

# 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.

**AMERICA'S FIRST WOMAN CHEMIST:** Ellen Richards—Esther M. Douty—*Messner*, 191 p., \$2.95. Juvenile biography.

**ARCHAEOLOGY IN THE USSR**—A. L. Mongait, transl. from Russian and adapted by M. W. Thompson—*Penguin*, 320 p., illus., paper, \$1.45. Intended as a popular scientific outline of the achievements of Soviet archaeologists.

**BIRDS OF THE WORLD**—Oliver L. Austin, Jr.—*Golden Press*, 320 p., 11" x 14", illus. by Arthur Singer, \$14.95. Ornithologist's survey of the 27 orders and 150 families, with more than 300 paintings and maps in full color.

**A BOOK OF CURVES**—E. H. Lockwood—*Cambridge*, 200 p., illus., \$4.95. Describes methods of drawing plane curves, from parabola to bipolar coordinates.

**THE CHALLENGE OF THE ATMOSPHERE**—O. G. Sutton—*Harper*, 227 p., diagrams, \$5.95. Explains meteorology as an analytic and deductive science that challenges the meteorologist to extract some measure of rule from the turbulent atmosphere in his attempt to explain and predict its behavior.

**CHECK LIST OF PLANT AND SOIL NEMATODES: A Nomenclatorial Compilation**—Armen C. Tarjan—*Univ. of Fla. Press*, 200 p., \$7.50. A guide to nomenclature as well as to the pertinent literature.

**CHEMICAL PROCESSING OF REACTOR FUELS**—John F. Flagg—*Academic Press*, 530 p., illus., \$17.50. Textbook and reference work for engineers and research workers.

**CHEMISTRY AND TEXTILES FOR THE LAUNDRY INDUSTRY**—Harry Cohen and George E. Linton—*Textile Bk (Interscience)*, 429 p., illus., \$15. Fundamental facts and technical data, textbook and reference work.

**COMPUTERS AND COMMON SENSE: The Myth of Thinking Machines**—Mortimer Taube—*Columbia Univ. Press*, 136 p., \$3.75. Critical evaluation of the literature, discussing new types of machines for mechanical translation,

linguistic analysis and man-machine relations in defense systems.

**DAHLIAS FOR EVERYONE**—T. R. H. Lebar—*Blandford (St. Martins)*, 208 p., illus., \$3.95. Guide to modern principles and practices of dahlia culture.

**DAVID EDWARDES INTRODUCTION TO ANATOMY, 1532**—C. D. O'Malley and K. F. Russell—*Stanford Univ. Press*, 64 p., \$2.75. A facsimile reproduction with English translation and introductory essay.

**EDUCATING THE GIFTED: An Axiomatic Approach**—Virgil S. Ward—*Merrill*, 240 p., \$5.75. Comprehensive theory of general principles derived from psychological facts and practices which have proven effective.

**EXPERIMENTS IN SOUND**—Nelson F. Beeler—*Crowell*, 130 p., illus. by George Giusti, \$2.95. Modern experiments for the intermediate level, including Doppler effect, sound toys, mathematics and musical chords.

**EXPLORING FOR FUN: A Young Explorer's Handbook**—William A. Burn—*Dutton*, 127 p., illus. by J. M. Sedacca, \$3. For young campers.

**EXTENDING MATHEMATICS UNDERSTANDING**—Roger Osborn and others—*Merrill Bks.*, 271 p., illus., \$6. Designed to develop and strengthen the mathematical competence of elementary school teachers, emphasizing the new concepts of modern mathematics.

**THE FIRE OF LIFE: An Introduction to Animal Energetics**—Max Kleiber—*Wiley*, 454 p., diagrams, \$11.50. This text emphasizes fundamental concepts and basic relationships.

**FROM MIASMAS TO MOLECULES**—W. Barry Wood, Jr.—*Columbia Univ. Press*, 100 p., illus., \$3. Four essays on the progress of medical science in dealing with a single disease, diphtheria.

