

FISHING-GROUNDS.

Up to the present time it may be said that the fishing-grounds which have to be worked are only those within easy reach of the principal markets, and beyond those, there is a vast extent of coast-line which has practically never been fished, and on which is to be found abundant supplies of our best market fishes. The fishing-grounds which have been systematically worked are as follows: Bay of Islands; Whangarei; from Mokohinou to Mercury Islands, including Great Barrier, Hauraki Gulf, and Thames Gulf; part of the Bay of Plenty, off Tauranga; from Poverty Bay to the Kidnappers; from Cape Palliser, through Cook Strait, to Farewell Spit, including Tasman and Golden Bays; a section of the Marlborough coast off Kaikoura; and from Motunau Island round Banks Peninsula; a section of the coast off Timaru; from Oamaru to Cape Saunders; and from Coal Point to Chaslands Mistake; from Waipapapa Point, through Foveaux Strait, to Preservation Inlet, and round Stewart Island. On the west coast of both Islands the only fishing done is in the Hokianga, Kaipara, and Manukau Inlets, and a little at Westport, Greymouth, and Hokitika. So that there is a very large extent of coast-line which has never been fished for the market, and an immense extent of off-shore deep-sea grounds which have so far never been explored.

Some of the old fishing-grounds within a certain distance of the larger centres are not now producing anything like the quantity of fish which they have done formerly, and in several places fishermen find it necessary to keep moving farther afield in order to get the supplies required. The cause of this decline is, I consider, due to overfishing and the predominance of sharks, dogfish, and other enemies of our market fish. There are some in this country who ridicule the idea of the possibility of depleting any fishery. In this connection, Professor Prince, Commissioner of Fisheries for Canada, a gentleman who has had special training in marine biological research work, says, "One of the most important conclusions reached by the investigations of experts in recent years is that all important fishes are local in their range. The old idea that all fish migrated over great distances has been exploded. It has become more and more apparent that they affect their own local areas *and that such local areas can be exhausted more or less completely.*" And in another article on the same subject he says, "Most fish have their special local range. They loyally linger around their own native haunts, and only lack of food or some potent physical cause will induce them to change their ground." The late Professor Spencer Baird, who was one of America's ablest fishery experts, laid down the same principle very clearly when he said, "In all discussions and considerations in regard to sea fisheries one important principle should be borne in mind, and that is, that every fish that spawns near the shores has a definite relationship to a certain area of sea-bottom, or, in other words, that as far as can be judged by experiment and observation every fish returns as nearly as possible to its own birthplace to exercise the function of reproduction, and continues to do so, year by year, during the whole period of its existence."

With regard to overfishing, Professor Prince says, "While it must be admitted that the ocean, taken as a whole, is inexhaustible, yet established fisheries are confined to specially prolific areas, and such areas will bear the exhausting process of utilization only to a limited extent, or their reproductive and recuperative capacities will be too severely taxed. Overfishing may be effected in many ways, but the principal are the too constant and uninterrupted pursuit of the fish, so that when feeding or engaged in spawning they are harried and destroyed without cessation." Mr. E. W. L. Holt, Scientific Director of the Fisheries Board of Ireland, in his evidence before the Select Committee of the House of Lords which was appointed to take evidence and report on the Sea Fisheries Bill, in 1904, when questioned with regard to the decrease of flat fish on the trawling-grounds in the North Sea, said, "My impression is that fish has in nature, without the interference of man, quite enough to do to keep his species up; and the balance would appear to have been upset by human agency."

I have drawn somewhat extensively from the statements of these well-known scientific fishery experts in order to show that in their opinion fishes which inhabit the inshore waters and shallower banks are local in their life habits, and that it is possible to exhaust such fisheries by the agencies of man. The areas I have mentioned as suffering from overfishing are not very extensive; in fact, they may be considered as a mere bagatelle in comparison to the fishing-grounds round our coasts which have as yet not been exploited. At the same time, their condition proves the possibility of exhausting the inshore fisheries and the necessity for certain conservative measures.

PROTECTIVE LAWS AND REGULATIONS IN FORCE.

These consist of—(a) Limiting the size of the mesh of nets; (b) limiting the size at which certain fish and oysters may be taken and marketed; (c) prohibiting trawling within certain limits; and (d) prescribing a close season for certain fishes, oysters, and seals. As will be seen by the information received from England, Scotland, Ireland, Canada, and all the Australian States, restrictive and protective measures are in force, and on similar lines to ours.

DEVELOPMENT OF THE INDUSTRY.

A person inspecting a map of New Zealand can scarcely fail to be impressed with its extensive coast-line in comparison to the aggregate area of its three main islands; and considering, too, in connection with this its wonderful fresh-water system, one would naturally come to the conclusion that fish (both sea and fresh water) should be one of its people's principal articles of diet. That it is not so may probably be accounted for by the fact that in the past beef, mutton, and other meats have been readily obtainable at very reasonable prices—that our people could find more regular and remunerative employment apart from fishing—and the very irregular supply of fish prevented people from depending on it to take the place of other foods. A great change has, however, taken place during the last few years. The steady increase in the price of all our food products and the