books of the week

Books of the Week is an editorial service for readers' information. To order any book listed, or any U.S. book in print, please remit retail price, plus 25c handling charge for each book to Book Order Service, Science News, 1719 N St., N.W., Washington, D.C. 20036. All books sent postpaid.

ALASKA: The Embattled Frontier—George Laycock, introd. by Les Line—Houghton, 1971, 205 p., photographs, maps, \$6.95. Based on first-hand study, including the Aleutian Islands and the route to Pruhoe Bay, the writer presents a broad outline of the struggle between development and spectacular natural wildlife and resources, the struggle between protection and exploitation of Alaska's wilderness.

AMAZONIA: Man and Culture in a Counter-feit Paradise— Betty Meggers—Aldine/Ath-erton, 1971, 182 p., photographs, drawings, \$7.50. Examines the rain forest landscape and the uses to which it has been put by the Indians, presenting a study in cultural

AMERICAN GARDENS: A Traveler's Guide —Frederick McGourty, Jr., Ed.—Brooklyn Botanic Garden, 1971, 105 p., photographs, paper, \$1.50. Handbook features 200 of the finest gardens and arboretums in the U.S. and Canada, selected for their beauty, diversity of plant material and educational value.

ANNUAL REVIEW OF BIOCHEMISTRY, Vol. 40—Esmond E. Snell and others, Eds.—Annual Reviews, 1971, 1206 p., illus., \$13. Contributions range from complex polysacharides, energy conservation by mitochondria, structure and function of histones, to biochemistry of catecholamines, protein-protein interaction, and cyclic AMP.

AN ATLAS OF DETAILED NORMAL PNEUMOENCEPHALOGRAPHIC ANATOMY—Giovanni di Chiro, M.D.—Thomas, C. C., 1971, 2nd ed., 343 p., 291 illus., \$25.50. Diagnostic tool for the neuroradiologic examination of craniocerebral problems. Among expanded features is section dealing with axial transverse encephalography.

BIRDS OF EUROPE—Bertel Bruun; Bruce Campbell, Consult. Ed.—Golden Press, 1971, 321 p., paintings by Arthur Singer, maps, \$16.95. Comprehensive reference to the orders and families, describes and depicts some 516 species for identification, includes habitat studies and distribution maps indicating breeding and wintering ranges.

BLACK AMERICANS: A Psychological Analysis—E. Earl Baughman; foreword by M. Brewster Smith—Academic Press, 1971, 113 p., diagrams, \$6.95. Deals with the psychological aspects of research data of the black/white comparison studies in such areas as stability of I.Q., scholastic performance, self-esteem, psychopathology, family, and leader-shin

CELL MEMBRANES: Biological and Pathological Aspects—Goetz W. Richter and Dante G. Scarpelli, Eds.—Williams & Wilkins, 1971, 180 p., photographs, diagrams, \$16. Monograph deals with a diversity of aspects, from discussion of molecular structure and function of cellular membranes to experimental modification of mitochondrial biogenesis in rat liver cells.

CHANGE AND CONTINUITY IN IN-FANCY—Jerome Kagan with Robert B. McCall and others—Wiley, 1971, 298 p., illus., tables, \$10.95. Summarizes research investigation of longitudinal studies of a large sample of children observed from four months to three years, examining tempera-mental differences, early cognition, and

tempo in child play, to learn about continuities in psychological functioning.

DARK NEBULAE, GLOBULES AND PROTOSTARS—Beverly T. Lynds, Ed.—Univ. of Ariz. Press, 1971, 150 p., illus., 57.50. Topics range from star counts and galactic structure, and polarimentry, to interstellar molecules, composition of interstellar dust, and galactic infrared sources.

EARTHBOUND ASTRONAUTS: The Builders of Apollo-Saturn—Beirne Lay, Jr.—Pren-tice-Hall, 1971, 198 p., photographs, \$6.95. A tale about the personalities, decisions, plans, tests, goals, ebb and tide of success in the development of the launch vehicle that was to take the astronauts to the moon.

THE EVOLUTION OF WAR: A Cross-Cultural Study—Keith F. Otterbein, foreword by Robert L. Carneiro—HRAF Press (Taplinger), 1971, 165 p., \$7; paper, \$5. Analysis of cross-cultural data on primitive war, testing a series of hypotheses concerned with the influence of ecological, economic and sociopolitical factors on warfare.

FORESTS OF LILLIPUT: The Realm of Mosses and Lichens—John H. Bland—Prentice-Hall, 1971, 210 p., photographs, drawings by Stanley Wyatt, \$7.95. Introduces the reader to that realm of fundamental plants few people are even aware of, and shows their interdependent, structured system. Presents mosses and lichens in such a way as to republe the reader to recognize them without enable the reader to recognize them without botanical training or microscope.

THE FOURTH STATE OF MATTER: Plasma Dynamics and Tomorrow's Technology—Ben Bova—St. Martin's, 1971, 181 p., photographs, drawings, \$5.95. In popular style the book describes the behavior of plasmas, the role of plasma physics in the origin of the solar system, in the space environment, and the applications of plasma physics in power and propulsion systems.

THE FUTURE OF TIME: Man's Temporal Environment—Henri Yaker, Humphrey Osmond and Frances Cheek, Eds.—Doubleday, 1971, 512 p., illus., \$10. Collection of essays which deal with the perception of time and locate man's place in time, viewed from the perspective of social and cybernetic revolutions that are altering the very pattern of information processing in human thought.

