Do You Know? 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.

Advances in Glass Technology—The American Ceramic Soc.—Plenum, 639 p., illus., \$21.00. Technical papers of the Sixth International Congress on Glass, Washington, D. C., July, 1962.

BORDERLANDS—Delia and Ferdinand Kuhn-Knopf, 335 p., illus., maps, \$6.75. Tells of the life and character of six remote, tense and restless regions of Asia roughly encircling China and the USSR.

ELECTRON TRANSPORT IN METALS-J. L. Olsen —Interscience, 121 p., illus., \$4.50; paper, \$2.50. Intended as an introduction for experimental physicists to the phenomena connected with electronic conduction in metals.

FOREST GIANTS: The Story of the California Redwoods-Harriet E. Huntington-Doubleday, 57 p., photographs by author, \$2.50. Includes their history, how they are constructed, and their part in the life cycle of the forest.

Fun with Radio Control-Edward L. Stafford, Jr.—Gernsback Library, 160 p., illus., paper, \$3.20. For young people as well as parents to help understand the building and operation of radio-controlled models.

GEOLOGY AND EARTH SCIENCES SOURCEBOOK for Elementary and Secondary Schools—Robert L. Heller, Ed.—Holt, 496 p., illus., paper, \$2.40. Prepared under the guidance of the American Geological Institute.

HANDBOOK OF MATHEMATICAL TABLES: Supplement to Handbook of Chemistry and Physics —Samuel M. Selby and others, Eds.—Chem. Rubber Pub. Co., 579 p., tables and charts, \$7.50. Contains basic mathematical tables, formulas and equations.

MODERN CHEMISTRY—Charles E. Dull, H. Clark Metcalfe and John E. Williams—Holt,

revised edition, 694 p., illus., \$5.48. High school text covering the study of chemistry in the light of modern theory.

SCIENCE IN PROGRESS: Twelfth Volume — George C. Kennedy and others; Wallace R. Brode, Ed.—Yale Univ. Press, 331 p., illus., \$7.50. Includes the Sigma Xi-RESA National Lectures given in 1959 and 1960.

World Provider: The Story of Grass-Sarah R. Riedman-Abelard-Schuman, 191 p., illus., \$3.50. Tells of the species in the grass family, their botanical characteristics, and their adaptability.

YOU OUGHT TO PATENT THAT-Stacy V. Jones —Dial Press, 210 p., \$4. Addressed primarily to the prospective inventor and patentee, telling what he may expect not only as an independent inventor but also as an employee of industry or

• Science News Letter, 82:100 August 18, 1962

GENERAL SCIENCE

Need Exciting Research To Attract Good Minds

➤ "ONLY WORK that is exciting can attract good minds."

"No dull job of any difficulty ever gets done."

These are rules for a vigorous research effort by a laboratory, set forth by Dr. Willard F. Libby, Nobelist and director of the University of California's Institute of Geophysics and Planetary Physics at Los Angeles.

A group's necessary stimulating intellectual atmosphere can be extinguished by two dampers, secrecy and over-specialization.

Dr. Libby believes that "secrecy has a smothering effect which is fatal to the development of interests in a broad form." To increase the free flow of ideas, Dr. Libby suggests that in every area of knowledge within a research institution "there must be more than one person so learned that intellectual interchange among all the activities of the group is possible."

Although the purposes of research organizations vary from improving a specific product to pure, long-range research, the same basic rules apply for successful operations.

Dr. Libby also proposes three other requirements:

- 1. A steady infusion of bright youngsters. One good method is summer employment of outstanding college and high school students, an arrangement which benefits the students, the company, and the universities.
- 2. Opportunities for continued education through extension classes, on-the-job lectures and seminars, sabbatical leaves, and contacts with consultants from universities.
- 3. Clear statement of mission, which gives the potential employee a precise idea of what is expected of him.
 - Science News Letter, 82:100 August 18, 1962

There are 57 dentists in the U.S. for every 100,000 persons.

More than three-quarters of the world's food is still produced with simple hand tools and animal-drawn machines.

