

Books of the Week

For the editorial information of our readers, books received for review since last week's issue are listed. For convenient purchase of any U. S. book in print, send a remittance to cover retail price (postage will be paid) to Book Department, Science Service, 1719 N Street, N.W., Washington 6, D. C. Request free publications direct from publisher, not from Science Service.

AIR POLLUTION EFFECTS OF IRRADIATED AUTOMOBILE EXHAUST AS RELATED TO FUEL COMPOSITION—E. A. Schuck, H. W. Ford, and E. R. Stephens—*Air Pollution*, 91 p., illus., paper, \$3. Study showed that regulation of the composition of automotive fuels is an unpromising approach to the problem of urban air pollution.

CHEMICAL TRANSFORMATIONS BY MICROORGANISMS—Frank H. Stodola—*Wiley*, 134 p., \$4.25. On the chemical composition of microorganisms, the organic type reactions they carry out and their synthetic powers.

THE CHEMISTRY AND TECHNOLOGY OF LEATHER, Vol. II: Types of Tannages—Fred O'Flaherty, William T. Roddy and Robert M. Lollar, Eds.—*Reinhold*, 554 p., illus., \$16.50. Monograph on the chemistry, processing and mechanism of tannery.

CIVIL AIR REGULATIONS AND FLIGHT STANDARDS FOR PILOTS—*Aero Publishers*, 20th ed., 160 p., illus., paper, \$2.25. Air laws, flight rules, licensing requirements and instructions for student pilots.

CONTRIBUTIONS OF THE PHYSICAL, BIOLOGICAL, AND PSYCHOLOGICAL SCIENCES IN HUMAN DISABILITY—Renato Contini, Ed.—*N.Y. Acad. of Sciences, Annals*, Vol. 74, Art. 1, 160 p., illus., \$3.50. Report on interdisciplinary research.

DEMOGRAPHIC YEARBOOK 1957—*United Nations (Columbia Univ. Press)*, 9th ed., 656 p., \$8, paper \$6.50. Special subject of this volume is mortality statistics.

EXPLORERS' MAPS: Chapters in the Cartographic Record of Geographical Discovery—R. A. Skelton—*Praeger*, 337 p. 200 maps, \$12.50. Pictorial history of exploration, originally written for *The Geographical Magazine*, London.

THE FUNDAMENTAL PRINCIPLES OF QUANTUM MECHANICS WITH ELEMENTARY APPLICATIONS—Edwin C. Kemble—*Dover*, new ed., 611 paper, \$2.95. Unabridged and corrected reprint of 1937 edition.

FUNDAMENTALS OF TRANSISTORS—Leonard M. Krugman—*Rider*, rev. ed., 164 p., illus., paper, \$3.50. For the technician and the amateur.

THE GOLDEN GEOGRAPHIC ENCYCLOPEDIA—Theodore Shabad and Peter M. Stern, Eds., compiled by Erich Kaden and others—*Simon & Schuster*, 228 p., 450 maps and color photographs, \$7.95. Adapted from the German *Westermann Bildkarten Lexikon*.

THE GREY SEAS UNDER—Farley Mowat—*Little*, 341 p., \$5. Story of fifteen years of rescue work of a small salvage tug in the North Atlantic.

GUIDE TO ROCKETS, MISSILES, AND SATELLITES—Homer E. Newell, Jr.—*Whittlesey House*, 54 p., illus., \$2.50. Brief review of the high-speed weapons and vehicles that are either in existence or under development.

HANDBOOK OF CARDIOLOGY FOR NURSES—Walter Modell and Doris R. Schwartz—*Springer Pub.*, 3rd ed., 328 p. \$4.50. Revision includes new drug therapy and latest techniques of cardiac surgery.

HANDBOOK OF RESPIRATION—Philip L. Altman, John F. Gibson, Jr., and Charles C. Wang—*Saunders*, 403 p., paper, \$7.50. Prepared under the direction of the Committee on the Handbook of Biological Data, National Academy of Sciences-National Research Council.

A HIVE OF BEES—John Crompton—*Double-day*, 180 p., illus. by A. E. Bestall, \$3.75. A mixture of experiences, impressions, and speculations as well as facts about bees.

THE IMPENETRABLE SEA—Arthur Constance—*Citadel*, 279 p., illus., \$4. On the wonders

of the sea, of winds, whirlpools, coastlines, whales and plankton.

AN INTRODUCTION TO FOURIER METHODS AND THE LAPLACE TRANSFORMATION—Philip Franklin—*Dover*, new ed., 289 p., paper, \$1.75. Unabridged reprint of *Fourier Methods*, first published in 1949.

LIGHT—Alexander Efron—*Rider*, 127 p., illus., paper, \$2.25. Introduces general reader to the phenomena of reflection, refraction, nature and spectrum of light waves with chapter on optical instruments.

LOGIC MACHINES AND DIAGRAMS—Martin Gardner—*McGraw*, 157 p., illus., \$5. Traces the history of logic devices and projects their future.

