

• First Glances at New Books

See also
page 400

Biology

STUDIES IN THE LITERATURE OF NATURAL SCIENCE—Julian M. Drachman—*Macmillan*, 487 p., \$4. A new and interesting approach to the history of science. The dramatic rise of biological theory is treated like other literature, as the expression of its authors' minds. References, bibliography and index are excellent.

Science News Letter, December 20, 1930

Eugenics

PRACTICAL APPLICATIONS OF HEREDITY—Paul Popenoe—*Williams and Wilkins*, 128 p., \$1. An interesting group of popular essays with such engaging titles as *Will Your Son Be A Genius?* *Heredity and the Infant Prodigy*, *Your Children's Chance To Be Talented*. The book should win many friends to the cause of eugenics because of the simple, effective way in which the practical side of this science is presented.

Science News Letter, December 20, 1930

General Science

FIVE YEARS OF RESEARCH IN INDUSTRY 1926-1930—Clarence J. West—*National Research Council*, 91 p. 50c. Those who wish to obtain a background of recent industrial and scientific research in more than eighty fields of industry ranging from abrasives to woods will find this bibliography helpful in selecting articles which are worthy of being read.

Science News Letter, December 20, 1930

Natural History—Travel

GUIDE TO THE CRATERS OF THE MOON NATIONAL MONUMENT, IDAHO—Harold T. Stearns—*Caxton Printers, Caldwell, Idaho*, 59 p., pa. 25c, lea. \$2. A compact and well-illustrated guide to one of the newest and most interesting of our national monuments. The principal attention is given to the volcanic geology of the region, but there are also brief sections on the plant and animal life.

Science News Letter, December 20, 1930

Physics

THE WAVE MECHANICS OF FREE ELECTRONS—G. P. Thomson—*McGraw-Hill*, 172 p., \$2.50.—The wave mechanics of de Broglie and Schrödinger has been one of the most important physical developments of recent years, and Dr. Thomson, son of Sir J. J. Thomson, discoverer of the electron, has been in the forefront of those studying the

problem. In this volume are published the lectures he gave on the subject last year at Cornell University. It is an attempt, says the preface, "to state the principles and application of the new wave mechanics, in so far as these concern electrons not forming part of an atom, using the minimum of mathematics." In this attempt he has succeeded admirably, and the book can be recommended to anyone who wants authoritative information concerning this new phase of physical science.

Science News Letter, December 20, 1930

Physics

MATTER AND ENERGY, VOL. I.—Gerald Wendt and Oscar F. Smith—*Blakiston*, 335 p., \$1.50. For some years students at Pennsylvania State College have been given an introductory course combining physics and chemistry, making no distinction between them, but using both to give the student an idea of the fundamental nature of matter and energy. This first volume is an inquiry into the nature of matter and energy, and covers such topics as molecules, atoms, protons, electrons and radiation. The second volume, it is announced, will show how modern civilization rests on this knowledge.

Science News Letter, December 20, 1930

General Science

PATENT RIGHTS FOR SCIENTIFIC DISCOVERY—C. J. Hamson—*Bobbs-Merrill*, 286 p., \$5. Though the composer of a sonata can copyright his work, and control its presentation; and the inventor of a mousetrap can patent it and share in the profits, if any; the discoverer of a fundamental scientific principle has no such rights. His discovery becomes public property. In this book the author sums up the situation in various countries and suggests a statute that would give such rights to the scientist. It is doubtful, however, whether many scientific men would care to take advantage of such rights, and it seems highly probable that any such procedure would materially retard the progress of science.

Science News Letter, December 20, 1930

Plant Pathology

EPIDEMIC DISEASES OF FRUIT TREES IN ILLINOIS 1922-1928—L. R. Tebon and G. L. Stout, 97 p. Of interest to plant pathologists and commercial orchardists.

