

Books of the Week

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ABC MANUAL FOR NEW EDITORS of Recreation and Park Publications—Dorothy Donaldson, Ed.—Nat. Recreation & Park Assn., 56 p., illus., paper, \$2.50. Practical tips on editorial and production practices.

ANIMALS OF THE VALLEY OF THE AMAZON—Cecile Hulse Matschat—Abelard-Schuman, 160 p., illus., by Edward Osmond, \$3.50. The animals of the Amazon basin seen through the eyes of two young boys.

ASK ME A QUESTION ABOUT THE EARTH—Sam Rosenfeld—Harvey House, 93 p., photographs, illus., by Anne Lewis, \$2.95. Gives clear, simple answers to such questions as what igneous rocks are and what causes tides.

CADDIS INSECTS: Nature's Carpenters and Stonemasons—Ross E. Hutchins—Dodd, 80 p., photographs by author, \$3.25. Remarkable close-ups illustrate this detailed description of the larvae of caddisflies as they build their amazing constructions of portable homes in ponds and streams.

COMMUNICATIONS IN SPACE—Leonard Jaffe—Holt, 176 p., illus., \$2.95. About types of systems, space power supplies, communication satellites, ground stations and plans for the future, on the high school level.

THE COMPANY OF ANIMALS: A Naturalist's Adventures in the Jungle of Malaya—Ronald McKie—Harcourt, 271 p., 54 photographs by James Hislop and others, maps, \$6.50. A game warden's vivid tales of deep-jungle wildlife—elephants, monkeys, sun bears, tigers, jungle ox and mouse deer.

DEEP-SEA WORLD: The Story of Oceanography—Charles Coombs—Morrow, 256 p., 95 photographs, \$4.95. About probing the depth of "liquid space," the instruments and vessels, and man's efforts and concerns beneath the waves, for young and old set in particularly readable type.

DIELECTRICS, INTERMOLECULAR FORCES, OPTICAL ROTATION—R. H. Cole, Ed.—Gordon & Breach, 271 p., illus., \$8.50; paper, \$4.95. Collection of J. G. Kirkwood's papers on dielectric constant measurements, theory of dielectrics and optical rotary power forces of molecules.

DIRECTORY OF ENGINEERING SOCIETIES AND RELATED ORGANIZATIONS—Engineers Jt. Council, 4th ed., 180 p., paper, \$6. Contains basic information on national, regional, state and local organizations which are primarily engineering or have activities related to engineering, including international and national joint bodies.

EXPLORING THE WORLD—Stella Davies—Roy Pubs., 245 p., maps, \$3.50. Tells young people about such explorers as Marco Polo, Vasco da Gama, Columbus, Captain Cook, Livingstone and Mary Kingsley.

THE PSYCHOLOGY OF SEEING—R. L. Gregory—McGraw, 254 p., illus., paper, \$2.45. An authoritative introductory book for students and the general reader.

FORBUSH AND THE PENGUINS—Graham Billing—Holt, 191 p., \$3.95. The moving and dramatic story of a young New Zealand biologist living alone in the Antarctic, observing and recording day by day the habits of a colony of penguins.

THE FOUNDATIONS OF MATHEMATICS: A Study in the Philosophy of Science—Evert W. Beth—Harper, rev. ed., 741 p., paper, \$4.45. Originally published in 1959 in Amsterdam, the author treats both philosophical and logico-mathematical problems in depth, relating some to contemporary problems and ideas.

THE GREAT WALL OF CHINA—Robert Silverberg—Chilton Bks., 232 p., illus., maps, \$7.95. Reconstructs the past, tracing ancient Chinese history the author tells what parts different dynasties played in the construction of the wall.

THE GRIZZLY BEAR: Portraits from Life—Bessie Doak Haynes and Edgar Haynes, Eds.—Univ. of Okla. Press, 386 p., illus., by Mary Baker, \$5. Collected stories about encounters of mountain men, settlers, naturalists and scouts with grizzlies.

