

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.

ABC'S OF COMPUTERS—Allan Lytel—*Bobbs*, 128 p., illus., paper, \$1.95. To serve as self-teaching basic introduction to digital and analog computers.

ACCEPTED DENTAL REMEDIES, 1961—*Am. Dental Assn.*, 26th ed., 230 p., paper, \$3. Drugs used in dental practice, including a list of brands accepted by the Council on Dental Therapeutics of the A.D.A.

ATOMIC ENERGY: The Story of Nuclear Science, Including Many Home Experiments—Irène D. Jaworski and Alexander Joseph—*Harcourt*, 218 p., illus., \$4.95. Explains the nature and structure of the atom, fission, fusion and peaceful uses of atomic energy for the young adult.

BASIC MATHEMATICS, Vol. 1: Arithmetic as an Outgrowth of Learning to Count—Norman H. Crowhurst—*Rider, J. F.*, 143 p., illus., paper, \$3.90. Step-by-step arithmetic, grade-school level.

BATTLE FOR THE MIND: A Physiology of Conversion and Brain-Washing—William Sargent—*Penguin*, 255 p., illus., paper, \$1.45. Examines some of the mechanisms involved in the fixing or destroying of religious or political belief in the human brain.

THE BIBLICAL ARCHAEOLOGICAL READER—David Noel Freedman and G. Ernest Wright—*Doubleday*, 342 p., illus., paper, \$1.45. Collection of articles published by the American Schools of Oriental Research, selected for the general reader.

THE BIOCHEMISTRY OF INSECTS—Darcy Gilmour—*Academic*, 343 p., \$8. Summary of the literature on the life processes of insects at the biochemical level, for entomologists and those engaged in the field of insecticide toxicology.

CALIFORNIA SPRING WILDFLOWERS: From the Base of the Sierra Nevada and Southern Mountains to the Sea—Philip A. Munz—*Univ. of Calif. Press*, 122 p., 96 color photographs, 173 drawings, paper, \$2.95. Handsome and authoritative guide to identification.

THE COSTLY TIME LAG BETWEEN DISCOVERY AND USE OF MEDICAL KNOWLEDGE—*Public Health Service*, 20 p., illus., paper, single copies free upon request direct to publisher, Washington 25, D. C. Facts about loss in life and health resulting from failure to use new research findings.

DRUG ADDICTION: Crime or Disease? Interim and Final Report—Joint Committee of the American Bar Association and the American Medical Association on Narcotic Drugs, introd. by Alfred R. Lindesmith—*Indiana Univ. Press*, 173 p., paper, \$2.95. Report's recommendations

YOUR HAIR

Its Health, Beauty and Growth

By Herman Goodman, M.D.

A medical specialist tells you what to do to save and beautify your hair, stimulate healthier hair growth, and deal with many problems, as: Dandruff—gray hair—thinning hair—care of the scalp—baldness—abnormal types of hair—excessive oiliness—brittle dryness—hair falling out—infection—parasites—hair hygiene—glands—diet—coloring—and myriad other subjects concerning hair.

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have been opposed by the Federal Bureau of Narcotics.

EDUCATION DIRECTORY, 1960-1961, Part 2: County, City and Other School Superintendencies—Rudolph V. Thompson—*Office of Educ. (GPO)*, 210 p., paper, 75¢.

ELECTRICITY AND ELECTRONICS BASIC—William B. Steinberg and Walter B. Ford—*Am. Tech. Soc.*, 2nd ed., 262 p., illus., \$4.50. Discussions of basic principles are followed by work projects labeled "Interesting Things to Do."

ELEMENTARY LOGIC OF SCIENCE AND MATHEMATICS—P. H. Nidditch—*Free Press*, 371 p., \$4. Introductory textbook of inductive and of modern deductive logic.

ELEMENTS OF MODERN PHYSICS: A Course in Those Aspects of Modern Physics That Underlie Important Engineering Developments—Paul L. Copeland and William E. Bennett—*Oxford Univ. Press*, 507 p., \$8.50. One-semester survey course for engineering students.

