

BOOK NOTICES

Biometric Principles.

This is an excellent introduction to the principles of biometric analysis. Proceeding on the admirable assumption that biologists need a conviction of the usefulness of biometric formulae and a knowledge of the fundamental assumptions involved rather than a mathematician's detailed training, the author develops logically the underlying principles of biometry. "Normal" curves and their statistics, tests for goodness of fit, correlations, predictions, and errors of sampling are all discussed in a lucid and practicable manner. It is to be hoped that Part II of this work will be speedily available.—L. H. S.

Outlines of Biometric Analysis, Part I, by Alan E. Treloar. 65 pp. (mimeograph). Minneapolis, The Burgess Publishing Co., 1933. \$1.65.

Great Men of Science.

It is not often that a historical biography of scientists is of a truly readable nature, even to other scientists. The material is apt to be either tiresomely technical, or else to consist of useless and superficial personal idiosyncrasies. This book, however, may lay claim to being a masterpiece. The story of the development of the sciences and of the men who made the development possible is strongly and consistently woven. The book will repay careful reading, and the reading will not be a chore.—L. H. S.

Great Men of Science, by Philipp Lenard. xxii+389 pp. New York, The Macmillan Company, 1933.

British Economic Grasses.

An interesting volume containing keys to 57 British economic grasses. Two keys are presented, one based on the external vegetative structures, the other on the anatomy of the leaf blade and sheath. Of the 57 forms dealt with, 49 are reasonably abundant in eastern North America, many of them being the common grasses of our lawns and pastures. Since the keys in the ordinary manuals are based on reproductive structures, this volume would be valuable to anyone attempting to identify the grasses of lawns and closely grazed pasture lands.

W. H. CAMP.

British Economic Grasses, by Sidney Burr and Dorothy M. Turner. 94 pp., 111 figs. New York, Longmans, Green & Co. 1934. \$3.75.

Animal Biology.

Professor Wolcott of Nebraska has produced here a textbook which deals with a wider range of subjects than either Zoology textbooks which review a series of type forms, or the typical "biology" text which fails to satisfy the requirements for a standard college zoology course. It is a modification of these two types in which the subject is developed in a logical way, presented in five parts, which contribute to the adaptability of the book.

The author has made a definite attempt in Part I to state and illustrate the general principles and their applications within this field. The body of the text is concerned with a review of the animal groups, in which much more than usual is included on life histories, behavior and environmental relationships. The last fourth of the book deals with general considerations of ecology, evolution, and a whole series of related problems.

The text is well illustrated with many original drawings. The style is clear, forceful and concise. Many common misconceptions are stated as such and ruled out. Behavior is placed on a stimulus-response basis. Statements are unusually if not entirely free from teleology. Above all, the student is made to feel that the animals being discussed are alive. A useful glossary of terms precedes the index.

This book should receive the attention of those presenting general survey courses as a text which presents a wide range of material in a clear, dynamic way, understandable to the student with normal preparation.—JOHN W. PRICE.

Animal Biology, by Rob't H. Wolcott. xvii+615 pp., 335 fig. New York, McGraw-Hill Book Co., Inc., 1933. \$3.50.

Hunting Dinosaurs.

These two books belong together, as the second is a sequel to the first. They are the autobiographical account of the author's experiences as a collector of fossils. The man, Charles H. Sternberg, started life in 1850 in New York, moved West in 1865 when his father became principal of a College in Iowa, and two years later went to his brother's ranch in Kansas. Although he was lamed in a youthful accident he early became interested in the collecting of fossils and minerals. This interest became his one aim in life when at the age of seventeen he decided (much to the disgust of his father) to devote himself to that pursuit. His first serious collecting was of fossil plants from the Dakota group. From this he "graduated" into collecting fossil vertebrates, for the most part. The years between 1867 and 1907 brought him into personal contact with such leaders as Leo Lesquereux, the paleobotanist, E. D. Cope, Karl von Zittel, S. W. Williston, Henry Fairfield Osborn, and the great rank of vertebrate paleontologists of that time. He collected for and with them, covering most of the West, visiting known collecting areas or discovering new ones. These contacts enliven the books and give insights into these men. The second book covers his experiences from 1909 to 1917 during which time he was collector and chief preparator for the Geological Survey of Canada. Since then he has "retired" to California although still actively collecting. (I had a letter from him this past spring offering fossils for sale.)

We often read with pleasure the life of a game hunter. Let us try the life of a really **big** game hunter. Here is an opportunity to obtain a better insight into the trials and tribulations of hunting fossil "big game." Now and then the author diverges from the course of events and draws careful and detailed "word pictures" of scenes from out of the geologic past, clothing the land with plants and filling the sea, air, or woods with the proper animals. The books leave one with a renewed wonder at what has passed and a great respect for one of the oldest and earliest collectors. His collections are now found in most of the great museums of the world.

The chronological order of events is not strictly followed, and though jumping backwards and forwards in time is confusing. The illustrations are all halftones and give the reader an idea of the animals mentioned and an idea of the difficulties encountered in collecting, especially in the earlier years of the work.

WILLARD BERRY.

Life of a Fossil Hunter, by Charles H. Sternberg. 286 pp. San Diego, 1931. \$1.75.

Hunting Dinosaurs on Red Deer River, by Charles H. Sternberg. 261 pp. 1932. \$1.75. (Published by Charles H. Sternberg, 4046 Arizona St., San Diego, California).

Sixth International Botanical Congress.

Those interested in the botanical sciences are requested to note that the time of the Sixth International Botanical Congress has been changed. The Congress will meet at Amsterdam, Holland, from September 2nd to September 7th, 1935.