

# • New Machines and Gadgets •

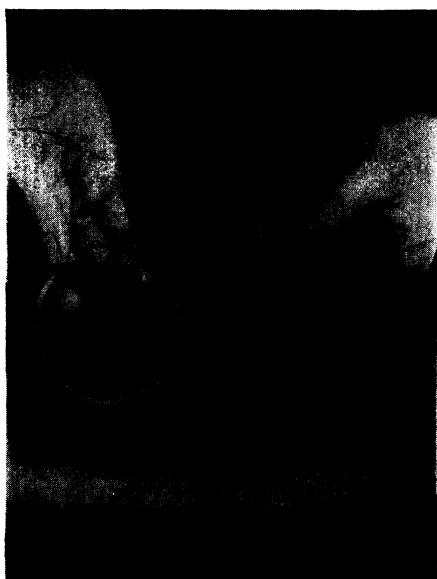
☛ **PADLESS** crown caps for bottles or cans, recently patented, require no rubber, cork or other sealing material. A slightly lowered, flat center, which fits the neck of the bottle, plus a crimped edge makes an airtight seal when the cap is pressed into position.

☛ **WOODEN PEGS** and collets made of small, hollow cylinders may replace nails in fruit and vegetable boxes. The collets, quarter-sawed part of their length, are wet with glue and inserted in holes. Tapered pegs are then driven into the hollow centers.

☛ **TRANSPARENT** plastic sheeting is furnished Army officers to protect field maps. An adhesive back holds the sheet permanently in place over the map. It protects against moisture, grease, dust and sand.

☛ **PAYROLL TAX** deductions are made in a flash with a cardboard device. A rotary disk is set to fit the employee's marital status, wage, and pay period. It then shows the amount to be deducted. The gadget will be sent free to employers requesting it from the manufacturer.

☛ **JAR SEALING RINGS** made of non-critical materials to take the place of rubber rings are now available. The picture shows on the left a ring made of a thermoplastic, and on the right rings made from a vulcanized linseed



oil compound combined with secret ingredients.

☛ **LIFEBOAT** housekeeping has been simplified by a portable "kitchen" which includes a still for obtaining drinking water from the ocean and cooking facilities as well. A solid non-explosive com-

ponent is used as fuel which burns without melting, thus reducing the fire hazard. Thousands of the units are now being produced for the U. S. Navy.

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 175.

## • Just Off the Press

**ADVANCED QUANTITATIVE ANALYSIS**—Hobart H. Willard and Harvey Diehl—*Van Nostrand*, illus., 457 p., \$4.75. A textbook which also serves as a companion volume to *Elementary Quantitative Analysis* by H. H. Willard and N. H. Furman.

**THE ADVANCEMENT OF SCIENCE**, Vol. II, No. 8—*British Ass'n for the Advancement of Science*, 92 p., 5 shillings. This publication contains the records of two conferences of the BAAS, one on "Science and the Citizen" and the other on "Co-operative Systems in European Agriculture," and two committee reports; "Mineral Resources and the Atlantic Charter" and "Scientific Research on Human Institutions."

**THE APOTHECARY CHEMIST: CARL WILHELM SCHEELE**—George Urdang—*American Institute of Pharmacy*, 71 p., illus., \$1.25. A pictorial life history of the pioneer scientist with biographical sketch and timetable of his experiments.

**CALCULUS**—Lyman M. Kells *Prentice-Hall*—509 p., illus., \$3.75.

**CHEMISTRY MADE EASY**—Cornelia T. Snell and Foster Dee Snell—*Van Nostrand*, illus., 4 volumes, Vol. 1, 184 p. The Theory of Inorganic Chemistry; Vol. 2, 232 p., Elements and Compounds in Inorganic Chemistry; Vol. 3, 256 p., The Aliphatic and Aromatic Compounds of Organic Chemistry; Vol. 4, 542 p., Chemicals of Commerce. \$7.95. The books are designed for home study use. But the authors advise that no experiments be performed without the guidance of an expert or instructor near at hand.

**THE DRYING OF RAYON**—Howard P. Simons and others—*Ohio State University*, illus., 171 p., 50 c. postpaid. Bulletin no. 116, 1943.

**ENCYCLOPEDIA OF SUBSTITUTES AND SYNTHETICS**—Morris D. Schoengold, ed.—*Philosophical Library*, 382 p., \$10. This encyclopedia should prove useful to industrial and laboratory chemists who are in search of new and improved materials.

**THE EXCAVATION OF TELL BEIT MIRSUM: VOL. III: THE IRON AGE**—William F. Albright—*American Schools of Oriental Research*, illus. 229 p., \$4. Price correction.

**FARM MANAGEMENT RESEARCH 1940-1941: A Report by the Subcommittee on Farm Management**—W. W. Wilcox, S. E. Johnson, S. W. Warren—*Social Science Research Council*, 60 p., 70c., Bulletin 52, 1943.

**GOING FISHING**—Negley Farson—*Harcourt,*

*Brace*, 148 p., illus., \$3. The author's fishing experiences in his travels from one part of the world to another.

**LABORATORY PRACTICE OF ORGANIC CHEMISTRY**—G. Ross Robertson—*Macmillan*, 367 p., illus., \$2.50. Rev. ed.

**METAL FORMING BY FLEXIBLE TOOLS**—Chris J. Frey and Stanley S. Kogut—*Pitman*, illus., 193 p., \$3. The book supplies information on the production techniques that have had marked success in the aircraft industries. The future extension for various sheet metal industries is also foreseen.

**METALS AND ALLOYS DATA BOOK**—Samuel L. Hoyt—*Reinhold*, 334 p., illus., \$4.75

**SEMIMICRO QUALITATIVE ANALYSIS: A Course in Applied Chemical Equilibrium**—John F. Flagg and Willard R. Line—*Van Nostrand*, illus., 140 p., \$1.50.

**SOCIAL WELFARE AND NARCOTICS**—Lou Adna Sours—*Meador*, 187 p., \$2. For teachers, parents and social workers. Frankly propagandist against intemperance, particularly in narcotics.

**TRAIL BLAZERS TO RADIONICS AND REFERENCE GUIDE TO ULTRA HIGH FREQUENCIES**—compiled by E. Kelsey—56 p., *Zenith Radio Corporation*, free upon direct request.

**WAR AND EDUCATION**—Porter Sargent—*Porter Sargent*, 506 p., \$4.

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