

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.

ADVANCES IN VIRUS RESEARCH: Volume V—Kenneth M. Smith and Max A. Lauffer, Eds.—*Academic*, 376 p., illus., \$9.50. Reports of recent research.

AIR, WINDS, AND WEATHER—J. Myron Atkin and R. Will Burnett—*Rinehart*, 58 p., illus. with drawings by Raymond Perlman, paper, \$1. Simple experiments, simply described for elementary school pupils.

ARCTIC RIVIERA: A Book About the Beauty of Northeast Greenland—Ernst Hofer—*Kummerly & Frey*, (Walter Pitkin), 127 p., illus., with photographs by the author, \$14.50. A book of breath-taking beauty containing information of especial interest to those concerned with the Arctic and the Geophysical Year.

THE BADGER—Ernest Neal—*Penguin*, 176 p., illus., paper, 85¢. Reporting the investigation of an English amateur naturalist into the private life secrets of this interesting animal.

BIOLOGY SERVING YOU—Charles Gramet and James Mandel—*Prentice-Hall*, 616 p., illus., \$4.96. A high-school text on living things.

BUZZTAIL: The Story of a Rattlesnake—Robert M. McClung—*Morrow*, 64 p., illus. with drawings by the author, \$2.50. Information about the timber rattlesnake prepared for children.

CAREER OPPORTUNITIES IN BIOLOGY: The Challenge of the Life Sciences—Russell B. Stevens—*Nat. Acad. of Sciences—Nat. Res. Council*, 63 p., illus., paper, \$1. To help the young student to match himself to a job truly appropriate to his personal inclinations and talents.

THE DEFORMATION OF THE EARTH'S CRUST: An Inductive Approach to the Problems of Diastrophism—Walter H. Bucher—*Hajner*, 518 p., illus., \$10. Authorized reissue of the original edition of 1933.

DOCTOR HARRY: The Story of Dr. Herman Lorber—Adam Barnett—*Crowell*, 180 p., \$3.50. Biography of an endearing family doctor who came to this country from Austria-Hungary at the age of 16.

ENERGY AND POWER—Robert Irving—*Knopf*, 143 p., illus. with drawings by Leonard Everett

Fisher, \$2.75. Explaining for young people how the world gets its work done.

ENGINEERS DID IT!—Duane Bradley—*Lippincott*, 121 p., illus. with drawings by Anne Marie Jauss, \$2.95. Describing for children great engineering works of the world.

EXPLORING THE DISTANT STARS: Thrilling Adventures in Our Galaxy and Beyond—Clyde B. Clason—*Putnam*, 384 p., illus., \$5. Written by a layman for other laymen and telling what astronomers have learned about the heavenly bodies without having to go up in a rocket.

FUNDAMENTAL PRINCIPLES OF TRANSISTORS—J. Evans—*Van Nostrand*, 255 p., illus., \$6.75. To give engineers and specialists sound basic knowledge of the subject quickly.

GEOLOGY OF BARRO COLORADO ISLAND, CANAL ZONE—W. P. Woodring—*Smithsonian*, 39 p., illus., paper, 65¢. This island is of particular interest because it has been a wildlife reservation since 1923 and is used as a field laboratory by many scientists.

HENRY HUDSON—Nina Brown Baker—*Knopf*, 146 p., illus. with drawings by George Fulton, \$2.50. Biography of the explorer written for young people.

HUMAN BIOCHEMISTRY—Israel S. Kleiner and James M. Orten—*Mosby*, 5th ed., 808 p., illus., \$9. For the student of medicine, dentistry and related disciplines.

THE HUMAN SUM—C. H. Rolph, Ed., preface by Lord Simon of Wythenshawe—*Macmillan*, 232 p., illus. with amusing drawings by Alfred G. Wurmser, \$3.75. Describing efforts toward family planning especially in England.

INTRODUCTORY PHYSICS: An Historical Approach—Herbert Priestley—*Allyn*, 515 p., illus., \$7.50. Showing the reader how some of the great scientists approached problems and what their results meant.

LONGER LIFE—George Soule—*Viking*, 151 p., \$3. An economist urges revision of our measures that tend to retire and isolate those over 65 thus depriving society of useful human resources.

