

school garden, studies on insects of economic importance, &c. The lessons are objective and practical, and from the stores of trustworthy information which they contain the teacher can select those topics most applicable to the locality and conditions under which he works. The volume is a plea for care and method, and we can recommend it to those teachers who desire to develop their work in this subject along sound lines. There are 178 illustrations, for the most part good, but several of those of insects might have been more carefully executed.

OUR BOOK SHELF.

An Introduction to Biology for Students in India. By Prof. R. E. Lloyd. Pp. xviii+298+15 plates. (London: Longmans, Green and Co., 1910.) Price 4 rupees (or 5s. 4d.)

THIS little book does not pretend to be a complete introduction to biology, and the title is perhaps somewhat misleading. It deals exclusively with certain invertebrate types and certain general principles, and appears to have been designed for the use more especially of Indian medical students. The author tells us in his preface that the book was written somewhat hurriedly, because it was urgently needed. The types dealt with have very properly been selected from the Indian fauna, and the work is evidently based very largely upon personal observations, for which the author deserves due credit. Some of the animals described, such as the fresh-water sponge, the scorpion, and the mosquito, are not usually dealt with in elementary text-books.

The work is of a strictly elementary character, but at the same time suffers somewhat from being rather too much up-to-date. Thus the chapter on heredity is practically confined to Mendelism. The author is not always happy in his definitions. He tells us that "the anterior end of an animal is that at which the mouth opens; the posterior end is where the anus is to be found. But difficulties sometimes arise in using these terms; for example, in a gasteropod mollusc, the mouth and anus open in the same direction." Surely it would be more correct to say that primarily the anterior end is carried foremost when the animal moves about, while the posterior end comes hindmost. It is difficult to excuse the spelling of the word "Foramenifera," and the statement that the shells of these animals are "always perforated by minute round apertures" is very misleading. Another misspelling against which we must protest is "chord," for "cord," in the case of the nerve-cord of Annelids. This is a mistake which is frequently made by elementary students, doubtless on the analogy of "notochord," which, of course, is really a Greek word.

It must not, however, be forgotten that this is a pioneer work written under great disadvantages. It shows a considerable amount of originality, both in scope and treatment, and should prove useful to those for whom it is intended.

A. D.

Botany for High Schools. By Prof. G. F. Atkinson. Pp. xv+493. (New York: Henry Holt and Co., 1910.)

WHEN it is found that a school text-book of botany of average size contains, in addition to a course of morphology dealing with growth and work of parts of the flowering plant, a series of life-histories drawn from all the plant divisions and accessory chapters on ecology, economic plants and plant breeding, the question naturally arises whether careful exposition is not being sacrificed to variety. There are certainly objections to the inclusion of the life-histories from

the lower cryptograms, as they are too sketchy to suffice for practical work; also the range and variation are too complex for the ordinary schoolboy or girl, while many teachers would prefer a good course of physiology or a grounding in the classification of vascular plants as an item in training.

Nearly half the book is devoted to the first part, in which the author presents a well-arranged account of the activities of the plant. The morphology of the vegetative organs is not so well ordered, and there are several unsatisfactory passages, such as the confusion between stem and shoot, unacceptable definitions of "decumbent" and parts of a leaf, and a misuse of cambium in describing the stem of the maize plant. The flowers, methods of pollination, and seed dispersal are treated at some length. The later chapters suffer from excess of generality or a tendency to the introduction of specialised topics, but it should be added that it is the author's intention to present outlines that are to be filled in by the teacher's lectures and practical work.

Proceedings of the Aristotelian Society. New series. Vol. x., 1909-10. Pp. 300. (London: Williams and Norgate, 1910.) Price 10s. 6d. net.

THE Aristotelian Society exists for the systematic study of philosophy, as to its historic development, and as to its methods and problems. It is an aristocratic body—intellectually speaking—consisting of about one hundred members, among whom are Mr. A. J. Balfour, Mr. Haldane, Prof. Sorley, Dr. Stout, Dr. Bernard Bosanquet, and Dr. Shadworth Hodgson.

In the latest volume of *Proceedings* there are papers on "Sensations and Images," by Prof. Alexander; "The Subject-matter of Psychology," by Mr. G. E. Moore; "Epistemological Difficulties in Psychology," by Dr. William Brown; "Kant's Account of Causation," by Mr. A. D. Lindsay; "Bergson's Theory of Instinct," by Mr. H. Wildon Carr; "Science and Logic," by Mr. E. C. Childs; "Some Philosophical Implications of Mr. Bertrand Russell's Logical Theory of Mathematics," by Mr. S. Waterlow; and two interesting papers on "Are Secondary Qualities Independent of Perception?" by Dr. Percy Nunn and Dr. F. C. S. Schiller respectively. The former takes up a position of vigorous realism, while the latter, with all his accustomed attractiveness of style—even when dealing with very technical matter—hopes to convince Dr. Nunn that philosophical salvation lies in humanism, for which the old terms idealist and realist have almost ceased to have meaning or interest. Dr. Nunn has a curious and rather novel argument in favour of there being possibly something really "there," in some hallucinations. He instances our old friend the "stick bent in a pool." To the eyes, it is bent, to the touch it is straight; in other words, its visual characters are not in the same position as its tactual. May we not therefore see a real thing which, to our other senses, is elsewhere? It is certainly a suggestive analogy, though risky.

Häusliche Blumenpflege. Eine Anleitung zur Pflege der dankbarsten Zimmer- und Balkon-Pflanzen. By Paul F. F. Schulz. Pp. vii+216. (Leipzig: Quelle and Meyer, n.d.) Price 1.80 marks.

ACCORDING to the author plant culture in the home is not sufficiently practised in Germany, and the object of the present work is to arouse more interest in the pursuit. Certainly if the plants for which instructions are given can be grown in the house, many having the time and taking a keen interest in flowers would be inclined to try their skill. The list includes Abutilon, Camellia, the Alpenrose, Bouvardia, Clivia, *Monstera deliciosa*, and *Odontoglossum grande*, in addition to the palms, geraniums, hydrangea, Cacta-