

**THE SCIENTIFIC APPROACH TO CAREER PLANNING**—M. C. Cobb—*Lantern Press*, 142 p., \$3.95. Describes major career fields and how to go about applying for jobs in the chosen field.

**THE SOCIAL INSECTS**—O. W. Richards—*Harper*, 219 p., illus., paper, \$1.50. Deals with the social behavior of wasps, bees, ants, termites and insect parasites. First published in 1953.

**SOILS MANUAL FOR DESIGN OF ASPHALT PAVEMENT STRUCTURES**—*Asphalt Institute*, 248 p., illus., paper, single copies free upon request direct to publisher, Univ. of Md., College Park, Md. Reference aid for the highway engineer.

**STEDMAN'S MEDICAL DICTIONARY**—Isaac Asimov and others—*Williams & Wilkins*, 20th ed., 1,680 p., illus., thumb-indexed, \$14.95. Golden Jubilee edition of fully revised up-to-date vocabulary of medicine and its allied sciences, with pronunciations and derivations.

**SWAMPS**—Delia Goetz—*Morrow*, 64 p., illus. by Louis Darling, \$2.75. Explains for young children how swamps are formed, the ways in which they differ, and the various forms of life found there.

**SYMPOSIUM ON HUMAN PROBLEMS IN THE UTILIZATION OF FALLOUT SHELTERS**—George W. Baker, John H. Rohrer and Mark J. Nearman, Eds.—*NAS-NRC*, 234 p., illus., paper, \$3. Symposium was held at the National Academy of Sciences in Washington, D. C. on February 11 and 12, 1960.

**TESTED WAYS TO HELP YOUR CHILD LEARN**—Virginia Burgess Warren—*Prentice-Hall*, 276 p., illus., \$4.95. Among its more than 800 suggestions, tells parents about ways to help a child explore science and how to use television as a teaching tool.

**WHITEFOOT: The Story of a Wood Mouse**—Robert M. McClung—*Morrow*, 48 p., illus. by author, \$2.75. A life-cycle story for the young-est readers.

**WORK-STUDY COLLEGE PROGRAMS: Appraisal and Report of the Study of Cooperative Education**—James W. Wilson and Edward H. Lyons, introd. by Ralph W. Tyler—*Harper*, 240 p., \$3.50. Based on the findings and recommendations of a study made under the auspices of the Thomas Alva Edison Foundation.

**YOU AND YOUR HEARING**—Norton Canfield—*Public Affairs Committee*, Pamphlet No. 315, 20 p., illus., paper, 25¢ direct to publisher, 22 E. 38th St., New York 16, N. Y. Describes types of hearing loss, psychological effects, treatment and hearing aids.

• Science News Letter, 80:108 August 12, 1961

## Questions

**AERONAUTICS**—How are designers lowering the death rate from airplane crashes? p. 100.

**MEDICINE**—What pest is now providing a weapon against fungus infection? p. 99.

**Photographs**: Cover, U. S. Coast and Geodetic Survey; p. 99, Northrop Corp.; p. 101, General Electric; p. 106, General Dynamics; p. 112, Bradford's, Inc.

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## MEDICINE

# Blood Clot Removal

➤ A 37-YEAR-OLD WOMAN owes her life to the first successful removal of blood clots from the lungs during use of a heart-lung machine.

Pulmonary embolism—the closing of the lung artery or one of its branches by a blood clot or other plug brought by the blood current from a distant vessel—has remained a constant threat to life in surgical patients. Despite occasional survival after blood clots have been surgically removed, autopsies of 375,000 patients in the past 50 years showed 10,497 died from pulmonary embolism.

The achievement of Drs. Denton A. Cooley, Arthur C. Beall Jr., and James K. Alexander of the Baylor University College of Medicine and Jefferson Davis Hospital, Houston, Texas, was hailed by the *Journal of the American Medical Association*, 177:283 and 326, 1961, as “another milestone in cardiovascular surgery.”

Editorially, the *JAMA* said application of the cardiopulmonary bypass for open-

heart surgery has opened an entirely new field, permitting operation for many lesions which formerly were not surgically correctable. Application of this technique to emergency treatment of pulmonary embolism was a logical step.

Quick action is necessary if blood clots in the lungs are not to be fatal. The Houston surgeons recommended that a physician who diagnoses massive pulmonary embolism in a patient should immediately begin “supportive measures, including oxygen inhalation.”

The operation they performed included forceful compression of the lungs by hand to remove the many clots present in the patient's lungs. They also tied off the inferior vena cava (trunk for the lower extremities and pelvic organs) to prevent further clots.

The patient had undergone hysterectomy and ovarian tube removal following ruptured tubal pregnancy.

• Science News Letter, 80:109 August 12, 1961

## MEDICINE

# High Speed X-Rays

➤ THE EFFECTIVENESS of high speed X-ray motion pictures in spotting calcium salt deposits on heart valves, a condition that interferes with the efficient pumping action of the heart, is being investigated at the University of California, Los Angeles, Medical School.

The study, supported by the Los Angeles County Heart Association, is being conducted at the Harbor General Hospital by Dr. J. H. Woodruff.

Finding out the nature and extent of such deposits is increasingly important, Dr. Woodruff explained, because of the rapid advances in surgery that make it possible to repair defective heart valves.

Simple X-ray pictures have not proved entirely reliable in diagnosing calcification

because the fast action of the valves, opening and closing with each heart beat, blurs the picture. The fluoroscope has been more satisfactory but does not provide a permanent record for detailed study.

• Science News Letter, 80:109 August 12, 1961

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