**THE FUTURE OF MAN**—P. B. Medawar—*New Am. Lib.*, 125 p., paper, 50¢. Reprint of biologist's speculations on genetic qualities of future generations.

**GENES, ENZYMES AND INHERITED DISEASES**—H. Eldon Sutton—*Holt*, 120 p., illus., \$3.50. Informs the mature student of the outstanding advances in biochemical genetics.

**GRASS AND PEOPLE**—Charles Morrow Wilson—*Univ. of Fla. Press*, 233 p., illus., \$6.50. Popularly written story of grasslands and grass types in the United States and abroad.

**GREAT DISSENTERS**—Norman Thomas—*Norton*, 220 p., \$4. Study of five men who influenced the thinking of the western world by speaking out against world opinion: Socrates, Galileo, Tom Paine, Wendell Phillips and Gandhi.

**HERE COME THE DOLPHINS!**—Alice E. Goudey—*Scribner*, 94 p., illus. by Garry MacKenzie, \$2.75. For beginning readers.

**INTELLIGENCE AND ATTAINMENT TESTS**—P. E. Vernon—*Philosophical Lib.*, 207 p., \$7.50. British psychologist's survey and critique of tests used in English-speaking countries.

**INTRODUCTION TO TRANSIENTS**—D. K. McClerry—*Wiley*, 232 p., illus., \$7.50. Offers a simpler approach to the operational calculus of Oliver Heaviside.

**LAND OF PLENTY: The American Farm Story**—Wheeler McMillen—*Holt*, 137 p., photographs, \$3.95. Tells about the mechanization of American farm production.

**THE LAST PROBLEM**—E. T. Bell—*Simon & Schuster*, 308 p., \$4.95. Very readable history of Fermat's theorem, tracing the still unsolved algebraic query from Babylonia to the present time.

**LEARNING THEORY AND THE THERAPY OF NEUROSES**—R. Metzner—*Cambridge*, 29 p., paper, \$1.50. Monograph on recent studies on the use of conditioning as therapy for neuroses.

**THE LIFE AND WORK OF SIGMUND FREUD**—Ernest Jones, edited and abridged by Lionel Trilling and Steven Marcus, introd. by Lionel Trilling—*Basic Bks.*, 541 p., illus., \$7.50. Single-volume abridgement of original biography with mainly technical aspects of Freud's work deleted.

**LIGHT AND PLANTS**—R. J. Downs, H. A. Borthwick and A. A. Piringer—*USDA (GPO)*, 26 p., paper, 20¢. A series of experiments describing light effects on seed germination, plant growth and plant development.

**LINEAR DIFFERENTIAL OPERATORS**—Cornelius Lanczos—*Van Nostrand*, 564 p., \$12.75. Deals thoroughly with advanced topics in mathematical analysis, using as basic frame of reference the theory of matrices.

**LINEAR VACUUM-TUBE AND TRANSISTOR CIRCUITS: A Unified Treatment of Linear Active Circuits**—Alfred J. Cote, Jr. and J. Barry Oakes—*McGraw*, 411 p., diagrams, \$10.75. Basic text on the analysis and synthesis of vacuum-tube and transistor linear circuits.

**THE MEASUREMENT OF ABILITIES**—Philip E. Vernon—*Philosophical Lib.*, 276 p., graphs, \$7.50. British psychologist outlines principles of test construction and procedure and tells how to interpret the results of mental measurement.

**NATIONAL CHARACTER IN ACTION: Intelligence Factors in Foreign Relations**—Brig. General Washington Platt—*Rutgers Univ. Press*, 250 p., \$6. Explores the possibilities for a specific plan for studying the character of foreign nations and for applying this knowledge to military intelligence interpretation.

**NAVIGATION IN THE JET AGE**—Robert Wells, foreword by General Curtis E. LeMay—*Dodd*, 117 p., illus. by Jack Coggins, \$3. Tells young people about modern instruments of navigation and their uses.

**NUCLEAR REACTOR INSTRUMENTATION**—M. W. Jervis—*Temple (Simmons-Boardman)*, 74 p., illus., \$2.95. Monograph discussing instrumentation necessary for starting, running, measurement and protection of reactors.

