

# Books of the Week

For the editorial information of our readers, books received for review since last week's issue 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. Request free publications direct from publisher, not from Science Service.

**ADMINISTRATION OF SALARIES FOR ENGINEERS AND SCIENTISTS**—John W. Riegel—*Univ. of Mich. Press*, 116 p., paper, \$3.50. Based on interviews conducted in eight manufacturing companies and two public utilities.

**AN EVENING IN SAPSUCKER WOODS**—P. P. Kellogg, producer—*Cornell Univ. Records*, \$4.95. A delightful record for the beginning and advanced bird watcher giving 32 identified bird calls along with many other woodland sounds.

**BELOW THE SURFACE**—Compiled by Alice Isabel Hazeltine—*Abingdon*, 223 p., illus., \$3.95. For the teen-ager. Biographical accounts of exploits below the surface of earth's land and water.

**CELLULOSICS**—Walter D. Paist—*Reinhold*, 270 p., illus., \$5.75. On the chemistry, properties and fabrication methods of cellulose with examples of their applications.

**CHEMISORPTION OF NITROGEN ON NICKEL CATALYSTS**—R. J. Kokes and P. H. Emmett—*Mellon Institute*, 5 p., paper, free upon request direct to publisher, 4400 Fifth Ave., Pittsburgh 13, Pa.

**CHEMISTRY**—James V. Quagliano—*Prentice-Hall*, 877 p., illus., \$6.95. For the beginning college student.

**CHEMISTRY: Man's Servant**—Leonard J. Fliedner and Louis Teichman—*Allyn*, 625 p., illus., \$4.96. A textbook for high school students.

**CONCISE OXFORD ATLAS**—D. P. Bickmore, Ed. and T. K. Derry—*Oxford Univ. Press*, 2nd ed., 288 p., \$5.75. The British Isles and the rest of the world, includes climatics, statistics and historical information.

**DICTIONARY OF PHYSICS AND ALLIED SCIENCES,**

**Vol. I: German-English**—Charles J. Hyman, Ed.—*Ungar*, 671 p., \$9. The first dictionary of its kind, contains also the principal terms of astronomy, chemistry, mineralogy and geophysics, as well as, electronics, television, navigation.

**ELEMENTARY NUCLEAR PHYSICS**—W. K. Mansfield—*Temple Press (Simmons-Boardman)*, 60 p., illus., paper, \$2.75. Nuclear engineering monograph based on lectures given to British undergraduate students.

**EVOLUTION BY NATURAL SELECTION**—Charles Darwin and Alfred Russel Wallace, foreword by Sir Gavin de Beer—*Cambridge Univ. Press* for XV International Congress of Zoology and the Linnean Society of London, 288 p., \$4.75. A centenary commemorative volume.

**FM RADIO SERVICING HANDBOOK**—Gordon J. King—*Macmillan*, 192 p., illus., \$5. For the amateur enthusiast as well as for the professional service engineer.

**FLUOROCARBONS**—Merritt Allen Rudner—*Reinhold*, 238 p., illus., \$5.75. Covers properties, chemistry, processing and fabrication techniques, and final applications of fluorocarbons.

**FOUNDATIONS OF EMBRYOLOGY**—Bradley M. Patten—*McGraw-Hill*, 578 p., illus., \$10.50. For advanced work in comparative or experimental embryology for zoology majors, or human embryology for medical students.

**FROM KITE TO KITTY HAWK**—Richard W. Bishop—*Crowell*, 211 p., illus., \$3.00. The story of the pioneers of flight with a simple and vivid explanation of the principles involved in each step toward Kitty Hawk.

**HAWAIIAN FLOWERS & FLOWERING TREES**—Lorraine E. Kuck and Richard C. Tongg—*Tuttle*, 158 p., illus. in color, \$7.50. A guide to over 140 tropical and semitropical flowering plants.

**HERE COME THE BEAVERS**—Alice E. Goudey—*Scribner*, 94 p., drawings by Garry MacKenzie, \$2.50. Nature story book for young children.

**HERE COME THE SEALS**—Alice E. Goudey—*Scribner*, 93 p., illus. with drawings by Garry

MacKenzie, \$2.50. Life story of the fur seal and harp seal told for young children.

**HIGH QUALITY SOUND REPRODUCTION**—James Moir—*Macmillan*, 591 p., illus., plates, \$14. Comprehensive work for those interested in the problem of reproducing sound with a high degree of fidelity.

**HIGHER EDUCATION IN TRANSITION: An American History, 1636-1956**—John S. Brubacher and Willis Rudy—*Harper*, 494 p., \$7.50. Beginning with the colonial colleges, the authors follow the changes wrought in the structure and curricula of American colleges and universities.

**INTANGIBLE REWARDS FOR ENGINEERS AND SCIENTISTS**—John W. Riegel—*Univ. of Mich.*, 84 p., paper, \$2.50. Based on interviews with executives, supervisors and employees.

