"The concrete plates used for the cultivation of the southern rock-oyster (*Ostrea tatei*) were frequently cleaned of slime and mud. On the majority of the plates the under-side was covered with oysters measuring from ¾ in. to 2 in. in diameter, while on the upper side few oysters had become attached. Early in November the plates were reversed, so that during the spawning season the young spat could become attached to the clean side of the plate. On the walls of the pond oysters are increasing, and in some of the small ponds, where until a year ago there were no oysters, there are now several clusters of them. A trial is being made with roofing-slates, which, if satisfactory, will cost less and be more easily handled than the concrete plates. It is probably also that the smooth surface of the slate will not encourage the excessive growth which fouls the rougher surface of the concrete.

"The last of the drift bottles, twenty in number, were liberated on the 1st May. This experiment was commenced in January, 1920, and up to May, 1922, 484 bottles were put out. Seven labels were returned during the year, making a total of sixty-seven returned. Of the labels which came to hand last year one was picked up at the Chathams, one at Cape Turnagain, and another at Nelson. The bottle recovered at Cape Turnagain was liberated in February, 1921, and was not picked up until January, 1923. The remaining four bottles came ashore between Moeraki and Timaru.

"The weather throughout the year has been very unsettled, and in consequence we have been unable to spend as much time as in previous years in line fishing and trawling off Otago Heads. At least twice every month we have hauled the seine net on the banks inside the harbour. The dredge has also been towed several times. . . . Whale-feed has been exceptionally plentiful throughout the summer months. The stomach-contents of fish caught were noted by Mr. Young.

"Mr. Broadley, assistant curator and local Inspector of Fisheries, has paid a visit of inspection to the Dunedin fish-market once every week, and to the outlying fishing-ports twice during the year. The quantities and prices of fish sold on the market during his visits have been recorded.

"Throughout the year numbers of people have visited the station, and all were greatly interested in the exhibit of local fish in the observation-tanks."

From the inception of the work at the hatchery the absolute cleanliness of the tanks and all the fittings has been a main cause of the successes achieved. No station either in Europe or America succeeded in rearing young lobster-fry over a year till the Portobello Station showed they could be kept in confinement from the time of hatching right up to over four years. And the condition of the turbot experiment is equally satisfactory. These fourteen large fish are in a concrete shallow tank, where they have lived for several years under abnormal conditions, but with a plentiful supply of well-aerated sea-water and fresh fish-food. Not one has been lost for over four years, which is surely a record. It shows the care and attention to the smallest detail which characterizes the work of the staff.

Several times during the past year or two your chairman has received apparently well-authenticated reports of large turbot having been taken and sold in the shops. These reports came from many quarters, but three especially—from Invercargill, Christchurch, and Napier—were worthy of careful investigation. This, however, failed to secure identification of the fish as turbot. Unfortunately, in no case was it possible to obtain a specimen of the fish reported to be turbot. The only conclusion which could be come to was that they were probably very large flounders. As considerable public interest attaches to the probable naturalization of the turbot in New Zealand waters, the chairman of the Board addressed a letter to the principal newspapers in the Dominion, giving the history of the introduction of this fish, and especially drawing attention to the fact that the turbot swims on his right side, while all the New Zealand flat-fishes—with the exception of the megrim, a thin bony fish which very seldom appears in the market—swin on the left side. Mr. Gilbert Archey, of the Canterbury Museum, has watched the Christchurch fish-shops, which occasionally report turbot for sale, but all those he has yet seen are native flounders.

In Mr. Maxwell Young's report on his biological work the varied character of this is seen. He has examined the stomachs of all fish caught, and has kept a record of the contents, in some cases preserving the material for future investigation.

"Tow-nettings have been made at regular intervals on an average once every ten days, and the contents of the net carefully preserved for future examination, as soon as this can be arranged with specialists."

As no specialists either in Britain or Australia are free to undertake the examination of the Copepoda and Ostracoda, which form so large an element in the food-supply of all larval fish, and as a very great number of these have now been collected, the chairman has sought to interest Professor G. O. Sars, of Christiania, in the work. Dr. Sars, who is an Honorary Fellow of the New Zealand Institute, is the greatest living authority on these groups of Crustacea, and he has already described many New Zealand species. The chairman himself hopes to be able to work out the species of crab zoœas and larval shrimps which occur very freely in the collections.

The circular sent out last year by the Board has drawn outside attention to the work of the hatchery, and inquiries for zoological material have come from several institutions and individual workers. This has entailed considerable and constant work on Mr. Young. The following are some of the persons to whom specimens have been supplied:—

(1.) Dr. Raynor C. Bell, Professor of Clinical Dentistry, University of Otago. Fish-jaws for research work.

In acknowledging the help received, Dr. Bell, who has written a valuable paper on the development of the teeth of fishes, writes as follows:—

"In order to obtain good sections for microscopic study it is necessary that the tissues of fishes be placed in special fixing solutions immediately the fish is taken from the water. This fact has already been emphasized by Mr. Thornton Carter, England, but it was only after a year's experiment with various specimens that I learned to appreciate Mr. Carter's statements to their full extent. The