

• 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.

ACCELERATORS OF THE FUTURE—John P. Blewett—Brookhaven Nat'l Lab. (OTS), 13 p., illus., paper, 50¢. Discusses the design feasibility of a 300 to 1000-Bev accelerator.

ADVANCES IN ECOLOGICAL RESEARCH, Vol. 1—J. B. Cragg, Ed.—Academic Press, 203 p. \$7.50. Contributions on soil arthropod sampling, energy in animal ecology, and inter-relations between the biological and physico-chemical components of woodlands.

ANIMAL BEHAVIOR—John Paul Scott—Doubleday, 331 p., illus., photographs, paper, \$1.45. Reprint (1958), describes the work of biologists, psychologists and naturalists, their methods and findings in field and laboratory experiments.

ARCHAEOLOGY—Samuel Rapport and Helen Wright, Eds., foreword by Jotham Johnson—N. Y. Univ. Press, 367 p., 36 plates, maps, \$4.95. Selections from the popular writings of archaeologists around the world.

A BIOLOGY OF DRAGONFLIES—Philip S. Corbet—Quadrangle Bks., 247 p., illus., \$5.75. Concerned with the ecology of dragonflies, emphasizing their biology and behavior, including tropical species.

THE CITY OF MAN: Prophecies of a World Civilization in Twentieth-Century Thought—W. Warren Wagar—Houghton, 310 p., \$5. A young scholar's search for synthesis.

THE COMPLETE BOOK OF SLIDE RULE USE—Ira Ritow—Doubleday, 200 p., illus., paper, \$1.95. Designed for self-study.

COMPOUND SEMICONDUCTORS, Vol. I: Preparation of III-V Compounds—Robert K. Willardson and Harvey L. Goering—Reinhold, 553 p., illus., \$25. Authoritative treatment of crystal structure and bonding, purification of the elements, detection of impurities, preparation of compounds, thin films, surfaces and thermodynamic properties.

AN ELEMENTARY INTRODUCTION TO THE THEORY OF PROBABILITY—B. V. Gnedenko and A. Ya Khinchin, transl. from Russian by Leo F. Boron; Sidney F. Mack, Ed.—Dover, 130 p., paper, \$1.45. Unabridged translation of the fifth Russian edition published in 1961.

ENGINEERING—Samuel Rapport and Helen Wright, Eds., foreword by John R. Ragazzini—N. Y. Univ. Press, 378 p., illus., \$4.95. Selection of readings presenting a history of engineering from pre-Christian time to the space age.

ESSENTIALS OF ELECTRICITY—William H. Timbie, rev. by Arthur L. Pike—Wiley, 3rd ed., 302 p., illus., \$5.75. Up-to-date presentation of material, with shift in emphasis placing more stress on circuit theories.

GEOGRAPHY IN WORLD SOCIETY: A Conceptual Approach—Alfred H. Meyer, and John H. Strietermeier—Lippincott, 846 p., illus., maps, \$11. College textbook designed to develop awareness of the

role of geography in world affairs, presenting the geographic framework in which social, economic and political systems have evolved.

THE GREEN TURTLE AND MAN—James J. Parsons—Univ. of Fla. Press, 126 p., photographs by Archie Carr, maps, \$8.50. A history of the relationship of man and the green turtle, giving survey of its nesting beaches around the world, and description of conservation program in western Caribbean.

HALL-EFFECT INSTRUMENTATION—Barron Kemp—Sams, 128 p., illus., \$4.95. A nonmathematical discussion of the Hall effect principle and its many applications.

HOW TO DETECT & MEASURE RADIATION—Harold S. Renne—Sams, 160 p., illus., paper, \$3.95. Tells what radiation is and describes ionization and scintillation counters, dosimeters and home-built devices.

HOW TO MAKE A TELESCOPE—Jean Texereau, transl. and adapted from French by Allen Strickler—Doubleday, 258 p., illus., paper, \$1.45. Step-by-step course covering operation and equipment in detail, including those elements of optical theory necessary for an understanding of the telescope.

IN PREHISTORIC SEAS—Carroll Lane Fenton and Mildred Adams Fenton—Doubleday, 127 p., illus. by C. L. Fenton, photographs, \$2.95. A popular introduction to the fossils from the sea.

INDUSTRIAL X-RAY HANDBOOK—Allan Lytel—Sams, 286 p., illus., \$7.95. Describes basic principles and techniques of X-ray equipment used in the laboratory and in manufacturing processes.

INTERNATIONAL REVIEW OF TROPICAL MEDICINE, Vol. 2—David Richard Lincicome, Ed.—Academic Press, 425 p., illus., \$16. Papers range from assessing the handicap imposed on man by parasitism to the story of malaria and its main discoveries.

KNOWLEDGE AND WONDER: The Natural World As Man Knows It—Victor F. Weisskopf—Doubleday, 282 p., illus., paper, \$1.45. A theoretical physicist synthesizes the facts and ideas of physics, astronomy, chemistry, biology and genetics in an effort to help the layman see science as a whole.

LADY LUCK: The Theory of Probability—Warren Weaver—Doubleday, 392 p., illus., paper, \$1.45. A truly engaging and witty discussion of the probability theory in science, business, games and everyday life, for bright high school youngsters and laymen.

MAGNETISM OF THE EARTH—James H. Nelson, Louis Hurwitz and David G. Knapp—Coast & Geodetic Survey (GPO), 79 p., illus., paper, \$1. Up-to-date short monograph on the earth's magnetic field, surveys, instruments and origins of geomagnetic science, suitable for the general reader.

