• First Glances at New Books

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Physics

WAVE - MECHANICS — Arnold Sommerfeld, translated by Henry L. Brose-Dutton, 304 p., \$6.25. Prof. Sommerfeld's "Atombau und Spektrallinien," now in its fourth German edition, has deservedly become the standard work on the subject, and Dr. Brose's translation of a few years ago has made it available to English readers. The birth and growth of quantum and wave mechanics since its publication has resulted in a supplementary volume giving the author's views towards the new theories. In the author's preface he states that he is renouncing "the more definite wave-kinematic objective, set up by Schrödinger and de Broglie," and sacrifices "pictorial representation to formalism. But the dualism between the light-quantum and the light-wave extends into the corpuscular region; beside the electroncorpuscle we have the electron-wave with all the accumulative experimental evidence to confirm it." Necessarily the book is highly mathematical, for to write on this subject without mathematics is as impossible as writing a symphony in plain English, without musical notation. But he has described in a convenient form, for one properly qualified, the mathematics needed to understand the theory.

Science News Letter, November 22, 1930

Philology

BABEL OR THE PAST, PRESENT AND FUTURE OF HUMAN SPEECH — Sir Richard Paget—Kegan, Paul, 93 p., 2s. 6d. Sir Richard has long been a student of speech. Now in this volume of the Today and Tomorrow series he recapitulates the fundamentals of speech as he views them and discusses the yesterday, today and tomorrow of our language.

Science News Letter, November 22, 1930

Biography

EDISON AS I KNOW HIM—Henry Ford, in collaboration with Samuel Crowther — Cosmopolitan, 123 p., \$1.50. In this book Mr. Ford, through the typewriter of Mr. Crowther, describes some of the highlights of a friendship that began in 1896. He expresses the opinion that "Edison has done more toward abolishing poverty than have all the reformers and statesmen since the beginning of the world."

Science News Letter, November 22, 1930

Astronomy

Present-Day Astronomy—J. W. N. Sullivan—Newnes, 143 p., 2s 6d. Here is a new volume in this British publisher's "Outline Library." It is a small, pocket-sized work covering such important astronomical topics as the scale of the universe, the origin of the solar system, the planets, the sun, comets and meteors, the analysis of light, the history of a star and the finite universe.

Science News Letter, November 22, 1930

Journalism

TYPOGRAPHY AND MECHANICS OF THE NEWSPAPER—Kenneth E. Olson—Appleton, 441 p., \$5. The technique of newspaper making, both editorial and mechanical, is covered by the author, who is the professor of journalism at the University of Minnesota.

Science News Letter, November 22, 1930

Anatomy-Medical History

LEONARDO DA VINCI THE ANATOMIST—J. Playfair McMurrich—Williams and Wilkins for the Carnegie Institution of Washington, 265 p., \$6. Here is a book to delight anatomists and those interested in medical history. The author, himself professor of anatomy at the University of Toronto, describes Leonardo's scientific background, his place as an anatomist and scientist, his successful observations and conclusions, his failures, and the extent of his originality. The book is beautifully illustrated.

Science News Letter, November 22, 1930

History of Science

THE ADVENTURE OF SCIENCE—Benjamin Ginzburg-Simon and Schuster, 487 p., \$5. As interest in the history of science increases, it is inevitable that more attention is being given to it in the publishing field. And it is regrettably inevitable, perhaps, that those with a philosophical viewpoint will attempt to expound "the intellectual epic represented by the adventure of science,' as the publishers' blurb puts it. The lineal intellectual descendants of the great figures of science are more careful, less positive and less ambitious in their humanizing science. Research scientists will object to the attitude with which this book is written. Ambiguous and misinterpreted statements will annoy those who know and mislead those who wish to know.

Science News Letter, November 22, 1930

Recreation

A STATE PARK ANTHOLOGY—Herbert Evison—National Conference on State Parks, 200 p., \$2.50. All persons interested in any phase of the great state park movement in America will want this book. Mr. Evison has made a most judicious and happy selection of addresses, reports and other utterances of informed and authoritative persons, which have hitherto been published, if at all, only in the most scattered and frequently inaccessible places.

Science News Letter, November 22, 1930

Archaeology

Ancient Life in the Southwest— Edgar L. Hewett-Bobbs-Merrill 392 p., \$5. A comprehensive account of the Pueblos and other groups of the Southwest, narrating their culture history and telling of archaeological investigations at pueblo ruins and cliff dwellings. Explaining in the foreword how he came to add a new book to the "sizable library" of works on the Southwest, Dr. Hewett writes: "Obviously, the book our publisher wants is of a different sort; perhaps a correlation for students and general readers of the essential facts in the natural history and the life of man in the Southwest; a delineation of the whole as a panorama of natural phenomena and cultural expression stretching across the ages; in short, a work that might aid in the comprehension of the forces which have combined to shape this fascinating region for a unique place in world history.

Science News Letter, November 22, 1930

Pediatrics

THE FIRST YEAR OF LIFE—Charlotte Buhler—John Day, 281 p., \$3.50. Exhaustive records of the behavior of sixty babies in their sleeping and their waking moments comprise this book on infant psychology and make it of great practical interest to parent and nurse as well as to physician and student. Although extremely guarded in drawing conclusions, the author has presented the evidence so directly and the material with which she deals is so inherently interesting, that she has succeeded in making the book interesting to the lay reader without sacrifice of technical accuracy and thoroughness. And from the great mass of details, tirelessly observed and minutely recorded, there emerges a human picture of the developing infant.

