

them; and unless they put into their organization of fisheries, the energy, the ingenuity, the scientific knowledge and the practical skill which characterized Professor Baird and his assistants, their efforts were not likely to come to very much good." At the same conference, Mr. S. Wilmot, of the Canadian Department of Fisheries, expressed his surprise that "in a vast and intelligent country like Great Britain, the Government had not taken up this question of protecting, improving and advancing the interests of the fisheries." He was of opinion that this was a work rather for the State than for private persons, and he was supported in this view by Professor Brown Goode, the Director of the United States Exhibit.

It is no doubt true that in England, for years past, successive Fisheries Commissions have been appointed; but these have devoted their energies to taking the evidence of fishermen and others engaged in the fisheries, and embodying it in voluminous reports, from which nothing of a practical nature came. Professor Huxley, who took part in this work, in his inaugural address at the London Exhibition of 1883, expressed the astonishment he felt on discovering that fishermen know nothing about fish except the way to catch them. "In answer to questions," he remarked, "relating to the habits, the food and the propagation of fishes—points of fundamental importance in any attempt to regulate fisheries rationally—I usually met with vague and often absurd guesses in the place of positive knowledge."

Very different has been the method adopted in Norway, the United States and Canada. In Norway, instead of appointing a commission to take the evidence of fishermen, a body composed of four distinguished men of science was appointed to investigate the biology and physics of the sea; and on their reports was founded that organization of the fisheries which has led to such important results, and those experiments in the culture of marine food fishes which are yielding such abundant fruits. One brilliant outcome of this commission which has been carrying on its operations for more than twenty years, was Professor Sars's great discovery that the eggs of the cod, the haddock, the gurnard, and most food fishes with the exception of the herring, instead of resting on the bottom, as had been previously universally believed, floated, in almost invisible globules, at or near the surface of the sea. This discovery laid the foundation of the scientific culture of marine food fishes.

In the United States, the same method was followed. A distinguished naturalist—Professor Baird—was, in 1871, placed at the head of a commission who wasted no time in taking the evidence of fishermen, but set to work on an investigation of the causes which had brought about a diminution of the commercial fishes and of the remedies adapted to remedy the evil. The result has been a thoroughly equipped department, with a large staff of scientific and skilled men, having the means of carrying on hatching operations on a large scale, both in fresh and salt water fish, and for studying the whole natural history of the various fishes. The splendid reports of this commission, issued annually since its commencement, are of inestimable value. Up till 1883, Congress and the various State Governments had appropriated over two and a quarter millions of dollars for the work of the Fishery Commission. Since that date there has been no diminution in the liberality with which the work has been sustained.

It would seem that at length Great Britain has been roused to the necessity of regulating and improving its fisheries on the same scientific lines as other countries. The