BOOK NOTICES.

OUTDOOR STUDIES: a Reading Book of Nature Study.—By James G. Needham; r Vol., pp. 90. New York, Cincinnati, Chicago: American Book Company.

These are a series of stories of animal life, written in a charmingly interesting way, and designed to lead on a youthful reader to observe for himself the wonders of nature that are everywhere open to his view. begins with an account of the common wild snapdragon, or "butter and eggs," and tells how the peculiar structure of the flower is designed for the visits of the bumblebees who come for the nectar and carry off the pollen as well. The next chapters are on Chipmunks; Galls and their makers; the Golden-rod and its visitors and tenants; Crows and their doings; Dragon-flies, which, as our readers may remember, have been special objects of the author's studies; Eye-spots on insects which aid in the protection of their owners; and Ant-lions. Any boy or girl who takes up the book and dives a little way into its pages will surely read on with delight, and when the little volume is closed, be anxious to sally forth and see if he (or she) cannot find some similar marvels of nature and learn their meaning while admiring their beauty.

The book is one of a series designed for the use of school children who are about to enter the high schools. It is beautifully illustrated with about ninet; wood-cuts, the work of Mrs. Needham, the author's wife, and is provided with an index and a list of the scientific names of

the animals and plants referred to in the text.

LEPIDOPTERA, RHOPALOCERES AND HETEROCERES, indigenous and exotic. Supplement No. 1. By Herman Strecker. (Printed for the author), Reading, Pa., 1898. 12 pp., 4to. Price, 25 cents.

It is now twenty-one years since Mr. Strecker published the last number of the above-named work; it was, therefore, an agreeable surprise to receive the first part of a new issue with the old familiar title page. This "Supplement No. 1" contains descriptions of fifty-one species of Heterocera, which have all, with one exception—a species from Brazil been taken in North America; two-thirds of them are described from single examples. The author states in his preface that he found, on rearranging his collection of Noctuidæ, that he had a number of specimens which he was unable to identify, "either through the bibliography, or the examination of other collections, or by the aid of specialists," and consequently he took the matter in his own hands and issued this instalment of new descriptions. He explains also the difficulties that he met with in his endeavor to give figures of the species thus described, and how he was compelled to do without them. We certainly miss them very much, but as we are never likely to possess duplicates of anything that is unique in Mr. Strecker's collection, the want of them is not so serious. Under these circumstances it seems a pity that Mr. Strecker had not sent his descriptions to some entomological journal, such as the Transactions Am. Ent. Society, rather than to have published them in this form himself.