

oil, whalebone and guano are its products, and to an increasing extent "salted beef." Black cod, oulachon, smelts, pilchards, sturgeon, shad, sea-cucumber and bass are also abundant in British Columbia waters.

A word might be added with regard to the Canadian seal fisheries of the Pacific whose historic headquarters were the city of Victoria. The industry has disappeared, in part through the scarcity of the animals, and in part through the workings of the Pelagic sealing treaty of 1911. The hair-seal fleets of the north Atlantic make St. John's, Newfoundland, their headquarters; a few Canadian vessels, however, clearing from Halifax, N.S., take fur seals off the Falkland islands.

**Game Fish.**—The above is a purely industrial and commercial survey. Fishing for sport, however, has its economic side in a country of such famous game fish as the salmon of the Restigouche, the black bass of the Quebec and Ontario highlands, and the trout of the Nipigon. A considerable public revenue is derived from the leasing of waters in sparsely settled districts to clubs and individuals for sporting purposes. Several hundreds of guides find employment here during the summer months.

### 3.—The Government and the Fisheries.

Upon the organization of the Government at Confederation, the administration of the Canadian fisheries and marine was placed in the charge of a Department of the Dominion government which then exercised complete jurisdiction over the fisheries, under the supervision of a Cabinet Minister, with a large staff of inspectors, overseers and guardians to enforce the fishery laws. The annual expenditure of the Dominion on the fisheries is now \$1,343,136 and its revenue about \$224,156. In 1882, 1898, 1913 and 1920, decisions in the courts considerably altered the status of jurisdiction as between the Dominion and the provinces. To-day the Dominion controls the tidal fisheries of the Maritime provinces and British Columbia and the fisheries of the three Prairie provinces, together with the right of legislation for all fisheries. The non-tidal fisheries of the Maritime provinces and Ontario and both the tidal and non-tidal fisheries of Quebec are controlled by the respective provinces.

**Conservation.**—River and lake fisheries certainly, and sea fisheries probably, if left to themselves, conform to the economic law of diminishing returns. The Canadian Government, accordingly, has had for a main object the prevention of depletion, the enforcement of close seasons, the forbidding of obstructions and pollutions, and the regulation of nets, gear and of fishing operations generally. In addition, an extensive system of fish culture has been organized, the Dominion at present operating 46 hatcheries at a yearly cost of about \$362,000, and producing 1,300,000,000 fry per annum, mostly B.C. salmon and whitefish. The young fish are distributed gratis if the waters applied for are suitable.

**Scientific Research.**—Stations under the direction of the Biological Board of Canada for the conduct of biological research into the numerous complex problems furnished by the fisheries are established at St. Andrews, N.B., and Nanaimo, B.C. Toronto, McGill, Queen's, Manitoba, British Columbia and the chief Maritime province universities send workers to both stations, chiefly professors and trained specialists. The life-histories of edible fishes, the bacteriology of fresh and cured fish, improved method of handling and preparing fish, and numerous other practical problems have been taken up and scientific memoirs and reports issued.