An aircraft collision-warning device based on radiation from a plane in flight is being considered as a possible means of preventing mid-air collisions.

Each summer and early fall many tropical fish species usually found only between Florida and Brazil are carried north by the Gulf Stream into the harbors of Rhode Island Sound and Woods Hole, Mass., region.

• Science News Letter, 82:100 August 18, 1962

SCIENCE NEWS LETTER

VOL. 82 **AUGUST 18, 1962** NO. 7

Edited by WATSON DAVIS

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington 6, D. C., NOrth 7-2255. Cable Address: SCIENSERVC.

7-2203. Cable Address: SCIENSERVC.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; ten or more copies in one package to one address, 7½ cents per copy per week; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage. Change of address: Three weeks notice is required. Please state exactly how magazine is addressed. Include postal zone number.

copyright © 1962 by Science Service, Inc. Republication of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicated services issued by Science Service. Science Service also produces and distributes THINGS of science (monthly), produces and publishes books, and conducts the National Science Youth Program. Printed in U.S.A. Second class postage paid at Washington, D. C. Established in mimeograph form March 13, 1922. Title registered as trademark, U.S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. Member of Audit Bureau of Circulation.

۱ موققه

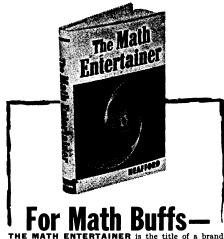
SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: William W. Rubey, University of California at Los Angeles; Wallace R. Brode, Washington, D. C. (Treasurer); Douglas Whitaker, Rockefeller Institute for Medical Research. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; Philip Bard, Johns Hopkins University; Henry Allen Moe, John Simon Guggenheim Memorial Foundation. Nominated by the National Research Council: Leonard Carmichael, Smithsonian Institution (President); John R. Dunning, Columbia University; Benjamin H. Willier, Johns Hopkins University. Nominated by the Journalistic Profession: Michael J. Ogden, Providence Journal-Bulletin; O. W. Riegel, Washington and Lee University; Ralph B. Curry, Flint Journal. Nominated by the Scripps Estate: Edward J. Meeman, Memphs Press-Scimitar; Ludwell Denny, Washington, D. C.; Charles E. Scripps, Cincinnati, Ohio (Vice President and Chairman of Executive Committee).

Staff—Director: Watson Davis. Assistant Director: Dorothy Schriver. Writers: Ann Ewing, Lillian Levy, Faye Marley, Vincent Marteka, William E. Small, Judy Viorst. Science Youth Division: Joseph H. Kraus, Leslie Watkins. Photography: Fremont Davis. Production: Priscilla Howe, Marcia Nelson. Syndicate Sales: Hallie Jenkins. Conferences: Jane Marye. Librarian: Margit Friedrich. Interlingua Division in New York: Alexander Gode, 80 E. 11th St., GRamercy 3-5410. Advertising Manager: Fred A. Moulton, MEtropolitan 8-2362, Washington, D. C.



For Math Buffs—
THE MATH ENTERTAINER is the title of a brand new treasure trove of mathematical teasers, ticklers, traps, and twisters, gems, jests and gyrations—by the hundred!—to beguile, bemuse, and bewilder (perchance—whisper it softly!—to instruct).

Includes: math history, symbols, circles, triangles, measures, moneys, series, permutations, abbreviations, roots and powers, math instruments, ratios, arrangements, fractions, shapes, "limerick" problems, true-and-false, identifications, logarithms, associations, statistics, calculus "cocktails," crosswords, figures from figures, arches, codes, problems and puzzles, etc., etc. Some of the posers will seem easy, others hard, some will amuse, others exasperate—but none are dull.

Answers and complete explanations are given for all problems.

Illustrated

ORDER

NOTE: THE MATH ENTERDITAINED

THE MATH ENTERTAINER

\$2.95 Postfree. By Phillip Heafford 10-day Money Back Guarantee EMERSON BOOKS, Inc., Dept. 478-M 251 West 19 Street, New York 11