GUIDE TO IDENTIFICATION OF MARINE AND ESTUARINE INVERTEBRATES: Cape Hatteras to the Bay of Fundy—Kenneth L. Gosner—Wiley-Interscience, 1971, 693 p., drawings, \$29.95. Complete identification manual for invertebrate species inhabiting the shore and shallow sea bordering the northeastern United States.

GUIDES FOR AMERICAN-ENGLISH PRONUNCIATION—Kendall K. Ward and Arthur L. Kaltenborn, Jr.—Thomas, C. C., 1971, 245 p., \$10.75. Presents the student of speech with a detailed analysis of English vocabulary coinage from the classical languages and relates accent patterns to this phenomenon in the structure of some 10,000 polysyllabic words. Deals with accent in prefix and suffix combinations.

HIDDEN VALLEY OF THE SMOKIES: With a Naturalist in the Great Smoky Mountains—Ross E. Hutchins—Dodd, 1971, 214 p., photographs by author, map, \$6.50. Combines a wealth of remarkable close-ups of flora and fauna with the author's informal narrative and informative observations.

HUMAN FACTORS APPLICATIONS IN TELEOPERATOR DESIGN AND OPERA-TION—Edwin G. Johnsen and William R. Corliss—Wiley-Interscience, 1971, 252 p., illus., \$12.95. Comprehensive description of manipulators, walking machines, artificial limbs and man amplifiers—cybernetic machines that perform as appendages of man.

HUMAN HEREDITY AND BIRTH DE-FECTS—E. Peter Volpe—Pegasus (Bobbs-Merrill), 1971, 166 p., illus., paper, \$1.95. Ex-plains how scientists today are creating meth-

ods that may spare future generations such hereditary defects as mongolism, thalidomide deformities, sickle cell anemia, Rh disease, cystic fibrosis, and enzyme deficiency diseases.

IN THE NAME OF LIFE: Essays in Honor of Erich Fromm—Bernard Landis and Edward S. Tauber, Eds.—Holt, 1971, 333 p., portrait, \$10.95. Biographical notes and 24 contributions by scholars and scientists from different countries and disciplines on psychoanalysis, philosophy and science, social and political issues

KINETIC EQUATIONS—Richard L. Liboff and Norman Rostoker, Eds.—Gordon & Breach, 1971, 346 p., diagrams, \$19.50. Papers included in this volume cover wide spectrum of topics, from axiomatics, quantum and relativistics, to properties and solutions, and waves and fluctuations.

LEADERS OF AMERICAN CONSERVA-TION—Henry Clepper, Ed.—Ronald Press, 1971, 353 p., \$10. Short biographies of con-servationists and their contributions, selected by the member organizations of the Natural Resources Council of America.

THE LEPIDOPTERA OF RAPA ISLAND— J. F. Gates Clarke—Smithsonian (GPO), 1971, 282 p., 29 plates, photographs, drawings, maps, \$4.75. Monograph offers detailed treat-ment of Microlepidoptera, based on a study of 4,990 specimens, and includes record of larger moths known to occur on the rugged island in the Pacific. island in the Pacific.

LITTON'S PROBLEMATICAL RECREATIONS—James F. Hurley—Van Nostrand Reinhold, 1971, 337 p., illus., \$7.95. Collection of nearly 600 mathematical puzzles that require analysis and logical deduction, use probability and variables, geometry, Diophantine equations, integers and calculus for solution.

MAJOR APPLIANCE REPAIR GUIDE—Wayne Lemons and Bill Price—TAB Bks., 1971, 288 p., illus., \$8.95; paper, \$5.95. Practical advice on troubleshooting and repair of such home appliances as refrigerators and freezers, dishwashers, automatic washers and driers, garbage disposers, and electric ranges.

MAMMALS of Great Smoky Mountains National Park—Alicia V. Linzey and Donald W. Linzey—Univ. of Tenn. Press, 1971, 114 p., 32 photographs, map, paper, \$3.50. Up-to-date information on the distribution and habits of the various types of Great Smokies' mammals, from shrews to cats, with checklist, elessary and bibliography. glossary and bibliography

MICHAEL FARADAY: A Biography—L. Pearce Williams—Clarion Bk. (Simon & Schuster), 531 p., illus., 36 photographs, diagrams, paper, \$4.95. Reprint of definitive biography first published in 1965, illustrates the full extent of Faraday's contributions to modern physics modern physics.

NATURAL SELECTION IN HUMAN POPULATIONS: The Measurement of Ongoing Genetic Evolution in Contemporary Societies—Carl Jay Bajema, Ed.—Wiley, 1971, 406 p., diagrams, \$9.95; paper, \$4.95. Research papers concerned with man's continuing genetic evolution in relation to physical characteristics, disease, human behavior, and composition of future populations.

PATHOLOGY OF THE NERVOUS SYSTEM, Vol. II—Jeff Minckler, Ed.—McGraw-Hill/Blakiston, 1971, 974 p., illus., \$65. Handbook covers current knowledge of neuropathologic disorders in the standard classifications of metabolic disturbances, degenerations, vascular diseases, deficiencies, intoxications, trauma, birth defects, and neoplasms.

PESTICIDES IN THE ENVIRONMENT, Vol. 1, Part I (in two parts)—Robert White-Stevens, Ed.—Dekker, 1971, 270 p., diagrams, \$23.50. Annotated compendium, describes the chemical and biological properties, functions, utilities and contributions of pesticidal chemicals, and the metabolism of insecticides, fungicides and herbicides.

science news, vol. 100