

Books of the Week

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ALL ABOUT ELEPHANTS—Carl Burger, foreword by Fairfield Osborn—Random House, 132 p., photographs, drawings by author, \$1.95. Describes the ways of wild elephants, of elephants that work, and of show elephants.

ALL ABOUT THE UNIVERSE—David Dietz—Random House, 144 p., photographs, diagrams, \$1.95. Tells young people what we have learned by scanning the sky with giant telescopes and radio antennas.

THE AUDUBON NATURE ENCYCLOPEDIA: Vol. 1, AC-BE—John K. Terres, Ed.-in-Chief—National Audubon Soc. (Curtis Bks.), 192 p., photographs, illus., \$3.98 direct to Curtis Bks., Independence Square, Philadelphia, Pa. First of 12 volumes to be mailed on a monthly basis until completed. Ready reference on birds, mammals, insects, trees, wildflowers, biomes, water, grasslands and weather, written by naturalists.

CELL BIOLOGY—John Paul—Stanford Univ. Press, 197 p., 12 plates, diagrams, \$4.75. A current summary of research developments on the nature of cells, the molecular basis of cellular structure, and the physicochemical basis and organization of cellular activity.

CHEMICAL LASERS: Applied Optics, Supplement 2—Kurt E. Shuler and W. R. Bennett, Jr., Eds.—Optical Soc. of Am., 216 p., illus., paper, \$6. Twenty-one papers on the development and properties of gas lasers, laser pumping mechanisms, laser action in rare earth chelates and other aspects of chemical lasers.

CIRCULATION OF THE BLOOD: Men and Ideas—Alfred P. Fishman and Dickinson W. Richards, Eds.—Oxford Univ. Press, 859 p., illus., \$18. Twelve chapters in the history of cardiovascular physiology, written by specialists in the field, center on the great men whose original ideas were breaking new ground for advances in this branch of science.

THE CLIMATE NEAR THE GROUND—Rudolf Geiger, transl. from German by Scripta Technica—Harvard Univ. Press, rev. ed., 611 p., illus., \$11.50. Completely rewritten authoritative text, translated from the fourth German edition, incorporates the great development since 1950 in the practical applications of micrometeorology.

CLINICAL PHONOCARDIOGRAPHY—Dennis C. Deuchar—Van Nostrand, 144 p., illus., \$3.75. Provides a relatively short text to familiarize the general practitioner and student with the potentialities and current usage of the phonocardiograph.

DIFFUSION PROCESSES, STRUCTURE AND PROPERTIES OF METALS—S. Z. Bokstein, transl. from Russian—Consultants, 135 p., illus., paper, \$22.50. Deals with diffusion and structure of metals, recrystallization, pore formation and destruction at high temperatures, and high strength resulting from whiskers.

ESSAYS ON CROP PLANT EVOLUTION—Sir Joseph Hutchinson, Ed.—Cambridge Univ. Press, 204 p., 16 plates, maps, \$9.50. Based on lectures dealing with the diverse ways in which the genotype of a crop plant may be built up under the influence of natural and human selection.

FAREWELL TO EDEN—Matthew Huxley and Cornell Caps—Harper, 244 p., 148 photographs, \$15. Records the passing of a primitive culture, that of the handsome Amahuaca Indians in the tropical jungle of Peru, whose Stone Age society is giving way to the dominant white civilization.

FOUNDATIONS: 20 Viewpoints—F. Emerson Andrews, Ed.—Russell Sage Foundation, 108 p., paper, \$1.25. Collection of papers discussing the functions of foundations, their various fields of activity and evaluation of their administration.

FUNCTIONALISM: An Outline of a Philosophy for Today—John Henry Melzer—Philosophical Lib., 145 p., \$4. Attempts to work out an elementary working philosophy.

FUNDAMENTAL NUCLEAR ENERGY RESEARCH 1964—U.S. Atomic Energy Commission, Div. of Plans and Reports—GPO, 299 p., illus., paper, \$2. Research report on the more significant advancements made under AEC-sponsored basic studies in physical research, isotope development, radioactive waste disposal, biological, medical and environmental research programs.

GEM AND MINERAL LOCALITIES OF SOUTHEASTERN UNITED STATES—Leon D. Willman—Willman, Leon D., 97 p., folded maps, paper, \$2. Handbook gives exact directions to gem and mineral locations in the American Southeast, Actinolite to Wavellite, cross-indexed by counties.

GENERAL COLLEGE GEOLOGY—A. J. Eardley—Harper, 499 p., photographs, maps, diagrams, \$9.25. An introductory text by the author well-known for his advanced professional volume entitled STRUCTURAL GEOLOGY OF NORTH AMERICA.

