

## • Books Off the Press •

ARTIFICIAL PNEUMOTHORAX IN PULMONARY TUBERCULOSIS, Including Its Relationship to the Broader Aspects of Collapse Therapy—T. N. Rafferty—*Grune*, 192 p., illus., \$4. Introduction by Henry Stuart Willis.

CLINICAL UROLOGY—Oswald S. Lowsley and Thomas J. Kirwin—*Williams & Wilkins*, 1769 p., 2 vol., illus., \$10.

FUNDAMENTALS OF INTERNAL MEDICINE—Wallace M. Yater—*Appleton*, 1206 p., illus., \$10. Second ed.

MODERN OPERATIONAL MATHEMATICS IN ENGINEERING—Ruel V. Churchill—*McGraw*, 306 p., illus., \$3.50.

PRODUCTION, JOBS AND TAXES: Postwar Revision of the Federal Tax System to Help Achieve Higher Production and More Jobs—Harold M. Groves—*McGraw*, 116 p., \$1.25.

QUANTITATIVE CHEMICAL METHODS FOR ENGINEERING STUDENTS—Otto M. Smith and L. F. Sheerar—*McGraw*, 118 p., illus., \$2.50.

SCIENCE IN THE UNIVERSITY—Members of the Faculties of the University of California—*Univ. of Calif. Press*, 332 p., illus., \$3.75.

THE SCIENCE OF DENTAL MATERIALS—Eugene W. Skinner—*Saunders*, 421 p., illus., \$4.75. Second ed., rev.

SMALL COMMUNITY HOSPITALS—Henry J. Southmayd and Geddes Smith—*Commonwealth Fund*, 182 p., \$2.

THE TWENTY-SIXTH SESSION OF THE INTERNATIONAL LABOUR CONFERENCE—Reprinted from the *International Labour Review*, Vol. 1, No. 1, July 1944, 37 p., 10c. *Science News Letter*, August 26, 1944

### CHEMISTRY

## Glucosides Successfully Studied for First Time

► THE MOLECULAR structure of certain sugar compounds known as glucosides has been successfully determined recently by measuring the amount and the direction of twist given to a beam of polarized light passed through solutions of these substances. The method was developed by scientists at the National Bureau of Standards in Washington. The effect of temperature on the amount of rotation or twist was noted in the process. Polarized light is light that vibrates in one plane. When it is passed through certain substances the plane of vibration is turned at an angle. It has long been used in testing sugar, but this is probably the first time it has been successfully used in studying the

details of the structure of a glucoside molecule and the interactions that take place between certain groups of atoms within these complicated sugar derivatives.

The study at the government bureau has resulted in the preparation of several new compounds and the determination of their properties. The influence of temperature, and of the wavelength of the light used, on the optical rotation has been measured particularly for the benefit of other research workers.

*Science News Letter*, August 26, 1944

### ORDNANCE

## New Hammer for Firearms Is Patented by Garand

► JOHN C. GARAND, the government's most noted gunsmith, has taken out another patent, this time on a hammer for firearms. The hammer is thrust forward by a plunger impelled by a strong coil spring; just short of its contact with the firing-pin, a smaller auxiliary plunger imparts a slight bias to the blow, preventing the cartridge primer from blowing the pin backwards, with resulting wear and tear on the lock.

*Science News Letter*, August 26, 1944

## In the Management of Severe Third-Degree Burns

much has been learned through the unfortunate occurrence of the Coconut Grove fire at Boston. The numerous reports in the medical press emphasize the need for large amounts of dietary protein of adequate biologic value, given as early as possible.\* Meat is one of man's main sources of protein that can be eaten with relish several times daily in goodly quantities; its proteins are of highest quality, and it contributes to the satisfaction of the greatly increased vitamin requirements as well.

\*"All the patients with ten per cent of surface area, or more, involved in third-degree burns became serious nutritional problems. . . . All patients were started on high protein, high vitamin diets. . . . This diet contained 140 Gm. of protein." (Clowes, G. H. A., Jr.; Lund, C. C. and Levenson, S. M.: *The Surface Treatment of Burns*, Ann. Surg. 118:761 [Nov.] 1943.)

" . . . at least from 200 to 300 grams of protein is needed for replacement alone. One must give the patient as much food as he can take . . . give him a good protein, one that contains all of the essential amino acids." (Elman, R.: *Physiologic Problems of Burns*, J. Missouri M. A. 41:1 [Jan.] 1944.)



The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

# AMERICAN MEAT INSTITUTE

MAIN OFFICE, CHICAGO . . . MEMBERS THROUGHOUT THE UNITED STATES