

Books of the Week

Listing is for readers' information, not advertising. For convenient purchase of any book listed or any U.S. book in print, remit retail price (we pay postage) plus 25¢ handling charge if price is less than \$2 to Book Department, Science Service, 1719 N St., N.W., Washington, D. C. 20036.

AIAA BULLETIN, Vol. 1, No. 1—Martin Summerfield, Ed.—Am. Inst. of Aeronautics and Astronautics, 87 p., paper, 75¢ direct to publisher, 599 11th Ave., New York, N. Y. 10019. New publication replaces series of fliers and program booklets announcing scheduled meetings, including abstracts of papers to be presented.

THE ADVANCED GEOMETRY OF PLANE CURVES AND THEIR APPLICATIONS—C. Zwikker—Dover, 299 p., diagrams, paper, \$2. Reprint (1950), formerly titled *Advanced Plane Geometry*.

ADVANCES IN INORGANIC CHEMISTRY AND RADIOCHEMISTRY, Vol. 5—H. J. Emeleus and A. G. Sharpe, Eds.—Academic Press, 429 p., diagrams, \$14.50. On stabilization of oxidation states, the chemistry of gallium, chemical effects of nuclear activation, and borazines.

ANALYZER CIRCUIT ELEMENTS: A Fundamental Discussion of Transistorized Logic Circuits—Lloyd J. Austin—RIDL, 36 p., diagrams, paper, \$1 direct to Radiation Instrument Development Laboratory, 4501 W. North Ave., Melrose Park, Ill.

ANIMALS, INC.—Roy Pinney—Doubleday, 127 p., photographs by author and others, \$2.95. About animal collectors, wild animal dealers, trainers and zoo keepers.

BIOGRAPHICAL MEMOIRS, Vol. XXXVII—National Academy of Sciences—Columbia Univ. Press, 361 p., photographs, \$5. Biographies with bibliographies of recently deceased Academy members, among them Arnold Gesell, Clyde Kluckhohn and Edward C. Tolman.

BRAIN MECHANISMS AND INTELLIGENCE: A Quantitative Study of Injuries to the Brain—K. S. Lashley, new introd. by D. O. Hebb—Dover, 200 p., illus., paper, \$1.75. Unabridged, corrected republication of original (1929) edition.

THE CHEMISTRY OF BERYLLIUM—D. A. Everest—Elsevier Pub. Co. (N. Y.), 151 p., \$8.

A concise account of the chemistry of beryllium metal and its compounds.

CRYSTALLIZATION OF POLYMERS—Leo Mandelkern—McGraw, 359 p., illus., \$13.50. Introduction to the nature of high polymers, with formal treatment of the kinetics of crystallization and the morphological characteristics of the crystalline state.

ESI QUARTERLY REPORT: Winter-Spring 1964—Dan C. Pinck, Sec'y—Educational Services Inc., 148 p., illus., paper, single copies free upon request to publisher, 184 Main St., Watertown, Mass. 02172. Reports on programs developed by the Physical Science Study Committee, Elementary Science Study, Mathematics Curriculum and other projects.

FROM THE SILENT EARTH: A Report on the Greek Bronze Age—Joseph Alsop, introd. by Sir Maurice Bowra—Harper, 296 p., photographs by Allison Frantz, maps, \$7.50. A historical essay based on study of the archaeological literature on Crete and early Greece, and on a journey to Pylos with the American field archaeologist, C. W. Blegen. It presents a new political interpretation of the archaeological record reexamined after discovery of the clay tablets at Pylos.

THE INNER WORLD OF MENTAL ILLNESS: A Series of First-Person Accounts of What It Was Like—Bert Kaplan, Ed.—Harper, 467 p., paper, \$3.95. Autobiographical reports of the psychotic experience, drug-induced states, and some historic statements.

INSIDE ELECTRONICS: The How and Why of Radio, TV, Stereo and Hi-Fi—Monroe Upton—Devine-Adair, 262 p., diagrams, \$5.95. An introduction to the fundamentals of radio, TV and hi-fi in language the intelligent layman can understand.

MEET THE MAMMALS—C. H. Keeling, foreword by Brian Vesey-Fitzgerald—Watts, F., 246 p., illus., by David Pratt, \$3.95. Stories about the habits and background of zoo animals.

MICROMANIPULATORS AND MICROMANIPULATION—Hamed M. El-Badry—Academic Press, 335 p., illus., \$15. Offers a wide survey of the various instruments, manipulative and related techniques, with examples of applications in a variety of fields of science and technology.

MODERN SCIENCE DICTIONARY: Astronomy, Biology, Chemistry, Geology, Meteorology and Physics—A. Hechtlinger—Grosset & Dunlap, 784 p., paper, \$3.95. Reprint of 1959 edition, contains more than 15,000 concise definitions for the student and general reader, from "abaca" to "zymogen."

THE NATURAL PHILOSOPHER, Vol. II—Daniel E. Gershenson and Daniel A. Greenberg—Blaisdell Pub. Co., 127 p., illus., \$2.95; paper, \$1.95. Papers devoted to the history of physics and the influence of physics on human thought and affairs through the ages.

NUCLEAR RADIATION GUIDE—Aerospace Medical Division—OTS, 233 p., illus., paper, \$3.50. Supersedes WADC Technical Report 57-118 (I and II) "A Radiobiology Guide." Nontechnical report on biological effects of radiation, shielding methods, monitoring instruments, radiation exposure control, waste disposal and radiation protection guides.

PROCEEDINGS OF THE SYMPOSIUM ON PHYSICS AND NONDESTRUCTIVE TESTING, 1963—Warren J. McGonagle, Chmn.—Southwest Research Institute, 383 p., illus., \$20. Symposium emphasized fundamental principles underlying non-destructive methods for the evaluation of materials or material properties, such as the physics of failure, ultrasonics, the Mossbauer effect, and radiation.

