

Books of the Week

For the editorial information of our readers, books received for review are listed. For convenient purchase of any U. S. book in print, send a remittance to cover retail price (postage will be paid) to Book Department, Science Service, 1719 N Street, N.W., Washington 6, D. C.

ABOUT DAMS—Mabel Harmer—Melmont Pubs., 63 p., photographs, \$2.50. Tells children about the building of dams and their importance to conservation.

ALDOVRANDI ON CHICKENS: The Ornithology of Ulisse Aldovrandi (1600), Volume II, Book XIV—Transl. from Latin, introd. and notes by L. R. Lind—Univ. of Okla. Press, 447 p., illus., \$6.95. This first English translation of the work by the Italian naturalist exemplifies the spirit of Renaissance science.

ANALYTICAL MICROBIOLOGY—Frederick Kavanagh—Academic Press, 707 p., \$22. Provides a theoretical foundation for methods of assay and discusses specific methods for the assay of 20 antibiotic substances, for amino acids and B vitamins.

THE ANCIENT ENGINEERS—L. Sprague de Camp—Doubleday, 408 p., illus., \$4.95. The story of the rise of engineering, describes the methods used by irrigators, architects and military engineers in the early civilizations.

ANIMALS OF EAST AFRICA—C. A. Spinage, foreword by Sir Julian Huxley—Houghton, 160 p., 64 plates, maps, \$7.50. Excellent collection of wildlife photographs, grouped by habitat, with information about the habits of typical examples of East African fauna.

APPROACHES TO THE STUDY OF APHASIA: A Report of an Interdisciplinary Conference on Aphasia—Charles E. Osgood and Murray S. Miron, Eds.—Univ. of Ill. Press, 210 p., \$5. Research seminar discussed clinical diagnosis and treatment of aphasia, neurological theory, and implications of linguistics and aphasia.

ASTRONAUTICS IN THE SIXTIES: A Survey of Current Technology and Future Development—Kenneth W. Gatland—Iliffe Bks. (Wiley), 388 p., illus., 60 plates, \$8.25. Attempts to place the wide range of space projects in perspective and to show where the various avenues of development are leading in the present decade.

ATOMS AND THE UNIVERSE: An Account of Modern Views on the Structure of Matter and the Universe—G. O. Jones, J. Rotblat and G. J. Whitrow—Scribner, 2nd rev. ed., 277 p., photographs, diagrams, \$4.50. Presents not only modern theories but their practical applications and conclusions drawn for the future, in nontechnical language.

THE BACTERIA, A Treatise on Structure and Function, Vol. IV: The Physiology of Growth—I. C. Gunsalus and Roger Y. Stanier—Academic Press, 459 p., \$16. Contributions deal with biochemical phenomena at the level of the intact microbial cell and the growing cell, covering the ecology of bacteria, exoenzymes, permeation, and temperature relationships.

BASIC DICTIONARY OF AMERICAN ENGLISH—Morgan L. Walters, Ed. Dir.—Holt, 484 p., illus., \$4.50. Designed particularly to help children, word definitions use examples from areas that interest the young, written by specialists in education, lexicography and semantics.

BIOPOLYMERS, Vol. I, No. 1, 1963—Murray Goodman and others, Eds.—Interscience, 97 p., illus., paper, bimonthly, annual subscription \$18. Devoted to significant original research in the field of biopolymers (proteins, nucleic acids, polysaccharides) and synthetic model compounds for such substances.

A BOOK TO BEGIN ON ALASKA—Dorothy Tina—Holt, unpagged, illus. by Alik, \$2.50. Charmingly illustrated and informative, for the youngest readers.

THE BOUNDARIES OF SCIENCE—Magnus Pyke—Penguin, 208 p., illus., paper, 95¢. Reprint (1961) of scientist's work showing how interdependent the sciences have become.

CELEBRATION OF THE AMERICAN PATENT SYSTEM, 1836-1961—U.S. Department of Commerce—GPO, 231 p., paper, \$1.50. Record of proceedings, including conference entitled International Patent Office Workshop on Information Retrieval.

A CLASSIFIED BIBLIOGRAPHY OF GERONTOLOGY AND GERIATRICS: Supplement II, 1956-1961—Nathan W. Shock—Stanford Univ. Press, 624 p., \$10. Makes available the most recent references to world literature on the biology of aging, organ systems, psychological processes, and social and economic aspects of aging.

