

•First Glances at New Books

Zoology

WILD ANIMALS IN AND OUT OF THE ZOO—William M. Mann—*Smithsonian Institution Series, Inc.*, 362 p. Fortunate is the city that has a zoo, and fortunate is the zoo that has as sympathetic and well-schooled a director as Dr. Mann of the National Zoological Park at Washington, D. C. In this, the latest volume in the Smithsonian Scientific Series, we learn of his many years of experience with all kinds of animals, from mouse opossums to elephants, both behind the bars and among the jungle trees. While the principal emphasis is naturally on the national zoo, there are fascinating accounts of how the problems of getting animals there are met and solved, and interesting excursions into the biography of famous individuals like Jumbo. And chapters like the one on "Some Rhinos the Park Has Not Had" show that there are still goals to be attained in stocking the National Zoo and that he has hope and ambition to attain them. The literary style is interesting and vivid, and the illustrations, both photographs and drawings, are up to the high standards of the series.

Science News Letter, November 1, 1930

Linguistics

MATTOLE, AN ATHABASKAN LANGUAGE—Fang-Kuei Li—*University of Chicago Press*, 152 p., \$3. Analysis of a language spoken by California Indians who lived along the Mattole and Bear rivers. The study consists of phonology, morphological elements, lexical elements, and a text.

Science News Letter, November 1, 1930

Zoology

STUDIES ON THE STRUCTURE AND DEVELOPMENT OF VERTEBRATES—Edwin S. Goodrich—*MacMillan*, 837 p., \$10. A scholarly discussion of the subject, not meant for general readers or any but advanced students and those engaged in teaching and research to whom it should be a welcome aid. There are numerous illustrations, many of which were drawn by the author. There is also a bibliography.

Science News Letter, November 1, 1930

Astronomy

DETERMINATION OF ORBITS OF COMETS AND ASTEROIDS—Russell Tracy Crawford—*McGraw-Hill*, 233 p., \$4. One of the most practical problems that

the astronomer encounters is when a new comet or planet is discovered and he has to work out its exact orbit from a few observations. Undoubtedly the leading American center of orbit computation is the Student's Observatory of the University of California, and Prof. Crawford is one of their experts. In this excellent book he has produced the first text-book on the subject, for the larger works, such as Oppolzer, are much too inclusive for an introductory college course, though they have been used because no better work was available. Dr. Crawford provides an introductory text, and at the same time gives the very latest methods, such as those of Dr. Leuschner, his chief, and Dr. Merton, in England. Prerequisite to its use is a working knowledge of differential and integral calculus and spherical trigonometry. With this book now available, it is to be hoped that interest in the study of this important branch of astronomy will increase.

Science News Letter, November 1, 1930

Archaeology

THE MOUND-BUILDERS—Henry Clyde Shetrone—*Appleton*, 508 p., \$7.50. Dr. Shetrone, who is one of the foremost authorities on the mound-builder Indian cultures, has made his book as simple and straightforward as the title. He has dedicated it to the average man and woman, who are aware of the human interest in the story of these prehistoric Indians and would like to know the important facts about them. The professional prehistorian will also find the book useful. It is the first book of its kind bringing the subject up-to-date in one compact volume. Besides general chapters on the manners and customs of these Indians there are a number of chapters on mound-building tribes of different localities, such as the Ohio area, the Great Lakes area, the Pennsylvania area. To make sure that the subject is clear to his readers Dr. Shetrone has chosen 299 illustrations, and they are both interesting and instructive.

Science News Letter, November 1, 1930

Chemistry

RESTORATION OF ANCIENT BRONZES AND CURE OF MALIGNANT PATINA—Henry W. Nichols—*Field Museum*, 51 p., 50c. Describes the electrochemical process which was first developed by

Prof. Colin Fink, for the Metropolitan Museum of Art, and which has been used at the Field Museum for five years. Diagrams and descriptions of apparatus used at the Field Museum, and directions for procedures and results are explained.

Science News Letter, November 1, 1930

Dietetics

GROW THIN ON GOOD FOOD—Luella E. Axtell—*Funk and Wagnalls*, 336 p., \$2. A cheery book full of good, safe advice, tempting menus and original recipes by a physician who reduced her own weight 75 pounds and passes on the method to others. The book emphasizes the importance of will power in reducing. Simple but effective exercises are given with advice on mechanical aids to reduction.

Science News Letter, November 1, 1930

Mechanics

MECHANICS FOR STUDENTS OF PHYSICS AND ENGINEERING—Henry Crew and Keith Kuenzi Smith—*Macmillan*, 371 p., \$4. So often do modern writers neglect the historical side of their subjects that it is a relief to encounter a book such as this, in which the historical approach is used to show what mechanics is to day. Probably no physicist is better fitted for such work than Prof. Crew, who is already known as one of the co-translators of Galileo's "Dialogue Concerning Two New Sciences," which laid the foundations of modern mechanics. Here, in collaboration with his former colleague at Northwestern University, he has produced a college text on mechanics that is adapted to a year course meeting two or three times a week, or a semester course meeting five times a week. As an example of its practicability as a text may be mentioned the fact that the authors, feeling that mechanics should be started early and at the same time the student begins calculus, postponed use of this method to the middle of the work.

Science News Letter, November 1, 1930

Aviation

AVIATION ENGINES—Ray F. Kuns—*American Technical Society*, 198 p., \$2. A handbook of aviation power plant operation and maintenance which has been written with the cooperation of manufacturers of the various engines.

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