**INTRODUCTION TO THE MOON**—Dinsmore Alter—*Griffith Observatory*, 108 p., illus. with photos, \$1.65. Gives a general knowledge of the lunar surface, omitting technical and mathematical details.

**MANUAL OF SCIENTIFIC RUSSIAN**—Thomas F. Magner—*Burgess*, 103 p., paper, \$4.60; loose-leaf punched for three ring notebook, \$4. The written language, rather than the spoken idiom, is the main object of this manual.

**A MANUAL ON CARDIAC RESUSCITATION**—Robert M. Hosler—*Thomas, C. C.*—2nd ed., 208 p., illus., \$5.50. Presents the problems and step-by-step procedures to follow in saving human lives.

**MINERALS YEARBOOK 1955, Vol. III: Area Reports**—Bureau of Mines field staff—*Govt. Printing Office*, 1220 p., \$4. Record of performance of the Nation's mineral industry, covering the 48 states.

**A MODERN APPROACH TO ORGANIC CHEMISTRY**—J. Packer and J. Vaughan—*Oxford Univ. Press*, 980 p., \$13.45. For undergraduate students, presenting organic chemistry as a rational structure.

**NUCLEAR QUADRUPOLE RESONANCE SPECTROSCOPY, Supplement I to SOLID STATE PHYSICS**—T. P. Das and E. L. Hahn—*Academic*, 223 p., \$7. Special branch of radiofrequency resonance physics used as an analytical tool for solid state studies and structural chemistry.

**NUCLEAR REACTOR THEORY**—J. J. Syrett—*Temple Press (Simmons-Boardman)*, 80 p., illus., bibliography, paper, \$2.95. A general introduction to the physics of reactor design.

**ORBITAL RESULTS FOR SATELLITE 1957 BETA ONE**—Luigi G. Jacchia—*Smithsonian Institution Astrophysical Observatory*, Special Report No. 13, 8 p., paper, free upon request direct to publisher, Cambridge 38, Mass.

**OTTO RANK: A Biographical Study Based on Notebooks, Letters, Collected Writings, Therapeutic Achievements and Personal Associations**—Jessie Taft—*Julian Press*, 299 p., illus., \$6.50. A close associate of Sigmund Freud during the years 1905-1906.

**OUR WORLD**—E. Joseph Dreany—*Maxton*, 30 p., illus., 69¢. For young children.

## FULFILL YOUR DESIRE FOR SCIENTIFIC KNOWLEDGE

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Covers the physical nature of sound and the characteristics of hearing with all the ramifications of acoustics, music instruments and the human voice. #200-5, \$1.25.

**NUCLEAR ENERGY** by Alexander Efron, E.E., Ph.D.

In clear, concise language, the atom, its makeup and uses are completely explained. Starting with the general historical background; the electron, proton and neutron; natural radioactivity, alpha, beta and gamma rays, detectors, isotopes—the book progresses to more advanced concepts such as the mass-energy relationship, induced radioactivity, nuclear fission, research and power reactors, the hydrogen bomb, etc. #200-7, \$1.25.

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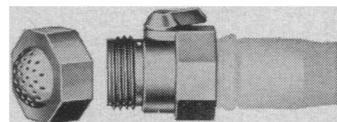
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THE PHYSICAL WORLD—Richard Brinckerhoff and others—*Harcourt*, 450 p., illus., \$4.88. A high school general science text requiring only simple mathematics.

POCKET FIELD GUIDE TO TREES—William Carey Grimm—*Stackpole*, 143 p., illus. with drawings by author, paper, \$1.50. Facilitates familiarity with deciduous trees and conifers.

POCKET PHOTO DATA BOOK—*Morgan & Morgan*, 160 p., charts, \$3.95. Provides a distillation of the data most used and wanted by working photographers in a handy 6-ring loose-leaf binder.

A PUPPY NAMED GIH—Sara Machetanz—*Scribner*, 30 p., illus. with drawings by Fred Machetanz, \$2.75. For the very young reader, the story of the training of a team of sled dogs in Alaska.

REACTOR HEAT TRANSFER—W. B. Hall—*Temple Press (Simmons-Boardman)*, 68 p., illus., bibliography, paper, \$2.75. British monograph, for engineers and physicists in nuclear engineering.

REINFELD ON THE END-GAME IN CHESS—Fred Reinfeld—*Dover*, 176 p., paper, \$1.25. First published in 1940 under the title "Practical End-Game Play."

RESEARCH IN ION EXCHANGE CHROMATOGRAPHY: Transactions of the Session on Applications of Ion Exchange Chromatography in Medicine and the Food Industries, U.S.S.R. Academy of Sciences—V. V. Rachinsky and others, in English translation—*Consultants Bureau*, 180 p., paper, \$35.

