

Books of the Week

For the editorial information of our readers, books received for review since last week's issue are listed. For convenient purchase of any U. S. book in print, send a remittance to cover retail price (postage will be paid) to Book Department, Science Service, 1719 N Street, N. W., Washington 6, D. C. Request free publications direct from publisher, not from Science Service.

ANNUAL REPORT OF THE BOARD OF REGENTS OF THE SMITHSONIAN INSTITUTION: Showing the Operations, Expenditures and Condition of the Institution for the Year Ended June 30, 1952—A. Wetmore, Secretary—*Govt. Printing Office*, 461 p., illus., \$2.75. Special articles on a variety of scientific subjects are contained in an appendix.

BIOCHEMISTRY AND PHYSIOLOGY OF NUTRITION: Volume 1—Geoffrey H. Bourne and George W. Kidder, Eds.—*Academic Press*, 569 p., illus., \$13.00. In this work the attempt is made to bring together in one book the most important parts of the vast amount of research in the field of nutrition.

CHROMATOGRAPHIC METHODS OF INORGANIC ANALYSIS: With Special Reference to Paper Chromatography—F. H. Pollard and J. F. W. McOmie—*Academic Press*, 192 p., illus., \$5.50. Providing an introduction to the subject in non-mathematical language, and enough practical details so that the beginner can perform experiments.

COMMUNICATION: From Cave Writing to Television—Julie Forsyth Batchelor—*Harcourt, Brace*, 116 p., illus., \$2.50. A book for children telling about the many ways of conveying thought that have been used by man throughout history.

ENRICHING THE YEARS—Thomas C. Desmond, Chairman—*New York State Joint Legislative Committee on Problems of the Aging*, 199 p., illus., paper, single copies free upon request direct to Senator Thomas C. Desmond, 94 Broadway, Newburgh, N. Y. Specialists here report on the progress made recently toward enlarging understanding of aging persons and the main problems of later life.

FIDDLER CRAB—Mary Adrian—*Holiday House*, 44 p., illus., \$2.00. A nature story for children.

FLOOD CONTROL POLITICS: The Connecticut River Valley Problem, 1927-1950 — William Edward Leuchtenburg — *Harvard University Press*, 339 p., illus., \$5.00. In any river valley, the author points out, the attempt to provide

flood control inevitably entails conflict; it is intensified when the river crosses state lines. Conflict in the Connecticut valley is typical of political struggles of the Franklin Roosevelt era.

FRANZ BOAS: The Science of Man in the Making—Melville J. Herskovits—*Scribner's*, 131 p., \$2.50. A leading anthropologist tells the story of the life of a colleague and the influence of his ideas on our thinking about other peoples.

GREAT MEN OF SCIENCE: A History of Scientific Progress—Philipp Lenard—*British Book Centre*, 389 p., illus., \$3.25, translated from the 2d German edition. Something about the lives and work of leading scientists from Pythagoras of Samos to Friedrich Hasenohrl of Vienna.

HANDBOOK OF SELECTED BIOLOGICAL REFERENCES ON WATER POLLUTION CONTROL, SEWAGE TREATMENT AND WATER TREATMENT—William M. Ingram—*Govt. Printing Office*, Public Health Service Publication No. 214, 66 p., illus., paper, 30 cents. References selected largely for their availability and their potential usefulness to those not trained primarily in biology.

HARVARD CASE HISTORIES IN EXPERIMENTAL SCIENCE: Case 7, Pasteur's and Tyndall's Study of Spontaneous Generation—James Bryant Conant, Ed.—*Harvard University Press*, 61 p., paper, \$1.25. These case studies are intended for the student of the social sciences who needs to be able to relate developments in the natural sciences to those in other fields.

HEALTH MANPOWER SOURCE BOOK: 2, Nursing Personnel—Helen G. Tibbits and Eugene Levine—*Govt. Printing Office*, 88 p., paper, 40 cents. General hospitals employ four times as many nurses per patient today as in 1938, but modern techniques demand more of the nurse.

HIGH JUNGLES AND LOW—Archie Carr—*University of Florida Press*, 226 p., illus., \$4.50. An invitation to ramble with the naturalist author among the delights of the tropic jungles.