Science News Letter, December 20, 1930

Chemistry

AN INTRODUCTION TO CHEMISTRY—John Arrend Timm—*McGraw-Hill*, 561 p., \$3.50. It is a bit surprising to one brought up on the older generation of chemical textbooks to find one that contains discussions of such topics as sound waves, radiation of electromagnetic waves including x-rays, the quantum theory and Millikan's oil drop experiment to determine the charge of the electron, as in this excellent work. However, the subtitle, "A Pandemic Text," should prepare the reader for an unorthodox presentation. The idea of the book, and the course at Yale on which it is based, is to give the student who takes only chemistry a good idea of the problems of physical science, and it seems that it should be successful in this attempt.

Science News Letter, December 20, 1930

Biography—General Science

THE BOOK OF MY LIFE—Jerome Cardan, translated by Jean Stoner—*Dutton*, 331 p., \$3.50. An unusual autobiography is here made available to English readers. Dr. Cardan was a celebrated Italian physician, a contemporary of Cellini. His life was an exciting one and he writes of it in pleasing style. Besides being an eminent scientist, he was a believer in magic. This translation is equipped with an introduction and explanatory notes.

Science News Letter, December 20, 1930

Archaeology

EXPLORATION OF RUINS IN THE WHITE MOUNTAIN APACHE INDIAN RESERVATION, ARIZONA—Walter Hough—*Smithsonian Institution*, 20 p., 10 pl. At this pueblo, explorations were conducted in 1919 for the Bureau of American Ethnology. Detailed results have not heretofore been published, Dr. Hough explains, because it was expected that further work might be done there. Some interesting features of pueblo engineering were found at this site.

Science News Letter, December 20, 1930

Ichthyology

CONTRIBUTION TO THE BIOLOGY OF THE PACIFIC HERRING, "CLUPEA PALLASII, AND THE CONDITION OF THE FISHERY IN ALASKA—G. A. Rounsefell—*Government Printing Office*, 93 p., 35 c. A publication of the Bureau of Fisheries, of interest to ichthyologists and commercial fishermen.

Science News Letter, December 20, 1930

• First Glances at New Books

See also
page 399

Public Health History

RIDERS OF THE PLAGUES—James A. Tobey—*Scribner's*, 348 p., \$3.50. A vivid, dramatic account of some of the world's worst plagues and man's conquest of them. Unfortunately, the modern reader may be discouraged by the long paragraphs and rather long sentences. The book has several fine illustrations and the frontispiece and title page are particularly attractive.

Science News Letter, December 20, 1930

Physics

A TEXTBOOK OF SOUND—A. B. Wood—*Macmillan*, 519 p., \$6.50. Authors of older books on sound would hardly recognize some of the topics covered in this excellent work, as belonging in their field. "For want of a more appropriate word," says the author, "I have regarded 'sound' as referring to vibrations of all frequencies, audible or otherwise." Hence we find mentioned such topics as sonic depth finding, sound ranging, and the work with ultra-sonics of R. W. Wood and A. L. Loomis at the latter's Laboratory at Tuxedo Park. In addition are the more usual topics, dealing with audible sound, including vibrations of a string, of bars and of membranes, transmissions of sound, etc.

Science News Letter, December 20, 1930

Natural History

ABYSSINIAN BIRDS AND MAMMALS—Louis Agassiz Fuertes—*Field Museum*, 32 colored prints, portfolio \$3, fabrikoid bound \$5. Once in a rare while a publication appears which makes ordinarily reluctant reviewers perfectly willing to indulge in superlatives. This collection of prints of paintings made in Africa by the late Louis Agassiz Fuertes demonstrates anew that he was king of his craft and makes us realize with a fresh pang what the worlds of zoology and art alike lost by his untimely death. The printers have done their work so well that one could easily believe he had a collection of Fuertes' originals in his hand instead of "just prints."

Science News Letter, December 20, 1930

Medical History

HISTORIC ARTIFICIAL LIMBS—Vittorio Putti—*Hoerber*, 63 p., \$1.50. Translated by Dr. M. Forrester Brown. A short discussion of an unusual but interesting subject. The author, professor of orthopedic surgery at the famous University of Bologna, is particularly well qualified to discuss it. Eight arti-

ficial limbs are illustrated and described in detail with the author's opinions. Several others are mentioned more briefly in the introduction. The book will interest historians as well as orthopedic surgeons, and also those who have made a hobby of armor and old inventions.

