

# Books of the Week

For the editorial information of our readers, books received for review 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.

**ADOLESCENT ATTITUDES TOWARD ACADEMIC BRILLIANCE**—Abraham J. Tannenbaum—Teachers College, 100 p., \$3.50. A study concerned with the popularity rating of academic endeavor, mental superiority and athleticism, among fellow students.

**ADSORPTION AND COLLECTIVE PARAMAGNETISM**—Pierce W. Selwood—Academic Press, 189 p., illus., \$7.50. Research monograph of the novel method for studying molecular interactions on solid surfaces through measurements of magnetization.

**AFGHANISTAN**—Christine Weston—Scribner, 162 p., photographs, maps, \$3.95. Vividly depicts the land, the people and their customs today.

**AIR CUSHION VEHICLES: Transportation of the Future**—William J. Armfield IV and others—Transportation Research Associates, 219 p., illus., paper, single copies available from publisher, P. O. B. 167, Bowling Green Station, New York 4, N.Y. Concise review of an emerging mode of transportation, the Ground Effect Machine concept, for aeronautical and marine engineers.

**AN ANALYSIS OF URBAN TRAVEL DEMANDS**—Walter Y. Oi and Paul W. Shuldiner—Transportation Center, Northwestern Univ., 281 p., illus., \$12.50. Monograph deals with traffic generating characteristics of urban residences, composition of urban travel and determinants of travel expenditures.

**APPROXIMATE CALCULATION OF INTEGRALS**—Vladimir Ivanovich Krylov, transl. by Arthur H. Stroud—Macmillan, 357 p., \$12.50. Provides a systematic introduction to the subject of approximate integration, an important branch of numerical analysis.

**THE BOYS' THIRD BOOK OF RADIO AND ELECTRONICS**—Alfred Morgan—Scribner, 277 p., diagrams by author, \$3.50. Gives clear, detailed information for slightly more advanced projects that can be built at home, such as radio receivers and home intercom system.

**CHEMISTRY OF CARBON COMPOUNDS, Vol. V: Miscellaneous General Index to Vols. I-V**—E. H. Rodd, Ed.—Elsevier Pub. Co. (N.Y.), 912 p., illus., \$29 single; \$26 as part of series. This concluding volume, in addition to collective index, contains special chapters on selected topics in which there has been conspicuous advance during the last decade.

**COLOR OF FOODS**—Gordon Mackinney and Angela C. Little—Avi Pub. Co., 308 p., illus., \$12.70. Written for food technologists, treats perception of color, the C.I.E. and the Munsell color space, reflectance data, evaluation of color differences, natural coloring matters and specifications.

**COMMON EDIBLE AND USEFUL PLANTS OF THE WEST**—Muriel Sweet—Naturegraph, 66 p., illus., by Emily Reid and others, \$2, paper, \$1. An aid to identification with information on food and medicinal values and early uses by native Indians.

**CONTINUUM MECHANICAL BEHAVIOR OF ENGINEERING MATERIALS**—Joseph Marin—Pa. State Univ., Coll. of Eng., 46 p., diagrams, paper, \$2. Reviews recent developments in evaluating continuum properties.

**THE DEVELOPMENT OF ELECTRICAL TECHNOLOGY IN THE 19TH CENTURY: 2, The Telegraph and the Telephone**—James King—U.S. National Mus. (GPO), 59 p., 88 illus., paper, 70¢. Describes and depicts early historical instruments that used electric current to transmit information.

## TO MEN WHO JUST "CAN'T LEARN" MATH!

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**DISCUSSIONS IN CYTOGENETICS**—Charles R. Burnham—Burgess, 375 p., illus., \$8. Intended as an advanced course, discusses published research results and further experimentation on structural changes in the chromosomes and on changes in chromosome number.

**ELECTRONIC TEST INSTRUMENT HANDBOOK**—Joseph A. Risse—Sams, 288 p., illus., paper, \$4.95. An up-to-date, practical guide on the various types of modern test equipment.

**ELSEVIER'S DICTIONARY OF GENERAL PHYSICS IN Six Languages: English/American/French/Spanish/Italian/Dutch and German**—W. E. Clason—Elsevier Pub. Co. (N.Y.), 859 p., \$22.50. Compiled and arranged on an English alphabetical base, this multilingual dictionary gives definitions of essential terminology of the various branches of physics.

