

investigations among the sea fauna; while they bring their knowledge to bear practically on the great fishing industries of Scotland.

One other feature of such a Biological station as has been referred to is the aid it would render in the collection of specimens which could be distributed among the various museums of the Dominion, thus enriching their treasures and placing materials for the study of fish-life within the reach of all. At present the collection of such specimens, in the different museums, is reported to be very meagre and imperfect.

#### APPENDIX.

The season for hatching at Dildo Hatchery, in 1892, closed August 1st. The total number of young codfish "planted" during the season by Mr. Nielsen was one hundred and sixty-five millions, being four times as many as in 1891, and nine times the output of 1890. This marked success has been partly owing to the construction of a salt water pond—an improvement introduced this year—in which the cod were allowed to spawn in the natural way, and the fertilized eggs were then syphoned into a proper receptacle, cleansed, measured, and placed in the hatching jars. The gain by this new method is 20 to 25 per cent in the number of ova hatched and a considerable saving of labour. The pond is 60 feet in length with an average breadth of 24 feet and a depth of 12 feet. It is capable of containing from 1,000 to 1,500 spawning codfish which would give an average hatching of four hundred millions in the season.

In this pond it was noticed that when in the act of spawning the cod come to the surface, and the male turns on its back, the two touching each other and their vents coming together. This is different from the view hitherto held by naturalists as to the mode of spawning.

When the water was 42° or over the ova were hatched in 14 days. A week after hatching the young had absorbed their yolk-sack and were ready for planting. The pond is supplied with fresh sea-water pumped from a depth of 30 feet by a small "Eclipse" windmill supplied by Fairbanks and Morse of Chicago.