

• 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.

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☛ **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.

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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.