

Books of the Week

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THE AFRICAN ELEPHANT—Rennie Bere—Golden Press, 96 p., photographs, maps, \$2.95. A study of elephants in their natural habitat, describes their group behavior, physical characteristics and individuality.

THE APPLICATION OF CONTROL THEORY TO PHYSIOLOGICAL SYSTEMS—Howard T. Milhorn, Jr.—Saunders, 386 p., diagrams, \$14. Text combines engineering principles with physiological applications to acquaint the physiologist with the ways control theory can be applied to the respiratory and the vascular system, to the stretch reflex in human muscle system and to human eye tracking.

ATOMS AND MOLECULES—Irving and Ruth Adler—Day, 48 p., illus., \$2.68. Explains to children the nature of chemicals, elements, molecules, atoms, nucleus and ions.

BIOLOGICAL MEMBRANES: Recent Progress—Werner R. Loewenstein, Ed.—N.Y. Acad. of Sciences, Annals, Vol. 137, Art. 2, 645 p., illus., paper, \$12. Series of papers on wide range of topics including discussion of the permeability of membrane junctions, and membrane properties of the barnacle muscle fiber.

BRIDGES—Robert Silverberg—Macrae Smith, 189 p., photographs, \$4.50. A well-researched, readable account of famous bridges and the technical problems involved, for the young adult.

CEREBRAL PALSY: Its Individual and Community Problems—William M. Cruickshank, Ed.—Syracuse Univ. Press, 2nd ed., 704 p., diagrams, \$10.95. Completely revised and enlarged edition, presents latest data arranged under diagnosis and assessment, communication problems, therapy and education, and planning for life adjustment.

CORALS—Herbert S. Zim—Morrow, 64 p., illus. by Rene Martin, \$2.95. Tells young readers what we know about coral animals and what theories have been developed to explain how coral reefs and atolls form.

A DAY WITH TUPI: An Authentic Story of an Indian Boy in California's Mountains—Fran Hubbard—Ginn, unpag., illus. by Ed Vella, \$3.50. Reprint (1955) of a picture book story of how a little Indian boy might have spent his day in Yosemite Valley long ago.

THE DETECTION AND RECOGNITION OF UNDERGROUND EXPLOSIONS: A Special Report of the United Kingdom Atomic Authority, Vols. I and II (Appendix)—Foreword by Sir William Penney, Chmn.—HMSO (Brit. Information Service, N.Y.), 118 p., photographs, diagrams, paper, \$4.20. Describes basic problems and progress made since 1958 in seismological instruments, techniques and methods of analysis that could now be introduced into an international control system.

ELECTRONICS: A Bibliographical Guide-2—C. K. Moore and K. J. Spencer—Plenum Press, 369 p., \$18. Nearly 3,300 entries cover the period July 1959 to December 1964, includes sections on the theory of semiconductor devices, microelectronics, reliability and quality control.

FM RADIO STATION OPERATIONS HANDBOOK—Len Buckwalter and others—TAB Bks., 196 p., paper, \$9.95. By the end of 1966 more than 1500 FM stations are expected to be on the air. This practical guide offers experienced advice on engineering and management problems.

IN THE NAME OF SCIENCE—H. L. Nieburg—Quadrangle Bks., 431 p., \$7.95. A documented inquiry into federal science policy and government contracting, its influence on scientists and on the direction and development of science in the United States.

INFRARED SPECTRA OF CELLULOSE and Its Derivatives—Rostislav Georgievich Zbankov, transl. from Russian by A. B. Densham—Consultants, 333 p., illus., \$16. Gives considerable attention to problems of technique in obtaining infrared spectra of fibrous cellulose materials.

INORGANIC SYNTHESIS, Vol. VIII—Henry F. Holtzclaw, Jr., Ed.-in-Chief—McGraw, 319 p., diagrams, \$12.50. The 68 syntheses included in this volume reflect current research interests and were selected on the basis of need, utility and potential value to the scientific community.

AN INTRODUCTION TO COMPUTER PROGRAMMING—Henry Mullish—Gordon and Breach, 246 p., illus., \$14.50; paper, \$5. Designed to familiarize the layman, high-school and college

student with the essentials of programming for large-scale electronic computers, explaining the arithmetic of FORTRAN, the computer language used throughout.

AN INTRODUCTION TO THE THEORY OF MOLECULAR STRUCTURE—Jean-Joseph Charette—Reinhold, 188 p., diagrams, \$7.50. Text-book presenting chiefly the theoretical methods of studying the structure of molecules, treating thoroughly selected topics such as rotation and vibration of molecules, and electronic energy of molecules.

THE LIVING WORLD OF THE SEA—William J. Cromie—Prentice-Hall, 343 p., photographs, illus. by George Geygan, \$6.95. Traces the story of sea creatures, starting with a discussion of the origin of life and ending with projects for farming the sea.

MENTAL HEALTH OF CHILDREN—The Child Program of the National Institute of Mental Health—Julius Segal and others—PHS (GPO), 65 p., paper, 40¢. Provides an overview of the Institute's child mental health activities which comprise nearly one-third of its total projects and programs.

