

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.

AGING IN THE MODERN WORLD: An Annotated Bibliography—Dorothy M. Jones—Office of Aging, HEW (GPO), 194 p., paper, \$1.25. Contains 1,400 references to articles and publications covering 30 areas, from general references to social casework, author index and listing of periodicals included.

AGRICULTURAL PLANNING AND VILLAGE COMMUNITY IN ISRAEL—Joseph Ben-David—UNESCO (Int'l Doc. Serv., Columbia Univ.), 159 p., paper, \$2.50. Deals with the kibbutz and the new moshav, collective settlements in the Negev, the absorption of immigration, and social integration and change.

AMERICAN DRUG INDEX 1964—Charles O. Wilson and Tony Everett Jones—Lippincott, 772 p., \$6.75. Lists alphabetically drugs and drug products under generic and brand names, giving manufacturer, composition, available forms, sizes, dosage and use.

BIKINI OF THE NEIGHBOR WORLD—James R. Randolph, introd. by Robert H. Goddard—Wilson's Printers, 13 p., paper, 50¢ direct to author, Foxhole, Sanbornville, N. H. 03872. Outline for a science fiction story about a round trip to Mars, based on what was believed in 1928.

BLUEPRINT FOR LIFE: The Story of Modern Genetics—Julius Fast—St. Martin's, 206 p., 60 diagrams by author, \$5. Traces the early history of genetic research, shows how the genetic process affects heredity, disease, race and I.Q., and explains the complex structure of the DNA molecule in non-technical language.

CHARLES DARWIN: Evolution by Natural Selection—Sir Gavin de Beer—Doubleday, 290 p., illus., \$4.95. A concise and authoritative biography concentrating on Darwin's scientific contributions, showing the relationship of the theory of natural selection to modern genetics and molecular biology.

THE CONCISE OXFORD DICTIONARY OF CURRENT ENGLISH—H. W. Fowler and F. G. Fowler, Eds., based on The Oxford Dictionary, rev. by E. McIntosh; Etymologies rev. by G. W. S. Friedrichsen—Oxford Univ. Press, 5th ed., 1,568 p., \$5.50; thumb-indexed \$7.50. For this edition the etymologies have been thoroughly revised and for the most part rewritten.

DESERT ANIMALS: Physiological Problems of Heat and Water—Knut Schmidt-Nielsen—Oxford Univ. Press, 277 p., photographs, diagrams, \$7.20. Examines what we know about the resourcefulness of biological adaptation to a hostile environment in man, camel, cattle, donkey, sheep, carnivores, rodents, birds and lizards.

THE DOUBLEDAY FIRST GUIDE TO INSECTS—Su Zan Noguchi Swain—Doubleday, 32 p., illus. by author, \$1.50. Presents handsomely some facts about a variety of common insects.

THE DOUBLEDAY FIRST GUIDE TO WILD FLOWERS—Millicent Selsam—Doubleday, 32 p., illus. by Barbara Wolff, \$1.50. Very attractive guide to identifying field and woodland flowers by color groups.

THE ERIE CANAL—Ralph K. Andrist; Carter Goodrich, Consultant—Am. Heritage Pub. Co. (Harper), 153 p., illus., \$3.95. Colorful pictorial history of one of the important early engineering projects of New York State.

EXPERIMENTS IN NUCLEAR SCIENCE—Grafton D. Chase, Stephen Rituper and John W. Sulcoski—Burgess, 167 p., illus. by Vincent Civiletti, paper, \$3.50. Teacher's Guide, 72 p., illus., paper, \$2.45. Experiments designed to train the student in the basic techniques and principles of using radioisotopes.

THE FIRST BOOK OF THE JUNGLE—John Hoke—Watts, F., 64 p., illus. by Russell Peterson, \$2.50. Tells youngsters about plants and inhabitants of the jungle.

FROM SPINNING WHEEL TO SPACECRAFT: The Story of the Industrial Revolution—Harry Edward Neal—Messner, 191 p., photographs, \$3.95. Highlights the developments that have steadily improved the U.S. standard of living, for young people.

