

Books of the Week

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AFRICA'S WILD LIFE: Survival or Extinction?—Eric Robins, foreword by H.R.H. Prince Bernhard of the Netherlands—Taplinger, 224 p., photographs, maps, \$5.95. Describes the vanishing wildlife of Kenya, Uganda and Tanganyika.

BIOLOGY OF BIRDS—Wesley E. Lanyon—Nat. Hist. Press (Doubleday), 186 p., illus., paper, \$1.25. Concise introduction to the evolution, physiology, adaptation, migration, distribution and habits of birds.

BROADCAST ENGINEERING NOTEBOOKS: Vol. 2: AM-FM Broadcast Operations. Vol. 3: AM-FM Broadcast Maintenance—Harold E. Ennes—Sams, 240 p., 256 p., illus., ringbound, paper, \$5.95 each. Comprehensive and practical treatment of radio broadcasting at the studio and at the transmitter site.

THE CENTURY OF SCIENCE—Watson Davis—Duell, Sloan and Pearce, 313 p., 200 photographs, \$5.95. The editor of the Science News Letter here reviews the 20th century record of outstanding scientific and technical achievements, ranging from the atomic revolution to the testing of human talent and the organization of research. Book is indexed and illustrated with many original pictures documenting breakthroughs.

CHANGES IN FAMILY MEDICAL CARE EXPENDITURES AND VOLUNTARY HEALTH INSURANCE: A Five-Year Resurvey—Odin W. Anderson, Patricia Collette and Jacob J. Feldman—Harvard Univ. Press, 217 p., \$6. A detailed account of changes in the medical economy from 1953 to 1958, evaluating the 1958 data in terms of contemporary problems.

THE CHEMISTRY OF WOOD—B. L. Brown, Ed.—Interscience, 689 p., photographs, diagrams, \$25. Reference text presenting the outstanding features of the chemistry of wood and its components, including wood-water relationship, manufacture of wood pulp, and the chemistry of bark.

COUNTRY REPORTS ON THE ORGANISATION OF SCIENTIFIC RESEARCH. United States—Mary E. Corning—OECD, 96 p., charts, paper, single copies free upon request National Science Foundation, Washington 25, D.C. Describes the organization of U.S. academic, industrial, government and private scientific activities.

CULTURAL SCIENCES: Their Origin and Development—Florian Znaniecki—Univ. of Ill. Press, 438 p., paper, \$2.25. Reprint (1952), in which author points out the fundamental differences in the nature of object-matter and the special methodologies between the natural and cultural sciences.

DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS—N. Irving Sax and others—Reinhold, 2nd ed., 1,343 p., diagrams, \$25. Single source for up-to-date, concise hazard-analysis information about more than 10,000 common industrial laboratory materials.

ERNEST THOMPSON SETON'S AMERICA—Farida A. Wiley, Ed.—367 p., illus. by author, paper, \$1.45. Selection of tales and observations about American wildlife by well-known naturalist.

EUGENIS: Hereditarian Attitudes in American Thought—Mark H. Haller—Rutgers Univ. Press, 264 p., \$6. An historical study of American attitudes as they were influenced by concepts of heredity, and their effect on American social history.

EXPLORATION OF THE MOON—Franklyn M. Branley—Nat. Hist. Press (Doubleday), 146 p., illus., paper, 95¢. On the nature of the moon, lunar probe projects and the problems of colonizing the moon.

FINDING OUT ABOUT MAMMALS—Joseph A. Davis, Jr.—Home Lib. Press, 56 p., illus. by Lloyd Sanford, 8 p. color photographs, \$2.95. For boys and girls.

PHYSICAL TECHNIQUES IN BIOLOGICAL RESEARCH. Vol. VI: Electrophysiological Methods, Part B—William L. Nastuk, Ed.—Academic Press, 425 p., illus., \$14.50. Covers some of the more sophisticated analytical methods and experimental techniques such as operational amplifiers, the cable theory, voltage clamp techniques, and determination of biological impedances.

PICTURE BOOK OF ATOMIC SCIENCE—Fred Reinfeld—Sterling, 64 p., illus., paper, \$1. Abridged and revised from Uranium and Other Miracle Metals (1955).

