

# 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.

**ADVANCES IN ELECTRONICS AND ELECTRON PHYSICS, Vol. XII: Photo-Electronic Image Devices**—J. D. McGee and W. L. Wilcock, Eds.—*Academic*, 397 p., illus., \$12. Proceedings of the Symposium on Image Tubes and Related Devices, held in London, September 1958.

**ADVANCES IN X-RAY ANALYSIS, Vols. I-III**—William M. Mueller, Ed.—*Plenum Press*, 494 p., 359 p., and 376 p., illus., \$8.50, \$8.50 and \$12. Proceedings of the Sixth, Seventh and Eighth Annual Conference on Applications of X-Ray Analysis held in August 1957, 1958 and 1959, respectively.

**BEYOND MARS**—William Nephew and Michael Chester—*Putnam*, 72 p., illus. by Walter Buehr, \$2.75. Missile experts describe in simple language for boys and girls the difficulties and problems a trip to one of the outer planets would entail.

**BIOCHEMISTRY OF PLANTS AND ANIMALS: An Introduction**—M. Frank Mallette, Paul M. Alt-house and Carl O. Clagett—*Wiley*, 552 p., illus., \$8.50. Mainly intended to provide a general knowledge of biochemistry for students in the agricultural sciences.

**THE CHORD OF STEEL: The Story of the Invention of the Telephone**—Thomas B. Costain—*Doubleday*, 238 p., illus., \$3.95. Tells of the eventful years when the Bell family lived in Brantford, Ontario, during which time Alex-

ander Graham Bell demonstrated his successful tests which resulted in the invention of the telephone.

**CONCISE DICTIONARY OF SCIENCE: Physics, Mathematics, Nucleonics, Astronomy, Chemistry**—Frank Gaynor—*Littlefield*, 546 p., paper, \$2.25. Provides concise definitions of terms and concepts, including such newer sciences as virology, cytogenetics, radio-chemistry, high-energy and solid-state physics.

**DIRECTORY OF UNIVERSITY RESEARCH BUREAUS AND INSTITUTES**—*Gale Research Company*, 199 p., \$20. A guide to college and university-sponsored institutes, experiment stations, laboratories and research organizations carrying on continuing research programs, including life sciences, mathematics, meteorology and many other specialized fields.

**DRAGONFLIES AND DAMSELFLIES**—Mary Geisler Phillips—*Crowell*, 95 p., illus. by Anne Marie Jauss, \$2.50. Describes habits, structure and life cycle of the insects, how to collect, identify and preserve them.

**THE FASCINATING WORLD OF ASTRONOMY**—Robert S. Richardson—*McGraw*, 274 p., illus., \$5.95. Written in the form of questions and answers, book treats selected subjects at some length, for the intelligent general reader.

**FOOD CHEMISTRY**—Lillian Hoagland Meyer—*Reinhold*, 385 p., illus., \$8.10. Written primarily as a text for the undergraduate student, it consolidates the fundamentals of food chemistry and recent advances in the food industry.

**FUEL CELLS**—G. J. Young, Ed.—*Reinhold*, 154 p., illus., \$5.75. Papers presented at symposium held by the Gas and Fuel Division of the American Chemical Society in 1959; book

covers design and principles of operation of various types of fuel cells, and their applications.

**GEODESY FOR THE LAYMAN**—Geo-Sciences Branch—*Aeronautical Chart & Info. Center USAF, (OTS)*, 83 p., illus., paper, \$2.25. Traces the development of geodesy from the third century B.C. to the first launching of earth satellites. Discusses figure of the earth, principles of geodetic surveying and geodetic systems.

**HOW THINGS GROW**—Herbert S. Zim—*Morrow*, 64 p., illus. by Gustav Schrotter, \$2.50. Introduces the young child to the factors that determine growth in crystals, plants, animals and man.

**ILLUSIONS AND DELUSIONS OF THE SUPERNATURAL AND THE OCCULT**—D. H. Rawcliffe, foreword by Julian Huxley—*Dover*, 551 p., illus., paper, \$2. Originally published under title "Psychology of the Occult." Critically evaluates such phenomena as water-divining, fire-walking, hypnotism, automatic writing and psychical research.

**KINGDOM OF THE OCTOPUS: The Life History of the Cephalopoda**—Frank W. Lane—*Sheridan*, 300 p., illus., 110 photographs, \$7.50. Brings together what is known about the octopus, cuttlefish and squids. A wealth of information, written in language the general reader can enjoy; 33-page bibliography included.

