

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.

ACTION FOR MENTAL HEALTH: Final Report of the Joint Commission on Mental Illness and Health, 1961—Science Editions, 338 p., paper, \$1.95. Up-to-date report on national survey of resources and recommendations for combating mental illness in the United States.

ADVANCES IN CARBOHYDRATE CHEMISTRY, Vol. 16—Melville L. Wolfrom and R. Stuart Tipson, Eds.—Academic Press, 410 p., illus., \$14.50. Treats such subjects as the effects produced in carbohydrates by ionizing radiation, and fluorine chemistry.

AMPHIBIANS AND THEIR WAYS—H. Rucker Smyth—Macmillan, 292 p., illus., \$6.50. A non-technical account of the natural history and biology of native frogs and salamanders.

ATOMIC PHYSICS AND HUMAN KNOWLEDGE—Niels Bohr—Science Editions, 101 p., illus., paper, \$1.45. Reprint of collection of articles which appeared between 1933 and 1955.

COLLEGE ALGEBRA—Charles H. Lehmann—Wiley, 432 p., \$5.95. Textbook designed for students who have completed intermediate algebra and plane trigonometry.

COLOR IN YOUR LIFE—Irving Adler—Day, 127 p., illus. by Ruth Adler, \$3.50. Explains in simple language how we see color and how it is transmitted.

COMPARATIVE PSYCHOLOGY OF MENTAL DEVELOPMENT—Heinz Werner, foreword by Gordon W. Allport—Science Editions, 564 p., diagrams, paper, \$2.45. Draws on the findings of such fields as child psychology, cultural anthropology and psychopathology, to construct a theoretical framework for the process of mental development in man.

CURRICULUM PLANNING FOR THE GIFTED—Louis A. Fliegler—Prentice-Hall, 414 p., \$9. Intended to serve as a resource compendium and basic text, contains chapters on creative mathematics, science in elementary school, and secondary school science.

CYBERNATION: The Silent Conquest—Donald N. Michael—Center for the Study of Democratic Institutions, 48 p., paper, single copies free upon request direct to publisher, Box 4068, Santa Barbara, Calif. Paper considers and analyzes the impact of automation on the American people and their institutions in the next twenty years.

ELECTROCHEMISTRY OF FUSED SALTS—U. K. Delimarskii and B. F. Markov, transl. from Russian by Adam Peiperl; ed. by Reuben E. Wood—Sigma Press, 338 p., \$12.50. Presents the principles of fused salt electrochemistry and reports on important experimental and theoretical studies.

THE EXACT SCIENCES IN ANTIQUITY—O. Neugebauer—Harper, 240 p., 14 plates, illus., paper, \$1.60. Reprint of second edition, presents a survey of the historical inter-relationship between mathematics and astronomy in ancient civilizations.

THE EXCITEMENT OF SCIENCE—John Rader Platt—Houghton, 174 p., \$3.50. Physicist's reflections on the fundamental relations between science and technology and the intellect of man which creates them, and their relations to the purposes of society.

THE FABRIC OF THE HEAVENS: The Development of Astronomy and Dynamics—Stephen Toulmin and June Goodfield—Harper, 285 p., illus., \$5. A history of men's conceptions of the universe and associated ideas about the way in which things move.

FOLLOW THE WATER—Varley Lang—Blair, J. F., 222 p., illus., \$4.50. About crabbing and clamming in Chesapeake Bay.

FROM SCALES TO FANCY FEATHERS—Iona Seibert Hiser—Rand McNally, 136 p., illus. by Anne Marie Jaus, \$3.50. Describes for young people some outstanding characteristics of birds.

HIGHER ALGEBRA FOR THE UNDERGRADUATE—Marie J. Weiss, rev. by Roy Dubisch—Wiley, 2nd ed., 171 p., \$4.95. Intended as an introductory text in abstract algebra, providing gradual transition from problem solving to postulational approach.