**OCEAN HARVEST: The Future of Oceanography**—Helen Wolff Vogel and Mary Leonard Caruso—*Knopf*, 144 p., illus. by John Kaufmann, \$3. Designed to stimulate young readers' interest.

**OUR EMERGING UNIVERSE**—Allan Broms—*Doubleday*, 296 p., illus., \$4.95. Explores for the general reader the latest theories of how the universe, our solar system and the earth were formed and have been evolving.

**PHYSICS AND CHEMISTRY: A Unified Approach, Books I and II**—John C. Hogg, Charles L. Bickel and Elbert P. Little—*Van Nostrand*, 374 p., 481 p., illus., \$4.95, \$5.40. Designed to teach integrated course of physics and chemistry in grades 11 and 12.

**THE PRINCIPLES OF CHEMICAL EQUILIBRIUM: With Applications in Chemistry and Chemical Engineering**—Kenneth Dembigh—*Cambridge*, 491 p., paper, \$2.95. Reprint of 1955 edition.

**PRINCIPLES OF REFRIGERATION**—Roy J. Dossat—*Wiley*, 544 p., illus., \$11.50. Textbook on theory and practical applications.

**PROTEIN BIOSYNTHESIS**—R. J. C. Harris, Ed.—*Academic Press*, 409 p., illus., \$14. Symposium held at Wassenar in 1960 under the auspices

## RAPID CALCULATIONS

by A. H. Russell

### CAN YOU —

- Name the day of the week on which May 1st 1485, fell . . .
- Give the cube root of 42508549 . . .
- Tell how long it takes for money to double itself at 5% compounded annually . . .

IN 5 SECONDS?

- or, Multiply 56837 by 2467
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of UNESCO and CIOMS, mainly dealing with the technology of protein synthesis.

**RADIOSTRONTIUM AND RADIOCESIUM IN DRINKING WATER IN THE UNITED KINGDOM, RESULTS TO DECEMBER, 1960**—R. N. Crooks, R. G. D. Osmond and T. J. Webber—*AERA (Brit. Inform. Serv.)*, 18 p., paper, 60¢. Results of measurement and analysis of radioactivity in British water supplies, 1957-1960.

**SCIENCE AND MUSIC**—Sir James Jeans—*Cambridge*, 258 p., illus., paper, \$1.95. First paperback reprint of 1937 edition.

**SCIENCE AND SENSIBILITY, Vols. I and II**—James R. Newman—*Simon & Schuster*, 372 p., 309 p., illus., boxed \$10. Collection of biographical essays and articles on science, philosophy and civilization, nearly all written since 1950. For the intelligent layman.

**SCIENCE EXPERIMENTS FOR NEW ELEMENTARY SCHOOL TEACHERS**—Donald Salem—*Teachers Practical Press*, 60 p., illus., paper, \$1.75. Lesson planning and suggestions for materials and methods for experimentation.

**THE SCIENTIFIC PAPERS, Vol. I: Thermodynamics. Vol. II: Dynamics, Vector Analysis**—J. Willard Gibbs—*Dover*, 434 p., 284 p., paper, \$2 each. Unabridged reprint of 1906 edition.

**SEE ALONG THE SEASHORE**—Millicent E. Selmsam—*Harper*, unpagged, illus. by Leonard Weisgard, \$2.95. About tides, plant and animal life a child can observe along the shore.

**SLUMS AND SUBURBS: A Commentary on Schools in Metropolitan Areas**—James Bryant Conant—*McGraw*, 147 p., \$3.95. Observations and conclusions based on contrasting situations found in public junior high schools in different big city neighborhoods.

**SPRING DESIGN AND APPLICATION**—Nicholas P. Chironis, Ed.—*McGraw*, 344 p., illus., \$9.50. Manual of spring design data, equations and theory, prepared by more than 100 experts.

