

Books of the Week

For the editorial information of our readers, books received for review since last week's issue 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. Request free publications direct from publisher, not from Science Service.

APPRAISING PERSONALITY: The Use of Psychological Tests in the Practice of Medicine—Molly Harrower—*Norton*, 197 p., illus., \$4.00. By means of a conversation between physician and psychologist, the author gives the general practitioner or the layman a better idea of what services the clinical psychologist can perform as well as the kind of measures he uses.

BUILDING AMERICA'S HEALTH: Volume 1, Findings and Recommendations—President's Commission on the Health Needs of the Nation, Paul B. Magnuson, Chairman—*Govt. Printing Office*, 80 p., illus., paper, 50 cents. The Commission recommends that Congress establish a Federal Health Commission.

CAREER: The Annual Guide to Business Opportunities, 1953 Edition—William A. Douglass and Paul Bancroft, III—*Career Publications*, 152 p., illus., paper, \$2.00. Here employers in various fields, including physics and chemistry, display their advantages to attract young graduates.

THE EXPANSION OF THE UNIVERSE—Paul Couderc—*Macmillan*, 231 p., illus., \$6.00. A book for both astronomer and layman on astronomical measurement and interpretation, showing how vastly the universe of Newton has changed in becoming the expanding universe of today.

GEOLOGY OF THE SEBASTOPOL QUADRANGLE CALIFORNIA—Russell B. Travis—*California Division of Mines*, 33 p., illus., paper, \$1.60. The most important mineral resources of this particular area are sand and gravel and crushed rock, although other minerals have been exploited at times.

GYPSUM IN CALIFORNIA—William E. Ver Planck—*California Division of Mines*, 151 p., illus., \$1.85. California has fourth place among the states in tonnage of gypsum produced.

HIGHWAY RESEARCH BOARD PROCEEDINGS OF THE THIRTY-FIRST ANNUAL MEETING, Washington, D. C., January 15-18, 1952—Fred Burggraf, W. N. Carey, Jr. and Walter J. Miller, Eds.—*National Academy of Sciences-National Research Council*, Publication 238, 690 p., illus., \$7.50. Contains papers on a variety of subjects of interest to highway engineers from the

physics of head-on collisions to the thermal analysis of soils.

HOUSING NEEDS AND PREFERENCES OF FARM FAMILIES: A Comparison of Data From Studies in Four Regions—Mildred S. Howard, Avis Woolrich and Emma G. Holmes—*Govt. Printing Office*, AIB 96, 63 p., paper, 30 cents. In the northeastern states, the preferred farm house would have more than one story, attic, basement, two porches and a fireplace. In the South, a one-story house is better liked.

MINERALS OF CALIFORNIA 1952 SUPPLEMENT—Joseph Murdoch and Robert W. Webb—*California Division of Mines*, 46 p., paper, 35 cents.

NATIONAL ANTHEMS—Paul Nettl—*Storm*, 216 p., \$3.50. Particularly useful to teachers, musicians and world travelers is this book which tells something of the author, history and spirit of the many patriotic songs and national anthems.

NEW BIOLOGY 13—M. L. Johnson and Michael Abercrombie—*Penguin*, 128 p., illus., paper, 50 cents. A new collection of British origin containing articles in the field of biology.

OUR COMMON NEUROSIS: Notes on a Group Experiment—Charles B. Thompson and Alfreda P. Sill—*Exposition Press*, 210 p., \$3.50. Reproduction of a series of articles which originally appeared in "Mental Health." These were prepared during an unusual experiment in group living and group analysis under the direction of the late Dr. Trigant Burrow.

POLIOMYELITIS: Papers and Discussions Presented at the Second International Poliomyelitis Conference—Morris Fishbein, Chairman, Committee on Publications—*Lippincott*, 555 p., illus., \$7.50. These papers will interest not only the medical scientist but also all those having a part in the fight against infantile paralysis.

