

•First Glances at New Books

Additional Reviews
On Page 400

GENERAL SCIENCE—BIOGRAPHY

AMOS EATON, Scientist and Educator, 1776-1842—Ethel M. McAllister—*Univ. of Penn. Press*, 587 p., \$5. The detailed and authoritative biography of a fascinating pioneer in American intellectual life, who played a leading role in the founding and organizing of what is now Rensselaer Polytechnic Institute.

Science News Letter, June 21, 1941

GENERAL SCIENCE—EDUCATION

THE ORIGINS AND DEVELOPMENT OF ELEMENTARY-SCHOOL SCIENCE—Orra E. Underhill—*Scott, Foresman*, 347 p., \$2.50. Smatterings of science are found in almost the earliest of books intended for teaching children. This historical study in educational methodology traces up through the decades the teaching of science to the younger ages.

Science News Letter, June 21, 1941

MATHEMATICS

TABLE OF POWERS GIVING INTEGRAL POWERS OF INTEGERS—British Association for the Advancement of Science; Initiated by J. W. L. Glaisher, extended by W. G. Bickley, C. E. Gwyther, J. C. P. Miller and E. J. Ternouth—*Cambridge (Macmillan)*, 132 p., \$4.25. (Mathematical Tables, Vol. IX). The basis of these tables was prepared many years ago by Dr. Glaisher, and then, mysteriously, suppressed. Fortunately a copy survived, and the present volume is the result. The tables are useful in many branches of mathematics.

Science News Letter, June 21, 1941

GEOGRAPHY

ALABAMA, A Guide to the Deep South—Alabama Writers' Program of the Work Projects Administration—*Richard R. Smith*, 442 p., illus., \$2.75. For tourists, who travel these days with increasing desire to see more than routine "sights," this book offers eye-openers to the industry, history, romance, and natural beauty of a southern state. Nineteen motor tours, arranged in detail, are one feature of the guidebook. For stay-at-homes who want to know more about Alabama there is much information not heretofore available in general reading.

Science News Letter, June 21, 1941

ARBORICULTURE

PRUNING TREES AND SHRUBS—Ephraim Porter Felt—*Orange Judd*, 237 p., illus., \$2. A highly useful manual that will be welcomed by landscape architects, park

administrators, orchardists, gardeners and all others who have trees in their care. It covers its subject in all possible fields—orchards as well as ornamental plantings, city streets as well as country highways.

Science News Letter, June 21, 1941

GENERAL SCIENCE

THE PROGRESS OF SCIENCE, A Review of 1940—H. Horton Sheldon, ed.—*Grolier Soc.*, 442 p., illus., \$7.50. In encyclopedic alphabetic arrangement, the essence of last year's progress in science has been distilled and processed by several score of specialists marshaled by the editors of this first volume of a new yearbook. Leading personalities are given biographical notice. Ample photographs aid the presentations.

Science News Letter, June 21, 1941

ELECTRICITY

POWER FACTOR PROBLEMS IN ELECTRICITY SUPPLY—G. W. Stubbings—*Chemical Pub. Co.*, 174 p., \$3.50. The power factor is a useful means of measuring electrical consumption, especially by large users, and hence has considerable importance in electrical engineering. This little book, of British origin, explains what it is and how it is applied.

Science News Letter, June 21, 1941

ENGINEERING

AUTOMOBILES FROM START TO FINISH (rev. ed.)—Franklin M. Reck—*Crowell*, 96 p., illus., \$2. Not only the automobile itself and its manufacture are discussed in this fully illustrated book, but such related topics as roads, gasoline, and tires.

Science News Letter, June 21, 1941

CHEMISTRY—CRIMINOLOGY

FORENSIC CHEMISTRY—Henry T. F. Rhodes—*Chemical Pub. Co.*, 214 p., \$5. Of English origin, this book covers poisons and their identification, chemical identification of explosives, examination of questioned documents, methods of fixing fingerprints, and many other problems of chemistry involved in the detection of crime.

Science News Letter, June 21, 1941

MEDICINE

WHAT PRICE ALCOHOL?—Robert S. Carroll—*Macmillan*, 362 p., \$3. Information about alcohol and its effects and advice for its victims with liberal illustrations from case histories.

