

*The Natural History of Aquatic Insects.* By PROFESSOR L. C. MIALl, F. R. S., with illustrations by A. R. HAMMOND, F. L. S. London, Macmillan. 1895. 8°.

Professor Miall has given us an excellent book. He has passed in review the life histories and particularly the larval life of most of the commoner and many of the rarer forms of aquatic insects of Great Britain, and supplemented his own story of their structure, contrivances and mode of life by liberal extracts from the renowned but too neglected works of Réaumur, Lyonnet, DeGeer and Swammerdam, reviving a genuine interest in their virgin discoveries, often since repeated. He has brought to bear upon his study the equipment of a naturalist well trained in all the modern appliances for investigation, and has thereby been able to explain better than has been done before the operation of the varied mechanisms by which insects properly and originally terrestrial (as he insists) have become fitted for a more or less prolonged subaqueous life.

The work is written in a very simple and clear style, which he seems to have caught, as it were, from the older and now classical writers upon these topics. By the aid of the excellent and abundant illustrations, the most abstruse parts (if there may be said to be any such) are made comprehensible to any bright boy's intelligence, and will make him wish to set up an aquarium forthwith.

There is the meagrest possible reference to American insects, and the way is therefore open to one of our own entomologists to follow Mr. Miall's example and give us something of personal study in the same ample field, supplemented by the scattered accounts that already exist; unless, however, he follows our author's example and familiarizes himself at first hand with a large number of varied forms, he will produce but an indifferent work. Meanwhile the present volume will admirably

serve as a guide to any young entomologist, for it deals with forms almost all of which have their close counterpart in the life of our ponds and streams.

The book is excellently printed; in reading it through we have noticed but a single typographical error, where (p. 347) Heteroptera is printed. Heteropoda.

S. H. S.

*The Butterflies and Moths of Teneriffe.* MRS HOLT WHITE. London, L. Reeve & Co. 1894. pp. 9 + 107, 4 colored plates.

Mrs. Holt White, a connection by marriage of Gilbert White, of Selborne, spent the winter of 1892-93 in Teneriffe, and has published the result of her observations on the lepidopterous fauna of the island in a popular and unpretending volume.

The introductory chapter sketching briefly the characters and life histories of the Lepidoptera, though the least satisfactory part of the book, is not likely to mislead, and may readily be improved in a future edition, which will surely be called for; the hints and suggestions, and the directions for the killing, setting and relaxing of specimens are generally good, though here the main point to be gained is always experience.

Twenty-nine butterflies and thirty-four moths are briefly characterized, and there are frequent notes on their comparative abundance, habits, early stages and food-plants. In addition to the above, there is a list of twenty-eight moths, most of them recorded on the authority of Alphéraky in his paper, 'Zur Lepidopteren-Fauna von Teneriffa,' in the fifth volume of Romanoff's magnificent *Mémoires sur les Lépidoptères*; these, principally microlepidoptera, are considered by Mrs. Holt White as of little interest to the ordinary collector.

The four plates give good, recognizable figures of twenty butterflies and eleven moths; the coloring, though in some cases somewhat rough, is always effective.