

Books of the Week

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ABC'S OF BOOLEAN ALGEBRA—Allan Lytel—Sams, 112 p., illus., paper, \$1.95. An introduction to the symbolic logic used in digital computers.

ABC'S OF ELECTRONICS DRAFTING—Howard W. Sams Engineering Staff—Sams, 96 p., illus., paper, \$1.95. Explains the tools, standard symbols and procedures of importance to the qualified electronics draftsman.

ABSORPTION SPECTRA IN THE ULTRAVIOLET AND VISIBLE REGION, Vol. III—L. Lang, Ed.—Academic Press, 424 p., 21 p. index, cloth ring-binder, \$20. Contains data mainly from Hungarian, Polish and Soviet sources.

ADULT PHYSICAL FITNESS—President's Council on Physical Fitness—GPO 64 p., illus., paper, 35¢. Booklet aimed at improving muscle tone and circulation of U.S. men and women.

AIR CHEMISTRY AND RADIOACTIVITY—Christian E. Junge—Academic Press, 382 p., diagrams, \$13.50. A comprehensive and critical review of atmospheric science concerned with the constituents and chemical processes of the atmosphere below the mesopause, the altitude range of the stratosphere and mesosphere which can be probed with balloons and high-altitude aircraft.

ALTERNATING CURRENT POLAROGRAPHY AND TENSAMMETRY—B. Breyer and H. H. Bauer—Interscience, 288 p., illus., \$12. Monograph dealing with the theory, instrumentation, and analytical applications of the polarographic technique, and the nature and mechanism of electrode processes.

THE ANTS OF COLORADO with reference to Their Ecology, Taxonomy and Geographic Distribution—Robert E. Gregg—Univ. of Colo. Press, 792 p., 24 plates, maps, \$14. First comprehensive treatment of the ant fauna of a portion of the Rocky Mountains with an account of the geological processes that have produced the mountainous environment in which these ants live.

CHALLENGES OF THE SIXTIES: Critical Issues and Decisions, Series II—Stephen K. Bailey and others, Harold F. Breimyer, Ed.—Graduate School, USDA, 122 p., \$2; paper, \$1.50. Six lectures dis-

cussing such issues as economic growth, the closed and the open society, and how democracy can produce excellence.

CHEMISTRY—T. L. Cottrell—Oxford Univ. Press, 239 p., diagrams, \$1.70. Brief but fairly sophisticated discussion of chemistry at an elementary level of knowledge.

CHEMISTRY: A Survey of Principles—Galen W. Ewing and E. Gerald Meyer—Wiley, 239 p., illus., \$4.95. Intended for a one-semester terminal course in chemistry for college freshmen.

THE CHEMISTRY AND FUNCTION OF PROTEINS—Felix Haurowitz—Academic Press, 2nd ed., 455 p., illus., \$10. Discusses methods used in work on the structure of proteins, the properties of the more thoroughly investigated proteins, and deals in some detail with the biosynthesis of proteins from amino acids.

CHESTNUT CUB—B. F. Beebe—McKay, 153 p., illus. by James Ralph Johnson, \$3.75. Story about a bear cub on a Cherokee Reservation.

COBOL: A Self-Instructional Manual—James A. Saxon—Prentice-Hall, 190 p., diagrams, paper, \$6. Lessons on the basic rules of the experimental programming language (Common Business Oriented Language) that was jointly developed by computer manufacturers and users.

THE COMING AGE OF SOLAR ENERGY—D. S. Halacy, Jr.—Harper, 241 p., illus., \$4.95. An informed review of the development and uses of solar batteries, thermo-electricity, solar-powered space engines, solar cooking and photochemistry.

THE COMPACT HISTORY OF THE UNITED STATES AIR FORCE—Lt. Col. Carroll V. Glines, Jr., USAF—Hawthorn Bks, 339 p., illus. by Gil Walker, \$4.95. A story of men and their flying machines, from civil war balloonists to space age astronauts.

DESIGN FOR LIFE—Richard F. Trump and David L. Eagle—Holt, 664 p., photographs, diagrams, \$5.48. An intermediary biology text using the process of adaptation as an introduction and the unifying theme throughout, featuring suggestions for seminar discussions, laboratory investigation and further reading.

FORESIGHT AND UNDERSTANDING: An Enquiry into the Aims of Science—Stephen Toulmin, foreword by Jacques Barzun—Harper, 117 p., paper, \$1.15. Based on a series of lectures concerned with forecasting, the ideals of natural order, styles of theory and the evolution of scientific ideas.

FROM A LOGICAL POINT OF VIEW: Logico-Philosophical Essays—Willard Van Orman Quine—Harper, 2nd rev. ed., 184 p., paper, \$1.35. On the problem of meaning in an analytic statement and the notion of ontological commitment in reference to universals.

ORIGIN OF THE SOLAR SYSTEM: Proceedings of a conference at the Goddard Institute for Space Studies, New York, Jan. 23-24, 1962—Robert Jastrow and A. G. W. Cameron, Eds.—Academic Press, 176 p., illus., \$8. Conference dealt with historical review of theories, formation of stars, planets, light nuclei and solar nebula, meteorites and properties of chondrules.

