and stocking of the aquarium, and also on the feeding and care of its inmates. These portions of the book appear altogether too brief, however, and it would seem that Mr. Eggeling, with his long experience in these matters, might have given us more of the benefit of it. He has chosen instead to devote three fourths of the book (or to be exact, 280 of the 352 pages) to descriptions and figures of aquarium plants and animals.

The figures are generally excellent with only a few of the old stereotyped sort and nearly all of them are from good photographs. The descriptions apparently suffer from too great an attempt to popularize—at any rate they are loosely written and often fail to give enough diagnostic characters to distinguish a species from its relatives. The few sunfishes mentioned, for example, could hardly be identified among the many others which are found in our streams and ponds and which thrive equally well in aquaria. Such descriptions can have no particular use except to acquaint the reader with the general characters of the group rather than the individual kind.

The authors would have done well to submit their scientific names to the scrutiny of a specialist before publishing them, and thus have avoided the use of antiquated nomenclature. This is especially true of the fishes, where a cursory examination reveals nearly a score of scientific names no longer regarded as correct. A number of cases of mis-spelling occur among these names also—*e. g., Cotostomus* for *Catostomus, Rhinichtys* for *Rhinichthys, Amiurus* for *Ameiurus, Etheostoma cœrulea* for *E. cœruleum, Pomotis elongatis* for *P. elongatus.* The parasitic fungus *Saprolegnia* also appears as *Saprolegnies,* and the word "milt" as milk!

The invertebrates are very inadequately treated, only aquatic insects and snails receiving mention. The dragonflies are omitted entirely from the former, though they are among the most interesting of aquatic larvæ and are easily kept and reared. Neither is any mention made of the crayfishes or other fresh-water crustacea—an unfortunate omission.

To make amends for some of these deficiencies there is a considerable amount of interesting natural history matter on the habits of the various forms in the aquarium.

The publishers have seen fit to make the volume about twice as large and heavy as necessary by the use of thick glazed paper and wide margins. But in spite of its many faults the book will no doubt be of real service to many amateurs in this alluring field of study, and will be useful in creating interest in the home aquarium and its inhabitants.

R. C. O.

SCIENTIFIC JOURNALS AND ARTICLES

The *Journal of Experimental Zoology* for July contains the following articles: E. Newton Harvey, "The Mechanism of Membrane Formation and other Early Changes in Developing Sea-urchins' Eggs as bearing on the Problem of Artificial Parthenogenesis," with two figures; William M. Wheeler, "The Effects of Parasitic and other kinds of Castration in Insects," with eight figures; A. M. Banta, "A Comparison of the Reactions of a Species of Surface Isopod with those of a Subterranean Species," Part II.; A. H. Estabrook, "Effect of Chemicals on Growth in Paramecium," with one figure; G. H. Parker, "Olfactory Reactions in Fishes."

OPINIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE[1]

This comprises a history of the commission; method to be followed in submitting cases for opinion; list of cooperating committees on nomenclature; personnel of the commission; references to places of publication of the International Code; opinions 1–25. The first five are republished from Science.[2] Twenty of the opinions are here published for the first time. As the brochure will have a rather restricted distribution, a résumé of these opinions is here presented. The intro-

[1] Smithsonian Institution, Washington, Publication No. 1938, July, 1910, 8vo, pp. 61.

[2] Vol. XXVI., October 18, 1907, pp. 522, 523.