HISTOCHEMISTRY OF THE SKIN, PSORIASIS—A. Jarrett and R. I. C. Spearman—Van Nostrand, 115 p., 23 plates, \$5.50. A monograph on normal and parakeratotic epidermal keratinization with special reference to psoriasis and its treatment.

HISTORICAL PERSPECTIVE ON MENTAL RETARDATION DURING THE DECADE 1954-1964—Children's Bureau—GPO, 314 p., paper, \$1.75. A compilation of articles from the periodical CHILDREN.

IDENTIFICATION AND ANALYSIS OF PLASTICS—J. Haslam and H. A. Willis—Van Nostrand, 483 p., diagrams, \$18. Based on 18 years of collaboration, the authors present the combined method of approach to the analysis of plastics, especially the linking of chemical and infrared methods of examination.

THE INTELLECTUAL FOUNDATIONS OF LIBRARY EDUCATION—Don R. Swanson, Ed.—Univ. of Chicago Press, 98 p., \$3.75. Papers of the 29th Annual Conference of the Graduate Library School.

KIKI, THE MOUSEBIRD—Lyn and Hubert Gutteridge—Reynal, 128 p., photographs, \$3.95. The story of a rare small African bird which was adopted by the authors on their plantation in Zululand.

LIGHT YOU CANNOT SEE—Bernice Kohn—Prentice-Hall, 72 p., illus., \$3.50. Acquaints young readers with the terminology and characteristics of rays in the electromagnetic spectrum.

MENTAL RETARDATION: A Handbook for the Primary Physician—Cathy Covert—Am. Medical Assn., 141 p., illus., paper, 40¢ direct to AMA, 535 N. Dearborn St., Chicago, Ill. 60610. Guidelines to aid the practicing physician in the prevention, diagnosis and treatment of mental retardation.

MICROBIOLOGY—Louis P. Gebhardt and Dean A. Anderson—Mosby, 3rd ed., 488 p., 90 illus., \$7.75. Thoroughly revised and updated textbook.

MODERN BIOLOGICAL PRINCIPLES—A. M. Winchester—Van Nostrand, 449 p., photographs, diagrams, \$6.95. Text covers the principles of modern biology in the light of recent discoveries, suitable for abbreviated courses.

NUCLEAR APPLICATIONS, Vol. 1, No. 1—Louis G. Stang, Jr., Ed.—Am. Nuclear Soc., 92 p., illus., paper, bi-monthly, annual subscription \$21. This first issue deals with such subjects as liquid metal breeder reactors, strength of zirkaloy and fast reactor fuel burnup.

THE OVERWEIGHT SOCIETY: An Authoritative, Entertaining Investigation into the Facts and Follies of Girth Control—Peter Wyden—Morrow, 338 p., \$4.95. An objective analysis of various programs of dieting and exercise, including fads and rackets.

PHOTOGRAPHY: A Manual for Shutterbugs—Eugene Kohn—Prentice-Hall, 64 p., photographs, illus., \$3.50. Explains to children how to use a camera intelligently and successfully.

PHYSICS—K. R. Atkins—Wiley, 754 p., illus., \$9.50. Intended for two-semester, elementary physics course, the book emphasizes such fundamental concepts as conservation laws, symmetry principles, the nature of particles and fields, and developments in the study of fundamental particles.

PRINCIPLES OF ELECTRON TUBES: Including Grid-Controlled Tubes, Microwave Tubes and Gas Tubes—J. W. Gewartowski and H. A. Watson—Van Nostrand, 655 p., illus., \$18.50. This comprehensive study gives practicing engineers a clear picture of how electron-field interactions lead to useful device performance.

PSYCHOLOGY IN SCIENTIFIC THINKING—Ernst Friedlander, M.D.—Philosophical Lib., 143 p., diagrams, \$4.75. Demonstrating the importance of the subcortical brain centers in the development of man's scientific explorations, the author here attempts to evaluate the influence of psychological factors upon the trend of scientific thinking.

THE QUEST FOR PEACE: The Dag Hammarskjöld Memorial Lectures—Andrew W. Cordier and Wilder Foote, Eds.—Columbia Univ. Press, 390 p., \$7.95. Composed of a series of 24 lectures delivered in various centers of learning around the world.

RADIOTRACER METHODOLOGY IN BIOLOGICAL SCIENCE—C. H. Wang and David L. Willis—Prentice-Hall, 382 p., diagrams, \$16. Text provides general background information in nuclear physics and radiochemistry, and stresses the considerations of radiotracer experimental design necessary for the successful application of radioisotopes as a research tool.