OUR SMALL NATIVE ANIMALS: Their Habits and Care—Robert Snedigar—Dover, rev. ed., 248 p., photographs, illus., paper, \$1.75. Revised edition contains new chapter on developments of the last 20 years in our knowledge of animal behavior.

THE PHILOSOPHY OF PHYSICS—Max Planck, transl. from German by W. H. Johnston—Norton, 128 p., paper, 95¢. Reprint (1936).

PLANT PHYSIOLOGY: A Treatise, Vol. III: Inorganic Nutrition of Plants—F. O. Steward, Ed.—Academic Press, 811 p., illus., \$24. Deals with the mineral nutrition and metabolism of plants, in particular with the role of those elements of the periodic table, other than carbon, hydrogen and oxygen, which are essential to plants in their vital processes.

PUZZLE PATTERNS—Larry Kettlekamp—Morrow, 46 p., illus. by author, \$2.75. Describes and depicts wide range of puzzles, stimulating to young and old.

THE QUIET BATTLE: Writings on the Theory and Practice of Non-Violent Resistance—Intro. by Mulford Q. Sibley, Ed.—Doubleday, 390 p., paper, \$1.45. Presents the theories of non-violent power, from Jewish, Christian and Taoist traditions to writings and case studies of modern times.

RADIOECOLOGY: Proceedings of the First National Symposium, Colorado, 1961—Vincent Schultz and Alfred W. Klement, Jr.—Reinhold, 746 p., illus., \$16.50. Deals with cycling and levels of radionuclides in the terrestrial, marine and freshwater environment, and the effects of ionizing radiation on plants and animals in these environments.

THE ROLE OF FLUORIDE IN PUBLIC HEALTH: The Soundness of Fluoridation of Communal Water Supplies, A Selected Bibliography—Irene R. Campbell—Kettering Laboratory, College of Medicine, 108 p., paper, single copies free upon request direct to publisher, Cincinnati 19, Ohio. Abstracts provide information on the soundness of fluoridation, evaluation of dental health, legal and engineering aspects, with author and subject index.

SCIENCE PUBLICATIONS: An Annotated Guide to Selected Listings—Albert Piltz—OE (GPO), 65 p., paper, 40¢. A graded, descriptive bibliography grouped by broad subjects.

SCIENTIFIC MANPOWER, 1962: Highlights—National Science Foundation—GPO, 46 p., paper, 35¢. Contains summary of events relating to scientific and technical manpower, and conference papers on community programs for motivation to science and engineering training at secondary school level.

SEXUAL REPRODUCTION—Louis Gallien, transl. from French by Paul Capon—Walker & Co., rev. ed., 146 p., illus., \$3.50. Brief, up-to-date study giving primary attention to the animal world, including recent findings in the area of the Metazoa.

SOLID STATE COMMUNICATIONS, Vol. I, No. 1—Harvey Brooks, Ed.—Pergamon, 24 p., diagrams, paper, monthly, institutions: \$30; private subscribers: \$15; direct to publisher, 122 E 55th St., New York 22, N. Y. To serve as an international medium for rapid communication among solid state physicists.

SPACE CARRIER VEHICLES: Design, Development and Testing of Launching Rockets—Oswald H. Lange and Richard J. Stein—Academic Press, 317 p., illus., \$12. This Supplement 1 of *Advances in Space Science and Technology* outlines the principal development trends from which modern large rocket-powered launch vehicles have evolved.

STRANGE PARTICLES—Robert Kemp Adair and Earle Cabell Fowler—Interscience, 151 p., illus., \$4.75. Attempts to summarize the important properties of strange particles in the context of basic, or at least popular, theoretical ideas, emphasizing analysis and interpretation of experimental results.

THE SUN AND THE AMATEUR ASTRONOMER—W. M. Baxter—Norton, 167 p., illus., 24 plates, \$5.95. A practical work of general information with an account of work in the field with modest equipment, encouraging the scientific study of the sun by amateurs.


THRUSHES, WRENS & MOCKINGBIRDS OF EASTERN NORTH AMERICA—Recorded by Donald J. Borror and William W. H. Gunn—Houghton, 33 1/2 rpm record, notes, \$5.95. Produced by Federation of Ontario Naturalists with Cornell Laboratory of Ornithology, presents songs and calls of 17 species recorded in the field from Florida and Texas to the eastern Arctic, and from Maine to Michigan and Manitoba.

TREATMENT AND STORAGE OF HIGH-LEVEL RADIOACTIVE WASTES: Proceedings of Symposium held by the International Atomic Energy Agency in Vienna, 8-12 Oct. 1962—IAEA (International Publications, N. Y.), 666 p., illus., paper, \$13. Considers the long-range problems posed by increasing quantities of highly radioactive wastes from the reprocessing of irradiated fuel.

THE TRIUMPH OF ASTRONAUT L. GORDON COOPER, JR. AND THE FAITH 7, May 15-16, 1963—NASA, Manned Spacecraft Center—GPO, 49 p., photographs, paper, 40¢. Official pictures and description of first U. S. 22-orbit space flight lasting 34 hours and 20 1/2 minutes.

• Science News Letter, 84:172 Sept. 14, 1963

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