

## Short Reviews

*Studies in the Literature of Natural Science.* By Julian M. Drachman. Pp. xi+487+6 plates. (New York: The Macmillan Co., 1931.) 17s. net.

As science becomes more and more popular, the man of science can no longer isolate himself in the laboratory; he must communicate his attainments to the general public in books which can be read without spending a lifetime in the mere learning of an alphabet. If it could be shown that the writers of scientific classics produced what in some cases were works of literary art, that might be a more convincing argument still. Such is the task which the author of this interesting book sets himself to do. He confines his research to the literature of natural science in the nineteenth century, which is dominated by men of genius like Darwin, Lyell, Owen, Huxley, and Tyndall, pointing out in each case how art and science are happily interconnected. The general conclusion of this historical investigation is that the writer of books on scientific subjects can vastly increase the number of his readers and the efficiency of his presentation by means of increased attention to the literary art.

Besides a number of interesting quotations from the sources, and the novel commentary presented by the author of several classical scientific works, there are two points in this book which should be mentioned. One is the new 'cyclical' classification of the sciences, which are divided into four groups—mental, human, natural, physical—each of which is further divided into sub-groups. The arrangement illustrates in a striking manner the mutual interdependence of the sciences. The other point is a questionnaire on the literature of science which was answered by various scientific workers and writers, and is intended to show that there is no essential contradiction between literature and science. Huxley's "Essays" have had more votes than any other as a "particularly fine book of popular science".

T. G.

*A Manual of the Dragonflies of China: a Monographic Study of the Chinese Odonata.* By Prof. James G. Needham. (Zoologia Sinica, Series A: Invertebrates of China, Vol. 11, Fascicle 1.) Pp. ii + 344 + 11 + 20 plates. (Peiping: The Fan Memorial Institute of Biology, 1930.) 5 dollars; 20s.

THIS bulky memoir is based upon researches that were supported by a grant from the Heckscher Foundation of Cornell University, and it forms a notable contribution to a knowledge of the little explored insect fauna of China. The material which rendered the work possible was obtained from many sources and includes that collected by Dr. Needham during a year's residence in China. Altogether 266 species of dragonflies are described, of which 58 are regarded as being new to science. They are included in 89 genera, of which the single genus *Simolestes* is new. The memoir is very fully illustrated by 20 plates which portray structural

details of both adults and of the few nymphs that have yet been discovered. We congratulate the author, and those responsible for its publication, upon the production of a work that will be welcomed by students of the Odonata throughout the world.

*Thought Transference (or What?) in Birds.* By Edmund Selous. Pp. xi+255. (London: Constable and Co., Ltd., 1931.) 7s. 6d. net.

MR. SELOUS holds a high place as an observer of bird behaviour, and in the present small volume he gives much admirable description in support of his view that the concerted actions of flocks can be explained only by postulating some kind of 'thought transference' between the members. The apparently simultaneous rising of a flock of rooks without obvious extraneous stimulus; the unanimity with which a party of dunlins wheel in their dashing flight; the sudden hush that stills the screaming of a colony of terns: these and many other examples of community behaviour the author observes over and over again with minute care.

The crux lies, of course, in the interpretation, and the reader may doubt whether the human eye is not deceived by an appearance of simultaneity that is in fact an extreme rapidity of imitative action: the author, indeed, seems to give part of his case away when he describes instances in which the movement could be seen spreading through the flock. Even so, there are difficulties, for why are some movements of individuals instantly conformed with by all the rest, while other movements—as the author points out—are ignored by the majority? The phenomenon is, at the least, a remarkable one, but Mr. Selous admits that his explanation would itself require to be explained. The author's method of presenting his matter in the raw, that is, wholly in the form of extracts from his diary embellished with footnotes, will probably appeal to some readers, but it will repel those who prefer a more orderly marshalling of evidence and argument.

*The British Journal Photographic Almanac and Photographer's Daily Companion: with which is incorporated 'The Year Book of Photography and Amateurs' Guide' and 'The Photographic Annual', 1932.* Edited by George E. Brown. Pp. 684 + 64 plates. (London: Henry Greenwood and Co., Ltd., 1932.) Paper, 2s. net; cloth, 3s. net.

THIS well-known handbook for photographers needs no introduction to readers of NATURE: it has been published annually for more than sixty years. This year there are five articles by well-known writers on photography. The latest advances in photography and photographic apparatus are discussed in a space of one hundred and sixteen pages. A further eighty-four pages gives a great mass of formulæ and other technical information. Not least in importance are the advertisements, which are very numerous and sufficiently descriptive to be of great use in a handbook of photography. The examples of pictorial photography cover a wide range of subjects and are well produced in photogravure.

S. O. R.