JAPANESE GARDENS AND MINIATURE LANDSCAPES: A Handbook—Kan Yashiroda, Ed.—Brooklyn Botanic Garden, 84 p., illus., paper, \$1. Generously illustrated descriptions of Japanese garden architecture, tree trimming techniques, and the art of creating landscapes in trays.

LIFE AND ENERGY—Isaac Asimov—Doubleday, 380 p., diagrams, \$4.95. An exploration of the physical and chemical basis of modern biology.

THE MANY-BODY PROBLEM: A Lecture Note and Reprint Volume—David Pines—Benjamin, W. A., 456 p., paper, \$3.95. A Frontiers of Physics Lecture Note and Reprint volume, representing revised version of author's lectures delivered during the past two years.

MATHEMATICAL RECREATIONS & ESSAYS—W. W. Rouse Ball, rev. by H. S. M. Coxeter—Macmillan, 11th ed., 418 p., illus., paper, \$1.95. Original work was issued in 1892.

METHODS AND MATERIALS OF THE GREAT SCHOOLS AND MASTERS, Vols. I and II—Sir Charles Lock Eastlake—Dover, 561 p. and 434 p., paper, \$2 each. Reprint, records the history of the techniques and practice of oil painting from its invention.

MORPHOGENESIS OF THE VERTEBRATES—Theodore W. Torrey—Wiley, 600 p., illus., \$9.95. Course integrates into a single unit the usually separate consideration of comparative vertebrate anatomy and vertebrate embryology.

NUCLEAR MAGNETIC RELAXATION: A Reprint Volume—N. Bloembergen—Benjamin, W. A., 178 p., illus., paper, \$3.95. Contains photographic reproduction of author's thesis (1948) and research paper on the interaction of nuclear spins.

ON HUMAN COMMUNICATION: A Review, A Survey and A Criticism—Colin Cherry—Science Editions, 333 p., diagrams, paper, \$1.95. Treats wide variety of aspects of communication theory, such as analysis of signals, especially speech, and statistical theory of communication.

THE PHILOSOPHY OF MATHEMATICS: An Introduction—Stephan Körner—Harper, 198 p., paper, \$1.35. First published in 1960, essay concentrates on the construction of mathematical theories and considers the relation between pure and applied mathematics.

PRACTICAL MATHEMATICS: A Tutor-Text—Grace C. Martin and Ann Smalley—Doubleday, 698 p., \$5.95. A "scrambled" course designed for effective self-teaching in the fundamentals of mathematics used in practical engineering and shop situations.

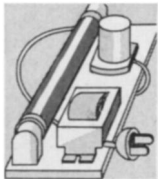
PROBLEMS IN COMMUNICATION—Charles Watkins and Benjamin Pasamanick, Eds.—Psychiatric Research Reports, 131 p., paper, \$2. Papers present a sampling of the areas, concepts, quality and activities of present research in communication.

THE PYRAMIDS OF EGYPT—I. E. S. Edwards—Pitman, rev. ed., 258 p., illus., \$8.50. Expanded and completely revised text incorporates important discoveries since 1947.

QUALITATIVE ELEMENTAL ANALYSIS—Ernest H. Swift and William P. Schaefer—Freeman, 469 p., illus. by Evan L. Gillespie, \$6.75. Pri-

SCIENCE SPECIALS

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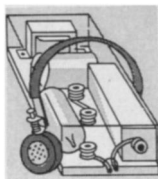
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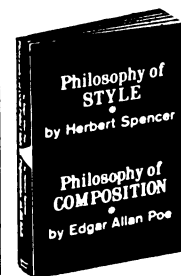
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marily a laboratory manual for a course in qualitative analysis on the undergraduate level.

RADIOISOTOPES IN WORLD INDUSTRY: Abstracts of Selected Foreign Literature—Office of Isotopes Development, U. S. AEC—OTS, 120 p., paper, \$2.50. Bibliography of 529 abstracts, reviewing non-English technical literature on current progress in the use of isotopes.