DOWN THE MOUNTAIN: A Book About the Ever-Changing Soil—Margaret Farrington Bartlett—Scott, W. R., 63 p., illus. by Rhys Caparn, \$3.25. Book takes the young reader on a graphic and descriptive walk, from rocky top into the valley.

ELEMENTARY SURVEYING—William Horace Rayner and Milton O. Schmidt—Van Nostrand, 4th ed., 485 p., illus., \$7.50. Beginning course in surveying and mapping, with substantial treatment of photogrammetry.

EXPERIMENTAL CHEMOTHERAPY, Vol. I—R. J. Schnitzler and Frank Hawkins, Eds.—Academic Press, 1,008 p., illus., \$32 until 5/31/63; \$38 thereafter. Treatise attempts to condense the existing knowledge in the field of compounds active against infectious disease and neoplastic growth. Short history of chemotherapy included.

EXPERIMENTS IN SEEING—Harry Asher—Basic Bks., 271 p., illus. by C. Phillipson, \$4.95. Written for the general reader, describes what is known about the eye and about its relation to the brain and the act of seeing, includes accounts of the author's own laboratory investigations.

FIELDING'S TRAVEL GUIDE TO EUROPE, 1963-64—Temple Fielding—Sloane (Morrow), 1,292 p., illus. by Lombard C. Jones, \$6.95. Up-to-date information and practical tips for every kind of transportation, preparation and needs, with country-by-country discussion of places, prices and special events.

THE FIRST BOOK OF THE ARAB WORLD—Ruth Warren—Watts, F., 65 p., photographs, map, \$2.50. Introduction to Arab lands and people.

FOREST MENSURATION AND STATISTICS—Bertram Husch—Ronald, 474 p., diagrams, \$10. Modern treatment stresses basic principles and statistical tools for their application, including photogrammetric procedures and the use of electronic computing equipment.

FUEL: The Conquest of Man's Environment—E. C. Roberson and Roy Herbert—Harper, 128 p., illus., \$2.50. Discusses for the general reader fuels derived from coal, from petroleum and other unconventional sources, as well as new methods of using fuel.

GALILEO GALILEI: Dialogue Concerning the Two Chief World Systems, Ptolemaic & Copernican—Transl. by Stillman Drake, foreword by Albert Einstein—Univ. of Calif. Press, 505 p., illus., paper, \$2.95. Reprint (1953) of the classic argument for and against the motion of the earth.

GENERAL BIOLOGY: A Unified Text Manual—William W. Bloom and Carl H. Krekeler—Van Nostrand, 491 p., illus. by Kenneth E. Nichols, \$7.50.

Presents both laboratory manual and text material integrated in a single book, covers biological principles systematically in a basic program.

GEOLOGY OF A PART OF THE CENTRAL GUATEMALAN CORDILLERA—Alexander R. McBirney—Univ. of Calif. Press, 65 p., 27 plates, illus., 2 folded maps, paper, \$2. Monograph describes the geologic setting, rock units and structural geology of the region.

GRAVITY ALL AROUND—Tillie S. Pine and Joseph Levine—Whittlesey House, 48 p., illus. by Bernice Myers, \$2.50. Teaches children to become aware of the force of gravity in their environment.

THE GREAT PSYCHOLOGISTS: Aristotle to Freud—Robert I. Watson—Lippincott, 572 p., \$7.50. Based on the theory that modern concepts in psychology found their beginnings in the work of ancient philosophers, this history of psychology in terms of the men who made the greatest contributions to it, begins with the Egyptians and Plato.

THE GREEKS—Hugh Lloyd-Jones, Ed.—World Pub. Co., 204 p., illus., maps, \$4.50. Ten noted specialists present up-to-date views of Greek achievements from the Homeric to the Hellenistic ages.

A GUIDE TO SCIENCE READING—Hilary J. Deason, Ed., with William Blacklow—New Am. Lib., 220 p., paper, 60¢. Annotated AAAS list of 900 of the best of scientific titles in 54 classifications, for students and general public available in paperback form, with original essays by H. Bentley Glass, Margaret Mead, Warren Weaver and others.

