

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 25¢ handling charge for each book to Book Order Service, Science News, 1719 N St., N.W. Washington, D.C. 20036. All books sent postpaid.

ADVANCES IN BIOPHYSICS, Vol. 2—Masao Kotani, Ed.—Univ. Park Press, 1971, 206 p., illus., \$12.50. Papers concentrate on the theoretical aspects of new work in biophysics, such as the transfer mechanisms in enzyme reactions, the structure of tropomyosin and its crystal, and stochastic theory of reaction kinetics.

ANNUAL REVIEW OF ASTRONOMY AND ASTROPHYSICS, Vol. 9—Leo Goldberg, David Layzer and John G. Phillips, Eds.—Annual Reviews, 1971, 394 p., photographs, diagrams, \$10. Topics of contributions range from meteorites and the early solar system, the nearby stars, to the formation of spectral lines, and developments in the theory of degenerative dwarfs.

CITIES IN CIVILIZATION: The City in Western Civilization, Vol. 1—Herbert Druks and Silvio R. Lacetti—Speller, 1971, 383 p., illus., \$12.50. Brings together a collection of eyewitness accounts from the recorded history of Jerusalem, Athens, Rome, Paris, London and Boston prior to the late 1700's.

CONTINENTAL DRIFT: A Study of the Earth's Moving Surface—Don Tarling and Maureen Tarling—Doubleday, 1971, 140 p., plates, drawings, maps, \$5.95; paper, \$1.95. A highly readable, informative account of the growing scientific evidence for putting the jigsaw puzzle of the formation of the continents together.

CONTROLLING DIABETES WITH DIET—Annette Gormican—Thomas, C. C., 1971, 211 p., illus., paper, \$6.75. Medical nutritionist outlines the essentials of dietary control, caloric food values and food exchange lists.

THE DEVELOPMENT OF QUANTUM THEORY: J. Robert Oppenheimer Memorial Prize Acceptance Speech—Paul A. M. Dirac—Gordon & Breach, 1971, 66 p., 15 photographs, \$7. Reviews in nontechnical terms the exciting period from 1925 onward when the basic ideas of the quantum theory were developing very rapidly.

DIRT: A Social History as Seen Through the Uses and Abuses of Dirt—Terence McLaughlin—Stein & Day, 1971, 182 p., \$6.95. Deals with the relative concept of dirt as illustrated by historical scenes and events, and examines changing conditions and attitudes.

EARTHKEEPING: The War with Nature and a Proposal for Peace—Gordon Harrison—Houghton, 1971, 276 p., \$5.95. An analysis of the origins and characteristics of man's long struggle to master the natural environment for profit and convenience, and some suggestions for more considerate action in using the earth's resources.

HANDBOOK OF LABORATORY UNIT OPERATIONS FOR CHEMISTS AND CHEMICAL ENGINEERS—Jan Pinkava, Czech transl. ed. by J. Bryant—Gordon & Breach, 1971, 470 p., drawings, \$29.50. A valuable aid in designing and modelling small-scale equipment and systems for continuous processes in chemical engineering laboratories.

HAWAIIAN LAND MAMMALS—Raymond J. Kramer—Tuttle, 1971, 347 p., photographs, illus. by Khan Pannell, \$12.50. Reference book, deals thoroughly with the 23 species of land mammals inhabiting the islands of the Hawaiian chain, from brush-tailed rock wal-

laby to feral sheep; includes appendixes with tabulated information.

HEARING AIDS FOR NERVE DEAFNESS—Herman G. Wallenfels—Thomas, C. C., 1971, 116 p., illus., \$7. A practical book, answers patient's questions in general and about specific cases, gives generic description of hearing aid, discusses the problem of noise, music, and binaural hearing.

INFORMATION AND ITS USERS: A Review with Special Reference to the Social Sciences—J. M. Brittain—Wiley-Interscience, 1971, 208 p., \$11.50. Deals with the methods used to establish information needs and requirements in research, teaching and practice. Includes comprehensive review of user studies in the social sciences.

AN ISLAND CALLED CALIFORNIA: An Ecological Introduction to its Natural Communities—Elna S. Bakker—Univ. of Calif. Press 1971, 357 p., photographs by Philip Hyde, illus. by Gerhard Bakker, Jr., maps, \$10. Naturalist's guided tour observing the interrelated life in the tide pools and marshes, in riverlands and the agricultural valleys, the High Sierra forests and desertlands.

MAN AND ATOM: Building a New World Through Nuclear Technology—Glenn T. Seaborg and William R. Corliss—Dutton, 1971, 411 p., photographs, drawings, \$10. Systematic and affirmative review of the progress in atomic affairs, discusses the peaceful applications of the atom in technology, as source of energy, in food production, planetary engineering, in space and underwater, medicine, archeology, and international affairs.

SCIENCE FAIR EXPERIMENTS—Byron G. Wels—Vertex Bk. (Auerbach), 1971, 146 p., photographs, drawings, \$5.95. A former science fair judge offers tips on how to build or present some 43 projects on topics ranging from air pollution to fiber optics.

