

# • New Machines and Gadgets •

☛ **TRANSPARENT PLASTIC** butter molds with movable push-up bottoms may be used in the household or cafe to form into the conventional butter bar reworked butter, or margarine into which coloring has been worked. An available mold has four compartments.

Science News Letter, November 6, 1943

☛ **BOUNCE** in rubber, plastic and other materials is accurately measured by a new resiliometer, an instrument designed to measure resiliency. It records the rebound of a weighted plunger dropped on the material.

Science News Letter, November 6, 1943

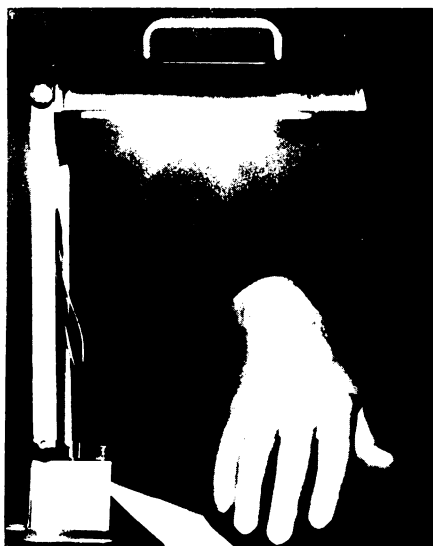
☛ **WORK APRONS** for factory workers and laboratory technicians are now made of a light plastic material which resists cutting oils, mild acids and alkalis. All the desirable qualities of rubber are claimed for this material, which weighs only one-seventh as much.

Science News Letter, November 6, 1943

☛ **PURITY METER**, recently developed, tests the purity of distilled water by measuring its electrical conductivity. It is rapid, practical and easy to operate.

Science News Letter, November 6, 1943

☛ **IDENTIFICATION** marks on persons are now made with a harmless secret, semi-permanent, invisible chemical ink that can be washed off only by the use of another secret chemical. The mark, invisible in ordinary light, gives off an intensive fluorescent glow under a special X-ray light. The photograph



shows the mark on the back of a hand stuck through a dark curtain into the X-ray.

Science News Letter, November 6, 1943

☛ **BY MERELY** applying pressure or squeezing with one hand, a new type fire extinguisher valve is opened and gas discharged. When the pressure is released, the valve closes and the flow of gas ceases. A lever directly over the carrying handle operates this valve, designed for use with portable carbon dioxide fire extinguishers.

Science News Letter, November 6, 1943

☛ **LOW-GLOSS** standards to measure the gloss of fabrics and paper are now available. Sets of 82 panels are calibrated

on the scale defined by the American Society for Testing Materials.

Science News Letter, November 6, 1943

☛ **DRYING** and dehydration may be aided by a direct-fired heater designed to produce temperatures between 150 and 350 degrees Fahrenheit. The heated air is claimed to be free from contamination from the coal, gas or oil fuel used. The new heater employs carbon steel combustion chambers, and a recirculating device allows heated air to be fed back to the heater's intake.

Science News Letter, November 6, 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 6, D. C., and ask for Gadget Bulletin 181.

## • Just Off the Press •

**THE CHEMICAL FRONT**—William Haynes—Knopf, 264 p., illus., \$3.

**CLEMENTINE IN THE KITCHEN**—Phineas Beck—Hastings House, 228 p., illus., \$3.

**DATA ON CHEMICALS FOR CERAMIC USE:** Formulas, Molecular Weights, Colors, Crystal Forms, Densities, Refractive Indices, Melting Points, Boiling Points, Transition Points, Decomposition Temperatures—Alexander Silverman, and others—Nat. Research Council, 94 p., \$2.50.

**EASY MATH:** Complete Study Manual of Practical Everyday Mathematics—Bern Williams—Arrow, 64 p., illus., 25c. An elementary book for those who know only how to add, subtract, multiply and divide.

**FOOD ENOUGH**—John D. Black—Jaques Cattell, 269 p., illus., \$2.50.

**KNOWING THE WEATHER**—T. Morris Longstreth—Macmillan, 150 p., illus., \$1.69.

**MAN AND HIS WORKS**—Edward Lee Thorndike—Harvard Univ., 212 p., \$2.50.

**MAN IN THE AIR:** The Effects of Flying on the Human Body—Herbert S. Zim—Harcourt, Brace, 332 p., illus., \$3.

**MARCHING HOME:** Complete War and Post-War Handbook for Service Men and Families—Richard Hart—Arco Pub., 182 p., cloth \$2.75, paper \$1.89.

**NAVIGATION WRINKLES FOR COMBAT MOTOR BOATS:** Geo. W. Rappleyea—Higgins Industries, 108 p., illus., \$1.

**POPULAR MECHANICS SHOP NOTES**—Pop. Mechanics, 224 p., illus., 50c., Vol. 40, 1944.

**RADIO DEVELOPMENT IN A SMALL CITY SCHOOL SYSTEM**—Lola Berry—Meador, 126 p., \$1.50.

**A SHORT COURSE IN QUANTITATIVE ANALYSIS**—J. F. Flagg, H. H. Willard, N.

H. Furman—Van Nostrand, 253 p., illus., \$2.50.

**THE U. S.-CANADIAN NORTHWEST: A Demonstration Area for International Post-war Planning and Development**—B. H. Kizer—Princeton Univ., 71 p., illus., \$1.

**"WHERE'S SAMMY?":** The Story of an Ace News Photographer—Sammy Schulman, ed. by Robert Considine—Random House, 234 p., illus., \$2.59.

**WOMEN IN WARTIME**—Institute for Psychoanalysis, 41 p., 35c.

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