Science News Letter, November 22, 1930

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Mathematics

NUMBER: THE LANGUAGE OF SCI-ENCE — Tobias Dantzig — Macmillan, 650 p., \$3.50. Every scientist realizes the importance of mathematics, but except for the professional mathematician, probably few people ever find an ordinary mathematics book really interesting. But this book by Professor Dantzig is far from being an ordinary book, for it can be read with real pleasure not only by the scientist, but by the educated layman as well. As he says in his preface, "This book deals with ideas, not with methods. All irrelevant technicalities have been studiously avoided, and to understand the issues involved no other mathematical equipment is required than that which is offered in the average high-school curriculum." Number forms the foundation of mathematics, and in this book are covered such topics as the development of counting from the use of fingers, the origin of zero, the notion of infinity, prime and perfect numbers and series. The fluent style of the author, though he is of Russian birth, helps make it as fascinating as any story of adventure.

Science News Letter, November 22, 1930

Physics

THE PRINCIPLES OF QUANTUM MECHANICS-P. A. M. Dirac-Oxford, 257 p., \$6. In the younger generation of physicists, the name of Dr. Dirac is outstanding. He makes an attempt, in this necessarily rather technical treatise, to survey the situation and to put what is already known into a more systematic form. It is the opinion of many that such a procedure is needed for future progress. Since Dr. Dirac himself is one of the main builders of the new theory, the book will find a wide welcome among physicists. (N. B.-Why does any publisher issue a book like this without an index?)

Science News Letter, November 22, 1930

Chemistry

SPIRAZINES—Carl F. Krafft—Author, Box 1421, Washington, D. C., 54 p., \$1. An interesting theory of space arrangement of atoms in compounds resulting from, and taking part in, living processes. To the chain and ring structures of classical chemistry the author adds a helical spiral which seems to offer a better mechanism for more complicated groupings.

Science News Letter, November 22, 1930

National Parks

NATIONAL PARKS OF CANADA: REPORT OF THE COMMISSIONER, YEAR ENDED MARCH 31, 1929—Department of the Interior, Canada, 43 p. This brief report chronicles gratifying progress in the development of existing national parks in Canada and in the acquisition of new sites.

Science News Letter, November 22, 1930

Ichthyology

MIGRATIONS AND OTHER PHASES IN THE LIFE HISTORY OF THE COD OFF SOUTHERN NEW ENCLAND — W. C. Schroeder—Government Printing Office, 136 p., 45 c. Of interest to ichthyologists and commercial fishermen.

Science News Letter, November 22, 1930

Botany

SOME FAMILIAR WILD FLOWERS—J. E. Jones—Macmillan, 82 p., \$1.50. This little book consists almost wholly of excellent photographs of flowers, made by Richard S. Cassels, K. C. The compiler has added concise notes on color, habit, phenology, and uses if any, with occasional poetic interludes.

Science News Letter, November 22, 1930

Astronomy

ETOILES ET ATOMES—A. S. Eddington, traduction par J. Rossignol—Hermann, 188 p., 35 frs. This is a French translation of Sir Arthur Eddington's famous work, "Stars and Atoms," published in the United States by the Yale University Press in 1927, and reviewed in the Science News Letter at that time.

Science News Letter, November 22, 1930

Mythology

THE STARS THROUGH MAGIC CASE-MENTS—Julia Williamson—Appleton, 241 p., \$2. A collection of mythological stories about the stars, drawn from Greek, Roman, Japanese and Amerindian sources, and intended for boys and girls.

Science News Letter, November 22, 1930

Television

FUNDAMENTALS OF TELEVISION—Thomas W. Benson—Mancall, 145 p., \$3.50. A little book describing briefly present-day television methods and containing directions for the construction of apparatus.

Science News Letter, November 22, 1930

General Science

THE ADVANCEMENT OF SCIENCE—British Association for the Advancement of Science, 257 p., 5s. In this paper-bound volume are gathered together the addresses given at the recent Bristol meeting by the president of the association and the various section presidents. These include "Size and Form in Plants," by Prof. F. O. Bower (the presidential address); "Theories of Terrestrial Magnetism," by Dr. F. E. Smith; "The Scope and Aims of Human Geography," by Prof. P. M. Roxby; "The Interdependence of Science and Engineering," by Sir Ernest Moir; "The Synthetic Activities of the Cell," by Prof. H. S. Raper; "A Policy of Higher Education," by the Rt. Hon. Lord Eustace Percy; and others.

Science News Letter, November 22, 1930

Chemistry

LECTURES ON COMBUSTION—Joseph Priestley and John MacLean—Princeton Univ. Press, 116 p. A reprint of two classic works by early American chemists. Joseph Priestley, the discoverer of oxygen, who migrated to America, is well known; MacLean was a contemporary who was a professor at what is now Princeton University. Priestley's work was originally published in 1796 and MacLean's a year later.

Science News Letter, November 22, 1930

Child Health

CHILDREN OF THE COVERED WAGON—Estella Ford Warner and Geddes Smith—Commonwealth Fund, 123 p., \$1. Report of the Commonwealth Fund child health demonstration in Marion County, Oregon, from 1925 to 1929. Besides being an enviable record of progress, it is more readable than are most reports and is well illustrated. Of particular interest to health workers and women's clubs.

Science News Letter, November 22, 1930

Sociology

INTELLIGENT PHILANTHROPY—Edited by Ellsworth Faris, Ferris Laune, and Arthur J. Todd—University of Chicago Press, 322 p., \$4. The manifold considerations which should influence the person planning any benevolent undertaking—the social, economic, religious, ethical, and even biological aspects of the problem are here discussed by eminent students in the various fields.

Science News Letter, November 22, 1930