**EMOTIONAL STRESS AND YOUR HEALTH**—Brian Inglis, foreword by Hans Selye—Collier, 288 p., paper, 95¢. Reprint (1958).

**ESKIMO ADMINISTRATION: I. Alaska—Diamond Jenness—Arctic Inst. of North America, 64 p., paper, \$3. Monograph covers the early years from 1867 when Russia sold Alaska to the U.S., the gold rush periods from 1869 to 1939, and the wartime and postwar changes up to 1960.**

**EVOLUTION**—Ruth Moore and Editors of Life—Time Inc. (Time Bk Div., Chicago), 192 p., 64 p. in full color, \$5.95. Beautiful presentation of the essential phases and aspects of evolution, from Darwin's voyage to the discovery of Zinjanthropus.

**FISH AS FOOD, Vol. II: Nutrition, Sanitation and Utilization**—Georg Borgstrom, Ed.—Academic Press, 777 p., \$25. This second in the 3-volume treatise on present-day fish science, presents the "public health" aspects of fish, its nutritive aspects, handling and processing.

**FOOD HINTS FOR MATURE PEOPLE: More Years to Live, More Life to Years**—Charles Glen King with George Britt—Public Affairs Committee, Pamphlet No. 336, 28 p., illus., paper, 25¢ direct to publisher, 22 E. 38th St., New York 16, N.Y. Simple advice for good food habits in the later years.

**FRONTIER TO SPACE**—Eric Burgess, foreword by Sir Harold Spencer Jones—Collier, rev. ed., 190 p., diagrams, paper, 95¢. Updated edition, with expanded chapter "Beyond the Exosphere."

**A GENERAL SURVEY OF THE SEMICONDUCTOR FIELD**—George William Reimherr—NBS (GPO), 44 p., paper, 80¢. A tabulated listing of properties and applications of single-element and binary compound inorganic semiconductors.

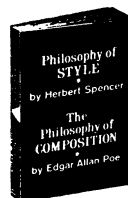
**GEOCHEMICAL AND RESISTIVITY PROSPECTING METHODS: A Field Investigation in Fend Orellio County, Wash.**—James W. Crosby III and Richard E. Carvin—Wash. State Univ., Div. of Indust. Res., 206 p., 16 plates, paper, \$3. Describes in detail a summer field research program by two geologists.

**GROUND DISPOSAL OF RADIOACTIVE WASTES: Second Conference Proceedings, Chalk River, Canada, 1961**—James M. Morgan, Jr., Donald K. Jamison and John D. Stevenson, Eds.—OTS, 635 p., illus., paper, \$7. Papers and panel discussions on hydrogeology, geochemistry, waste injection and solid waste disposal.

**HANDBOOK ON THE USE OF VACCINES AND SERA, USSR—M. I. Sokolov and P. V. Pavlov, transl. from Russian—OTS, 184 p., paper, \$3. Deals with Russian methods for using and storing preparations, intended for public health administration personnel.**

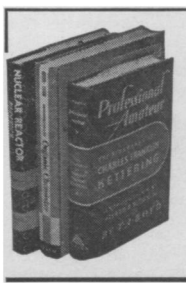
**HOW SMART ARE ANIMALS?**—Helen Kay—Basic Bks., 115 p., photographs, illus. by Donald Bolognese, \$3.75. Tells boys and girls some interesting facts about animal behavior and how children can learn by observing their pets.

**HOW TO WATCH BIRDS**—Roger Barton—Cornerstone Lib., rev. ed., 187 p., illus., paper, \$1.



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Revised reprint (1955) of guide for both beginner and the more advanced bird watcher.

**HUMANE TREATMENT OF ANIMALS USED IN RESEARCH: Hearings, Sept. 1962—U.S. Congress, House Committee on Interstate and Foreign Commerce—GPO, 375 p., illus., paper, \$1. Comprehensive hearings on bills that are inspired by the anti-vivisectionists who in advocating "humane treatment" actually often make necessary medical research more difficult.**

**INTERNATIONAL TRADE: Proceedings of the Fourth Annual Industrial and Economic Development Conference, 1962—Charles M. Elkinton and others—Wash. State Univ. Technical Extension Service, 49 p., graphs, paper, \$3.**

**THE KILGORE FLORA: A Late Miocene Flora from Northern Nebraska**—H. D. MacGinitie—Univ. of Calif. Press, 123 p., 16 plates, paper, \$2. Discusses the fossil flora, climatic conditions, age of the flora and gives systematic descriptions.