MODERN SCIENCE QUIZ BOOK—Anne Orth Epple and Lewis E. Epple, Jr.—*Platt*, 54 p., illus., \$1.50. 650 questions and answers in various fields of science. Ages 10 to 16.

RESEARCH IDEAS FOR YOUNG SCIENTISTS—George Barr—*Whittlesey House*, 142 p., illus. by John Teppich, \$3. Leads children to observe and do their own experiments at home without laboratory equipment.

SPACE SATELLITE: The Story of the Man-Made Moon—Lee Beeland and Robert Wells, preface by John P. Hagen—*Prentice-Hall*, rev. ed., 78 p., illus. by Jack Coggins, \$2.95. Popular explanation of the principles of rocketry and the Minitrack tracking system.

SOVIET WRITINGS ON EARTH SATELLITES AND SPACE TRAVEL—Ari Sternfeld and others—*Citadel*, 253 p., illus., \$3.95. Collection of Russian stories on space science and the three sputniks, in English.

SPACE TRAVEL—Willy Ley—*Guild Press, (Simon & Schuster)*, 44 p., illus. by John Polgreen, \$1. Fourth and last of *Adventure in Space* series.

STRUCTURAL CONVERSIONS IN CRYSTALLINE SYSTEMS AND THEIR IMPORTANCE FOR GEOLOGICAL PROBLEMS—Wilhelm Eitel—*Geological Soc. of Am.*, 183 p., illus., \$3. Monograph on the results of research in structural conversions.

THE STRUCTURE OF ARITHMETIC AND ALGEBRA—May Hickey Maria—*Wiley*, 294 p., \$5.90. Fundamental concepts explained for the non-science student and the teacher of secondary school mathematics.

THINK, MR. PLATYPUS—Anita Hewett—*Sterling*, 32 p., illus. by Anne Marie Jauss, \$2.50. Easy-to-read children's book about the habits of platypuses.

TRENDS IN GENETIC ANALYSIS—G. Pontecorvo—*Columbia Univ. Press*, 145 p., illus., \$4. Course of lectures reappraising the theory of the gene.

THE TWO ENDS OF THE LOG: Learning and Teaching in Today's College—Russell M. Cooper, Ed.—*Univ. of Minn. Press*, 317 p., \$4. Based on papers presented at a conference on col-
(Continued on page 350)

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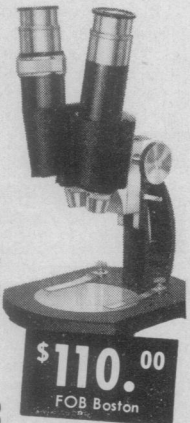
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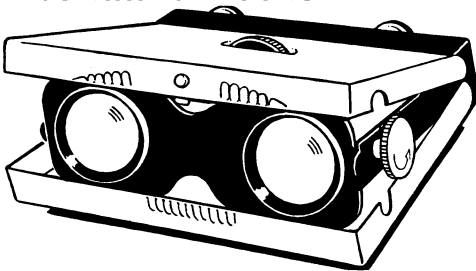
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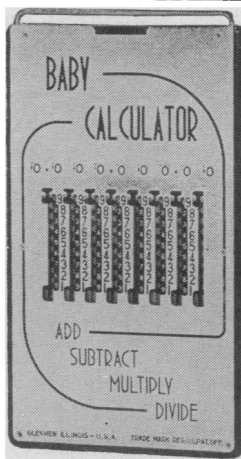


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Books of the Week

(Continued from page 348)

lege teaching, with chapter on challenging the gifted student.

WHO'S WHO IN WORLD AVIATION AND ASTRO-NAUTICS—Marion E. Grambow, Ed.—*Am. Aviation Publications*, 2nd ed., 497 p., \$12.50. More than 3000 short biographical entries.

WILDLIFE AT YOUR DOORSTEP—Glen Rounds—*Prentice-Hall*, 115 p., illus. by author, \$3. An illustrated almanac of curious doings, dealing with wasps, spiders, toads, birds and other kinds of small wildlife.

WORLD HEALTH—Fraser Brockington—*Pen-guin*, 405 p., paper, 95¢. Explains the problems of food, population, disease and social welfare that the World Health Organization is seeking to solve.

YOUR CHILD'S WORLD: From Infancy Through Adolescence—Robert P. Odenwald—*Random House*, 211 p., \$3.50. Written especially for Catholic parents.

Science News Letter, November 29, 1958

Questions

ASTRONAUTICS—What differences in dental health have been found in submarine crews and regular ships' crews? p. 339.

CHEMISTRY—What dyes are being used in an organic solar battery? p. 341.

PHYSIOLOGY—What relationship has been found between schizophrenia and cerebrospinal fluid? p. 344.

Photographs: Cover, U.S. Bureau of Reclamation; p. 339, National Cash Register Company; p. 341, Massachusetts Institute of Technology; p. 352, Dow Corning.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

and

THE NATIONAL SCIENCE FOUNDATION

announce that application forms for the 1959-60 Traveling High School Science Library are now available. Requests are cordially invited. Also available are the following revised lists:

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