THE RECORDING OF LIBRARY OF CONGRESS BIOGEOGRAPHICAL DATA IN MACHINE FORM—Lawrence F. Buckland—Council of Library

Resources, 54 p., diagrams, paper, single copies free upon request directly to publisher, 1025 Conn. Ave., NW, Washington, D.C. Steps toward more automated production of book catalog cards are detailed in this study which should speed up the ordering of library resources.

REPROGRAPHY AND COPYRIGHT LAW—Lowell H. Hattery and George P. Bush, Eds.—AIBS, 204 p., \$4.50; paper, \$3. Valuable background on the proposed changes in copyright law being considered in Congress, and history on the evolution of the problem of copying in microfilm and facsimile from the time of the introduction of microfilm in the 1930's until the present. Derived from 1963 symposium at American University.

SCIENCE, TECHNOLOGY AND HUMAN VALUES—A. Cornelius Benjamin—Univ. of Mo. Press, 296 p., \$7. Philosopher here examines man's relation to the pursuit of science, and its relations with other enterprises of the human spirit—education, society, government and technology.

SOUND WAVES AND LIGHT WAVES—Winston E. Kock—Doubleday, 165 p., photographs, diagrams, paper, \$1.25. Deals with fundamental properties of waves and their applications in advanced technological devices.

THE SPORTSMAN'S ALMANAC: A Guide to Hunting and Fishing in the 50 American States and National Forests and Their Principal Game, Mammals, Birds and Fishes—Carley Farquhar—Harper & Row, 493 p., illus., \$8.95. Contains a great number of well organized and tabulated facts about licenses, hunting and trapping seasons, firearms, wild areas and federal regulations.

STRUCTURE IN ART AND IN SCIENCE—Gyorgy Kepes, Ed.—Braziller, 190 p., photographs, drawings, \$12.50. Deals with vision as a fundamental aspect of human insight and explores the world of photomicrographs and atoms, fundamental structures, interchangeable forms and illusion.

STUDY OF THE RETRIEVAL OF AN ASTRONAUT FROM AN EXTRAVEHICULAR ASSIGNMENT—Warren H. Straley and Robert W. Adlhoeh—NASA CR-185 (OTS), multi-paged, paper, \$6. Investigates the properties of two tethered objects in an orbit and analyzes problems associated with effecting a union.

SUICIDE AND ATTEMPTED SUICIDE—Erwin Stengel—Penguin Bks., 135 p., paper, 95¢. This study draws throughout on international research into the incidence, methods, and social and personal dynamics of suicidal acts.

TIMBER TRENDS IN THE UNITED STATES—Forest Service, USDA—GPO, 235 p., illus., paper, \$1.75. The latest in a series of periodic appraisals of favorable and unfavorable aspects of the U.S. timber situation and outlook.

THE UNIVERSE, EARTH AND MAN—Hammond, C. S., 66 p., illus., \$2.50. An atlas that illustrates graphically with maps and charts the evolution of the universe, the moon and planets, the earth's structure, the geologic record, a graphic history of civilizations, the phenomena of weather and the space environment.

UNIVERSITY CHEMISTRY—John C. Bailar, Jr., Therald Moeller and Jacob Kleinberg—Heath, 708 p., illus., \$9.25. Designed by three experienced teachers and research chemists for a solid noncalculus freshman course, the text develops logically, in terms of observation, the fundamentals of theory and practice that constitute modern chemistry.

VACUUM MICROBALANCE TECHNIQUES, Vol. 4—Paul M. Waters, Ed.—Plenum Press, 288 p., illus., \$13.50. Proceedings of 1964 Conference, papers dealing with experimental results and techniques.

VIBRATIONS AND WAVES—Norman Feather—Penguin Bks., 330 p., diagrams, paper, \$1.45. A systematic discussion of matter in motion with emphasis on the formulation and elaboration of the classical concept of waves.

WEATHER EYES IN THE SKY: America's Meteorological Satellites—J. Gordon Vaeth—Ronald Press, 124 p., photographs, maps, \$5. Summarizes for the general reader the evolution of weather-observing techniques, pictorially describes the TIROS and Nimbus satellites, and considers the nature of things to come.

THE WILD ANALYST: The Life and Work of Georg Groddeck—Carl M. Grossman, M.D. and Sylvia Grossman—Braziller, 222 p., \$5. Biography of physician who contributed substantially to the development of psychoanalysis.

THE WORLD OF THE LIVING—Earl Ubell—Atheneum, 41 p., photographs by Arline Strong, \$3.25. Makes children aware of the essential characteristics of living things.

THE WORM RE-TURNS: The Best from the Worm Runner's Digest—James V. McConnell, Ed.—Prentice-Hall, 182 p., illus., \$3.95. Collection of humorous articles and poems related to science and the laboratory.

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