SCIENCE IN EVERYDAY LIFE—Ellsworth S. Obourn, Elwood D. Heiss and Gaylord C. Montgomery—*Van Nostrand*, 612 p., illus., \$3.80. This high-school text helps the student to learn by trying things out and by solving problems. A generous supply of illustrations, many in color, adds to the interest.

SCIENCE NEWS 26—A. W. Haslett, Ed.—*Penguin*, 128 p., illus., paper, 50 cents. A new collection of brief articles of current interest from various fields of science.

A TELEVISION POLICY FOR EDUCATION: Proceedings of the Television Programs Institute Held Under the Auspices of the American Council on Education at Pennsylvania State College—Carroll V. Newsom, Ed.—*American Council on Education*, 266 p., illus., \$3.50. Reservation of about one-tenth of television channels for educational use dumped in the laps of educators a new and powerful educational tool with untold possibilities.

Science News Letter, January 24, 1953

Gasoline has three times the potential energy of TNT.

CHEMISTRY

Parsnips Plus Chemical Make "Horseradish"

► **HOT STUFF**—that's the label pinned on allyl isothiocyanate, the chemical that gives pungency to both horseradish and mustard seed.

Some horseradish manufacturers were using the chemical's pungency to make ground-up parsnips taste like horseradish, so Dr. J. Carol and L. L. Ramsey of the U. S. Food and Drug Administration developed a method for telling the real stuff from the substitute. Reason for the adulteration is: parsnips cost about 10 cents a pound; horseradishes, about 60 cents per pound.

It is against the Pure Food and Drug Law to sell the parsnip substitute as horseradish in interstate commerce. The scientists spot the parsnips by their infrared spectra.

Science News Letter, January 24, 1953

INVENTION

Air Conditioned Auto Combined With Sun Visor

► A **COMBINED** air conditioner and sun visor for an automobile has been invented by Edwin E. Foster, Austin, Tex. Inside what looks like an ordinary outside sun visor over the windshield, there is a water reservoir. Water saturates a screen of material. Air entering the sun visor from under its lip is forced through this screen, thus being cooled. The air is then channeled around to the front side window where it enters the car.

Mr. Foster received patent number 2,625,425.

Science News Letter, January 24, 1953

PHYSICS

Machine Computing Helps Building Design

► **ARMED WITH** an adding machine, an advanced student at the University of Illinois worked four months analyzing the stresses that would surround a perfectly round bolt hole in a single thickness of metal. But problems such as that are "all in a second's work" for the University's new home-made electronic computer.

With its vacuum tubes and electrons, the machine can spin out answers to such engineering questions as "what would happen to a building of this design if an atomic bomb fell nearby, or if an earthquake rumbled underneath it?" It can figure out what happens when a heavy load moves across a bridge, a problem so complex it never has been analyzed thoroughly.

Under the supervision of Prof. N. M. Newmark, a group at the University's Structural Research Laboratory designed and built the computer. It will be available on a full-time basis for University research.

Science News Letter, January 24, 1953



New Model
35mm. EXAKTA "VX"
Single Lens Reflex Camera

One lens both for viewing and picture taking assures perfect sharpness, accurate exposure, maximum depth of field, and correct composition for color. You always see the exact image before you take the picture—whether the subject is an inch or a mile away, whether it is microscopic or gigantic, whether it is moving or stationary. Instantly interchangeable lenses permit telephoto, wide angle, close-up, copy and microscopic photography. With f2.8 Zeiss Tessar "T" Coated Lens with Pre-Set Diaphragm Control . . . \$269.50 tax included. Write Dept. 800 for Free Booklet "I".

NATURE PHOTOGRAPHY WITH MINIATURE CAMERAS by Alfred M. Bailey (Denver Museum of Natural History). This eminent explorer and scientist displays his finest Exakta photographs and others along with explanatory material. 35 full page photographs. 64 pages. 50¢. Exakta Camera Co., 46 W. 29th St., N. Y. C. 1