

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.

ALCOHOL AND CAFFEINE: A Study of Their Psychological Effects—Harvey Nash—*Thomas, C. C.*, 169 p., \$7.25. The results of an experimental study testing intellectual functioning, pre-drug and post-drug, with a large variety of psychological tests.

CAMP DES JEUNESSES SCIENTIFIQUES, Genk, Belgium, July 1961—Report, 156 p., illus., paper, limited copies free from Jeuneses Scientifiques de Belgique, 147 Chaussees de Haecht, Bruxelles 3. In French. What a group of students and teachers did during a two weeks camp.

COMMON SEASHORE LIFE OF THE PACIFIC NORTHWEST—Lynwood Smith—*Naturegraph*, 66 p., illus. by Constance Gabriel Schulte, \$3.25; paper, \$1.75. Guide to common and conspicuous beach life, describes habits and characteristics.

DETONATION AND TWO-PHASE FLOW—S. S. Penner and F. A. Williams, Eds.—*Academic Press*, 368 p., illus., \$5.25. Technical papers on detonations in solids, liquids and gases, and on stable and unstable combustion processes in liquid fuel rocket engines.

DISCOVERING SCIENCE ON YOUR OWN—Illa Podendorf—*Childrens Press*, 158 p., illus. by Robert Borja, \$4.50. Safe and interesting activities for children, demonstrating basic principles of science.

ELEMENTS OF PHYSICS—Baker, Brownlee and Fuller, rev. by Paul J. Boylan—*Allyn & Bacon*, rev. ed., 677 p., illus., \$5.76. High school text emphasizing basic principles and modern concepts.

EXPERIMENTS IN CHEMISTRY—John W. Sulcoski—*Burgess*, 103 p., illus., paper, \$2.50. Laboratory manual for beginners.

FUNDAMENTAL PRINCIPLES OF TRANSISTORS—J. Evans—*Van Nostrand*, 2nd ed., 332 p., diagrams, \$8.50. Deals on postgraduate level with the theory of transistor electronics, with the manufacture and special types of semiconductor devices.

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GENETICS—E. Grace White—*Vantage Press*, 258 p., illus., \$6. Text for college students, applying genetic principles to problems of sex, agriculture and animal breeding.

GEOLOGIC ACTIVITY OF MICROORGANISMS—S. I. Kuznetsov, Ed., transl. from Russian—*Consultants*, 112 p., diagrams, paper, \$17.50. On the role of microorganisms in the formation of ore deposits, and on the use of microorganisms in prospecting for gas and oil.

HUMAN PHYSIOLOGY—W. B. Youmans—*Macmillan*, rev. ed., 543 p., illus., \$6.75. Fundamental principles of human physiology, more elementary than first edition.

INTEGRATING RESEARCH & DEVELOPMENT WITH CORPORATE PLANNING AND MANAGEMENT—*Battelle Memorial Institute*, 6-page chart, paper, free upon request direct to publisher, Columbus 1, Ohio. Helps understand procedures of contract research for industry.

AN INTRODUCTION TO THE BIOCHEMISTRY OF THE CANCER CELL—Harris Busch—*Academic Press*, 424 p., illus., \$13.50. Deals broadly with the biochemical genetics of malignant cells and recent significant findings on the composition and function of nucleic acids and nucleoproteins.

AN INTRODUCTION TO THE STUDY OF DISEASES—William Boyd—*Lea & Febiger*, 5th rev. ed., 478 p., \$7.50. Textbook for students in the paramedical disciplines.

LIFE HISTORIES OF NORTH AMERICAN BIRDS OF PREY, Parts 1 and 2—Arthur Cleveland Bent—*Dover*, 409 p., 482 p., illus., paper, \$2.35 each. Unabridged reprint (1937-38), originally published by the Smithsonian Institution. Part 1 covers California condor, vultures, kites, hawks, eagles and American osprey; Part 2, falcons, hawks, caracaras and owls.

LIFE: Its Nature, Origin and Development—A. I. Oparin, transl. from Russian by Ann Syngé—*Academic Press*, 207 p., illus., \$4.50. Carrying evolutionary ideas of Darwin into the biochemical field, Soviet Academician discusses the nature and the origin of life, and the earliest period of the development of life.

MAN AND THE EARTH—Joseph Bixby Hoyt—*Prentice-Hall*, 521 p., illus., maps, \$11.95. Describes the land masses and oceans of the earth and shows how geographic processes are closely related to man in his various cultures.

MATHEMATICAL THEORY OF SEDIMENTATION ANALYSIS—Hiroshi Fujita—*Academic Press*, 314 p., \$11. Authoritative survey of the present status of the analysis, for research workers.

MEDICAL ENTOMOLOGY: Arthropods and Human Disease—William R. Horsfall—*Ronald*, 467 p., illus., \$10. Comprehensive treatment of the ecology of insects and crustaceans in relation to discomfort and disease in vertebrates, primarily man.