THE FUTURE OF THE RESEARCH LIBRARY—Verner W. Clapp—Univ. of Ill. Press, 114 p., \$4.50. Outlines the major problems facing research libraries—the increasing gap between production and acquisition of materials, obstacles to sharing among libraries, physical maintenance, record-keeping, administration—and suggests possible solutions.

GALVANOMAGNETIC EFFECTS IN SEMICONDUCTORS—Albert C. Beer—Academic Press, 418 p., \$13.50. A comprehensive information source on recent contributions to the analysis of electrical transport phenomena in semiconductors.

GEOLOGY—William C. Putnam—Oxford Univ. Press, 480 p., photographs, diagrams, \$10.95. This account of the science of geology with exceptionally fine illustrations presents a readable elementary course giving a general understanding of the physical world.

GREAT MOMENTS IN ASTRONOMY—Archie E. Roy—Roy Pubs., 128 p., illus. by W. F. Phillips, \$2.75. Tells young people about astronomical observations, from Galileo to Lunik III's jet-propelled camera.

HANDBOOK OF CHEMISTRY AND PHYSICS: A Ready-Reference Book of Chemical and Physical Data—Charles D. Hodgman, Robert C. Weast, Robert S. Shankland and Samuel M. Selby, Eds.—Chemical Rubber Pub. Co., 44th ed., 3,603 p., paper, \$7.50. Student edition of the standard reference volume.

A HUNDRED YEARS OF METALLURGY—W. H. Dennis—Aldine Pub. Co., 342 p., diagrams, \$8.95. Records the history of metallurgical progress over the last century in which metal art was replaced by metal science.

IS THERE LIFE BEYOND THE EARTH? A Scientific Approach in the Light of Past and Current Theories—Thomas Tsung—Exposition Press, 71 p., \$3. A popularly written short review of theories on the origin of the universe and life.

ISLANDS OF THE OCEAN—Delia Goetz—Morrow, 64 p., illus. by Louis Darling, \$2.75. On primary reading level, dramatically illustrates the formation and fauna of islands.

METABOLIC INHIBITORS: A Comprehensive Treatise, Vol. II—R. M. Hochster and J. H. Quastel—Academic Press, 753 p., \$29. Authoritative presentation of the properties of inhibitors of metabolic and enzymatic processes, such as inhibitors of gas transport, of photosynthesis, nitrogen fixation and nitrification, and inhibition due to radiation.

PEACE IS A THREE-EDGED SWORD—Lloyd Mallan—Prentice-Hall, 253 p., \$4.95. A book about the military factors of U.S. deterrent strength and the safeguards available to prevent misuse.

PHYSICAL CHEMISTRY—A. J. Mee with J. C. Speakman—Aldine Pub. Co., 719 p., diagrams, \$5.95. First U.S. edition of four times revised popular English college text, serving chemists as a handbook to the entire field of physical chemistry.

PULMONARY DEPOSITION AND RETENTION OF INHALED AEROSOLS—Theodore F. Hatch and Paul Gross—Academic Press, 192 p., illus., \$5.95; paper, \$3.45. Prepared under the direction of the American Industrial Hygiene Association for the U.S.

OCEANOGRAPHY

Seas Rise Upon Land

➤ THE OCEANS are slowly advancing.

The salty seas have risen upon the shores of the United States as much as nine inches during the past quarter century.

The oceans are spilling over the land because the great polar glaciers have been slowly melting and receding into their icy heights. These melting rivers of ice add tremendous quantities of water to the sea.

Tidal readings from 44 gauges along the coasts of the nation have been summed up by the Coast and Geodetic Survey, U.S. Department of Commerce.

The ocean level has risen highest at Eugene Island, La., a record nine inches, reports William Shofnos, assistant chief of the marine data division in the office of oceanography.

Next highest rise along the Atlantic Coast was five and a half inches at Sandy Hook, N. J. The record increase for the Pacific Coast since 1940 was two inches at San Diego, Calif., and also at Seattle, Wash.