RECENT ADVANCES IN SCIENCE: Physics and Applied Mathematics—Morris H. Shamos and George M. Murphy, Eds.—*Science Editions*, 384 p., illus., paper, \$1.95. Twelve scientists report on current progress in contemporary physics and modern engineering applications.

THE ROCK-HUNTER'S RANGE GUIDE: How and Where to Find Minerals and Gem Stones in the United States—Jay Ellis Ransom—*Harper*, 213 p., photographs, \$4.95. Comprehensive manual written in non-technical language, features nationwide listing of mineral collecting sites, arranged by state and county with location areas pinpointed, lists mineral museums.

SCIENTIFIC CAREERS IN AGRICULTURAL RESEARCH—*Agricultural Research Service, USDA*, Misc. Pub. Nos. 850-855, 6 folders, illus., free upon request direct to publisher, Washington 25, D. C. Discusses government research careers in soil and water conservation, agricultural engineering, animal diseases, plant quarantine, plant pest control and entomology research.

THE TEACHING OF SCIENCE—Joseph J. Schwab and Paul F. Brandwein—*Harvard Univ. Press*, 152 p., \$3.25. Contains the 1961 Inglis Lecture "The Teaching of Science as Enquiry" and the 1961 Burton Lecture "Elements in a Strategy for Teaching Science in the Elementary School."

THOUGHTS AND LANGUAGE—L. S. Vygotsky, transl. and ed. by Eugenia Hanfmann and Gertrude Vakar, introd. by Jerome S. Bruner—*M. I. T. Press*, 168 p., \$4.95. First translation of a Russian work on the interrelation of thought and language, which after publication in 1934 was officially opposed, yet greatly influenced contemporary Russian psychology.

WEIGHTLESSNESS: Physical Phenomena and Biological Effects—Elliott T. Benedikt, Ed.—*Plenum Press*, 170 p., illus., \$8. Symposium papers on hydrodynamics at zero gravity, heat transfer and boiling phenomena under zero-g conditions, and zero-g research in bioastronautics.

WORLD-WIDE SUMMER PLACEMENT DIRECTORY, 1962—Russell J. Fornwalt and others—*The Advancement & Placement Inst.*, 66 p., illus., paper, \$3. State-by-state listing and description of summer jobs, in this country and abroad, including summer institutes for teachers and laboratory assistant jobs.

• Science News Letter, 81:108 February 17, 1962

Questions

ARCHAEOLOGY—How old is pottery recently found in Ecuador and dated by the carbon-14 method? p. 101.

GENERAL SCIENCE—What was "Prometheus" designed for? p. 103.

SPACE—What is the main purpose of a new camera on Tiros IV? p. 101.

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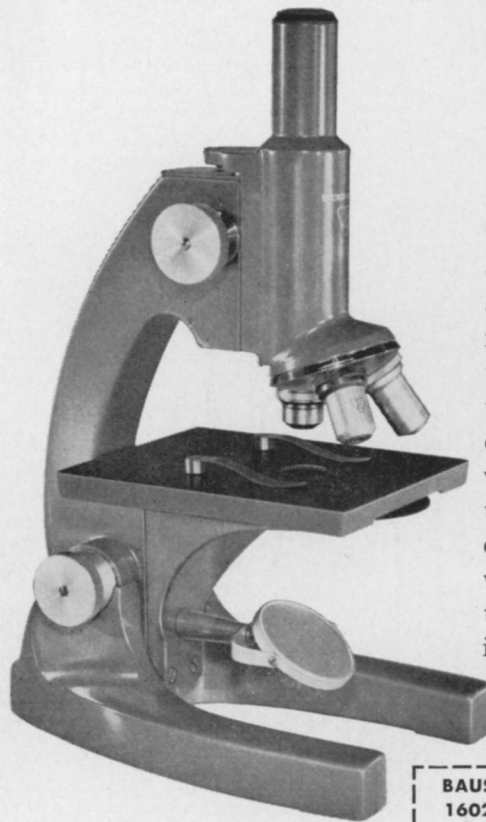
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