**MATHEMATICAL METHODS IN THE SOCIAL SCIENCES, 1959: Proceedings of the First Stanford Symposium**—Kenneth J. Arrow, Samuel Karlin and Patrick Suppes, Eds.—*Stanford Univ. Press*, 365 p., \$8.50. Papers are organized in three sections: economics, management science and psychology.

**OPERATION NOAH**—Charles Lagus—*Coward-McCann*, 176 p., photographs by author, \$4. Gives first-hand picture of the animal rescue work going on to save some of the wild species threatened by the waters of the Kariba Dam in Africa, which will form the largest man-made lake by 1963, covering an area as big as Long Island.

**THE RANDOM HOUSE VEST POCKET DICTIONARY OF SYNONYMS AND ANTONYMS**—Laurence Urdang, Ed.—*Random House*, 310 p., \$1.25. Compact, alphabetical, modern dictionary of more than 80,000 synonyms and antonyms of most commonly used English words.

**REGIONS, RESOURCES AND ECONOMIC GROWTH**—Harvey S. Perloff and others—*Johns Hopkins Press*, 716 p., illus., \$12. Survey of U. S. economic growth since 1870, discusses theories of growth, changes in distribution of population, natural resource activities, and analyzes the major causes of regional differentials in the rates of growth.

**RUNNERLESS MOLDING**—Ernest P. Moslo—*Reinhold*, 162 p., illus., \$4.95. Concise survey of the theory, design, applications and econom-

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**SATURDAY SCIENCE**—Andrew Bluemle, Ed., foreword by Clarence Zener—*Dutton*, 333 p., illus., \$5.95. Lectures on basic scientific concepts and current developments, as presented by scientists of the Westinghouse Research Laboratories to gifted high school seniors, members of the Science Honors Institute, invited Saturday mornings to stretch their imagination with glimpses into future scientific research.

**SAY IT WITH YOUR CAMERA**: An Approach to Creative Photography—Jacob Deschin—*Ziff-Davis*, rev. ed., 258 p., photographs, \$4.95. Outlines specific ways in which the amateur photographer can improve his pictures.

**SCIENCE IN SPACE**, Chapter IX: The Biological Sciences and Space Research—Joshua Lederberg and H. Keffer Hartline—*Nat. Acad. of Sciences-Nat. Res. Council*, 19 p., paper, \$1. Discusses exobiology, the experimental approaches to life beyond the earth.

**A STRUCTURE OF SCIENCE**—Joseph H. Simons—*Philosophical Lib.*, 269 p., \$4.75. A chemist's attempt to fit science into the framework of human knowledge and experience.

**THERMAL ENGINEERING**—Harry L. Solberg, Orville C. Cromer and Albert R. Spalding—*Wiley*, 649 p., illus., \$9.50. Textbook is revision and extension of "Elementary Heat Power" by the same authors, intended to serve as an introduction to courses in thermodynamics, fluid mechanics and heat transfer.

**TO KNOW THE DIFFERENCE**—Albert D. Ullman—*St. Martins*, 239 p., \$4.75. Sociologist discusses case histories, attitudes and customs, prevalent theories on alcoholism. Indicates the crucial points when treatment should begin.

**TOWARDS A UNIFIED COSMOLOGY**—Reginald O. Kapp—*Basic Bks.*, 303 p., \$6.50. An engineer's attempt to bring all physical phenomena within one simple, unified scheme.

**TRAVELS AND TRADITIONS OF WATERFOWL**—H. Albert Hochbaum—*Branford*, 301 p., illus. by author, \$6. For layman and ornithologist, tells how waterfowl live on Delta marshes in Manitoba, discusses seasonal migratory flights, influence of weather, awareness of direction and dimensions of travel. Bibliography and nomenclature of birds included.

**WALT DISNEY'S BEAVER VALLEY**—Text by Georges Blond, transl. by Frances Frenaye—*Simon & Schuster*, 83 p., color photographs, \$10. Swiss color printing makes this a very beautiful volume of nature study.

• Science News Letter, 78:140 August 27, 1960

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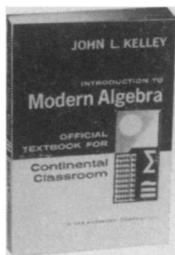
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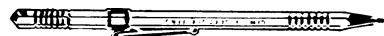
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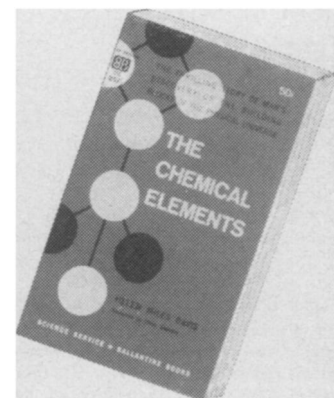
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