Science News Letter, December 20, 1930

Travel

GREAT DIPPER TO SOUTHERN CROSS—Edward H. Dodd, Jr.—*Dodd, Mead*, 332 p., \$3.50. An interesting account of the voyage of five Yale men, including the author, in a seventy-five-foot schooner from Connecticut to Australia.

Science News Letter, December 20, 1930

General Science

SCIENCE AND THE SCIENTIFIC MIND—Leo E. Saidla and Warren E. Gibbs—*McGraw-Hill*, 506 p. \$3. Essays on various inspirational aspects of science are here gathered for use in English or general science courses in which it is desired to emphasize the scientific habit of thought. The work of modern essayists, including Edwin E. Slosson, Robert Andrews Millikan, Bertrand Russell, Michael Pupin and others is mingled with that of another generation represented by John Tyndall and Thomas Henry Huxley.

Science News Letter, December 20, 1930

Sociology—Philanthropy

ANNUAL REPORT FOR 1929—*Rockefeller Foundation*, 401 p., Free. This covers the first year of the reorganized Foundation under the guidance of its new president, Dr. Max Mason. Several new policies are described. The bulk of the report covers the activities of the International Health Division.

Science News Letter, December 20, 1930

Chemistry—Botany

PLANT PHYSIOLOGICAL CHEMISTRY—Rodney Beecher Harvey—*Century*, 413 p., \$6. As its title implies, this reference and textbook is written from a physiological rather than a chemical point of view. It is a comprehensive presentation of the chemical mechanism of plants.

Science News Letter, December 20, 1930

Zoology

THE SALAMANDERS OF THE CHICAGO AREA—K. P. Schmidt—*Field Museum*, 16 p., 4 pl. Another of the useful booklets of the Field Museum series.

Science News Letter, December 20, 1930

Physics

PHOTOCELLS AND THEIR APPLICATION—V. K. Zworykin and E. D. Wilson—*Wiley*, 209 p., \$2.50. So important has the photoelectric cell become in modern science and industry, that it is about time for an adequate book dealing with its theory and applications. Dr. Zworykin and his colleague, both Westinghouse research engineers, have themselves made important contributions to these applications, so the book is entirely authoritative. First, the history of the cell is given, then its theory and mechanical features. The later chapters tell of its application in sound movies, facsimile transmission, television, and such other applications as counting, photometry, color matching, etc. The final chapter discusses "Photocells in the Future." It is a book to be highly recommended to any who want complete information on this valuable device.

Science News Letter, December 20, 1930

Archaeology

THE ARCHAEOLOGY OF THE WHITE-WATER VALLEY—Frank M. Setzler—*Historical Bureau, Indiana Library and Historical Dept., Indianapolis*, 188 p. Indiana is one of the midwestern states to undertake the task of surveying Indian remains within its borders. The survey of the Whitewater Valley is completed after two seasons of work, and the *Indiana Historical Bulletin* has given over its September, 1930, issue to it.

Science News Letter, December 20, 1930

Mechanics

MECHANICS—James E. Boyd—*McGraw-Hill*, 384 p., \$3.50. Here is the second edition of a widely used college text. The principal change is the adoption of the British engineer's unit of mass, equal to 32.174 pounds mass. For this the author prefers the name "geepound" though he does mention Worthington's suggestion that it be called a "slug."

Science News Letter, December 20, 1930

Biology

(1) **THE BIOLOGY OF THE VOLES OF NEW YORK** (2) **THE RELATION OF MAMMALS TO THE HARVARD FOREST**—Robert T. Hatt—*Roosevelt Wild Life Forest Experiment Station*, 165 p., \$1. A full discussion of the biology of an interesting group of mammals, with a briefer discussion of the relation of mammals in general to a forested area.

Science News Letter, December 20, 1930