# • First Glances at New Books

Additional Reviews On Page 256

# CHEMISTRY

The Condensed Chemical Dictionary (3d ed.)—Compiled and edited by the editorial staff of the Chemical Engineering Catalog — Reinhold, 756 p., \$12. Over 6,000 new items have been added, in the new edition of this book. Old items have been brought up to date, and a large number of chemical products sold under trade or brand names have been added.

Science News Letter, April 18, 1942

### ENGINEERING

BOATBUILDING, A Complete Handbook of Wooden Boat Construction—Howard I. Chapelle—Norton, 625 p., illus., \$5. This handbook, written by a well known designer of boats, is designed to meet the needs of the builder. The text covers all types of craft from flat-bottomed rowboats to ocean cruisers and commercial vessels.

Science News Letter, April 18, 1942

### EDUCATION-LIBRARY SCIENCE

EDUCATIONAL MOTION PICTURES AND LIBRARIES — Gerald Doan McDonald — American Library Assn., 183 p., \$2.75. "If books were as hard to get as films, little reading would be done in this country," says the author. The present study, made possible through a grant from the Rockefeller Foundation, considers the value of films to the public, types of films, training of the film librarian and the library's responsibility in making motion pictures available.

Science News Letter, April 18, 1942

# AERONAUTICS

AIR NAVIGATION OUTLINE—Frederic W. Keator—Weems System of Navigation, 95 p., \$2.50. Intended to assist instructors in the Civilian Pilot Training Primary Course in organizing their work so that the brief time allotted to navigation may be used to best effect even by students with little or no previous technical training.

Science News Letter, April 18, 1942

# AERONAUTICS

Model Airplane Design and Theory of Flight—Charles Hampson Grant—*Jay Pub. Corp.*, 512 p., illus. First publication of basic rules for airplane model construction developed by the author from an organized series of experiments conducted over more than 20 years. Those advanced in mathematics will find in the book comprehensive information,

# GIVE TO VICTORY BOOK CAMPAIGN

diagrams and basic formulas. Those less schooled in this field will find simple rules and data ready to be easily applied. Anyone interested in aviation should find much to absorb his attention.

Science News Letter, April 18, 1942

### ECONOMICS

Crisis in the Philippines—Catherine Porter—Knopf, 162 p., \$1.50. Finished after the Japanese invasion, this is an up to date, compact and inclusive treatment of the Philippines, written under the auspices of the American Council of the Institute of Pacific Relations.

Science News Letter, April 18, 1942

# TECHNOLOGY

1001 WAYS TO USE CONCRETE (2d ed.) —Harold O. Hayes, ed.—Popular Mechanics Press, 238 p., illus., \$1.98. Those who think of concrete only as material for foundations, walls, streets and sidewalks, will be astonished at the number of other uses for which it is adapted, many of them highly artistic and ornamental, as described in this book.

Science News Letter, April 18, 1942

### AERONAUTICS

Aerodynamics for Model Aircraft—Avrum Zier—Dodd, Mead, 259 p., illus., \$3. Through study of aerodynamics as applied to his flying models, the young student can absorb information that will serve as background for a later ground-school aviation course, the author believes. This text is intended for those with little or no technical training and only the mathematics covered in early grades of high school.

Science News Letter, April 18, 1942

# BOTANY

Cone-Bearing Trees of the Pacific Coast—Nathan A. Bowers—Whittlesey House, 169 p., illus., \$2.50. A well-prepared, well-illustrated manual for use in recognizing and studying the species of what is perhaps the world's most important conifer-forest region.

Science News Letter, April 18, 1942

# AERONAUTICS

FIRST PRINCIPLES OF FLIGHT—D. Hay Surgeoner—Longmans, Green, 108 p., illus., \$1.25. A book originating in England which is one of a series on aeronautics all written by the same author and according to the same method of teaching. It is in that convenient coat pocket size so popular among service men in England now.

