

• New Machines and Gadgets •

⊗ IN ARCTIC countries soldiers' feet will be protected by new wool insoles a half-inch thick. Each one is made of two perforated wool felt pads hinged by a five-inch stitched seam on one side. The 100 perforations in each sole insure ventilation.

Science News Letter, June 12, 1943

⊗ A SHAPE-CONFORMING boot now protects highly finished machine parts from injury. An outside sleeve of steel and cotton mesh with a cotton mesh lining prevents contact with hard surfaces, retains the oil film, and keeps out foreign matter.

Science News Letter, June 12, 1943

⊗ GLASS V-JEWELS, used with steel pivots as bearings in small instruments, are the equal of imported sapphire jewels, now hard to get. A new process cuts the V-shaped depression in special glass so that the steel pivot fits with great accuracy.

Science News Letter, June 12, 1943

⊗ LABORATORY GLASSWARE made of 96 per cent silica glass has been recently developed. It has low thermal expansion, high softening point, and exceptional chemical stability.

Science News Letter, June 12, 1943

⊗ THE PORTABLE melting furnace and ladle combination shown in the picture has been developed to speed the casting of aluminum war equipment. A removable burner attached to the side-



wall heats the 1000-pound charge. The outfit does away with superheating the metal and eliminates preheating the transfer ladles.

Science News Letter, June 12, 1943

⊗ A GLOSSMETER measures the reflecting gloss of paints, paper and polished surfaces. It will register changes due to age, use, or climatic conditions. A search unit, attached to an indicating instrument with an electric cord, is placed against the glossy surface. A light source inside is directed against the surface; reflected light strikes on a measuring photo-cell.

Science News Letter, June 12, 1943

⊗ A NEW HAND TOOL cuts engravings on steel, leather, wood, stone or rubber, it is claimed. Ordinary alternating current operates a vibrator giving 120 vertical strokes a second. Identification marks can thus be put on tools, dies, jigs, and other parts.

Science News Letter, June 12, 1943

⊗ PLYWOOD SCRAP, trimmed from panels in the mill, is being used as a substitute for steel in bridge decking and waterfront piers. Strips are glued together, bound with small steel plates and covered with concrete.

Science News Letter, June 12, 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 160.

• Glances at New Books •

➤ RIVERS are streams of adventure and romance. Such a river is described in THE AMAZON: THE LIFE HISTORY OF A MIGHTY RIVER, by Caryl P. Haskins (Doubleday, Doran, \$4). The book, not only describes the Amazon but country through which it flows.

Science News Letter, June 12, 1943

➤ THE WHOLE WORLD is in flux in the fiery furnace of war, and many things are certain to set in changed patterns when cooling finally ensues. It is therefore exceedingly timely that a new and authoritative source-book has appeared of which the title tells its scope: INTERNATIONAL AGREEMENTS ON CONSERVATION OF MARITIME RESOURCES, by Jozo Tomasevich. Whether we undertake to restore old ways, or strive to make all things new, we shall need the guideposts to past progress that are clearly outlined here. (Food Research Institute, Stanford Univ., \$3).

Science News Letter, June 12, 1943

➤ JAMES H. BREASTED lived so long among the great monuments of the past that now he has become one with the past himself he begins to loom monumental to those who knew him. The story of a great man is well told by an able son, in PIONEER TO THE PAST (Scribner's, \$3.50).

Science News Letter, June 12, 1943

• Just Off the Press •

AMERICAN STANDARDS — American Standards Ass'n., 20 p., pamphlet. Free upon request to American Standards Ass'n., 29 W. 39th St., New York. This will serve as a useful reference piece to the engineering and purchasing departments of manufacturing firms.

AN INTRODUCTION TO HISTORICAL PLANT GEOGRAPHY — E. V. Wulff — *Chronica Botanica*, G. E. Stechert, 223 p., illus., \$4.75.

CHEMICAL FORMULARY. Vol. 6—H. Bennett—*Chemical Pub. Co.*, 636 p., \$6. "A collection of valuable, timely, practical formulae and recipes for making thousands of products in many fields of industry."

ELEMENTARY STATISTICAL METHODS — Helen M. Walker—*Holt*, 368 p., illus.,

\$2.75. Intended particularly for students of education.

RESEARCH ON EARLY MAN IN BURMA—Hellmut De Terra and Hallam L. Movius, Jr.—*American Philosophical Society*, 464 p., illus., \$3. (Transactions of the American Philosophical Society. New Series. Vol. XXXII, Pt. III)

SYMPOSIUM ON RADIOGRAPHY—American Society for Testing Materials—*American Society for Testing Materials*, 256 p., illus., \$4. Includes technical papers by outstanding authorities.

THE RISE OF THE ELECTRICAL INDUSTRY —Malcolm MacLaren — *Princeton Univ. Press*, 225 p., \$3.75.

WALTER REED: Doctor in Uniform—L. N. Wood—*Messner*—277 p., illus., \$2.50.