Science News Letter, June 21, 1941

AERONAUTICS

AERONAUTICS IN THE UNION AND CONFEDERATE ARMIES, WITH A SURVEY OF MILITARY AERONAUTICS PRIOR TO 1861, Vol. I—F. Stanbury Haydon—*Johns Hopkins Press*, 421 p., 45 pl., \$4. Surprising it seems at first to realize that aeronautics played any part in the Civil War, before the Wright brothers were born. Of course, there were no airplanes at that time, but balloons, free as well as captive, played a part. This account ends in 1862; presumably later volumes will carry it to the end of the Civil War.

Science News Letter, June 21, 1941

NUTRITION—CHEMISTRY

CHEMISTRY OF FOOD AND NUTRITION (6th ed.)—Henry C. Sherman—*Macmillan*, 611 p., illus., \$3.25.

Science News Letter, June 21, 1941

CHEMISTRY

SIMPLE CHEMICAL EXPERIMENTS—Alfred Morgan—*Appleton-Century*, 269 p., illus., \$2. A practical manual of things that the amateur chemist can do in a home laboratory. To the relief of parents, though doubtless to the youngster's regret, the making of high explosives is omitted.

Science News Letter, June 21, 1941

ENGINEERING

AMERICAN PLANNING AND CIVIC ANNUAL, 1940—Harlean James, ed.—*American Planning and Civic Assoc.*, 278 p., \$3. Everyone interested in planning for the better world that should come with the return of quieter times (and we all should be doing that) will welcome this addition to what has already become a notable series.

Science News Letter, June 21, 1941

BOTANY

AN OUTLINE OF GENERAL BOTANY—Harry J. Fuller—*Barnes and Noble*, 180 p., illus., 75c. A compact manual, useful either as a brief text or as a guide in general review for advanced students who feel the need for a brushing-up.

Science News Letter, June 21, 1941

MATHEMATICS

FUNCTIONS OF A COMPLEX VARIABLE WITH APPLICATIONS—E. G. Phillips—*Interscience Pub.*, 140 p., \$1.50. This English book, in the series of "University Mathematical Texts," deals with a subject of great importance in advanced mathematics.

Science News Letter, June 21, 1941

• First Glances at New Books

Additional Reviews
On Page 399

DAIRY INDUSTRY

SEVEN DECADES OF MILK, A History of New York's Dairy Industry—*John J. Dillon—Orange Judd*, 340 p., \$3. With the emphasis now being placed on nutrition as a public responsibility, this book, telling of the acuteness of the milk problem in America's biggest urban community, and the magnitude of the efforts made toward its solution, should command wide interest and contribute substantial aid to those dealing with the same problem in other cities.

Science News Letter, June 21, 1941

MATHEMATICS—ASTRONOMY

THE ANALYTICAL FOUNDATIONS OF CELESTIAL MECHANICS—*Aurel Wintner—Princeton Univ. Press*, 448 p., \$6. This newest addition to the Princeton Mathematical Series, naturally, is highly technical. However, the properly qualified reader can learn the profound way in which the rest of mathematics has been affected by researches in celestial mechanics.

Science News Letter, June 21, 1941

HORTICULTURE

MODERN FRUIT PRODUCTION—*Joseph Harvey Gourley and Freeman Smith Howlett—Macmillan*, 579 p., illus., \$4.50. A text and reference book for fruit growers. It not only gives clear instruction in the practical phases of planning, planting and caring for fruit trees and bushes, but prefaces this with sections on the economics and botany of fruits, thus laying a sound scientific foundation before undertaking the superstructure of application.

Science News Letter, June 21, 1941

PHYSICS

PHYSICS, The Pioneer Science—*Lloyd William Taylor—Houghton Mifflin*, 891 p., \$4. The historical approach is effectively used in this new text-book, now appearing in print for the first time after the author, who is professor of physics at Oberlin College, tried it out in mimeographed form on several generations of his students.

Science News Letter, June 21, 1941

AGRICULTURE—ECONOMICS

A SURVEY OF INSECTICIDE MATERIALS OF VEGETABLE ORIGIN—*H. J. Holman, ed.*—155 p., \$1.05. THE TUNG OIL INDUSTRY OF THE UNITED STATES—Report of an inquiry . . . by *M. Ashby*—28 p., 30c. THE WORLD'S CINCHONA BARK INDUSTRY—*Imperial Institute*—28 p., 30c.