Science News Letter, April 18, 1942

TELEVISION

Television, Today and Tomorrow—Lee de Forest—Dial Press, 361 p., \$3.75. The inventor of the three-element vacuum tube that made modern radio possible tells us in simple language the whole story of television, its beginnings, present applications and probable future.

Science News Letter, April 18, 1942

### ENGINEERING

Aerial Bombardment Protection—Harold E. Wessman and William A. Rose—Wiley, 372 p., \$4. Detailed discussion of ways to make buildings resistant to the effects of bombing at reasonable cost. While much of the material is technical, it is clearly presented. Characteristics of bombs, shelter zones in existing buildings, air raid shelters, camouflage, are among other topics considered. Much of the information on the aerial bombs was obtained from foreign sources, chiefly British.

Science News Letter, April 18, 1942

### TECH NOLOGY

FORTY POWER TOOLS YOU CAN MAKE—Popular Mechanics Co., 96 p., illus., \$1.25. Clear instructions, with illustrations and diagrams, for making power tools for the home workshop.

Science News Letter, April 18, 1942

# TECHNOLOGY

Modern Pulp and Paper Making, A Practical Treatise (2d ed.)—G. S. Witham—Reinhold, 704 p., illus., \$6.75. A new edition of a highly useful, comprehensive reference work, more important than ever now that war has made pulp a vital munitions material and paper so essential in a thousand ways that we can no longer afford to waste it as carelessly as we used to.

Science News Letter, April 18, 1942

# METEOROLOGY-AVIATION

CLOUDS, AIR AND WIND—Eric Sloane—Devin-Adair, 74 p., illus., \$2.50. This is at once a brief popular discussion of one important phase of meteorology and a picture-book of airplanes. A large share of the full-page illustrations are beautifully executed monochrome drawings of the principal types of clouds, and occupying the center of attention in each one is a modern military plane. Some of the other illustrations are cartoon-diagrams that make light work of subjects often permitted to become unnecessarily heavy.

Science News Letter, April 18, 1942

# • First Glances at New Books

Additional Reviews On Page 255

GENERAL SCIENCE

THE MEN WHO MAKE THE FUTURE— Bruce Bliven—Duell, Sloan and Pearce, 325 p., \$2.75. A book well worth reading because it surveys the present and the future of science with a broad view. The editor of the New Republic talked to dozens of scientists and he reports what they are doing, what they are thinking and what they believe science can do in the future.

Science News Letter, April 18, 1942

### ENTOMOLOGY

College Entomology—E. O. Essig— Macmillan, 900 p., illus., \$5. A new general textbook by the professor of entomology at the California Agricultural Experiment Station. After an introductory section on the general anatomy of insects, the hexapod orders are taken up one by one, and each given thorough and complete treatment. Economic aspects of the subject receive special emphasis.

Science News Letter, April 18, 1942

WAR COMES TO Us, The Most Dramatic Story of Our Time-John Paul Adams, ed.—Bartholomew House, Inc., illus., \$1. A pictorial history of the war, from Versailles to Pearl Harbor.

Science News Letter, April 18, 1942

### AERONAUTICS

THE AIRCRAFT APPRENTICE — Leslie MacGregor—Pitman, 134 p., illus., \$1.50. A book intended to provide reliable information about airplane manufacture for airminded youth of high school age and in training for the airplane industry. Science News Letter, April 18, 1942

# ZOOLOGY

Wonders of the Sea — Gladys Pratt Freund; illustrated by Rudolf Freund-Random House, 36 p., colored illus., \$1. An even third of the pages are beautifully executed color plates, and smaller illustrations both colored and black-andwhite embellish the remainder. Text treatment is necessarily condensed, yet it presents interesting and accurate glimpses of the principal classes of animal life found in the sea. Really an astonishing dollar's worth of picturebook.

Science News Letter, April 18, 1942

# GENERAL SCIENCE

How THINGS WORK, Science for Young Americans—George Russell Harrison—Morrow, 301 p., \$2.75. Not long

ago Dr. Harrison wrote "Atoms in Action" which told the story of applied physics in the modern world for an adult audience. Now he has done a job for boys and girls stimulated by the questions of boys and girls. There are a good many "whys" in the book, such as why a red book looks red, and why a lamp on a firefly's stomach is cold.