Changes in sea level have far more impact on flat coastal areas than on steep shores, Mr. Shofnos explained. While an increase in the ocean level has little effect on the rocky cliffs of Maine, a similar rise in the Gulf of Mexico can cause the sea to cover thousands of acres of land.

With the earth going through a relatively "warm" period, glaciers have been melting and receding for some time. However in the past five or ten years, a trend indicates glacial recession is slowing down. Significantly, oceanographers note that the rate of

Atomic Energy Commission's Division of Technical Information.

RADIATION AND THE ATMOSPHERE—Aerophysics Laboratory, SRI—Stanford Research Institute, color chart, paper, \$1 direct to publisher, Dept. 300, Menlo Park, Calif. Chart shows how energy is scattered, absorbed and emitted in the earth's atmosphere from the HF region through the ultraviolet.

STRUTENES—CELANDINE (Chelidonium majus L.)—Robert O. Jakobsons—Jakobsons, 55 p., photographs, paper, \$1 direct to author, 1615 Berkeley Dr., Lansing, Mich. 48910. Monograph on one of the most frequently used plants in Latvian folk medicine, in Latvian with 10-page English abstract and bibliography.

SUICIDE OF THE WEST: An Essay on the Meaning and Destiny of Liberalism—James Burnham—Day, 312 p., \$5.95. A treatise expounding the author's thesis that liberalism is not equipped to meet the challenges confronting Western civilization today.

TO THE TOP OF THE WORLD: The Story of Peary and Henson—Pauline K. Angell—Rand McNally, 288 p., photographs, maps, \$4.50. A double biography for young people, about the expedition to the North Pole, centering on the relationship between Peary and his Negro assistant.

TOMORROW'S WEAPONS: Chemical and Biological—J. H. Rothschild—McGraw, 271 p., \$6.95. The former Commanding General, U.S. Army Chemical Corps Research & Development Command, writes about nerve gases and germ warfare, their controlled use and the moral implications of toxic warfare.

A TREASURY OF GREAT AMERICAN QUOTATIONS: Our Country's Life & History in the Thoughts of Its Men and Women—Charles Hurd—Hawthorn Bks., 318 p., \$5.95. Contains 1,500 selections from 329 American public leaders and authors arranged chronologically and annotated, with author index.

WHEN AND HOW TO QUIT SMOKING—Eustace Chesser—Emerson Bks., 126 p., \$2.95. A British physician's sympathetic advice to help smokers break the habit.

YOUR CAREER IN CHEMISTRY—Arnulf K. Esterer—Messner, 190 p., photographs, \$3.95. Discusses the challenges and rewards of a career in the various branches of chemistry and how to prepare for the profession.

• Science News Letter, 85:236 April 11, 1964

ocean rise has been diminishing somewhat during the past few years.

Another reason besides melting glaciers for the sea's rising is the sinking of the land in some places, Mr. Shofnos said.

When land sinks, it seems as if water rises. For instance, the apparent rise in the sea level at Galveston, Texas, has been four and a half inches since 1940, but the actual rise is less because the land there has been settling.

Other rises in tidal water since 1940 include about four inches at Baltimore, Md.; three and a half inches at Hampton Roads, Va.; three inches at New York, N. Y., Washington, D. C., Newport, R. I., New London, Conn., and Charleston, S. C.

Also, two and a half inches at Portland, Maine, Atlantic City, N. J., and Port Pulaski (Savannah), Ga.; two inches at Miami Beach and Key West, Fla.; one and a half inches at Boston, Mass., and Pensacola, Fla.; and one inch at San Francisco, Calif.

A different situation exists in other areas where both the sea and the land are rising. Land in southeast Alaska is rising faster than the sea. This combination makes it seem as if the ocean is dropping, and measurements show that the apparent level of the ocean near Juneau has dropped 14 inches since 1940.

Other apparent falls in the sea level occurred at Los Angeles, Alameda, and Crescent City, Calif., in Astoria, Ore., and Neah Bay, Wash.

• Science News Letter, 85:236 April 11, 1964