British Library of Information. Three manuals of much interest in this country, as well as in Britain where use was primarily intended. The publication on insecticides is of particular interest at the present time, when normal trade in such materials as pyrethrum and derris has been badly interfered with.

Science News Letter, June 21, 1941

GENERAL SCIENCE—HISTORY

STUDIES IN THE HISTORY OF SCIENCE—*E. A. Speiser and others—Univ. of Penn. Press*, 123 p., \$1.50. Eight important papers delivered at the bicentennial conference of the University of Pennsylvania. The authors are: *Otto E. Neugebauer, E. A. Speiser, Hermann Ranke, Henry E. Sigerist, Richard H. Shryock, Evarts A. Graham, Edgar A. Singer and Hermann Weyl*.

Science News Letter, June 21, 1941

CHEMISTRY

ORGANIC CHEMISTRY—*Francis Earl Ray—Lippincott*, 706 p., \$4. Such recent advances in organic chemistry as the developments in medicine with the use of sulfanilamide and related drugs have necessitated, the author points out, "a revaluation in the materials and methods of presentation in the introductory course."

Science News Letter, June 21, 1941

PHYSICS

AN INTRODUCTORY COURSE IN COLLEGE PHYSICS (rev. ed.)—*Newton Henry Black—Macmillan*, 734 p., illus., \$3.75. Experiments and practical applications of physical principles are emphasized in this new edition of a popular text.

Science News Letter, June 21, 1941

PUBLIC HEALTH—ENGINEERING

PLANNING REFUSE COLLECTION OPERATIONS, *Bulletin No. 13—American Public Works Assn.*, 48 p., 50c.

Science News Letter, June 21, 1941

ENGINEERING—ECONOMICS

PETROLEUM FACTS AND FIGURES (7th ed., 1941)—*American Petroleum Institute*—192 p., \$1. A useful collection of statistics, now brought up to date.

Science News Letter, June 21, 1941

ECONOMICS

STATISTICS OF THE COMMUNICATIONS INDUSTRY IN THE UNITED STATES FOR THE YEAR ENDED DECEMBER 31, 1939—*Federal Communications Comm.—Govt. Print. Off.*, 267 p., 25c.

Science News Letter, June 21, 1941

FIRE PROTECTION

FIRE DEFENSE—*Horatio Bond, ed.—National Fire Protection Association*, 221 p., illus., \$1.50. A manual for firefighters in war-threatened zones. Practical and complete, it embodies many lessons taught by experiences in bombed cities in the present war. It should be on the reading table of every fire department and every industrial plant in the country—and it should not just be there, but should be "read to pieces" by the fire-protection personnel.

Science News Letter, June 21, 1941

PALEONTOLOGY

WHEN THE WORLD WAS YOUNG—*Martha McBride Morrel; illus. by R. E. Falconer—Houghton Mifflin*, 252 p., illus., \$3. A popular book on paleontology and prehistoric man, which makes the story of early life on earth sound really exciting. This book should appeal to young people of the 'teen ages, as well as to such of their elders as have not lost the capacity for wonder. The illustrations are attractive.

Science News Letter, June 21, 1941

ANTHROPOLOGY—BIOLOGY

MAN, THE MECHANICAL MISFIT—*G. H. Estabrooks—Macmillan*, 251 p., \$2.50. The professor of anthropology at Colgate University offers a popular essay on man and what's wrong with him, so far as his physical makeup is concerned. The style is lively and stimulating, calculated to make at least some of the facts and opinions here set forth stick in the minds of readers who might otherwise straightway forget what manner of man they are.

Science News Letter, June 21, 1941

BIOLOGY

ANIMAL BIOLOGY (3d ed.)—*Michael F. Guyer—Harper*, 723 p., illus., \$3.75. A new edition of a well-established and successful text.

Science News Letter, June 21, 1941

ENGINEERING

MODERN MARINE REFRIGERATION—*Earl S. Shulters—Cornell Maritime Pr.*, 156 p., illus., \$2. The importance of refrigeration in ships has been increased in recent years with the air conditioning of passenger quarters and, lately, the need for more refrigerated bottoms to carry food supplies to Britain. This handbook gives necessary information about the most used systems.

Science News Letter, June 21, 1941