

life-tables, on the elementary theory and some special problems of probability, on the probable error, on the measurement of variation and correlation, and on simple curve fitting. The mathematical explanations that he has introduced in each special section are treated in a simple and logical manner, and should be followed without much difficulty by the average medical man. To each chapter is attached a short list of the books and papers which he regards as most suitable for reading, to provide more detailed information on the subject-matter therein.

While there are already available one or two well-known books on the elementary principles of statistics, there would appear to be a place for a book like the present one, which is specially designed for medical readers. It should prove a trustworthy guide to such in the legitimate use, in their work, of the simpler of the modern biometric methods, the practice of which is rapidly becoming more general and more essential in the field of medicine.

*Handbuch für das mikroskopisch-zoologische Praktikum der wirbellosen Tiere.* Von Prof. Dr. Paul Deegener. Erste Lieferung. Pp. 160. (Berlin und Leipzig: Walter de Gruyter und Co., 1923.) 8s.

THE first instalment of this "Handbuch" deals with Protozoa, Porifera, Cœlenterata, and Turbellaria, and the complete work will consist of six or seven parts, that is about 1000 pp. A brief definition of each phylum, e.g. Protozoa, is followed by a statement of the principal characters of the subclass, e.g. Sarcodina, and of the order, e.g. Lobosa, and the latter is then the subject of a fairly general account, with illustrations of the more important examples, dealt with from the point of view of structure, life-history, etc. For each subdivision—class, subclass, or order, according to convenience—suggestions are given for obtaining the more typical examples, and suitable methods are indicated for examination in the living state and for preservation, staining, and mounting of the organisms or their parts. As a whole, the work seems to accomplish its purpose satisfactorily, and some parts of it are excellent in treatment. The author gives no account of a siphonophore or of a ctenophore, and of the Sporozoa only the gregarines receive consideration. Other teachers will no doubt expect in a volume of this size, as did the reviewer, to find at least a short treatment of the Siphonophora and the Ctenophora, and perhaps also of a Coccidium and of malaria, as material of both but especially of the former is by no means rare.

The figures, with few exceptions, are well chosen, but the legends of certain of them require revision, e.g. the author has reproduced Kent's old figure of *Dendrosoma*, and has retained the reference to "external buds" for bodies which have been shown to be epizoaic Acinetaria of the genus *Urnula*.

*Birds in Legend, Fable and Folklore.* By E. Ingersoll. Pp. v+292. (London: Longmans, Green and Co., 1923.) 12s. 6d. net.

IN this work Mr. Ernest Ingersoll leads us along an attractive byway of ornithology. One chapter deals with birds as national emblems, and traces the symbolic eagle, not omitting dicephalous varieties, from 4000 B.C.

on the shores of the Persian Gulf to the bald-headed species honoured to-day in the United States. Others deal, for example, with Noah's messengers and parallel legends, with the folklore of bird migration, with birds in Christian tradition, with birds in ancient augury and modern popular weather-lore, and with birds of ill omen at all times and in many lands. Historical legends also have a place, from the Capitoline geese to the feathered disciples of St. Francis of Assisi which form the subject of the frontispiece. Purely fabulous species, such as the phoenix and the rukh, are likewise dealt with.

Mr. Ingersoll is an American, and we note that the folklore of the white and black peoples of the United States is relatively poor, as one would expect in populations without long traditions: Red Indian beliefs and stories, however, figure largely in the book and will be new to many readers in Great Britain. For the rest, the author has drawn his information both from antiquity and from the present time, and from very many parts of the world. The material he has collected is varied in nature and very large in amount, but even so it is not exhaustive. We find, for example, in the chapter on migration, only a bare mention of hibernation under water and no account of the views on that subject expressed by such writers as Olaus Magnus of Upsala. A better index would have been an advantage.

*The Properties of Engineering Materials.* By W. C. Popplewell and H. Carrington. Pp. xii+546+34 plates. (London: Methuen and Co., Ltd., 1923.) 28s. net.

THE volume before us is divided into two parts, the first of which deals with the mathematical theories of stress from the engineer's point of view, and the second includes matter descriptive of the properties of materials and methods of testing. The book is well written, and will be of service both to students and engineers in practice, who will find in the second part a great deal of information regarding the results of tests. It is an open question, however, as to whether both sides of this subject can be treated adequately in one volume, and on examination of Part I., we frequently find that the authors have stopped a discussion just when it had begun to be interesting, obviously through limitations of space. This is somewhat unfortunate, since the book is intended to meet the needs of the final years of university courses. Thus at the end of chapter x., which deals principally with resilience, curved bars, and flat plates, we find four pages on earth pressure (Rankine's theory), and the stability of dams. Both of these subjects might have been omitted, or, if included, both deserve much fuller treatment. The index requires revision also, since we can find no reference either to Rankine, or to earth pressure.

*Nature and Human Nature: Essays Metaphysical and Historical.* By H. B. Alexander. Pp. x+529. (Chicago and London: The Open Court Publishing Co., 1923.) 15s. net.

A COLLECTION of contributions to popular and philosophical journals. The writer has a picturesque style and reveals a striking personality. His essays are not original researches, but for the most part reflections on spiritual values.