

# •First Glances at New Books

## Horticulture

SOILLESS GROWTH OF PLANTS—Carleton Ellis and Miller W. Swaney—*Reinhold*, 155 p., illus., \$2.75. This appears to be the first really comprehensive popular treatise on the art of growing plants without soil, which has been causing a good deal of excitement lately. The authors describe fully, and illustrate in detail, a large variety of set-ups for both sand culture and solution culture, ranging in size all the way from individual pots for ornamental or experimental individual plants up to large-scale tanks suitable for commercial green-houses.

*Science News Letter, July 9, 1938*

## History

MEN AND IRON: THE HISTORY OF THE NEW YORK CENTRAL—Edward Hungerford—*Crowell*, 424 p., illus., \$3.75. A thoroughly readable volume telling of how old Commodore Vanderbilt, first a steamboat man and then a railroad magnate, built the "Central" and made through traffic possible; and of his son, William H. Vanderbilt, another famous railroad man known most for his "The public be damned." This is the story of the men who made a mighty railroad and of the many ingenious maneuvers they devised and stirring years they lived through in order to do it.

*Science News Letter, July 9, 1938*

## Zoology

TURTLES OF THE CHICAGO AREA—Karl P. Schmidt—*Field Museum*, 24 p., illus., 25 c. This well-illustrated pamphlet will be useful over a very considerable part of the Mississippi valley.

*Science News Letter, July 9, 1938*

## Engineering

AIR CONDITIONING, HEATING AND VENTILATING—J. Ralph Dalzell and Charles L. Hubbard—*American Technical Soc.*, 571 p., illus., \$4. A practical treatise on the principles and application of any type of heating system to almost any type of building. A large section on air conditioning brings in the newer aspects of human comfort in the home.

*Science News Letter, July 9, 1938*

## Engineering

ONE HUNDRED YEARS OF TRANSATLANTIC STEAM NAVIGATION 1838-1938—H. P. Spratt—*British Library of Information*, 23 p., illus., 20 c. This is a publication of the British government for the Science Museum in Kensington and accompanies an exhibit in the museum. Told in the form of descriptions of out-

standing ships. The descriptions of some of the more recent vessels assume some familiarity with the technical language of marine engineering.

*Science News Letter, July 9, 1938*

## Mathematics

TODAY'S GEOMETRY—David Reichgott and Lee R. Spiller—*Prentice-Hall*, 379 p., \$1.84. Here is a high school text in geometry which ever seeks—by example—to liven the subject. Illustrations of geometry in the home, the factory, or any of the other aspects of modern living are used to teach the principles that have come down to us from Euclid.

*Science News Letter, July 9, 1938*

## Chemistry

PHYSICAL CHEMISTRY—J. N. Bronsted—*Chem. Pub. Co. of N. Y.*, 394 p., \$5. An excellent English translation of the very well known Danish text book. The approach to physical chemistry is through the foundation of thermodynamics. The book is probably of postgraduate school caliber in this country.

*Science News Letter, July 9, 1938*

## Engineering

ELECTRIC WELDING—Morgan H. Potter—*American Technical Soc.*, 126 p., illus., \$1.25. A practical textbook covering the fundamental principles and applications of the various types of arc welding equipment.

*Science News Letter, July 9, 1938*

## Biography—General Science

ARCHITECTS OF IDEAS—Ernest R. Trattner—*Carrick & Evans*, 426 p., illus., \$3.75. Stimulating, competent and readable accounts of the great theories of science, told around the personalities of Copernicus, Hutton, Dalton, Lavoisier, Rumford, Huygens, Malthus, Schwann, Darwin, Marx, Pasteur, Freud, Chamberlin, Boas and Einstein.

*Science News Letter, July 9, 1938*

## Photography

PHOTOENGRAVING IN BLACK AND WHITE OR PHOTOENGRAVING PRIMER—Stephen H. Horgan—*Amer. Photo. Pub. Co.*, 112 p., \$2. An elementary technical work intended particularly for apprentice engravers.

*Science News Letter, July 9, 1938*

## Anthropology

CULTURE ELEMENT DISTRIBUTIONS: VIII, THE RELIABILITY OF CULTURE ELEMENT DATA—Harold E. Driver—*Univ. of Calif. Press*, 19 p., 25 c.

*Science News Letter, July 9, 1938*

## Sport

AMERICAN RED CROSS SWIMMING AND DIVING—American Red Cross—*Blakiston's*, 271 p., illus., 60 c. A practical manual for those who want to learn to swim or dive or who wish to perfect their form in these sports.

*Science News Letter, July 9, 1938*

## Engineering

FROM PLAN TO REALITY, TWO—*Regional Plan Association*, various paging, maps, \$2, \$1.20 to members. A second report on the progress of regional planning, in the New York metropolitan area. This covers the period from 1933-36, with a summary of the first four years, 1929-32. The latter period is covered in detail in an earlier publication.

*Science News Letter, July 9, 1938*

## Engineering—Juvenile

ADVENTURES IN STEEL—Lavinia R. Davis—*Modern Age*, 166 p., 75 c. The story of steel and its fabrication told through the device of following the activities of a number of young steel workers.

*Science News Letter, July 9, 1938*

## Physics

MOLECULAR BEAMS—R. G. J. Fraser—*Chem. Pub. Co. of N. Y.*, 70 p., \$1.25. Here in 15,000 words is a roundup of discovery in this important field. Physicists will need no reminder that molecular beams provide one of the best research tools to investigate the secrets of magnetic properties and also the angular momentum in atoms and molecules.

*Science News Letter, July 9, 1938*

## Zoology

NOTES ON THE ANATOMY OF THE TREE-SHREW *Dendrogale*—D. Dwight Davis—*Field Museum*, 21 p., 25 c.

*Science News Letter, July 9, 1938*

## Botany—Misseny

EVERYMAN'S WILD FLOWERS AND TREES—Miles Hadfield—*Dutton*, 184 p., illus., \$2. Descriptions and illustrations of 500 British plant species.

*Science News Letter, July 9, 1938*

## Anthropology

TUBATULABEL ETHNOGRAPHY—Erminie W. Voegelin—*Univ. of Calif. Press*, 94 p., illus., \$1.

*Science News Letter, July 9, 1938*

## Anthropology

BEAR RIVER ETHNOGRAPHY—Gladys Ayer Nomland—*Univ. of Calif. Press*, 38 p., illus., 50 c.

*Science News Letter, July 9, 1938*