MINIMAL BRAIN DYSFUNCTION IN CHILDREN: Terminology and Identification, Phase One of a Three-Phase Project—Sam D. Clements—PHS (GPO), 18 p., paper 20¢. Presents the findings of a task force of 12 physicians, scientists, and educators establishing norms to aid in the early recognition and adequate evaluation of children with limited alterations of behavior or intellectual functioning.

MOLECULAR BIOLOGY OF GRAM-NEGATIVE BACTERIAL LIPOPOLYSACCHARIDES—A. Nowotny, Ed.—N.Y. Acad. of Sciences, Annals, Vol. 133, Art. 2, 509 p., illus., paper, \$10. Topics range from biosynthesis of O-antigenic polysaccharides in Salmonella to detoxification of endotoxin by spleen.

MOVING INTO ADOLESCENCE: Your Child in His Preteens—Catherine S. Chilman—Children's Bureau (GPO), 46 p., illus., paper, 25¢. Addressed to parents to help them understand the needs and attitudes of their youngsters between childhood and adolescence.

MYCENAE AND THE MYCENAEAN AGE—George E. Mylonas—Princeton Univ. Press, 251 p., illus., 153 plates, maps, \$18.50. A scholarly survey that brings up to date the knowledge derived from excavations at the site of Agamemnon's four-thousand-year old city, establishing by conjecture and deductions many of the social, economic and funerary customs of that ancient culture.

NAVAHO NEIGHBORS—Franc Johnson Newcomb—Univ. of Okla. Press, 236 p., photographs, \$5.95. Tells of 25 years of observations and recollections of Navaho Indians as individuals, friends and customers at the reservation's trading post.

THE NEW CLASS DIVIDED: Science and Technology Versus Communism—Albert Parry—Macmillan, 364 p., \$8.95. A documented account of the sociopolitical place of the Soviet Union's new scientists, engineers and managers. Based on material gathered outside the Soviet borders, the author seeks to assess the influence of the scientific technical elite on possible changes in the Communist party pattern.

THE NORTH CASCADES: A Report—North Cascades Study Team, Edward C. Crafts, Chmn.—USDI & USDA (GPO), 190 p., photographs, maps, paper, \$3.25. Results of 2½-year study to determine how Federal lands of the North Cascade Mountains in the State of Washington can best serve the public interest, with recommendations.



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OCCUPATIONAL AND ENVIRONMENTAL CANCERS OF THE RESPIRATORY SYSTEM—W. C. Hueper—Springer Verlag, N.Y., 214 p., illus., \$8.50. Reports on the effects of industry-related atmospheric pollutants as specific and nonspecific carcinogenic irritants to the respiratory mucosa of nasal sinuses, larynx and lung.

ORAL CONTRACEPTIVES—Victor A. Drill, foreword by John Rock—McGraw, 211 p., \$10. Summarizes and analyzes data derived from research published on the endocrine properties, mechanism of action, side effects and safety of birth control pills. Contains informative details pertaining to serious conditions attributed from time to time to the progestational steroids.

OUR WORLD AND THE UNIVERSE AROUND IT, Part I: The Universe. Part II: The Earth. Part III: Matter and Energy. Part IV: Life—Ginestra Amaldi, freely adapted and expanded from the Italian edition by Norman Rudnick—Bradale Press, 627 p., illus., four-vol. set boxed, \$35. A condensed overview of modern man's knowledge of the world around him, with many illustrations and printed in large type. Includes 60-page glossary.

PROCEEDINGS OF THE TWENTY-FIRST ANNUAL NORTHWEST WOOD PRODUCTS CLINIC—Charles Krieder and others—Technical Extension Service, Wash. State Univ., 128 p., illus., paper, \$5. Discussions of problems of profit, technical machinery, products, automatic devices and management.

THE PROPERTIES OF GASES AND LIQUIDS: Their Estimation and Correlation—Robert C. Reid and Thomas K. Sherwood—McGraw, 2nd ed., 646 p., diagrams, \$27.50. Completely revised, this reference book reviews and evaluates the methods for estimating and correlating the more important physical and thermodynamic properties, with recommendations on the best methods for evaluating each property.

QUEST FOR PREHISTORY—Geoffrey Palmer and Noel Lloyd—Day, 127 p., illus. by Carol Baker, \$3.50. Examines the beginnings of man in a manner stimulating to young readers.

RECENT ADVANCES IN BIOLOGICAL PSYCHIATRY, Vol. VIII—Joseph Wortis, Ed.—Plenum Press, 367 p., illus., \$16.50. Contributions cover clinical models and formulations, the laboratory animal as model, model psychopathological states, the neurophysiological model, and computer analysis with special reference to EEG.

REGIONAL ECONOMIC IMPACT OF A U.S. OIL SHALE INDUSTRY—John J. Ryan and John G. Welles—Denver Research Institute, Univ. of Denver, 82 p., charts, paper, \$3.75. This study presents a pattern of possible development, with estimates of such factors as industry size, employment composition, urban support requirements and tax revenue generation.

SEISMO-ACOUSTIC METHODS IN MINING—M. S. Antsyferov, Ed., transl. from Russian by S. E. Hall—Consultants, 134 p., illus., paper, \$17.50. Data from investigations mainly carried out in the dangerous Donbass coal mines, dealing with construction of various seismo-acoustic instruments for laboratory and field use, and results of studies important in the prediction of burst-prone zones in seams.

Handbook of Knots & Splices

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