

Stars," "Tornadoes in the Sun," "Stars and their Wireless Messages," etc. By this method of treatment, the reader who scans the pages from cover to cover in an evening or two must necessarily encounter some unavoidable repetition of salient facts. On the other hand, a few points of general interest have been omitted. No mention is made, for example, of the cyclical change of the shape of the sun's corona. The description of Cepheid variables might well have contained a few sentences concerning their use in the determination of stellar distances. Again, in the chapter on "Greenwich Observatory" a brief reference is due to the instrument which produced the original of Plate VI., as being typical of another branch of routine work carried on for more than fifty years. It may be added that the type is scarcely large enough for a popular work. There are very few misprints, but the index is defective in a few places. The illustrations are a pleasing feature and include several of the most recent astronomical photographs, the reproduction of which is above the average standard for books of this kind.

*A Manual of Elementary Zoology.* By Dr. L. A. Borradaile. (Oxford Medical Publications.) Fifth edition. Pp. xvi+670+16 plates. (London: Oxford University Press, 1926.) 16s. net.

DR. BORRADAILE'S "Manual" is well known to all teachers of zoology, and, to judge from the frequency with which new editions appear, it must also be well appreciated by students. In these circumstances praise is superfluous and interest centres on the changes which the new edition shows. The most important of these are in the accounts of the movement of *Amœba* and of the relation of individuality to metabolic gradient, while the introductory chapter, the chapter on reproduction and sex, and that on the animal in the world, have been rewritten—and much improved.

A good deal of new matter has crept into the book since its first appearance, with the inevitable result that the medical student meets in it much that does not concern him, while the pure zoologist finds some rather serious omissions and some cases of too extreme condensation. There is no mention, for example, of *Helix*, *Peripatus*, or *Ciona*, and the reviewer's experience of the chapters on evolution and embryology is that they are too compressed to be of great value to the student. No two authors, however, would solve the problem of what to omit in the same way. On the whole, Dr. Borradaile's choice is a wise one; he maintains a balance between morphology and philosophy which makes his book a scholarly treatise, and one that can be unreservedly recommended.

*Elements of Photogravure, Photo Printing from Copper Plates: Screen Photogravure simply explained, with full Working Instructions and an Explanatory Chapter on Modern Rotary Gravure Printing.* By Colin N. Bennett. (Lockwood's Manuals.) Pp. viii+129. (London: Crosby Lockwood and Son, 1926.) 5s. net.

MR. BENNETT describes in clear and simple language every step of the process of the making of photogravure prints by the screen plate process, leaving the original dust-grain process with little more than a bare mention

as out-of-date. He begins with the getting of the necessary apparatus and materials, and estimates the prime cost to one who has the usual photographic necessities at from 10*l.* to 15*l.* This includes a copper-plate printing press. The book appears to provide an answer to every question that a photographer, whether amateur or professional, might wish to ask during his first attempts at the process, even as to where the various items may be purchased. In order to render the volume more complete, the final chapter is devoted to the "Elements of Rotary Gravure," and on the last page Mr. Bennett says that he "does not hesitate to name rotary gravure as the best all-round solution of two and three colour photo-printing." Flat plate gravure is not well adapted for the superposition of two or more impressions, because the damping of the paper renders registration difficult on account of its expansion thereby, and because the capacity of the paper to pick up copper plate ink is much diminished after its first pull through the press.

*Biology.* By O. H. Latter. ("Science for All" Series.) Pp. vii+197. (London: John Murray, 1926.) 3s. 6*d.*

THIS book may be confidently recommended wherever biology is taught as a subject of general education. Mr. Latter's long experience of biological teaching is an assurance that from the wide field of possible topics his choice will be a wise one, and his book is, in fact, a notable success. Its chapters are linked by the principles of the dependence of living things on one another, and their adaptations to their surroundings. Since it is assumed that time will not be available for general practical work, each chapter ends with a suggestion of suitable demonstrations, which need no special equipment beyond a few microscopes. Two features of the book will make it particularly helpful to its readers—its clear diagrams and Mr. Latter's practice of giving the Latin or Greek derivation of all technical words. He thereby removes, as nearly as possible, one of the chief difficulties of a young biologist—that of mastering the terms in which the science is described.

*Grundzüge der mathematischen Erdkunde.* Von Prof. Dr. Georg Wegemann. (Sammlung Borntraeger, Band 9.) Pp. 184. (Berlin: Gebrüder Borntraeger, 1926.) 6.60 gold marks.

PROF. WEGEMANN'S book is a compendium of astronomical and geodetic knowledge. It is mainly descriptive, with abundant numerical data; formulæ are quoted but not proved. Time measurement, including many systems not prevalent in modern Europe, the form and motions of the earth, astronomical errors of observation, and the nature of the principal perturbations of the moon's motion, are a few of the varied topics treated.

*An Introduction to the Calculus.* By Clement V. Durell and R. M. Wright. (Cambridge Mathematical Series.) Pp. vii+91+xi. (London: G. Bell and Sons, Ltd., 1926.) 2s. 6*d.*

THIS is a reprint, with slight modifications, of the section on calculus in Part 2 of the authors' "Elementary Algebra." The course meets the requirements of the School Certificate Examination conducted by the Oxford and Cambridge Joint Board.