ENGINEERING MANAGEMENT—Struan A. Robertson—*Philosophical Lib.*, 2nd ed., 467 p., \$10. British textbook.

ESSENTIALS OF HUMAN ANATOMY—Russell T. Woodburne—*Oxford Univ. Press*, 2nd ed., 620 p., 413 illus., \$12.50. Revised edition includes ten full-color plates illustrating central anatomical features of each region of the body.

EXPLORATIONS IN THE PHYSIOLOGY OF EMOTIONS—Louis Jolyon West and Milton Greenblatt, Eds.—*Psychiatric Res. Reports, Am Psychiatric Assn.*, 271 p., illus., paper, \$2. Papers and discussions of interdisciplinary symposium at University of Oklahoma in 1957.

FAMOUS INDUSTRIALISTS—Sigmund A. Lavine—*Dodd*, 157 p., illus. by Gerald McCann, \$3. Juvenile biographies.

GEOGRAPHICAL GUIDE TO FLORAS OF THE WORLD, Part II: Western Europe—S. F. Blake—*U.S. Dept. of Agric. (GPO)*, 742 p., \$2.75. Annotated selected list of floras and floristic works relating to vascular plants.

GREECE—Pierre-Jean Launay—*Hastings House*, 126 p., photographs by author, \$4.75. Geographical, historical and archaeological notes with 72 pages of illustrations.

A GUIDE TO DISSECTION IN GROSS ANATOMY—Russell T. Woodburne—*Oxford Univ. Press*, 162 p., illus., \$3.50. Laboratory guide designed to direct student in an organized dissection of the structures of the body.

HOW TO REPAIR SMALL APPLIANCES—Jack Darr—*Bobbs*, 128 p., illus., paper, \$2.50. Practical tips on how to take apart and repair 15 appliances, from toasters to small electric motors.

THE INTERNATIONAL DICTIONARY OF PHYSICS AND ELECTRONICS—Walter C. Michels, Ed.-in-Chief—*Van Nostrand*, 2nd ed., 1355 p., illus., \$27.85. Enlarged and revised, now includes recent developments in controlled fusion and magnetohydrodynamics, nuclear physics and astrophysics, comprises terms of pure science

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INTERNATIONAL TRANSISTOR SUBSTITUTION GUIDEBOOK—Keats A. Pullen, Jr.—*Rider, J. F.*, 64 p., diagrams, paper, \$1.50. Compact listing of 4500 direct substitutions of American and foreign manufacture.

INTRODUCTION TO SYMBOLIC LOGIC—A. H. Basson and D. J. O'Connor—*Free Press*, 175 p., \$3. Textbook for the beginner in formal logic, with exercises and bibliography.

INTRODUCTORY BOTANY—Arthur Cronquist—*Harper*, 892 p., illus., \$9.25. Text stresses both facts and interpretation, proceeds from the simple algae to the complex angiosperms, and includes results of recent research.

INTRODUCTORY FORMAL LOGIC OF MATHEMATICS—P. H. Nidditch—*Free Press*, 188 p., \$3. Course in formal logic and in elementary set theory, giving logically valid proofs of mathematical theorems.

LABORATORY WORKBOOK FOR BASIC PHYSICS—Alexander Efron—*Rider, J. F.*, 208 p., illus., paper, \$2.50. Instructive experiments to accompany high school or junior college text.

LOSE WEIGHT AND LIVE—Robert P. Goldman, foreword by Harold Willard, M.D.—*Doubleday*, 235 p., illus. by Roland Rodogast, \$3.95. Once overweight medical writer tells how he used nutritional know-how and psychology on himself to change his food habits and figure.

MAN TAKES CONTROL: Cultural Development and American Aid—Charles J. Erasmus—*Univ. of Minn. Press*, 365 p., \$6.50. Examines technical assistance programs in relation to cultural development, particularly in northwestern Mexico, where road and irrigation projects have created new opportunities.