MATHEMATICS—Samuel Rapport and Helen Wright, Eds., foreword by Hollis R. Cooley—N. Y. Univ. Press, 319 p., illus., \$4.95. Selection of readings on the highpoints of the history of mathematics.

THE MIGHT OF THE WEST—Lawrence R. Brown—Obolensky, 562 p., \$10. An examination and interpretation of Western history by an engineer and journalist.

MODERN COMMUNICATIONS COURSE, Vol 3: FM & Multiplex Modulation Systems—Edward M. Noll—Sams, 223 p., illus., paper, \$4.95. A practical course, includes experiments on the modulation section of FM transmitters.

A NATURALIST IN ALASKA—Adolph Murie—Doubleday, 302 p., photographs by author, paper, \$1.45. Concerns the domestic ways and ecologic relationships of Alaskan wildlife, the grizzly bear, wolf, lynx, wolverine, Dall sheep and caribou. Reprint (1961).

OSCILLATIONS IN NONLINEAR SYSTEMS—Jack K. Hale—McGraw, 180 p., \$9. Mainly concerned with aspects of the theory of nonlinear oscillations for ordinary equations containing a small parameter.

PIONEER OCEANOGRAPHER: Alexander Agassiz—Beryl Williams and Samuel Epstein—Messner, 191 p., \$3.25. Juvenile biography about the son of the natural scientist Louis Agassiz.

POISONOUS AND INJURIOUS PLANTS OF THE U.S. VIRGIN ISLANDS—A. J. Oakes and James O. Butcher—USDA (GPO), 97 p., photographs, paper, 45¢. Brings together available information about livestock poisoning and descriptions useful in identifying poisonous plants.

PORPOISES AND SONAR—Winthrop N. Kellogg—Univ. of Chicago Press, 177 p., illus., paper, \$1.50. Reprint (1961), describes research on the navigational sense of the bottlenose dolphin or porpoise.

PRINCIPLES OF APPLIED ELECTRONICS—Ben Zeines—Wiley, 425 p., diagrams, \$6.95. Basic text, from fundamental concepts of electron flow, through the most important electronic circuits.

PSYCHOLOGY OF THE SCIENTIST: Passages from the "Idea Books"—Clark L. Hull, introd. by Ruth Hays, R. B. Ammons, Ed.—Perceptual & Motor Skills, Monograph 9-V15, 82 p., illus., paper, \$3. Biographical sketch and excerpts from the 73 "idea books" of the late Yale Professor of Psychology.

SCIENCE: Method and Meaning—Samuel Rapport and Helen Wright, Eds., foreword by George M. Murphy—N. Y. Univ. Press, 258 p., \$4.95. Contains excerpts from the writings of distinguished scientists, from T. H. Huxley to Alfred North Whitehead.

THE SURGEON—W. C. Heinz—Doubleday, 245 p., \$3.95. A novel documenting a day's work and thoughts of a thoracic surgeon.

TEMPERATURE: Its Measurement and Control in Science and Industry, Vol. III, Part 3: Biology and Medicine—James D. Hardy, Ed.—Reinhold, 683 p., illus., \$22.50. Covers temperature measurement and calorimetry, temperature effects in biological systems, tissue heating, physiological responses to heat and cold, hypothermia, and temperature regulation.

TRADE AND TRAVEL IN EARLY BAROTSE-LAND: The Diaries of George Westbeech, 1885-1888 and Captain Norman MacLeod, 1875-1876—Edward C. Tabler, Ed.—Univ. of Calif. Press, 125 p., illus. by Lt. William Fairlie, maps, \$5. Record of early European penetration into Africa north of Victoria Falls.

WATER AT WORK—Jerome S. Meyer—World Pub. Co., 92 p., illus. by John Polgreen, photographs, \$3. Introduces young readers to modern technological uses of water.

WEALTH FROM THE GROUND—Walter Shepherd—Day, 48 p., illus. by Gaynor Chapman and Clifford Bayly, \$1.95. Tells children about minerals and traces of the ancient past.

THE WONDERFUL WORLD OF BULBS—Bebe Miles—Van Nostrand, 348 p., illus. by C. P. Myers, photographs, \$7.50. A practical handbook written by an experienced amateur.

• Science News Letter, 83:188 March 23, 1963

GENERAL SCIENCE

Test Ban Treaty Depends on Science

➤ **ACHIEVING** a nuclear test ban treaty is not like bargaining for a used car. The question of the number of on-site inspections "must be solved on a scientific basis" and not merely on a "trading basis," Arthur H. Dean, former U.S. Ambassador to the Geneva disarmament conference, said in Washington, D. C.

To negotiate a test ban treaty merely for the sake of making an agreement between Russia and the United States is not desirable, he said at a meeting of the American Association for the United Nations.

The problems of detection, location and identification of "seismic events" have to be worked out. It is "naive" to think that the creation of an atmosphere of "good will" can solve the problems, Mr. Dean said.

Test-ban negotiating is not playing a numbers game. Having three inspections is like driving a car with one wheel: with four wheels it works, and with one it does not, Mr. Dean reported.

He said an effective treaty would add to our security by keeping the Russians from carrying out further tests.

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TO MEN WHO JUST "CAN'T LEARN" MATH!

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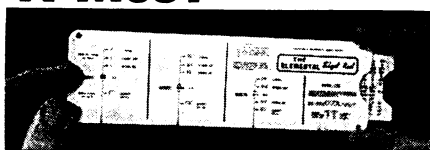
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