

THE NATURAL HISTORY OF AQUATIC INSECTS, by Prof. L. C. Miall, F. R. S. London and New York, MacMillan & Co. (66 Fifth avenue, N. Y.; price, \$1.75), pp. 395.

This interesting work is intended, as the author states, "to help those naturalists who take delight in observing the structure and habits of living animals," and also to revive an interest in the writings of some of the old zoologists who did notable work in their day, but who are now almost forgotten, namely, Lyonnnet, Réaumur, Swammerdam and De Geer, of whose lives and work he gives a short account.

To any lover of nature who wishes to look into the lives and doings of living creatures, and to investigate their structure and appliances for carrying on the business of their lives, this book will prove a very great help as well as an unfailing pleasure, and it ought to lead many a reader to explore for himself the ponds and pools in his own neighborhood which teem with insect life. The different groups of insects that live in the water in their larval or perfect states, are treated of in turn—water beetles and the larvæ of many flies, the caterpillars of some moths, caddis worms, May flies, alder flies (*Sialidæ*), stone flies (*Perlidae*), dragon flies, pond skaters, water boatmen, etc. The very names of these insects bring to mind what one cannot fail to have seen and watched and wondered over. To have many of these wonders explained and described, and to have the insects themselves depicted and the peculiarities of their structure made clear by excellent woodcuts, is what we owe to the author of this book, and we hope that many will turn to its pages with profit and delight. It is a handsome volume, with clear, large type and a number of very good illustrations.—C. J. S. B.

The Cambridge Natural History, Vol. V. *Peripatus*, by Adam Sedgwick, M.A., F. R. S. C.; *Myriapods*, by F. G. Sinclair, M.A.; *Insects*, (Part 1) by David Sharp, M.A., F. R. S. London and New York, MacMillan & Co.

The possession of some such work as this is of primary importance to the student in any department of zoology, to enable him to obtain, and have at hand for reference, a general knowledge of the varied groups into which, for convenience of study and classification, the animal kingdom is divided. In every home that can afford the luxury of books it will also be found most valuable, affording a continual fund of instruction, and implanting in the children a spirit of inquiry, and of interest in the many wonders of nature. It is only about ten years since the publication, in six sumptuous quarto volumes, of the *Standard Natural History*, edited by Prof. Kingsley, and having as contributors many of the most eminent scientific men of America. To a certain extent their references and illustrations were more largely drawn from the fauna of our own continent, although a work of this general character must not be expected to be in any way restricted in its choice of examples of any group. Our knowledge of the animal kingdom is, however, so constantly being enlarged by the labours of an ever increasing and better equipped body of investigators, that the present work will be found to be considerably in advance of any previous publication. The editors are S. F. Harmer, M.A., Superintendent of the Cambridge University Museum of Zoology, and A. E. Shipley, M.A., University lecturer on the Morphology of Invertebrates. These names, and those of the authors of the various memoirs, are a guarantee as to the accuracy and completeness of the work, and of its fitness either for the private student or for the teacher of zoology. When finished it will consist of ten handsome large octavo volumes, which will form a desirable addition to any library.

Mr. Sedgwick's memoir on *Peripatus* indicates at once the marked advance that has been made in some directions of biological research. In the *Standard Natural History*, where it is placed as a sub-class—*Malacopoda*—of the insects, this curious genus occupies scarcely more than a page, for the knowledge of it was then very fragmentary. Mr. Sedgwick, whose studies of the genus have been very extended, and who has written previous monographs, gives a very interesting account not only of the outward appearance of this very peculiar creature, but also of its embryology, development and habits. There are numerous illustrations and a map showing the distribution, which extends through portions of South Africa, Australia, New Zealand, South and Central America and the West