THE HIDDEN DIMENSION—Edward T. Hall—Doubleday, 201 p., photographs, \$4.95. An anthropologist's study and discussion of the social behavior of crowded animals, man's use

of space in public and private, and how different cultures react to space.

JOB DESCRIPTIONS OF PRODUCTION AND RESEARCH PERSONNEL IN THE CHEMICAL PROCESS INDUSTRIES—Conrad Berenson and Henry O. Ruhnke—Corporate Pubs., 116 p., paper, \$12.50. Contains 62 separate job descriptions, ranging from director of research division to junior chemist.

MARY ANNINGS TREASURES—Helen Bush—McGraw, 144 p., illus., by P. A. Hutchison, \$3.25. Story about a young girl's fossil hunting in a mudslide near an English Channel village.

THE NATURE OF LIFE: The Main Problems and Trends of Thought in Modern Biology—C. H. Waddington—Harper, 133 p., diagrams, paper, \$1.25. Reprint (1961).

NITROGEN FIXATION IN PLANTS—William D. P. Stewart—Athlone Press (Oxford Univ. Press), 168 p., illus., \$4. Provides up-to-date account of symbiotic nitrogen fixation of legumes and non-legumes, and nitrogen fixation by free-living organisms, deals with structure, physiology and biochemistry.

THE ORIGIN OF CULTIVATED PLANTS—Franz Schwanitz—Harvard Univ. Press, 175 p., illus., \$4.75. Deals with the differences in the characteristics of cultivated plants and wild forms, the genetic bases of the origin of cultivated plants, the influence of environment and the history of plant breeding.

PEANUTS: Production, Processing, Products—Jasper Guy Woodroof—Avi Pub. Co., 291 p., illus., \$14.50. A practical summary of information on peanuts.

PESTICIDES AND PUBLIC HEALTH: A Report on the Pesticide Programs of the Public Health Service—PHS, 17 p., paper, single copies free upon request direct to Public Health Service, Office of Pesticides, Washington, D.C. 20201.

PHYSICS SURVEY AND OUTLOOK: A Report on the Present State of U.S. Physics and Its Requirements for Future Growth—Physics Survey Committee, NAS-NRC; George E. Pake, Chmn.—Nat. Acad. of Sciences, 119 p., paper, \$5. Findings of survey, projections and recommendations. See story on p. 221.

QUANTUM STATISTICS AND COOPERATIVE PHENOMENA—F. H. Stillinger, Jr., Ed.—Gordon & Breach, 182 p., \$8; paper, \$4.95. First volume of John Gamble Kirkwood's collected works.

THE QUIET REVOLUTION: Computers Come of Age—I. S. Seligsohn, Ed.—AFIPS, unpagged, illus., paper, single copies free upon request direct to publisher, 211 East 43rd St., New York, N.Y. 10017. Basic facts about electronic computers presented by the American Federation of Information Processing Societies.

RADIO SCIENCE: Vol. I, No. 2: Special Issue on Sporadic E—Ernest K. Smith and Sadami Matsushita, Co-Chmn., S.A. Bowhill, Ed.—ESSA (GPO), 128 p., illus., paper, \$1. Proceedings of the Seminar on the Cause and Structure of Temperate Latitude Sporadic E.

THE RIGHTS OF INFANTS: Early Psychological Needs and Their Satisfaction—Margaret A. Ribble—Columbia Univ. Press, 2nd ed., 148 p., \$4.95. Describes the emotional needs of infants, stressing the interrelation between physical and mental growth and gives psychological insight into the roles of motherhood and fatherhood.

SCIENCE IN JAPAN: Symposium presented at the Cleveland meeting of the AAAS, Dec. 1963—Arthur H. Livermore, Ed.—Am. Assn. for the Advancement of Science, 486 p., illus., \$13. Papers discuss major areas of Japanese research, from high-energy physics, earthquake resistant construction and social life of Japanese monkeys to new organism of Vincent's disease.

