

accurate, clearly written, with as few technicalities as the subject permits. Moreover, admirably illustrated, and withal well printed. Every phase of reptile life is fully treated from the origin of the class estimated as some ninety million years ago (its forebears, the amphibia, three or four millions of years earlier), to the last note on the song of the tree frog. It concludes with a brief but wise commentary on Darwinism. Barbour remembers, what some evolutionists have forgotten, that the origin of species is an outdoor matter, in which nature takes her own time.

The numbers of kinds of these creatures, the world over, is far beyond the usual conception. Barbour estimates 6,875 living species; 50 of them crocodiles, 225 turtles, 2,300 snakes, 2,500 lizards, 1,500 frogs and toads, and 50 coecilians, blind, worm-like creatures. With the rest, one singular lizard of New Zealand, *Sphenodon*, of ancient type in which the ancestral middle eye (pineal) on top of the head is still extant.

Every phase of reptilian life is well considered. Some of the most interesting chapters relate to the poisonous snakes, the nature of their poison, and the methods of giving immunity through dilution of venom.

BERING'S VOYAGES

Bering's Voyages. An Account of the Efforts of the Russians to Determine the Relations of Asia and America. By FRANK A. GOLDER, in two volumes. Vol. II, Steller's Journal of the Sea Voyage from Kamchatka to America and Return on the Second Expedition, 1741-43.

A REMARKABLY valuable work, from the standpoint of geographical history as well as of natural science, is the record of Bering's voyages by Professor Frank A. Golder, of Stanford University. The first of these two volumes contains an annotated translation of the official reports. The second volume contains the Journal of Georg Wilhelm Steller, the gifted naturalist of the second expedition. This is especially interesting for the spirited narrative itself, and for the first account of "the four great beasts," Sea Lion, Sea Bear (Fur Seal), Sea Otter and Sea Cow, the last named now extinct. This journal is translated and in part annotated by Leonhard Stejneger, of the U. S. National Museum, whose own studies in this region have been of the highest importance.

American Geographical Society, Research Series, No. 2. W. L. G. Joerg, Editor. New York, 1925.

DAVID STARR JORDAN

SHERBORN'S "INDEX ANIMALIUM"

EVERY zoologist regards the accurate naming of animals as a matter of far-reaching importance. Sooner rather than later he must even refer to original papers or to complicated nomenclators, and find out whether his beasties have been described accurately, and whether names given to them have not been earlier used for entirely different creatures. It was the idea of simplifying this universal labor which led the English naturalist, Charles Davies Sherborn, to undertake the Herculean labor of preparing an index which should put an author's finger upon all species and genera hitherto described.

Beginning thirty years ago, Mr. Sherborn has overhauled all zoological literature from Linnaean beginnings to the year 1850, indexing (*mirabile dictu!*) some 27,600 works. His plan was to complete in an encyclopedic way the first century of zoology and to include, naturally, references to animals, recent and fossil, in the writings of all countries.

Thus far ten parts of his work have appeared, in all comprising 2,570 pages. Part I was published in 1902 by the Cambridge University Press: thereafter the work was taken up by the trustees of the British Museum. At the close of the present section (part X) the literature dealing with the genera and species has been accounted for from 1801 to 1850, up to the word *funereus*. The eleventh part, which will complete the letter G, will appear in December. The manuscript cards for the remaining letters are being revised, but from the nature of the task five or six years more will probably be required to complete the publication of an epoch which witnessed the description of the greatest number of animals. When this turning of the road has been reached, Mr. Sherborn plans to cease his labors and let the later literature be worked out by his successor, if such a one may be found. It would not be unfair to Mr. Sherborn to note that this vast work has been carried out largely as a labor of love.

BASHFORD DEAN

THE METROPOLITAN MUSEUM OF ART

SPECIAL ARTICLES

LOSSES IN TROUT FRY AFTER DISTRIBUTION

ON seining a quarter of a mile of Forbes Brook, Prince Edward Island, Canada, there were found, October, 1925, trout, yearlings and older, 319; fundulus, 82; salmon parr, 33; stickleback, 16, 152; a