**THE STORY OF ELECTRICITY**—Mae and Ira Freeman—*Random House*, 79 p., illus. by Rene Martin, \$1.95. For young boys and girls.

**STROKES: How They Occur and What Can Be Done About Them**—by Irvine H. Page and others—*Dutton*, 226 p., illus., \$4.50. Written by medical authorities for patients and their families.

**TEACHING THE RETARDED CHILD TO TALK: A guide for Parents and Teachers**—Julia S. Molloy—*Day*, 125 p., \$3.50. Specific instructions to help parents help their children who need assistance.

**THOMAS ALVA EDISON FOUNDATION 15 YEAR & 1960 ANNUAL REPORT**—*Thomas Alva Edison Foundation*, 49 p., illus., paper, single copies free upon request direct to publisher, 8 W. 40th St., New York 18, N. Y. About the Foundation's work for young people in the fields of science education and mass media between 1946-1960.

**THOMAS JEFFERSON, HIS MANY TALENTS**—Johanna Johnston—*Dodd*, 159 p., illus. by Richard Berge, \$3.50. Tells young people about Jefferson, the naturalist, scientist, architect, archaeologist and inventor.

**THE TREASURES OF TIME: Firsthand Accounts by Famous Archaeologists of Their Work in the Near East**—Leo Deuel, Ed.—*World Pub. Co.*, 318 p., illus., \$6. Chapters describing archaeological discoveries in Egypt, Mesopotamia, Syria, Palestine, Crete and Greece.

**THE WANDERING ALBATROSS**—William Jameson—*Doubleday*, rev. ed., 131 p., illus., paper, 95¢. Legends, breeding habits, flight and other observations of this largest of the sea birds.

**WHAT A WONDERFUL MACHINE IS THE SUBMARINE**—Norman Bate—*Scribner*, unpagged,

illus. by author, \$2.75. A picture-story book for children.

**WHIRLYBIRDS: The Story of Helicopters**—Edwin P. Hoyt—*Doubleday*, 58 p., illus. by George J. Zaffo, \$2.95. Boy's book about the development and uses of helicopters.

**WHITE WATERS AND BLACK**—Gordon MacCreagh—*Doubleday*, 336 p., illus., paper, \$1.45. Record of an expedition through some of South America's wildest jungle areas.

**WILD FLOWERS**—Homer D. House—*Macmillan*, 362 p., 364 color photographs by author, \$17.95. Reissue of popular reference work with detailed descriptions of native wild flowers from the Atlantic seaboard westward toward the Mississippi valley.

**THE WORLD OF ANIMALS: A Treasury of Lore, Legend and Literature by Great Writers and Naturalists from the 5th Century B.C. to the Present**—Joseph Wood Krutch, Ed.—*Simon & Schuster*, 508 p., illus., \$10; before Christmas \$8.95. Handsome volume of a great variety of fine writing.

**THE WORLD OF MEASUREMENT**—Donovan A. Johnson and William H. Glenn—*Webster Pub. Co.*, 64 p., illus., paper, 85¢. Mathematics enrichment reading with exercises, for teenagers.

**YOUR GUIDE TO MARINE STUDIOS, MARINE-LAND, FLORIDA**—*Marine Studios*, 36 p., 60 color photographs, paper, 50¢. About the fish species on view in the oceanaria of Marine Studios.

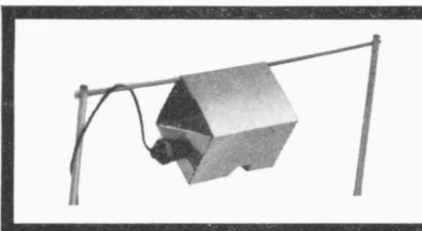
• Science News Letter, 80:308 November 4, 1961

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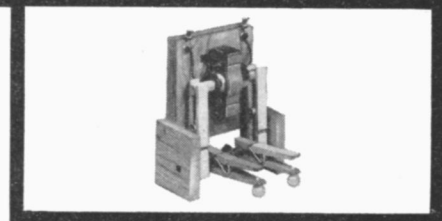
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