PRECIOUS STONES—Edouard Guebelin—Hallwag Berne (Taplinger), 28 p., 18 color plates, \$2. Small handbook on gem stones, printed in Switzerland.

PROCEEDINGS OF THE FOURTH CELLULOSE CONFERENCE, 1962—R. H. Marchessault, Ed.—Interscience, 548 p., illus., paper, \$22. Includes papers and discussion of the half-day symposium entitled "Molecular Architecture of Wood" organized by Dr. W. A. Cote.

PSYCHOLOGICAL COUNSELING IN A SMALL COLLEGE—Eugenia Hanfman and others, introd. by Lawrence K. Frank—Schenkman Pub. Co., 131 p., \$3.95. Tells step by step how psychological counseling was developed at Brandeis University and discusses specific features of therapeutic work on a small campus.

QUANTA AND REALITY: A Symposium—A. B. Pippard and others, introd. by Stephen Toulmin—Am. Res. Council, 96 p., illus., \$3.95. Essays and discussions on the physical and philosophical implications of quantum mechanics, first presented on the BBC Third Programme.

QUANTUM MECHANICS—Edward U. Condon and Philip M. Morse—McGraw, 250 p., paper, \$2.95. Reprint (1929), outlines the known results obtained by use of the quantum mechanics.

THE QUEST OF JOHANNES KEPLER, ASTRONOMER—Barbara Land—Doubleday, 128 p., illus. by Sam Wisnom, \$2.95. Juvenile biography.

RACE, SCIENCE AND HUMANITY—Ashley Montagu—Van Nostrand, 183 p., paper, \$1.95. Brings together the author's more important articles on the scientific study of race, and includes the UNESCO Statements on Race.

RADIO ASTRONOMICAL AND SATELLITE STUDIES OF THE ATMOSPHERE—Jules Aarons, Ed.—North-Holland Pub. Co. (Interscience), 561 p., illus., \$17.50. Proceedings of the Corfu Summer School in Greece, 1962, sponsored by the Scientific Affairs Division of NATO.

RANDOM VIBRATION IN MECHANICAL SYSTEMS—Stephen H. Crandall and William D. Mark—Academic Press, 166 p., \$6.50. Monograph on the fundamental facts and theories of random vibration and the basic concepts required to design and test equipment which must withstand a random vibration environment.

READING IN MODERN COMMUNICATION: The 1962 Annual Reading Institute Proceedings—Bruce W. Brigham and Marjorie Seddon Johnson, Eds.—Temple University Reading Clinic, 95 p., paper, \$2.50 direct to publisher, Philadelphia 22, Pa. Contains 13 articles including one on reading in different languages by Mario Pei.

ASTRONOMY

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Enjoy SKY AND TELESCOPE magazine monthly. Profusely illustrated. Observing and telescope making departments, monthly star and planet charts. Subscription in U.S.: \$6.00, 1 year; \$11.00, 2 years. Sample copy 60¢.

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RECENT PROGRESS IN HORMONE RESEARCH, Vol. 19: Proceedings of the 1962 Laurentian Hormone Conference—Gregory Pincus, Ed.—Academic Press, 750 p., illus., \$22. Papers and discussions on steroids, hormones and cellular metabolism, thyroid hormone, and comparative endocrinology.

RESEARCH FOR INDUSTRY, 1962—Dept. of Scientific & Industrial Research—HMSO (Brit. Information Services), 74 p., illus., \$1.40. A report on work done by British industrial research associations receiving grants from the government.

RESEARCH PROBLEMS IN BIOLOGY: Investigations for Students, Series 1 and 2—Biological Sciences Curriculum Study; Jerome Metzner, Chmn.—Doubleday, 232 p., 240 p., paper, 95¢ each. Eighty challenging projects, prepared by research biologists, in fields of biology still largely unexplored. For the gifted secondary school student.

SCIENCE AND CHILDREN, Vol. 1, No. 1, Sept. 1963—Frank R. Salamon, Ed.; Robert H. Carleton, Ed. Dir.—NSTA, 30 p., illus., paper, 75¢; monthly, eight times a year, \$4 pr year. Journal of science for the elementary school teacher.