HOW NATIONS SEE EACH OTHER: A Study in Public Opinion—William Buchanan and Hadley Cantril—*University of Illinois Press*, 220 p.,

\$5.00. Results of a public opinion survey conducted by UNESCO in nine countries to find out what people of various nations think of each other and whether the "bi-polar world" is a reality.

HOW TO PRINT POSTERS: A Process Developed at the Regional Fundamental Education Centre for Latin America—Jerome Oberwager—UNESCO's *Education Clearing House*, 28 p., illus., paper, limited number free upon request direct to publisher 19, Avenue Kleber, Paris 16^e, France. Describing a process developed at Patzcuaro for use in connection with the literacy campaign. It makes possible the quick and cheap production of posters.

HUMOUR AND HUMANISM IN CHEMISTRY—John Read—*British Book Centre*, 388 p., illus., \$4.50. These miscellaneous notes in lighter vein deal with much more than chemistry.

INTERGOVERNMENTAL RELATIONSHIPS IN HIGHWAY AFFAIRS—Norman Hebden and Ralph S. Lewis—*National Academy of Sciences—National Research Council*, Highway Research Board Bulletin 66, 15 p., paper, 30 cents. The principles suggested in this bulletin are drawn largely from a recently completed pilot study in Maryland.

INVESTIGACIONES ARQUEOLOGICAS EN LA SABANA DE BOGOTA, COLOMBIA (CULTURA CHIBCHA)—Emil W. Haury and Julio Cesar Cubillos—*University of Arizona Press*, 104 p., illus., paper, \$1.00. These people are frequently considered to have had one of the three highest native cultures of Central and South America, but the study reported here indicates the importance was probably greatly exaggerated. Report in Spanish with summary in English.

INVESTIGATION OF WIND FORCES ON HIGHWAY BRIDGES—G. S. Vincent—*National Academy of Sciences—National Research Council*, Highway Research Board Special Report 10, 30 p., illus., paper, 60 cents. Report of tests conducted on scale models.

KEEPING CHICKENS IN CAGES: A Description of the Outdoor Individual Cage System of Poultry Management as Developed Mainly in Southern California—Roland C. Hartman—*Hartman*, 3d ed., 237 p., illus., \$3.50. A working manual for poultrymen.

THE LIFE AND WORK OF SIGMUND FREUD: Volume 1, The Formative Years and the Great Discoveries 1856-1900—Ernest Jones—*Basic Books*, 428 p., illus., \$6.75. Not intended as a popular biography of Freud, the aim of this work is to relate Freud's personality and the experiences of his life to the development of his ideas.

LONE MUSKRAT—Glen Rounds—*Holiday House*, 124 p., illus., \$2.25. A story for children about an old muskrat who had been driven from his home by a forest fire and had to establish new quarters in strange terrain.

MACHINES THAT BUILT AMERICA—Roger Burlingame—*Harcourt, Brace*, 214 p., \$3.50. Telling the story of such basic inventions as the production line, the spinning jenny, cotton gin, McCormick reaper and six-shooter.

THE MARS PROJECT—Wernher Von Braun—*University of Illinois Press*, 91 p., illus., \$3.95. Space travel, says the author, a rocket engineer, cannot be attained by any back-yard inventor, no matter how ingenious, but only by the coordinated work of scientists, technicians and (See p. 238)

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organizers in every branch of modern science. Such talent is already being rallied around the standard of space travel.

MASTER INDEX TO SUPREME PUBLICATIONS MOST-OFTEN-NEEDED RADIO AND TELEVISION SERVICING INFORMATION 1953—*Supreme Publications*, 32 p., paper, free upon request (with 4 cents for postage) direct to publisher, 3727 West 13th St., Chicago 23, by readers mentioning the SCIENCE NEWS LETTER.

THE MEANING OF THE GLORIOUS KORAN—An Explanatory Translation by Mohammed Marmaduke Pickthall—*New American Library*, 464 p., paper, 50 cents. The translator, who is an English Muslim, explains that this work is not the "Glorious Koran" itself, but an attempt to present the meaning of the Koran and something of its charm in English. The Koran, he declares, cannot be translated but must be read in Arabic.

THE NURSING MOTHER: A Guide to Successful Breast Feeding—Frank Howard Richardson—*Prentice-Hall*, 204 p., illus., \$2.95. To answer the questions of expectant mothers who

want to know what preparations they should make for nursing the baby and those who doubt that it is possible. The author is licentiate of the American Board of Pediatrics.

