

former report. They cover very varied topics and many of them are of inestimable value from a practical fishery point of view, while all are valuable from the purely scientific standpoint. The papers admit of a five-fold classification; they are (a) those essentially practical in object and character; (b) faunistic; (c) embryological; (d) chemico-physiological, and (e) botanical. The authors are Professors Ramsay Wright, A. P. Knight, E. E. Prince, A. B. Macallum and James Fowler; Dr. Joseph Stafford and Dr. A. H. MacKay; Mr. G. A. Cornish and Mr. C. B. Robinson; but neither the present scientific papers nor the foregoing list of authors indicate the whole of the researches conducted at the Biological Station, nor include all the staff of brilliant investigators who have spent more or less time in its laboratories.

The primary object of the Station was to aid the fisheries of the Dominion. As the fishes in the sea, indeed all the larger forms of life, depend for sustenance upon the microscopic organisms, which render sea-water "a kind of minute broth," as the late Dr. W. B. Carpenter happily styled it, Professor Ramsay Wright appropriately heads the series with an account of the "Plankton" of the Nova Scotian waters. Professor Wright shows how minute plants, invisible to the naked eye, crowd the surface waters. These build up the protoplasm necessary as food to fishes and other marine creatures. The herring and mackerel feed almost solely on this microscopic life, collectively called the "Plankton." They are not all tiny plants, some are infusorian animals, Foraminifera, Radiolarians and the like. "No one sailing over the Atlantic," Professor Wright observes, "suspects the presence of such a rich vegetation, and indeed it can only be disclosed by filtering the water through an exceedingly fine fabric—the finest silk gauze." Seven exquisite plates indicate something of the variety and beauty of the Plankton. More beautiful artistic illustrations it would be difficult to imagine. They are heliotype reproductions of Mr. J. R. G. Murray's drawings of Professor Wright's original sketches done at the Station. No less than three species of the tadpole-like larval Ascidians belonging to the Copelata were secured near Canso. As, according to the poet,

"The ancestor remote of man, says Darwin,
Was the Ascidian,"

these small tailed creatures, showing the first indications of a back-bone, are of uncommon interest. A most peculiar egg, no doubt that of some Gastropod shell-fish, is figured on the same plate as the Ascidians, and "suggests in its shape," as Professor Wright points out, "a low broad-brimmed hat." There are