SCIENCE IN AUTHORITY: Essays—Lancelot Hogben—Norton, 157 p., \$5. Critical essays ranging from discussion of the race concept to symbolic logic and medical statistics, from conjectures on an interplanetary language to an appraisal of the social functions of science.

THE SCIENTIFIC APPROACH: Basic Principles of the Scientific Method—Carlo L. Lastrucci—Schenkman Pub. Co., 257 p., \$5.95. Attempts to synthesize and coordinate in nontechnical form the essential elements of the systematic analysis of phenomena and the logical form of problem solving which constitute the scientific approach.

SCIENTISTS' TESTIMONY ON SPACE GOALS: Hearings—Senate Committee on Aeronautical and Space Sciences, 88th Congress—GPO, 260 p., paper, 70¢. Statements by and questioning of scientists in connection with NASA's \$5,712 million space program for fiscal year 1964.

A SENSE OF WONDER: Selections from Great Writers on Nature—Dorothy Shuttlesworth, Ed.—Doubleday, 252 p., illus. by Joan Berg, \$3.50. Selections from the writings of 20 authors, with short biographies.

SKYBLAZERS: Your Career in Aviation—Harry Edward Neal—Messner, rev. ed., 191 p., photographs, \$3.65. Tells young people about qualifications, training and wide range of opportunities in the air and on the ground.

THE STORY OF OUR EARTH—Arthur N. Strahler—Home Lib., 56 p., illus. by Leonard D. Dank, \$2.95. Outlines the subject of earth science for young people.

A STRESS ANALYSIS OF A STRAPLESS EVENING GOWN and Other Essays for A Scientific Age—Robert A. Baker, Ed.—Prentice-Hall, 192 p., illus. by Stanley Wyatt, \$3.95. Satires, mostly written by scientists, lampooning some of the fads and foibles of our day.

THE STRUCTURE OF LINE SPECTRA—Linus Pauling and Samuel Goudsmit—McGraw, 263 p., diagrams, paper, \$2.75. Lucid description of the vector model of the atom, first published in 1930.

A SURVEY OF THE MOON—Patrick Moore—Norton, 333 p., illus., \$6.95. Gives a picture of the moon from the viewpoint of the observational astronomer, in layman's language.

THE TRANSITIONS FROM ANCIENT EGYPTIAN TO GREEK MEDICINE—J. B. deC. M. Saunders—Univ. of Kansas Press, 40 p., \$2. Tenth Logan Clendening Lecture on the History and Philosophy of Medicine, indexed.

A TREASURY OF SCIENCE—Harlow Shapley, Samuel Rapport and Helen Wright, Eds., introd. by Dr. Shapley—Harper, 5th rev. ed., 788 p., \$6.95. Contains new material on radio astronomy, fundamental particles, plasma physics, language of bees, DNA, Zinjanthropus, and new treatment of mental disorders.

VENGEANCE IN THE DEPTHS: The Nuclear Submarine—Commander George P. Steele, USN—Dutton, 183 p., photographs, \$3.50. Tells young people about life and work in war and peace aboard a typical nuclear submarine.

THE WONDERFUL WORLD OF PLANTS AND FLOWERS—Howard W. Swift—Home Lib., 56 p., illus. by Claudine Nankivel, 8 p. color photographs, \$2.95. Invites children to explore the world of botany.

THE WORLD OF THE FAMILY: A Comparative Study of Family Organizations in Their Social and Cultural Settings—Dorothy E. Blitstein—Random House, 303 p., \$4.50. This sociology textbook presents a comparative analysis of family life in complex, literate societies.

X-RAY DIFFRACTION: In Crystals, Imperfect Crystals and Amorphous Bodies—A. Guinier, transl. from French by Paul Lorrain and Dorothee Sainte-Marie Lorrain—Freeman, 378 p., illus., \$11. Advanced text useful to solid-state physicists, metallographers and research workers using modern X-ray diffraction instruments.

• Science News Letter, 84:220 Oct. 5, 1963

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