SUITING UP FOR SPACE: The Evolution of the Space Suit—Lloyd Mallan—Day, 1971, 262 p., photographs, drawings, \$9.95. Describes the step-by-step development of protective and flexible space clothing, including boots and gloves, tells why earlier designs were abandoned in the search for the best maneuverable extraterrestrial suit.

THE UNDERWATER WORLD: A Survey of Oceanography Today—Jim Thorne—Barnes & Noble, 1971, 160 p., photographs, paper, \$1.75. Reprint (1969), outlines the work of the new submersibles and underwater explorations, and describes recommended diving locations around the world.

UNITED STATES GOVERNMENT ORGANIZATION MANUAL 1971/72—Office of the Federal Register—GPO, 1971, 809 p., 45 charts, paper, \$3. Official organization handbook with more than 7,900 subject entries referring to agencies of the legislative, executive and judicial branches, lists names and titles of 5,200 key officials. Includes new locator service on matters of public interest.

THE WATER LORDS: Ralph Nader's Study Group Report on Industry and Environmental Crisis in Savannah, Georgia—James M. Fallows—Grossman, 1971, 294 p., maps, tables, \$7.95. Documents the intricate story of short and long range costs to a community when it makes concessions to industrial companies which in turn deplete and pollute its water resources.

WHEAT: Chemistry and Technology—Y. Pomeranz, Ed.—Am. Assn. of Cereal Chemists, 1971, 852 p., illus., tables, \$35. Monograph provides expert reviews of present knowledge on technological aspects of wheat, flour, dough and end-use products, while chapters on proteins, carbohydrates, lipids and enzymes stress the chemical aspects.

films OF THE WEEK

GASES AND "AIRS" IN THE CLASSROOM. 16mm, b&w, sound, 32 min. Shows the fifth or sixth session of a fifth grade using the Elementary Science Study unit "Gases and 'Airs'." The film conveys the style of a classroom in which these experimental units are used. The hum of voices, the informality and independence of the children's activity, the teacher's role and specific activities of individual children are evident. Audience: teachers, student teachers, parents. Purchase \$160 or rental \$15 from Education Development Center Film Library, Dept. SN, 39 Chapel St., Newton, Mass. 02160.

AIR POLLUTION. 16mm, color, sound. Discusses a problem that continues to grow in direct proportion with our industrial progress. A problem which currently causes the loss of billions of dollars annually and is fast becoming a serious health hazard. The film defines what air pollution is, then views the many manmade and natural causes of pollution. Plant life experiments graphically show how it affects our health. Building and crop damage illustrations detail the extent of financial loss. Air pollution control devices are shown and possible long-range remedies are proposed. Audience: high school, college. Purchase \$135 from Journal Films, Dept. SN, 909 W. Diversey Parkway, Chicago, Ill. 60614.

BALANCING. 16mm, color, silent, 18 min. This film was made by Dorothy Welch, a science teacher in Hollis, N.H. They show fifth and sixth grade students engaged in activities based on the Elementary Science Study unit "Bones." The film shows how a central theme is developed by different children in the same class. While some children make mobiles, others work with homemade equal-arm and pan balances and an array of improvised equipment. Audience: teachers, student teachers, parents. Purchase \$100 or rental \$10 from Education Development Center, Dept. SN, 55 Chapel St., Newton, Mass. 02160.

THE FACE OF BRITAIN. 16mm, color, sound, 20 min. Illustrates by aerial photography the great variety of landforms to be found in the British Isles. The film includes rocks and their structures, the processes modifying them, and landscapes characteristic of chalk, limestone, sandstone, granite and clay. Structure variations in landforms, river formation and coastal features are pointed out. The effects of erosion from weathering and ice action are shown. Audience: geology and geography classes at high school and college level. Purchase \$250 or rental \$12.50 from International Film Bureau, Dept. SN, 332 S. Michigan Ave., Chicago, Ill. 60604.

WHAT DO YOU THINK? 16mm, color, sound, 34 min. Demonstrates the three major states of a child's cognitive development between the ages of 4 and 12. Dr. David Elkind, professor of psychology at the University of Rochester, leads a discussion with six children in which they reveal some of their concepts about the physical world, the moral world and the religious world. A narrator comments on the discussion, and shows how the concepts exemplify the different and distinct stages of mental growth. The film is in three parts, providing the teacher or leader to stop at the end of each section for discussion with the audience. Dr. Elkind bases his approach on the work of Piaget, and the film will be particularly valuable for those studying the Piaget theories. Audience: teacher education programs, psychology students, parents organizations. Purchase and rental information from ACT Films, Dept. SN, 35 W. 45th St., New York, N.Y. 10036.

Listing is for readers' information of new 16mm and 8mm films on science, engineering, medicine and agriculture for professional, student and general audiences. For further information on purchase, rental or free loan, write to distributor.