MEN AND MOLECULES: What Chemistry Is and What It Does—Carl R. Theiler, transl. from German by E. Osers—*Dodd*, 226 p., photographs, diagrams, \$5. A quick review of the history of chemistry for the general reader.

NUCLEAR SCIENCE ABSTRACTS: Cumulative Index, Vols. 11 through 15, 1957-1961—U.S. Atomic Energy Commission—*GPO*, 2918 p., paper, set of 4 vols. \$19. This cumulative subject index supersedes the separate indexes to the five volumes.

OFFICIAL GUIDE TO PACIFIC NORTHWEST AND CENTURY 21 EXPOSITION—Eds. of Sunset Books—*Lane Bk Co.*, 177 p., illus., maps, paper,

\$1.95. Contains special Seattle World's Fair supplement.

THE POLES—Willy Ley and Eds. of *Life—Time Inc.* (*Bk. Div., Chicago*), 192 p., illus., \$3.95. Illustrates and describes expeditions and life in the polar regions.

PRACTICAL REFRACTOMETRY: By Means of the Microscope—Roy M. Allen—*Cargille, R. P., Laboratories*, 46 p., photomicrographs, paper, \$1 direct to publisher, 117 Liberty St., New York, N.Y. On the use of refractive index liquids in the identification of translucent solids.

PREDATOR-PREY RELATIONSHIPS BETWEEN FISH-EATING BIRDS AND ATLANTIC SALMON—P. F. Elson—*Fisheries Res. Bd. of Canada (Queen's Printer)*, 87 p., illus., paper, \$1. With supplement on fundamentals of merganser control.

PROCEEDINGS OF THE 1962 HEAT TRANSFER AND FLUID MECHANICS INSTITUTE—F. Edward Ehlers and others, Eds.—*Stanford Univ. Press*, 294 p., illus., \$8.50. Selected papers on fundamental research in fluid flow, heat transfer, and related fields.

THE PSYCHOLOGY OF INSANITY—Bernard Hart—*Cambridge*, 127 p., paper, \$1.25. Reprint of 5th edition (1957), gives an account of the principles of abnormal psychology, for the layman.

PSYCHOTHERAPY: A Helping Process—Elizabeth Ogg—*Public Affairs Committee*, Pamphlet No. 329, 28 p., illus. by Alexander Dobkin, paper, 25¢ directly to publisher, 22 E. 38th St., New York 16, N. Y. Describes the different kinds of treatment available.

REPAIRING HOME AUDIO SYSTEMS: A Practical Guide to Stereo and Monophonic High-Fidelity Systems—E. Eugene Ecklund—*McGraw*, 320 p., illus., \$6.95. Basic know-how presented with many diagrams, written by electronics expert.

REPRODUCTION AND SEX IN ANIMAL LIFE—Charles Gramet—*Abelard-Schuman*, 140 p., illus. by J. Yunge-Bateman, \$3.75. For boys and girls.

ROOTS OF BEHAVIOR: Genetics, Instinct and Socialization of Animal Behavior—Eugene L. Bliss, Ed.—*Hoeber-Harper*, 339 p., illus., \$16. Original observations of 31 authorities in the field of animal behavior, analysis of instinctual behavior, early socialization and studies of animals as members of groups.

SATURN STORY—Erik Bergaust, introd. by Wernher von Braun—*Putnam*, 48 p., photographs, diagrams, \$2.50. Shows the progressive work and plans for the big rocket booster vehicles, mostly in pictures.

THE SCIENCE MYTH—Magnus Pyke—*Macmillan*, 179 p., \$4. Chemist takes a slightly satirical look at modern man made to fit into the industrial society.

A SHORT TEXTBOOK OF COLLOID CHEMISTRY—B. Jirgensons and M. E. Straumanis—*Macmillan*, 2nd rev. ed., 500 p., illus., \$10.75. Covers the whole field of colloids, including emulsions, foams and aerosols.

SOCIALIZED MEDICINE IN ENGLAND AND WALES: The National Health Service, 1948-1961—Almont Lindsey—*Univ. of N. C. Press*, 561 p., \$8.50. Authoritative and impartial study, incorporating a vast amount of documented information, discussing the role of physicians after the first 13 years of the British Health Service.

SOLID STATE PHYSICS: Advances in Research and Applications, Vol. 13—Frederick Seitz and David Turnbull, Eds.—*Academic Press*, 482 p., illus., \$14.50. On vibration spectra of solids, electron spin resonance in semiconductors, and formalisms of band theory.

THE STORY OF PATENTS AND PROGRESS—*Du Pont*, 36 p., illus., paper, free upon request direct to publisher, Wilmington, Del. Shows how the patent system grew and how it serves the needs of company and public.

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