MINERAL METABOLISM: An Advanced Treatise, Vol. I: Principles, Processes and Systems, Part B—C. L. Comar and Felix Bronner, Eds.—*Academic*, 541 p., illus., \$14.50. Treats the physical and biological principles required for an analysis of metabolism of minerals.

MINIATURE ROSES—Roy Genders—*Blanford (St. Martins)*, 104 p., illus., \$3.95. British gardening guide.

MIRAGE OF HEALTH: Utopias, Progress and Biological Change—Rene Dubos—*Doubleday*, 235 p., paper, 95¢. A study of history and concepts of medicine, showing how the ingredients of utopia are often the agents of new disease.

NATIONAL ELECTRICAL CODE AND BLUEPRINT READING—Kennard C. Graham—*Am. Tech. Co.*, 153 p., illus., \$4. Pictorial presentation of safety measures and standard practices in electrical wiring.

OF MEN AND NUMBERS: The Story of the Great Mathematicians—Jane Muir—*Dodd*, 250 p., diagrams, \$3.50. Short biographies, from Pythagoras to Georg Cantor, showing each mathematician's contributions to modern mathematical thought and how each altered man's view of the universe.

PHILOSOPHIES OF EDUCATION—Philip H. Phenix, Ed.—*Wiley*, 137 p., paper, \$1.90. Sketches of some contemporary viewpoints on education.

POPULATION PERSPECTIVES—Philip M. Hauser—*Rutgers Univ. Press*, 183 p., illus., \$3.50. Elaboration of three lectures analyzing the revolutionary changes in population size, composition and distribution during the modern era, with particular emphasis on the metropolitan area explosion in the United States.

PROCEEDINGS OF THE SIXTH SYMPOSIUM ON MAGNETISM AND MAGNETIC MATERIALS: Supplement to the Journal of Applied Physics, Vol. 32, 1961—F. Keffer and others, preface by R. M. Bozorth—*Am. Inst. of Physics*, 399 p., illus., paper, \$1.75. Among other subjects, on spin

systems and spin configurations, ferro-magnetic resonance, anisotropy, and oxides.

SHE LIVED FOR SCIENCE: Irene Joliot-Curie—Robin McKown—*Messner*, 192 p., \$2.95. Biography for young people about the co-discoverer of artificial radioactivity, Nobel Prize-winning daughter of Nobel Prize-winning parents.

A SHORT HISTORY OF TECHNOLOGY: From the Earliest Times to A.D. 1900—T. K. Derry and Trevor I. Williams—*Oxford Univ. Press*, 782 p., illus., \$8.50. Emphasizes the underlying relation between man's general history and the history of technological progress, first part leading up to 1750 and the Industrial Revolution, the second describing events to 1900.

THE SOUTH AMERICAN HANDBOOK, 1961—Howell Davies, Ed.—*Trade & Travel (Wilson)*, 37th ed., 867 p., maps, \$3. A year book and guide to the countries and resources of South and Central America, Mexico and Cuba.

SPACE IN YOUR FUTURE—Leo Schneider—*Harcourt*, 260 p., illus. by Gustav Schrotter, photographs, \$3.75. Introduces boys and girls to the solar system, to galaxies and the tools of the astronomer. Includes list of planetariums and of astronomical organizations in the United States.

STATE PARKS OF CALIFORNIA—John Robinson and Alfred Calais—*Lane Bk. Co.*, 96 p., photographs by J. Robinson, paper, \$1.95. Describes location and nature of parks, generously illustrated.

THE USE OF CHEMICALS IN SOUTHERN FORESTS—Robert W. McDermid, Ed.—*La. State Univ. Press*, 152 p., illus., \$4. Symposium papers and discussions on the use of chemicals as growth stimulants, as species regulators and for control of destructive organisms in forest management.

VIRUSES AND THE NATURE OF LIFE—Wendell M. Stanley and Evans G. Valens—*Dutton*, 224 p., illus., \$4.95. Addressed to young adults, Nobelists presents essential facts known about viruses and about closely related research in genetics.