ONE GENERATION AFTER ANOTHER—James Lee Ellenwood—*Scribner's*, 182 p., illus., \$3.00. A humorous book intended to offer parents suggestions on dealing with their children.

PARRAKEETS—Herbert S. Zim—*Morrow*, 64 p., illus., \$2.00. Beautiful drawings illustrate this book for children, telling how to raise, train and breed parakeets.

THE PHILOSOPHY OF SHAKESPEARE—K. J. Spalding—*Philosophical Library*, 191 p., \$3.75. Shakespeare is known to us mainly as a poet and dramatist, but Prof. Spalding has searched all his known works to find the underlying philosophy which unifies them.

PRELIMINARY SURVEY ON METHODS OF TEACHING READING AND WRITING: Part I—William S. Gray—*UNESCO's Education Clearing House*, 66 p., illus., paper, limited number of copies free upon request direct to publisher, 19, Avenue Kleber, Paris 16°, France. To wipe out illiteracy, the report indicates, it will be necessary to at least double the present facilities for primary education and literacy training, and to train hundreds of thousands of teachers.

PRELIMINARY SURVEY ON METHODS OF TEACHING READING AND WRITING: Part II—William S. Gray—*UNESCO's Education Clearing House*, 72 p., paper, limited number of copies free upon request direct to publisher, 19, Avenue Kleber, Paris 16°. This part contains a summary of suggested practices for teaching both children and adults to read and write.

PRESENT KNOWLEDGE IN NUTRITION: Prepared from Articles Published in the Journal Nutrition Reviews—*Nutrition Foundation*, 122 p., paper, \$2.00. Bringing together the latest findings in this field.

PROBLEMS IN ORGANIC CHEMISTRY—Edward G. Rietz and C. B. Pollard—*Prentice-Hall*, 332 p., \$3.95. Intended for use with a standard organic text, and planned to eliminate some of the student's after-class perplexities.

RELATIVITY AND REALITY: A Re-Interpretation of Anomalies Appearing in the Theories of Relativity—E. G. Barter—*Philosophical Library*, 131 p., \$4.75. The author states that this is not an attempt to criticize the mathematical theory of relativity but to apply the criteria of a court of law to the evidence in such a way as to eliminate some of the logical difficulties.

REVIEW OF ASTM RESEARCH: As Studied by the Technical Committees of the Society—Administrative Committee on Research—*American Society for Testing Materials*, 22 p., paper, free upon request to publisher, 1916 Race Street, Philadelphia 3, Pa.

ROUND RIVER: From the Journals of Aldo Leopold—Luna B. Leopold, Ed.—*Oxford University Press*, 173 p., illus., \$3.00. Informal notes and essays by a conversation pioneer.

SEPARATION OF GASES BY FREE DOUBLE DIFFUSION—F. A. Schwertz—*Mellon Institute*, 5 p., illus., paper, free upon request direct to publisher, 4400 Fifth Ave., Pittsburgh 13, Pa.

Science News Letter, October 10, 1953

ENGINEERING

Auxiliary Motor Solves Trolley-Bus Problems

► TROLLEY-BUSES in Uerdingen, Germany, have been made more versatile by the addition of an extra motor to their power plants.

The spare motors permit the buses to go where no trolley wires exist. Thus motor-men can extract their buses from traffic snarls by resorting temporarily to the extra motor, and transit companies can cut capital outlay by dispensing with turn-around loops at the end of the line.

A gasoline-powered motor coupled with a 140-volt, 13-kilowatt electric generator makes up the supplementary power plant. It drives the fully loaded electric buses, carrying 92 persons, about 11 miles an hour. A particular advantage of the auxiliary motor lies in its ability to power the trolley buses across railroad tracks where no trolley wires can be strung.

An experiment of the Uerdingen Waggonfabrick Company, the new system has been declared satisfactory. Modified buses equipped with the extra motor already have been supplied to transit companies in Rheydt and Solingen.

Science News Letter, October 10, 1953

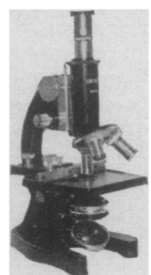
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