SATELLITES, ROCKETS AND OUTER SPACE—Willy Ley—*New Am. Lib.*, 128 p., illus., paper, 35¢. Survey of rocket development and space travel prospects.

SCIENCE AND FOREIGN POLICY—Robert E. Marshak and others—*Foreign Policy Assn.*, Headline Series No. 130, 62 p., illus., paper, 25¢. Includes discussion of rocketry and earth satellites.

SCIENCE NEWS 48—Archie and Nan Clow, Eds.—*Penguin*, 136 p., illus., paper, \$65. A rocket and satellite research number, interesting to anyone who wants an understanding of the background to space travel.

THE SEA AND ITS MYSTERIES—William M. Hutchinson—*Maxton*, 30 p., illus., 69¢. For young children.

SELECTED SCIENCE BOOKS FOR SECONDARY SCHOOLS (A Bibliography)—Compiled by R. Vincent Cash and others—*Conn. Science Teachers Assn.*, 116 p., paper, 25¢. About 500 annotated titles listed alphabetically by authors, indexed by subject and by titles.

TEN YEARS WITH TELEVISION AT JOHNS HOPKINS—Leo Geier—*Johns Hopkins University*, 66 p., illus., paper, free upon request direct to publisher, Director of Public Relations, Baltimore 18, Md. The pioneering story of educational TV called The Johns Hopkins Science Review.

THE TREASURY OF GAMES AND PUZZLES—Compiled by Carlton Wallace—*Philosophical Lib.*, 256 p., illus., \$6. Secret codes, brain twisters, pencil and paper games, optical illusions and party games.

TWENTY THOUSAND NURSES TELL THEIR STORY—Everett C. Hughes, Helen MacGill Hughes and Irwin Deutscher, Foreword by Agnes Ohlson—*Lippincott*, 280 p., \$5.75. Findings of a five-year program of research in nursing functions.

WHAT FLOWERING TREE IS THAT? A Handbook for the Tropics—Edwin A. Menninger—*Menninger*, 183 p., photographs, 6 color plates, cloth, \$4, paper without color plates \$2.50. Describes hundreds of exotic flowering trees found in Florida.

YOUR OPERATION—Robert M. Cunningham, Jr.—*Public Affairs Committee*, Pamphlet No. 267, 20 p., illus., paper, 25¢. Advice and reassurance to persons facing surgery.

Science News Letter, July 12, 1958

TECHNOLOGY

## Office Digital Computer Sends Data by Teletype

➤ AN ELECTRONIC digital computer, designed especially for office bookkeeping purposes, was introduced at the Second Annual Military Electronics Conference meeting in Washington, D. C.

The machine, called Cal-Key by its developer, Van Norman Industries of Manchester, N. H., is an electro-mechanical digital computer, and has the 11-column keyboard of the ordinary comptometer calculator.

While operation of the computer portion of the equipment is electronic, the results of any operation are automatically "read out" and mechanically punched on paper teletype tape in the standard five-hole code.

The manager of a chain-store, for example, can calculate the day's business, and instantly send the results by teletype to the home office in a distant city. There the results can either be received by conventional methods, or automatically recorded in a punched-card system for tabulation.

Science News Letter, July 12, 1958

PUBLIC HEALTH

## Suggest Goals For Care of Aged

➤ EXPANSION of health care facilities tailored to the specific needs of the nation's more than 14,000,000 aged, regardless of their economic status, is one of the goals of a new comprehensive health program.

Other problems of the aged that the Joint Council to Improve the Health Care of the Aged will study include increased opportunities for older people to obtain voluntary health insurance coverage, and more community health services.

Work projects which the Council has already taken an active part in are:

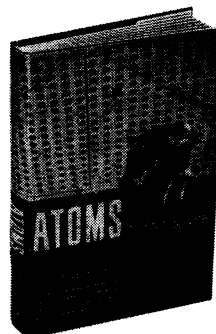
1. A conference on the care of patients with long-term illnesses.
2. Preparation of upgraded standards for nursing homes which will eventually lead to improved nursing home care for the aged.
3. A project to reduce the financial burden of a disabling illness among the elderly by performing the necessary household tasks to enable them to remain at home, with qualified nursing and medical attendance in the home.
4. Six regional conferences have been held to help doctors cope with the problems of the aged. A national conference will be held in September.

The four sponsors of the Joint Council are the American Dental Association, American Hospital Association, American Medical Association and the American Nursing Home Association.

The Joint Council has emphasized the need for state and local governments to assume their proper responsibility to aged patients by providing realistic financial support for medical, dental, hospital and nursing home care for those who are unable to pay, Dr. Edwin L. Crosby, director of the American Hospital Association and interim secretary of the Council, has said.

Science News Letter, July 12, 1958

How atomic researchers are working to improve commerce, industry, and the general welfare



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