THE HARVEY LECTURES, delivered under the auspices of the Harvey Society of New York, 1961-1962—Jacques Monod and others—Academic Press, 57th ed., 204 p., photographs, \$9.50. Among other subjects, deals with new insights into the control of cellular metabolism, viruses and common cold, and the secretory process.

HOW TO MAKE CHILDREN'S FURNITURE AND PLAY EQUIPMENT—Mario Dal Fabbro—McGraw, 192 p., illus. by author, \$6.50. Provides list of materials and instructions for each assembly with detailed drawings for the hobbyist.

INFORMATION SYSTEMS: Essential Tools in Engineering Application of Science for the Needs of Society—Ralph H. Phelps and others—Engineers Joint Council, 28 p., illus., paper, \$1.75. Papers presented at AAAS Annual Meeting, on aspects of information services and retrieval for the engineering profession.

MAGNETISM—E. W. Lee—Penguin, 286 p., 32 plates, diagrams, paper, \$1.65. Authoritative and up-to-date study written for the general reader by a research worker in magnetism.

METHODS IN CARBOHYDRATE CHEMISTRY, Vol. III: Cellulose—Roy L. Whistler, Ed.—Academic Press, 407 p., diagrams, \$15.50. Comprehensive reference of specific and reliable methods for use in both routine and experimental laboratory work with cellulose.

MODERN DEVELOPMENTS IN HEAT TRANSFER—Warren Ibele, Ed.—Academic Press, 493 p., illus., \$18. Lectures delivered to scientists and engineers by leading authorities in the various fields of heat transfer, dealing with current and recommended practice in the light of recent advances.

RESEARCH IN SURFACE FORCES—B. V. Deryagin, Ed., transl. from Russian—Consultants, 190 p., illus., paper, \$27.50. Research at the Institute of Physical Chemistry, USSR Academy of Sciences, covering general problems in surface forces, polymer adhesion, thin liquid films, surface effects in dispersed systems and in aerosols.

RESOURCES IN AMERICA'S FUTURE: Patterns of Requirements and Availabilities, 1960-2000—Hans H. Landsberg, Leonard L. Fischman and Joseph L. Fisher—Resources for the Future (Johns Hopkins Press), 1,017 p., maps, charts, \$15. A comprehensive and detailed study of the 40-year period to the end of the century, projecting human needs in food, clothing, shelter, heat, power, transportation and recreation. See story SNL 83:227, April 13, 1963.

SUPPLEMENT TO THE ELSEVIER DICTIONARIES OF ELECTRONICS, NUCLEONICS AND TELECOMMUNICATION in Six Languages: English/American, French, Spanish, Italian, Dutch and German—W. E. Clason—Elsevier (N. Y.), 633 p., \$18. Arranged on an English alphabetical base, incorporates recent additions to technical terminology, from "A and B display" to "zone of silence."

TEXTBOOK OF ORGANIC CHEMISTRY—Alexander Gero—Wiley, 679 p., illus., \$9.50. Text first reviews fundamental facts and fundamental theories of organic chemistry as a whole, then proceeds with detailed development of organic chemistry.

TO KNOW A FLY—Vincent G. Dethier, foreword by N. Tinbergen—Holden-Day, 119 p., illus. by Bill Clark and author, \$3.75. Scientist's amusing reflections on how "to know a fly" is to share a bit in the challenge and joy of scientific research.

TOPICS IN ORGANIC CHEMISTRY—Louis F. Fieser and Mary Fieser—Reinhold, 668 p., illus., \$10. Up-to-date coverage of specialized fields, among them polynuclear hydrocarbons, alkaloids, terpenoids, steroids, synthetic polymers and dyes, as well as literature survey to December 1962.

• Science News Letter, 83:252 April 20, 1963

You are cordially invited to attend the
14th National Science Fair-International
 New Mexico State Fair Coliseum
 Albuquerque, New Mexico

Some 400 exhibits from 220 regional, state and nation-wide science fairs will be shown, including participation from Canada, Germany-France-Italy, Japan, Puerto Rico and Sweden.

THURSDAY and FRIDAY, MAY 9 and 10
 8:00 a.m. to 10:00 p.m.

Finalists will be present on
Thursday and Friday, 2:00 to 5:00 p.m.

14th National Science Fair-International closes Friday, 10:00 p.m.