SHARKS—Herbert S. Zim—Morrow, 65 p., illus., by Stephen Howe, \$2.95. Informative and detailed discussion at child's level, indexed and fully illustrated.

SLEEP—Ian Oswald—Penguin Bks., 141 p., paper, diagrams, 95¢. Discusses methods of studying sleep, mental function and sleep, dreaming, hypnosis and insomnia.

STANDARD ENCYCLOPEDIA OF THE WORLD'S RIVERS AND LAKES—R. Kay Gresswell and Anthony Huxley, Eds.—Putnam's, 384 p., 100 photographs, maps, \$12.50; before July 1, '66, \$10.95. Illustrated partly in color, this volume contains 500 articles on the world's most interesting rivers and lakes, and includes gazetteer with more than 2000 short descriptions and index.

SUPERCONDUCTIVITY OF METALS AND ALLOYS—P. G. de Gennes, transl. by P.A. Pincus—Benjamin, W.A., 274 p., diagrams, \$12.50. Graduate-level reference book interpreting magnetic properties of type I and type II material, thin films, impurity effects and other results of experiments on superconductors.

TEACHING ABOUT MAPS, GRADE BY GRADE: Grade 1 - 6—Susan Marsh—Teachers Publishing Corp., 67 p., 84 p., 90 p., 88 p., 89 p., 104 p., photographs, maps, paper, \$1.95 each. Series of six map books of graded teaching material copiously illustrated with many types of maps.

TELEVISION: A World View—Wilson P. Dizard—Syracuse Univ. Press, 349 p., photographs, \$7.95. Reviews the history and current trends of television communication around the world, with emphasis on U.S. role in this global development.

THRUST INTO SPACE—Maxwell W. Hunter, 11—Holt, 224 p., diagrams, \$2.95. Written for the technically oriented high school student, the book covers propulsion systems, from artillery rockets through orbital and interplanetary rockets to interstellar spaceships.

THE TRAVELS OF MONARCH X—Ross E. Hutchins—Rand McNally, 64 p., illus., by Jerome P. Connolly, \$2.95. Follows the journey of one tagged butterfly who covered 2,000 miles in four months, a book for young children that adults will enjoy.

TROUT—Charles L. Ripper—Morrow, 64 p., illus., by author, \$2.95. Informative book for children, tells about trout in the wilderness and in hatcheries.

WEATHER MODIFICATION: Seventh Annual Report, 1965—National Science Foundation—GPO, 109 p., photographs, paper 40¢. Significant developments and evaluation of worldwide weather modification activities and U.S. government-supported studies.

THE WHY OF ALBERT SCHWEITZER—Joseph Franklin Montague—Hawthorn Bks., 320 p., photographs, \$5.95. A physician's description of Albert Schweitzer and his hospital, an attempt to probe and present objectively the legend and the facts.

WILD ANIMAL WHITE MAN: Some Wildlife in Europe, Soviet Russia and North America—Bernhard Grzimek—Hill & Wang, 360 p., photographs, \$8.95. A conservationist reports on what he found in nature reserves in the Ukraine, in Kazakhstan and the Soviet beaver colony in Voronezh Nature Reserve.

THE WORLD CITIES—Peter Hall—McGraw, 256 p., photographs, maps, \$4.95; paper, \$2.45. Analytical study of seven leading metropolitan centers: London, Moscow, New York, Paris, Tokyo and the great city-complexes of Holland and the Rhine-Ruhr.

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AGRICULTURE

Sugar Coated Fruit Retains Natural Flavor

➤ SUGAR is the key to a new process for drying fruit.

By coating cut fruits with a layer of sugar, U.S. Department of Agriculture scientists have been able to preserve fruits so they retain their natural flavor. This process removes 60 to 70% of their moisture or half their weight. The fruits are then drained and dried further under a vacuum or in air.

The thin film of sugar prevents most cut fruits from turning brown. The fruits can be eaten as is or sprinkled over breakfast cereal.

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