REPORT OF THE WORLD FOOD CONGRESS, Washington, D. C., 4 to 18 June 1963—Food and Agriculture Organization of the United States (Int'l Documents Service, Columbia Univ. Press), 160 p., paper, \$3. Discussion of plenary meetings and reports of the technical commissions.

RICH MAN, POOR MAN—Herman P. Miller, introd. by W. Willard Wirtz—Crowell, 260 p., illus., by Bill Gorman, \$4.95. Offers the layman a readable exposition of the human quantities that lie behind the numbers employed by economic statisticians as revealed in U.S. Census figures.

RUBBER: Natural and Synthetic—Walter Buehr—Morrow, 96 p., illus., by author, \$3. Informative reading for young boys and girls.

700 SCIENCE EXPERIMENTS FOR EVERYONE—Compiled by Unesco, foreword by Gerald Wendt—Doubleday, rev. ed., 252 p., illus., \$4. Originally (1956) published as Unesco Sourcebook for Science Teaching, the expanded edition offers safe experiments for beginners using simple or improvised equipment.

THE TWO CULTURES AND A SECOND LOOK: An Expanded Version of the Two Cultures and the Scientific Revolution—C. P. Snow—Cambridge Univ. Press, 107 p., \$1.95. New Am. Lib., paper, 60¢. Further thoughts on the problem of communication between the scientist and the non-scientist.

UNITED STATES EARTHQUAKES 1961—James F. Lander and William K. Cloud—Coast & Geodetic Survey (GPO), 106 p., map, paper, 55¢. Contains noninstrumental result in the various states and summary of instrumental epicenters for 1961.

• Science News Letter, 85:156 March 7, 1964

Nature Note

Cliff Swallow

► AS THE COLD northern winter draws to a close, flocks of birds which have migrated far to the south for the winter feel the urge to return to their native land. Although some migratory birds, such as the snipe, woodcock and lapwing, are guided by the thermometer and barometer, others depend only on instinct and arrive at almost the same time every year.

Famous among these "Instinktvoegel" is the cliff swallow, *Petrochelidon pyrrhonota*, which, like most swallows, makes a long migration every year. This bird nests throughout most of North America, but spends the winter months in Argentina and Brazil.

The regularity of the cliff swallow in arriving at his destination year after year has become famous because of one colony of swallows that returns each year the third week in March to the Mission of San Juan Capistrano in southern California.

The legend has arisen that the swallows regularly depart for the tropics on Oct. 23 and return on March 19, even in leap years. Although scientific observations have failed to support this theory, the birds do return approximately at the same time, regardless of the weather.

The cliff swallow is a colorful bird with his creamy forehead, chestnut face, gray color, blue upperparts, white underparts and buffy rump. You can easily find his nest up under the eaves of a building, on the side of a cliff or on a bridge. It looks like a large, gourd-shaped ball of mud with a spoutlike side entrance, and several nests are usually grouped.

• Science News Letter, 85:156 March 7, 1964

EXPLORE THE SKIES!

COLOR MAP OF THE NORTHERN HEAVENS: 30"x34 1/4" shows stars to magnitude 5.1. \$1.00
COLOR CHARTS OF THE MOON: 2 maps of 1st- and last-quarter, 23"x33". \$2.00
SPLENDORS OF THE SKY: 36-page picture booklet designed for the classroom. 50¢

Write for free folder N.

SKY AND TELESCOPE Dept. SNP
 Cambridge 38, Mass.



We Specialize in Sizes 10-16; Widths AAA-EEE. Hush Puppies, Boots, Sport, Dress, Casuals — Also Slacks, Sweaters, McGregor Jackets all extra long. Dress, Sport Shirts with bodies 4" longer. Top quality at sensible prices. 100% satisfaction guarantee. Send for FREE FULL COLOR CATALOG of Shoes and Apparel. King-Size, Inc., 6054 Forest St., Brockton, Mass.

BOOK OF 15 PARADOXES in Math and Logic

Here's a wonderful way to sharpen your mind. 16 great paradoxes in math and logic. 2 equals 1; a + b does not equal b + a; the distance between two points inside a square inch is longer than the distance from Earth to Sun! 12 more stumblers, compiled by noted Prof. Aubrey Kempner. Paperbound, over 40 pages, pocket size. Only 25¢—no further obligation, nothing more to buy. To get your copy of "Paradoxes and Common Sense" mail this ad with 25¢ and your name and address TODAY to: D. Van Nostrand Company, Dept. 263, 120 Alexander St., Princeton, New Jersey (Est. 1848)

Only 25¢

DIGI-COMP 1
 A DO-IT-YOURSELF DIGITAL COMPUTER
 that will not only add, subtract and multiply but can be programmed for a series of operations. It is a faithful mechanical analog of a binary computer, ingeniously designed in plastic and open so its operations can be viewed. Intended primarily as a game and teaching aid, the unit comes in kit form and can be assembled in less than an hour. Comes with an assembly chart and 28-page operations manual showing how to check the unit out, program problems, solve riddles and try experiments such as simulated automatic elevator sequencing. Order by mail. FULLY GUARANTEED • \$5.50 POST PAID
 E. S. R. inc. 34 Label Street, Montclair, N. J.

LIVE! micro-ZOO

FASCINATING NEW KIT provides thousands of specimens of live tropical protozoans for low-power microscopes. Just add water. micro-ZOO grows in hours in a paper cup—lasts for weeks! Kit contains selected species of hydroponically grown encysted protozoans, food, and decelerator for slow motion study. \$1.00. At your Science Museum, or direct from micro-ZOO, Dept. S, Box 334, South Miami, Florida.