

has the authority of a J.P. All these officers assist in the collection of statistics in the localities in which they act, with the result that the fisheries statistics in Canada are probably more complete, and approximately more accurate, than those of any other country. Professor Brown Goode, an eminent United States fishing authority, publicly declared his opinion that the Canadian system is the simplest and best in operation in any country; and the statistics accumulated, which are due to this universal system of supervision and patrol, are recognized as approaching accuracy as near as fishery statistics can be. It must be recognized that there are large catches of fish made by wandering tribes of Indians and by remote Eskimo communities which it is difficult to record; but the Royal North-west Mounted Police have aided most actively in getting statistics, and indeed in carrying out fishery supervision in the most distant waters of the Canadian Arctic regions. An organization of the character indicated, acting under a central Fishery Department, would accomplish admirable results in the most economical way.

FISHERY PUBLICATIONS.

A Fisheries Department would be able to prepare and issue publications of value to the fishermen and to the public. Various Governments have found the issue of hand-books of great help in the development of the fisheries. Thus there can be no doubt that the issue by the Government of Canada of a special handbook entitled "Fish and How to Cook it" has done a great deal in some Canadian cities to increase the demand for fish. Much ignorance exists generally as to the best methods of cleaning and cooking fish for the table; and the circulation of a small handbook of nine or ten pages such as that issued in Canada, furnishing probably a hundred different methods of preparing appetizing fish dishes, would be generally appreciated. Other books such as that issued by the Irish Fisheries Department in Dublin, explaining methods of curing mackerel and of handling fish for the market, have also been of great help. In Norway and Germany similar publications have given a great stimulus to the fisheries. There is no reason why in New Zealand those engaged in the fish business should not have the best and most recent information in handy printed forms, and New Zealand housewives be furnished with the best information as to the preparation of fish food in the house.

ACCLIMATIZATION OF THE TRUE HERRING.

While the New Zealand waters produce several fish which are called "herring" and resemble herring—I myself saw vast quantities of these small fish at Nelson in April—they differ from the true herring in several important points. Both from a fishery and a food standpoint the true herring has qualities of greater commercial importance. The texture of the flesh and the nature of the skeleton or bones in the true herring as well as the flavour are peculiar, and the markets will not take a substitute. Further, abundance of sea-herring, which is an inshore species, attracts the schools of valuable large fish into inshore waters; and it has been observed in Canada that the decline of sea-herring along any portion of the shore usually results in the disappearance of cod and valuable deep-sea species.

In order to provide a new food and to encourage a new and valuable industry, as well as to induce the schools of large commercial fish to remain in the inshore waters, it seems to me desirable that extensive experiments should be made to establish the sea-herring in our waters. If success followed and New Zealand could create a herring industry comparable with that of Scotland or Norway, it would be a source of considerable wealth. The interesting experiments which have been made with much trouble and labour to bring eggs of herring from England were almost successful, but owing to special circumstances the eggs did not reach New Zealand alive. The officers in charge did their best, and the plan adopted was admirable in every way. In my opinion it would be a great advantage to bring a supply of eggs from waters nearer than those of Britain. British Columbia has a herring which from a commercial standpoint is equal to the British herring, and it abounds in incredible quantities, so much so that certain harbours on Vancouver Island and Queen Charlotte Island are in some seasons practically a solid mass of fish, and owing to their crowded condition they often suffocate and die in vast numbers. I myself have seen bodies of dead herring extending for two or three miles, through which steamers have to make their way in crossing the Straits of Georgia. The Indian tribes have been accustomed to depend on herring-spawn for a not inconsiderable part of their food, and for centuries have practised a system of laying branches of trees along large portions of the coast where the herring spawn. On lifting these branches out of the water they were coated with the eggs of herring, which the Indians dried, and which they considered a great dainty as well as a nutritious food. From the first week in March to nearly the end of the month is the main herring-spawning period; and any quantity of herring-spawn can be got, which by properly arranged apparatus could be kept alive until it reached New Zealand, the voyage occupying about half the time occupied by the voyage from Britain. A prominent fisherman in British Columbia wrote me not long ago that in every bay along the coast for over a hundred miles he had noticed the herring spawning in immense schools, and the Indians were going down with sacks to gather it up and dry it. He said, "The numbers were such, to express it to a person not seeing the sight he would be very apt to doubt the truth, as I have always looked on it as an Indian yarn, but there must have been hundreds of thousand of tons of spawn."

LARGER FISHING-CRAFT.

The fishing operations carried on hitherto have on the whole been somewhat local in their character, and not to be compared with the fishing trips made by fishermen in other countries. For instance, the Scotch liners make trips of fifty to a hundred and fifty miles from shore, and secure some of their best catches out on the more distant grounds. Even the herring-fishing in Scotland, which is regarded as an inshore fishery, is largely conducted many miles from the coast; and the steam-vessels, both liners and trawlers, going out from British ports make trips of from twenty-five to thirty-five days, extending to distances of one thousand to one thousand five hundred miles. They are specially fitted for these