**LABORATORY MANUAL FOR INTRODUCTORY MYCOLOGY**—Const. J. Alexopoulos and E. S. Benke—Burgess, rev. ed., 199 p., illus., paper, \$4.25. Incorporates new techniques for the study of fungi and conforms with the newer classification.

**LAND, PEOPLE AND HISTORY**—Elizabeth S. Helfman—McKay, 271 p., photographs, \$4.95. Provides the general reader with an understanding of the use of land, soil erosion, and what can be done to conserve fertility of the land.

**MAMMALS OF GEORGIA: A Study of Their Distribution and Functional Role in the Ecosystem**—Frank B. Golley—Univ. of Ga. Press, 218 p., maps, diagrams, paper, \$3.75. A source for identification and biological information on mammals of the region.

**THE PHILOSOPHY OF WHITEHEAD**—W. Mays—Collier, 288 p., paper, \$1.50. Reprint (1959).

**PROGRAMMED MANUAL FOR STUDENTS OF FUNDAMENTAL PHYSICS**—Jay Orear—Wiley; multipaged, diagrams, \$4.95. A tested "cheat-proof" workbook for self-study in college physics, designed to accompany textbook "Fundamental Physics" by the same author. See story, SNL Feb. 3, 1962, p. 67.

**RF INTERFERENCE CONTROL HANDBOOK**—Baron Kenner—Sams, 224 p., diagrams, \$6.95. Provides information on theory and control of RF interference to permit proper analysis of different types of interference.

**RADIO, TELEVISION, ELECTRONICS DICTIONARY**—National Radio Institute Staff—Rider, J. F., 190 p., paper, \$3.50. Contains more than 6,500 technical definitions, from "abampere" to "zone refining".

**RANGE ECOLOGY**—Robert R. Humphrey—Ronald Press, 234 p., illus., \$6.50. A practical treatment of the principal factors affecting forage production on the range-lands of North America.

**RESUSCITATION AND ARTIFICIAL HYPOTHERMIA**—V. A. Negovskii, transl. from Russian by Basil Haigh; preface by Claude S. Beck—Consultants, 314 p., illus., \$12.50. Reports on research on hypoxia in particular on the use of artificial cooling in the treatment of terminal states.

**RHYTHM FUNCTIONS IN THE LIVING SYSTEM**—William Wolf, Ed.—N.Y. Acad. of Sciences, Annals, Vol. 98, Art. 4, 573 p., illus., paper, \$8.25. Papers on basic considerations in the study of rhythms, periodic phenomena in living systems, and the basic metric approach to biological rhythms.

**THE ROCK-HUNTER'S FIELD MANUAL: A Guide to Identification of Rocks and Minerals**—D. K. Fritzen, foreword by Wesley Dexter Gordon—Cornerstone Lib., 191 p., paper, \$1. Reprint (1959).

**SERVICING TRANSISTOR RADIOS, Vol. 16**—Howard W. Sams Engineering Staff—Sams, 160 p., illus., paper, \$2.95. Includes analysis of 41 models.

**STUDIES IN GENETICS: The Selected Papers of H. J. Muller**—Foreword by Joshua Lederberg—Indiana Univ. Press, 618 p., diagrams, \$10; paper, \$4.95. Seventieth anniversary volume of selected writings by the Nobel Prize winner, a great teacher and one of the leading living geneticists.

**TEACHING ASTRONOMY IN SCHOOLS**—Ernest Agar Bett—Cambridge Univ. Press, 2nd ed., 74 p., diagrams, \$2. Discusses the teaching of astronomy at intermediary level, in the classroom and in the open air, the school telescope and teaching aids.

**TEACHING HIGH SCHOOL BIOLOGY: A Guide to Working with Potential Biologists**—Paul F. Brandwein and others—Am. Inst. of Biological Sciences, 116 p., illus., \$3.50. Prepared for the use of teachers in guiding the gifted young investigator. Comprehensive bibliography on "giftedness" included.

**TECHNOLOGY AND CULTURE: Proceedings of the Encyclopaedia Britannica Conference on the Technological Order**—Carl F. Stover, Ed.—Wayne State Univ. Press, 285 p., paper, \$2. Opinions and views of 23 scientists, philosophers and writers on the effects of technology on man.

**THE UNITED STATES AND THE SINO-SOVIET BLOC IN SOUTHEAST ASIA**—Oliver E. Clubb, Jr.—Brookings, 173 p., maps, \$3; paper, \$2. Study identifies major policy problems in U.S.-Southeast Asia relations, and appraises alternative ways of dealing with those problems.

• Science News Letter, 82:406 December 22, 1962

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