Science News Letter, April 18, 1942

# AGRICULTURE

380 THINGS TO MAKE FOR FARM AND Home—Glen Charles Cook, comp.—Interstate Printers & Publishers, 325 p., illus., \$2.50. Detailed specifications for the building of many things needed around a farmstead. Any person handy with tools can save a good deal of money by making equipment customarily purchased. And in these days of increasing scarcity of some articles on the market, it may mean the difference between having and going without altogether.

Science News Letter, April 18, 1942

# ENGINEERING

THE SCIENCE AND PRACTICE OF WELD-ING-A. C. Davies-Cambridge (Macmillan), 436 p., illus., \$2.25. A British book for welders and student welders "requiring an understanding of the principles of physics, chemistry, metallurgy and electricity as applied to welding, no previous knowledge of these subjects being pre-supposed.'

Science News Letter, April 18, 1942

### TECH NOLOGY

CHANGES IN PACKAGING TECHNIQUES, Standardization, Display, Permeability, Gluing — Alex Pisciotta, W. L. Stensgaard and others — American Management Assn., 56 p., \$1.

Science News Letter, April 18, 1942

# BIOGRAPHY

FAMOUS EXPLORERS FOR BOYS AND Girls — Ramon Peyton Coffman and Nathan G. Goodman—Barnes, 166 p., illus., \$2. A story book about real heroes, from Leif the Lucky and Christopher Columbus to the polar explorers and flying pioneers of our own day.

Science News Letter, April 18, 1942

### ENGINEERING

Hydraulics (5th ed.) — George E. Russell—*Holt*, 468 p., illus., \$4.25. New edition of a successful text by the professor of hydraulics at Massachusetts Institute of Technology.

Science News Letter, April 18, 1942

METEOROLOGY

WEATHER AND THE OCEAN OF AIR-William Holmes Wenstrom-Houghton Mifflin, 484 p., illus., \$4.50. Now that war has necessitated an almost complete blackout of official weather information, the subject becomes tantalizingly interesting. This book, by a man who spent many years as an Army meteorologist, is admirably suited to the needs of the serious amateur "weather man" who wants to have sound scientific basis for his efforts at forecasting, and who is interested in weather study generally.

Science News Letter, April 18, 1942

#### ZOOLOGY

MICE, MEN AND ELEPHANTS, A Book About the Mammals-Herbert S. Zim-Harcourt, Brace, 215 p., illus., \$2. Facts about mammals, simply but accurately stated, illustrated with clear diagrams and many fine full-page halftones, most of them Ewing Galloway photographs. The author states that the book was written after a sort of poll taken among several thousand high school pupils, to find out what they wanted to know about animals.

Science News Letter, April 18, 1942

# SOIL SCIENCE

PRELIMINARY COLOR STANDARDS AND COLOR NAMES FOR SOILS—T. D. Rice, Dorothy Nickerson, A. M. O'Neal and James Thorp—Govt. Print. Off., 12 p., soil color name charts, \$3. A worthwhile effort to introduce a greater degree of exactness into the classification of soils by color.

Science News Letter, April 18, 1942

COMPETITIVE SWIMMING AND DIVING —David A. Armbruster—Mosby, 301 p., illus., \$3.25. By the associate professor of physical education and head swimming coach at the University of Iowa. Details of the various crawl strokes and the breast stroke, and competitive diving, with useful chapters on conditioning and training are given. The diagrams illustrating each chapter are amazingly good. Science News Letter, April 18, 1942

# CHEMISTRY

CHEMICAL SOLUTIONS, Reagents Useful to the Chemist, Biologist, and Bacteriologist-Frank Welcher-Van Nostrand, 404 p., \$4.75. The reagents are listed alphabetically; use, preparation and other data are given.

Science News Letter, April 18, 1942