

# • New Machines and Gadgets •

☛ **AUTOMOBILE TRAILERS** used to carry new cars from factories to dealers are now being used for carrying passengers to work in war plants. Bodies fabricated of plywood or patented wall-boards, are fitted on the metal frames which formerly carried the cars. They accommodate from 80 to 100 passengers.

*Science News Letter, April 10, 1943*

☛ **HYDRO-SIZING** is the new process which makes the body of a chemical mortar shell the correct size on a machine using hydraulic pressure. The old method of sizing the inside of a shell to exact measurements by the use of lathes required skilled operators. The hydro-sizing method is twelve times as rapid and relatively little skill is required to run the press.

*Science News Letter, April 10, 1943*

☛ **SHOP MOTOR SWEEPERS** that will gather up metal shavings, chips and filings, as well as dust and dirt, are now available. In appearance they resemble gasoline power lawn-mowers and are controlled by handlebars. Accessory parts are available so that the tractors may be used for snow-plows or mowing the lawn.

*Science News Letter, April 10, 1943*

☛ **THE NEW SYNTHETIC rubber** shown in the picture has a base of domestic vegetable oils not suitable for use in the kitchen. Commercial production is now under way and requires no crit-



ical equipment. It will be used for mats, erasers, treads, gaskets, jar rings and other products, the manufacturer states.

*Science News Letter, April 10, 1943*

☛ **THE NEW FISHEYE camera** photographs everything in a room above its own level, permitting illuminating engineers to solve illumination problems that would otherwise require elaborate calculations.

*Science News Letter, April 10, 1943*

☛ **A SMALL ELECTRIC steam heater** for use in small homes, garages and offices, has been recently developed. The electrical energy is applied directly to a vessel of water and the steam created passed through a radiator. It is claimed to be an efficient source of heat.

*Science News Letter, April 10, 1943*

If you want more information on the new things described here, send a three-cent stamp to SCIENCE NEWS LETTER, 1719 N St., N. W., Washington, D. C., and ask for Gadget Bulletin 151.

## • Just Off the Press •

**AIR NAVIGATION**—E. R. Hamilton—*Ronald Press*, 175 p., illus., \$2. British origin.

**AIRCRAFT RECOGNITION: How to Identify British, Nazi and Italian Planes**—R. A. Saville-Sneath—*Penguin Books*, 252 p., illus., 25c. 2d British edition revised and enlarged.

**ALPINES IN COLOUR AND CULTIVATION**—T. C. Mansfield—*Dutton*, 277 p., illus., col. plates, \$3.75.

**ATOMS, STARS AND NEBULAE**—L. Goldberg—*Blakiston*, 323 p., illus., \$2.50. One of the Harvard books on astronomy, edited by Harlow Shapley and Bart J. Bok.

**THE BOOK OF KNOWLEDGE: ANNUAL 1943**—E. V. McLoughlin, editor—*Grolier Society*—472 p., illus., red artcraft binding, \$10; blue cloth binding, \$8.50.

**BRUCELLOSIS IN MAN AND ANIMALS**—I. Forest Huddleson—*Commonwealth Fund*, 379 p., illus., \$3.50. Revised ed.

**EVOLUTION: The Modern Synthesis**—Julian Huxley—*Harper*—645 p., \$5.

**FUN WITH SCIENCE**—Mae and Ira Freeman—*Random House*—60 p., illus., \$1. Juvenile.

**THE GENUS NYSIUS AND ITS ALLIES IN THE HAWAIIAN ISLANDS (Hemiptera, Lygaeidae, Orsillini)**—Robert Leslie Usinger—*Bernice P. Bishop Museum*, 167 p., 12 plates, \$2. (Bernice P. Bishop Museum Bulletin 173).

**GEORGE WASHINGTON CARVER**—Hackham Holt—*Doubleday, Doran*, 342 p., \$3.50.

**INSECTS OF GUAM**—Bernice P. Bishop Museum, 218 p., illus., \$2.50. (Bull. No. 172).

**INSTRUCTIONAL TESTS IN ELECTRICITY**—Thirteen unit tests covering The Pre-induction Course in Fundamentals of Electricity as recommended by the War Department—Prepared by Benjamin C. Gruenberg and Ellsworth S. Obourn—*World Book Co.*, 32 p., illus., 16c each or \$5, package of 50.

**INSTRUCTIONAL TESTS IN MACHINES**: Fourteen unit tests covering The Pre-induction Course in Fundamentals of Machines as recommended by the War Department—Prepared by Benjamin C. Gruenberg and Ellsworth S. Obourn—*World Book Co.*, 36 p., illus., 16c each or \$5, package of 50.

**MAN IN STRUCTURE AND FUNCTION**—Fritz Kahn—Translated from the German and

edited by George Rosen—*Knopf*—2 volumes, 756 p., illus., \$10.

**PAPERS FROM TORTUGAS LABORATORY: VOLUME XXXIII**—Carnegie Institution of Washington—*Carnegie Institution of Washington*, 195 p., illus., 7 plates, \$1.50 paper; \$2 cloth. (Publication No. 524).

**THE PHYSICAL SCIENCES**—George S. Eby, Charles L. Waugh, Herbert E. Welch and Burdette H. Buckingham—*Ginn*, 493 p., illus., \$2.28. Textbook.

**REPORT OF THE COMMITTEE ON MARINE ECOLOGY AS RELATED TO PALEONTOLOGY 1941-1942**, Harry S. Ladd, chairman—*National Research Council*, 58 p., 50c. (Presented at the Annual Meeting of the Division of Geology and Geography).

**RESINS, RUBBERS, PLASTICS: A Survey and Report**—H. Mark and E. S. P. Proskauer, editors—*Interscience*, loose-leaf, \$38, binder included.

**RIO MAYO PLANTS: A Study of the Flora and Vegetation of the Valley of the Rio Mayo, Sonora**—Howard Scott Gentry—*Carnegie Institution of Wash.*, 328 p., 29 plates, \$2.25 paper; \$2.75 cloth. (Publication 527).

**RUSSIA**—Bernard Pares—*Penguin Books*, 245 p., 25c.

**SPICE & SCENT: Herbs in Fact and Fancy**—Lee Maril—*Coward-McCann*, 63 p., illus., \$1.75. Juvenile.

**SYNOPSIS OF DISEASES OF THE SKIN**—Richard L. Sutton and Richard L. Sutton, Jr.—*Mosby*, 481 p., illus., \$5.50.

**VIRUS DISEASES**—Thomas M. Rivers, Wendell M. Stanley, Louis O. Kunkel, Richard E. Shope, Frank L. Horsfall, Jr., and Peyton Rous—*Cornell Univ. Press*, 170 p., illus., \$2.

**WHAT YOU SHOULD KNOW ABOUT THE SIGNAL CORPS**—Harry Meyer Davis and F. G. Fassett, Jr.—*Norton*, 214 p., illus., \$2.50.

**WHITE HOUSE CONFERENCE ON CHILDREN IN A DEMOCRACY**, Washington, D. C., January 18-20, 1940—*Gov't. Print. Off.*, 392 p., 65c. Final report. (U. S. Department of Labor, Children's Bureau Publication, No. 272).

**X-RAYS IN RESEARCH AND INDUSTRY**—H. Hirst—*Chemical Pub. Co.*, 129 p., illus., \$2.50. Describes industrial and research problems, particularly those within the scope of physical metallurgy.