

EXPLORATIONS IN WESTERN CANADA. By C. H. EIGENMANN.

[ABSTRACT.]

An account was given of explorations undertaken under the auspices of the British Museum from Winnipeg to the Pacific coast, and from Portland, Ore., eastward. The headwaters of the following rivers were crossed and their fish faunas compared: The Red River of the North, the Saskatchewan, the Columbia, the Fraser, the Missouri. About twenty per cent. of the species collected were new to science. The most interesting of these was a new genus of *Percopsidae*, *Columbia* from Oregon. Several species not before taken on the Western slope were obtained. It was noticed that the number of fin rays of Pacific slope fishes was increased over their Atlantic slope relatives, or else some of the rays were modified into spines, as in the case of *Columbia* and *Meda*.

NOTES ON THE LOSS OF THE VOMERINE TEETH WITH AGE IN THE MALES OF THE SALAMANDER, *DESMOGNATHUS FUSCA*. By F. C. TEST.

THE WORK OF THE U. S. FISH COMMISSION STEAMER ALBATROSS IN THE NORTH PACIFIC AND BERING SEA IN 1892. By B. W. EVERMANN.

[ABSTRACT.]

Last winter a treaty was entered into between the governments of the United States and Great Britain, in which it was agreed to leave the various questions in dispute regarding the fur-seal fisheries to a board of arbitration, which will meet at Paris next March.

Very soon after the signing of this treaty, the State Department requested the Commissioner of Fish and Fisheries to undertake the collecting of information regarding the fur-seal of the North Pacific and Bering sea.

It was very soon arranged that the Fish Commission should undertake the work, the U. S. Fish Commission steamer, *Albatross*, then as now, on the Pacific coast, was detailed for the purpose, and it fell to my lot to be sent out as Senior Naturalist of the scientific staff of the *Albatross* to have immediate charge of the proposed investigations.

It was within the scope of the investigations to study the movements

of the seals during their return in the spring to their breeding grounds, to note the position of the herds from day to day, whether the two sexes and the younger seals all traveled together or in separate herds: we were also to determine experimentally the relative effectiveness of the different methods of killing the seal at sea, the percentage of seals lost by each method, the percentage of males, females, or young killed in indiscriminate hunting; a study was also to be made of their food and food-habits; in short, attention was to be paid to everything which would throw any light upon the natural history of this valuable animal.

I joined the *Albatross* at Port Townsend, Washington, March 27, and four days later we steamed through the Straits of Fuca and began our investigations in the North Pacific. At this time it is not proper that the details or results of the work should be given. Suffice it to say that the investigations and studies of seal-life were continued until September, and that during that time the *Albatross* was pretty well over the North Pacific and Bering Sea, and made special visits to a number of points on the mainland of Alaska as well as to numerous islands. Among the places visited may be mentioned Sitka, Prince William Sound, Cook's Inlet, Kadiak, various islands of the Aleutian chain, the Commander Islands only eighty miles off the Asiatic coast, and the Pribilof Islands, where are situated all the breeding grounds of our fur-seal, and where I spent two weeks studying the seals upon the rookeries.

The report upon the entire summer's work of the *Albatross* concerning the seal is now in the hands of the State Department, and cannot now be made public; but while carrying on this work opportunities occurred for making collections in other lines of natural history, and I was, of course, not slow in availing myself of them.

The collection of fishes is quite large, and contains a number of interesting species from Sitka, Unalaska, Atka, Attu and Bering Island.

Among these is a very fine series of the Atka mackerel, *Pleurogrammus monopterygiens*, an important food-fish, hitherto but poorly represented in museums.

An important collection of birds was also made, a part of which collection—the ptarmigan—is treated in another paper.

Several hundred plants were collected, chiefly at Unalaska, the Pribilof Islands, and Sitka.

All these collections are now being studied, and will be reported upon in due time.