

• Books of the Week •

AGRICULTURE IN AN UNSTABLE ECONOMY—Theodore W. Schultz—*McGraw*, 299 p., tables, \$2.75. An analysis of the essential conditions for a prosperous agriculture; a book to interest both lay reader and the economist.

ATOMIC AND FREE RADICAL REACTIONS: The Kinetics of Gas-Phase Reactions Involving Atoms and Organic Radicals.—E. W. R. Steacie—*Reinhold*, 548 p., diags., \$8. American Chemical Society Monograph Series, No. 102.

ELEMENTARY BACTERIOLOGY—Joseph E. Greaves and Ethelyn O. Greaves—*W. B. Saunders*, 613 p., tables and illus., \$4. 5th ed. A textbook, revised to cover recent advances including antibiotics, especially penicillin; electron microscope; new material in influenza, Rocky Mountain spotted fever, infantile paralysis, etc.

FOREIGN TRADE AND SHIPPING—American Maritime Council—*McGraw*, 307 p., tables, \$3. A comparison of the American and British approach in handling problems relating to foreign trade and shipping with a view to determining those steps which should be taken by government and industry to develop an effective organization for the handling of our foreign trade.



MICROMAX "Watches" ASTM Tests in Dewey and Almy Lab

The above Micromax Recorder, shown being examined by a test engineer of the Dewey and Almy Chemical Co., is doing an important job as the measuring and controlling instrument in tests of the diverse cement ingredients the company manufactures.

This instrument's ability to serve six variously-located thermocouples; to maintain accuracy and micro-sensitivity, under all conditions, in tests requiring long-time observations; and to protect its accuracy by standardizing itself, are a few of the qualities that make it useful for testing jobs.

See Catalog N-33A for further details.

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THE FUNDAMENTALS OF RADIO: And How They Are Applied—Henry Lionel Williams—*Blackiston*, 204 p., illus., \$1. The inside story of radio transmission and reception and their various applications simply explained without mathematics.

HACK'S CHEMICAL DICTIONARY: American and British Usage—Julius Grant, Ed.—*Blackistone*, 925 p., diags., \$8.50, 3rd ed. Words generally used in chemistry and many of the terms used in the related sciences of physics, astrophysics, mineralogy, pharmacy, etc.

HOW TO FIND AND SUCCEED IN YOUR POSTWAR JOB—Frank S. Endicott—*International Textbook*, 147 p., tables and illus., \$1.75. Suggestions for an individual's self-analysis, choice of vocational opportunities, satisfactory placement, and successful achievement.

INDUSTRIAL ALGEBRA AND TRIGONOMETRY WITH GEOMETRICAL APPLICATIONS—John H. Wolfe, William F. Mueller, Seibert D. Mullikin—*McGraw*, 389 p., diags. and tables, \$2.20. Practical training in applying mechanical and electrical engineering problems in modern industry.

THE NUTRITIONAL IMPROVEMENT OF WHITE RICE—M. C. Kik and R. R. Williams—*National Research Council*, 76 p., tables and illus., free. Bulletin of the National Research Council, No. 112.

THE NUTRITION OF INDUSTRIAL WORKERS—*National Research Council*, 33 p., tables, free. An appraisal of dietary deficiencies among industrial workers and suggestions for the development of nutrition programs.

PROTECTION FOR ELECTRIC MOTORS—E. S. Shepardson—*N. Y. State College of Agriculture*, 12 p., tables and illus., 5 cents. Description and use of motor overload protective devices. Cornell Extension Bull. 673.

RADAR: What Radar Is and How It Works—Orrin E. Dunlap, Jr.—*Harper*, 208 p., diags. and illus., \$2.50. A simple explanation for the layman.

A REVIEW OF BLOAT IN RUMINANTS—*National Research Council*, 53 p., tables, 25 cents. Fourth report of the Committee on Animal Health.

SCIENCE FOR YOUNG MEN—A. Frederick Collins—*D. Appleton-Century*, 257 p., diags., \$3. For those interested in entering any branch of the aviation industry; includes chapters on surveys, and maps, photography, electricity, radio, meteorology, gliders, ground work in aviation, and air navigation.

THE TECHNIQUE OF THE PICTURE STORY: A Practical Guide to the Production of Visual Articles—Daniel D. Mich and Edwin Eberman—*McGraw*, 239 p., illus., \$3.50. Reference book for general public and free-lance writers who want to learn the goals and methods for picture-magazine publishing.

WINDOW LABORATORIES—Gustave B. Timmel and E. L. Palmer—*N. Y. State College of Agriculture*, 31 p., illus., 10 cents. Suggestions for the use of school room windows in nature study projects. Cornell Rural School Leaflet: Vol. 39, No. 2.

WINGS OVER AMERICA: The Future of Air

Power—John Stuart—*Public Affairs Committee*, 31 p., diags., 10 cents. Discussion of the research and development necessary to maintain our air power. Public Affairs Pamphlet No. 114.

Science News Letter, March 9, 1946

METEOROLOGY

Weather Stations to Get Cloud Measuring Device

► THE CEILOMETER, a delicate electronic instrument for measuring the altitude of clouds, will soon be in operation at 140 weather stations in the United States, reported W. R. Thickstun, chief, instrument division, Weather Bureau, Department of Commerce.

Capable of measuring the heights of clouds up to 15,000 or 20,000 feet in daylight and up to 30,000 feet at night, the new instrument was developed during the war.

The ceilometer consists of two separate instruments, a powerful arc-light projector which flashes a beam of light into the sky to reflect from the base of a cloud layer, and a photo-electric cell or electronic eye mounted in a telescope-like apparatus, that picks up the reflected light beam. Measurements are computed in a similar manner to that used with a mariner's sextant, with a triangle formed by the two parts of the ceilometer and the cloud layer.

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AERONAUTICS-METEOROLOGY

All-Weather Flying Tests In Thunderstorms Planned

► SPECIALLY equipped fighter planes will be flown by Army Air Forces pilots in the area of Orlando, Fla., during the worst spring and summer thunderstorms.

The planes will collect instrumental and photographic data on cloud forms and heights, turbulence, precipitation, lightning and temperature.

Ten P-61 Black Widow night fighters will make flights to get the observations and will also test various methods of using radar to find safe paths through storm areas. Army experts hope to use the information from these tests to develop flight procedure and techniques that will reduce the hazards of flying through storms, the War Department reported.

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