books of the week

ALIVE IN THE WILD—Victor H. Cahalane and C. C. Johnson, Eds.—Prentice-Hall, 1970, 244 p., drawings by Robert Candy, \$9.95. Collection of stories by 35 outstanding biologists in the U.S. and Canada, each writing about an animal he has known through years of study.

ANIMAL BEHAVIOR—V. G. Dethier and Eliot Stellar—Prentice-Hall, 1970, 3rd ed., 152 p., illus., \$6.95; paper, \$3.25. Looks at animal behavior from the viewpoint of evolution, from simple to complex nervous systems, deals with stereotype behavior, learning and intelligence, and social behavior.

A BASIC VOCABULARY OF SCIENTIFIC AND TECHNOLOGICAL GERMAN—J. Horne—Pergamon Press, 1970, 334 p., \$8. A practical vocabulary, ranging over the main fields of pure and applied science, including anatomy and physiology, commerce and industry. Contains glossaries and some basic grammar.

BERGGREN'S BEASTS—Sigvard Berggren, transl. from Swedish by Ian Rodger—Eriksson, 1970, 149 p., photographs by author, \$5.95. Tells the story of the origin and management of the Swedish animal park where wild African species live together unsegregated, and lions and zebras adapt to snowy environment.

THE BIG MACHINE—Robert Jungk, transl. from German—Scribner, 1970, 245 p., photographs, paper, \$2.65. The story of the development of CERN (the European Organization for Nuclear Research), describes the scientific teamwork within an international frame.

THE BISECTED BRAIN—Michael S. Gazzaniga—Appleton, 1970, 172 p., illus., \$10. Reviews critically much of recent split-brain research, sensory-sensory integration, psychologic and neurologic effects, cerebral dominance and lateral specialization.

BLUEBELLS & BITTERSWEET: Gardening with Native American Plants—Bebe Miles—Van Nostrand Reinhold, 1970, 168 p., photographs by author, drawings by Victoria I. Miles, \$7.95. Experienced gardener describes the best native American trees, shrubs, vines, bulbs, annuals and perennials for use by ordinary gardeners.

BREEDS OF MEN: Toward the Adulthood of Humankind—J. Samuel Bois—Harper, 1970, 174 p., \$6.95. In this post-Korzybskian treatment of general semantics the author is developing a theoretical base for recognizing, predicting, analyzing, and working with different breeds of men.

CHEMISTRY OF THE ALKALOIDS—S. W. Pelletier, Ed.—Van Nostrand, 1970, 795 p., illus., \$24.95. Reference book, surveys the chemistry of the most important alkaloids and provides selection of reactions and syntheses representative of each class.

CHEMISTRY OF THE IONOSPHERE—A. D. Danilov, transl. from Russian—Plenum Press, 1970, 296 p., diagrams, \$22.50. Deals with elementary processes in the ionosphere, rates of ion-molecular processes, oxygen dissociation, reactions in which nitrogen and its oxides participate, and other reactions.

CITIES ON THE MOVE—Arnold Toynbee—Oxford Univ. Press, 1970, 257 p., illus., maps, \$6.75. A historian looks at the phenomenal growth of mechanized cities from the perspective of the previous history of traditional city development.

CLIMATE THROUGH THE AGES: A Study of the Climatic Factors and Their Variations—C.E.P. Brooks—Dover, 1970, 2nd rev. ed., 395 p., diagrams, maps, paper, \$3. Reprint (1949).

COMPUTERS, CHESS AND LONG-RANGE PLANNING—M. M. Botvinnik, transl. from Russian by Arthur Brown—Springer-Verlag, N.Y., 1970, 89 p., illus., paper, \$3.50. The author, an electrical engineer and world chess champion, analyzes the intuitive thought processes of master chess players and translates them into mathematical form.

CREATING THE HUMAN ENVIRON-MENT: A Report of the American Institute of Architects—Gerald M. McCue, William R. Ewald, Jr. and the Midwest Research. Institute—Univ. of Ill. Press, 1970, 339 p., diagrams, tables, \$15. Examines the social and physical contexts of American life projected to the year 2000, and evaluates the role of the architectural profession, its possibilities and limitations.

DEPRESSION: Its Diagnosis and Treatment. LITHIUM: The History of its Use in Psychiatry—Nathan S. Kline—Brunner/Mazel, 1970, 92 p., tables, \$6. Stresses the clinical aspects of diagnosis and deals with available pharmacotherapy, its selection, incompatibilities, side effects and their management.

