of our lighthouse-keepers, Mr. T. B. Smith, of Godley Head, also retired on

superannuation after long and faithful service in various parts of the Dominion.

The best wishes of the staff of the Marine Department and of all navigators go out to these officers in the hope that they will enjoy health and prosperity for the remainder of their days.

FISHERIES

An abridged report on the working of the Fisheries Branch of the Department follows hereon.

I have, &c.,

W. C. SMITH, Secretary of Marine.

PORTOBELLO MARINE BIOLOGICAL STATION

Notwithstanding difficulties and limitation of facilities arising from the long period of financial straits and restricted material resources due to wartime conditions, the Station continues to provide the means for carrying out valuable researches in marine biology. These have been well utilized during the year by the staff and students of Otago University, by whose individual and combined work our knowledge of the marine fauna and flora of the area is being progressively advanced.

Among material awaiting publication is a study by Miss B. I. Brewin and Miss E. Batham of plankton taken at fortnightly intervals over a period of eighteen months. This is the first systematic investigation of the kind to be made in New Zealand waters. Plankton phenomena have an important bearing on some fishery problems. Miss Brewin's monograph on "Ascidians in the Vicinity of Portobello Marine Biological Station, Otago Harbour," has been published during the year in Transactions of the Royal Society of New Zealand (September, 1946). In it nineteen species are described and illustrated, four of them being new to science and two not hitherto known in New Zealand waters. Other published papers by Miss Brewin based on work at Portobello include studies on the breeding habits of a chiton, Cryptoconchus porosus (1943), and on "Some Alcyonaria of the Order Stolonifera from New Zealand Waters" (1946).

Miss Elizabeth Batham, who is now in Britain pursuing marine biological research as a post-graduate scholar of the University of New Zealand, has made investigations on barnacles at Portobello, having published in 1945 an account of the biology and anatomy of *Pollicipes spinosa*, and in 1946 a study of its embryonic and larval development together with a description of larval forms of the small stalked barnacle, *Ibla idiotica*.

Mr. W. H. I. Dawbin, of the Medical School Physiology Department, has worked at Portobello during the year on a study of holothurians, more especially on the process of regeneration of viscera in *Stichopus mollis*. Professor Eccles and his physiological research staff have used the Station in connection with studies of nerve physiology. It is hoped to provide proper facilities for extending such work in the near future.