THE VOICE OF THE DOLPHINS and Other Stories—Leo Szilard—*Simon & Schuster*, 122 p., \$3. Satires on contemporary socio-political issues, written by biophysicist of world renown.

WATER: The Mirror of Science—Kenneth S. Davis and John A. Day—*Doubleday*, 195 p., illus., paper, 95¢. Readable analysis of the physical, chemical and biological properties of water, one of PSSC series.

WORKS OF THE INSTITUTE OF HIGHER NERVOUS ACTIVITY: Pathophysiological Series, Vol. I—A. G. Ivanov-Smolenskii, Ed., transl. from Russian—*Acad. of Sciences, USSR (OTS)*, 484 p., \$5. Experimental research into higher nervous activity in certain neuropsychotic diseases.

WORLD OF THE WIND—Slater Brown—*Bobbs*, 224 p., \$3.95. Tells about the characteristics and effects of winds in various parts of the world.

YOU CAN'T COUNT ON DYING—Natalie Harris Cabot—*Houghton*, 273 p., \$3.95. Discusses the problems of the aging, based on case studies and research at the Age Center of New England.

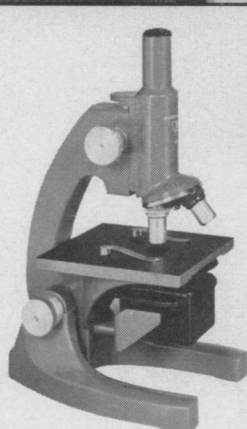
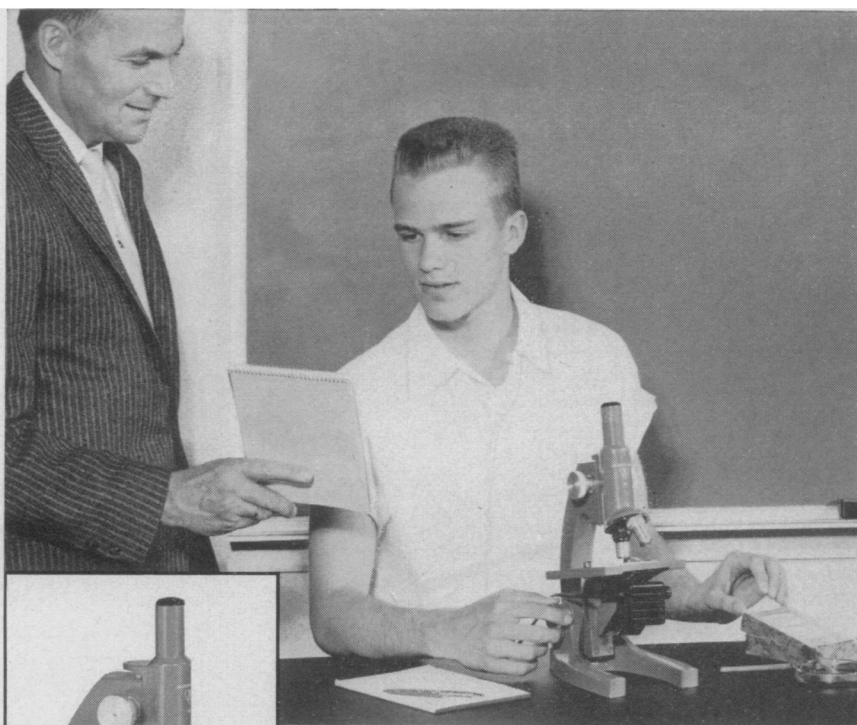
• *Science News Letter*, 79:268 April 29, 1961

Questions

CHEMISTRY—How was element 103 produced? p. 259.

PHYSICS—How can the idea of "multiple connected" be explained? p. 262.

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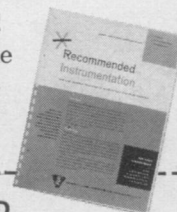
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