A DICTIONARY OF GEOGRAPHY—F. J. Monkhouse—Aldine Pub. Co., 1970, 2nd ed., 378 p., diagrams, maps, \$7.95. A comprehensive guide to some 4,000 geographical terms, with special emphasis on terms used in planning and in quantitative geography.

DIRECTORY OF FEDERAL R&D INSTALLATIONS for the Year Ending June 30, 1969—National Science Foundation—GPO, 1970, 1,044 p., paper, \$6.75. A report to the Federal Council for Science and Technology, provides current information on the identity, location, size, functions and capabilities of the Federal Laboratories

DISEASES OF ATTENTION AND PER-CEPTION—Monte Jay Meldman—Pergamon Press, 1970, 241 p., illus., \$13.50. Brings the findings of neurophysiological investigations of arousal, vigilance and selective attention to bear on clinical psychiatry, and makes an attempt to formulate a new concept of attentional disease.

ELECTRONIC FLASH, STROBE—Harold E. Edgerton—McGraw-Hill, 1970, 362 p., photographs, diagrams, \$22.50. Covers both the theoretical and practical aspects of electronic flash systems today, discusses circuits, the stroboscope, exposure calculations, techniques of light measurements, and specialized applications.

EMBODIMENTS OF MIND—Warren S. McCulloch—MIT Press, 1970, 402 p., illus., paper, \$2.95. Reprint (1965), presents physician-mathematician's attempt to found a physiological theory of knowledge.

ENRICO FERMI: PHYSICIST—Emilio Segré—Univ of Chicago Press, 1970, 288 p., illus., \$6.95. A highly readable biography, written by one physicist-Nobelist about another. Thoroughly documented, the book tells how Fermi received his doctor's degree magna cum laude almost entirely self-taught. explains Fermi's methods and style, the scientific problems he faced and solved, and assesses his achievements.

EVOLUTIONARY BIOLOGY, Vol. 4—Theodosius Dobzhansky, Max K. Hecht and William C. Steere, Eds.—Appleton, 1970, 312 p., plates, illus., \$16. Contributions range from discussion of the diverse approaches to systematics, to evolution of human threat display organs.

FLYING BIRDS—David and Katie Urry, foreword by Peter Conder—Harper, 1970, 192 p., photographs by authors, \$7.95. An extraordinary visual record of the gliding, soaring, hovering and landing of some 25 species of birds observed in England, with informative ornithological text and notes on the photo-technique used.

THE GEOLOGICAL REVOLUTION—Charles L. Drake—Condon Lectures (Univ. of Ore. Bks.), 1970, 55 p., photographs, diagrams, maps, paper, \$2. Generously illustrated and integrated discussion of the findings and hypotheses explaining the evolution of continents, mountain systems, volcanoes, and climatic changes.

HANDBOOK OF THIN FILM TECH-NOLOGY—Leon I. Maissel and Reinhard Glang, Eds.—McGraw-Hill, 1970, 1216 p., illus., \$29.50. Authoritative treatment of the methods of preparation and the nature of thin films, discusses their properties and practical applications, particularly as they pertain to the electronics industry.

HOW TO ENJOY MATHEMATICS WITH YOUR CHILD—Nancy Rosenberg—Stein & Day, 186 p., diagrams, \$6.95. Lively discussion of working with magic squares, number bases, Flatland, conic sections and other mathematical concepts.

IF IT DOESN'T WORK, READ THE INSTRUCTIONS—Charles Klamkin—Stein & Day, 1970, 191 p., \$4.95. A readable, consumer-oriented discussion of the electrical appliance business, marketing methods, warranties and servicing.

INTERNATIONAL DICTIONARY OF METALLURGY, MINERALOGY, GEO-LOGY: Mining and Oil Industries. In Four Languages ENGLISH - FRENCH - GER-MAN-ITALIAN—Angelo Cagnacci-Schwicker—McGraw-Hill, 1970, 1,530 p., \$38.50. Lists more than 27,000 technical terms alphabetically in English, from abacus to zygadite, with indexes referring to French, German and Italian terms.

LIFE AS REVEALED BY THE MICRO-SCOPE: An Interpretation of Evolution—J. LeRoy Conel—Philosophical Lib., 1970, 200 p., 200 illus., \$7.95. Pathologist presents collection of illustrations that support the concept of evolution.

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