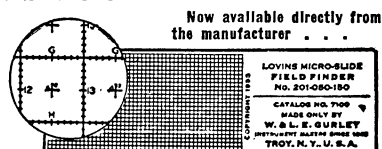
MACROMOLECULES IN CELL STRUCTURE—A. Frey-Wyssling—*Harvard Univ. Press*, 112 p., illus., \$5. Tracing the structure of cytological objects.

NEW BIOLOGY: Number 25—M. L. Johnson, Michael Abercrombie and G. E. Fogg, Eds.—*Penguin*, 126 p., illus., paper, \$6.5¢. The lead article is in celebration of the centenary of Karl Pearson.

THE OKLAHOMA SCIENCE EDUCATION STORY—James G. Harlow and Lyle M. Spencer—*Thomas Alva Edison Foundation*, 19 p., paper, single copies free upon request direct to publisher, 8 West 40th St., New York 18, N. Y. Describing a unique attempt to make the total citizenship concerned with improving science education.

OSTRICHES—Herbert S. Zim—*Morrow*, 64 p., illus. with drawings by Russell Francis Peterson, \$2.50. Telling children about these strange, long-legged birds.

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OUR NUCLEAR FUTURE: Facts, Dangers and Opportunities—Edward Teller and Albert L. Latter—*Criterion Bks.*, 184 p., illus., \$3.50. Telling laymen about the dangers of the atomic age.

THE PENTAERYTHRITOLS—Evelyn Berlow, Robert H. Barth and John E. Snow—*Reinhold*, 317 p., illus., \$10. Survey and evaluation of published literature covering preparation, properties and uses.

PETS FROM THE POND—Margaret Waring Buck—*Abingdon*, 72 p., illus. with drawings by the author, \$3. A book for children on how to collect and keep pond life.

PHYSICS OF FISSION: Supplement No. 1 Soviet Journal of Atomic Energy—In English Translation—S. M. Popova, Ed.—*Atomic Press (Consultants Bureau)*, 140 p., diagrams, paper, \$30. Mostly reviews of experimental and theoretical work on the most important problems in the field.

A PRIMER FOR CORONARY PATIENTS—Robert J. Needles and Edith M. Stoney—*Appleton*, 176 p., illus., \$3.75. A practicing physician and a medical writer explain for the layman what the heart patient needs to know.

PRINCIPLES OF BIOLOGY—W. Gordon Whaley and others—*Harper*, 2d ed., 877 p., illus., \$6.75. A thoroughly revised edition of a text for students majoring in biological sciences as well as those taking only one course.

PRINCIPLES OF PHYSICAL CHEMISTRY: An Introduction to Their Use in the Biological Sciences—Wallace S. Brey, Jr.—*Appleton*, 433 p., illus., \$7. Intended to acquaint the biological scientist with the field of physical chemistry.

THE PROBLEM OF VOCABULARY IN THE POPULARISATION OF SCIENCE—W. E. Flood—*Oliver and Boyd* for University of Birmingham Institute of Education, 121 p., paper, 84¢. Listing words which the author believes the public should know in order to understand newspaper articles and radio or television talks about science. Based on experience in England, with an evident underestimation of the intelligence of the public. One idea is that foreigners must learn English to understand science.

RIVERS, MAN AND MYTHS: From Fish Spears to Water Mills—Robert Brittain—*Doubleday*, 288 p., illus., \$4.50. Telling of the effect of great rivers on the life and development of man.

SAFETY TECHNIQUES FOR RADIOACTIVE TRACERS—J. C. Boursnell—*Cambridge Univ. Press*, 68 p., \$1.75. Even the small quantities of radioactive isotopes used in microanalysis or tracer investigations can be a hazard to health unless safety measures are used.

SCIENCE AND THE MODERN WORLD VIEW—Gerald Holton, Ed.—*Am. Acad. of Arts and Sciences*, 140 p., quarterly, paper, \$1.75, \$6.50 a year. Published as the first quarterly issue of DAEDALUS, with contributions by Philipp Frank, Robert Oppenheimer, P. W. Bridgman, Howard Mumford Jones and others.

SCIENCE FOR ALL: An Annotated Reading List for the Non-Specialist—British Association for the Advancement of Science—*National Book League (Cambridge Univ. Press)*, 177 p., \$2. To help the layman understand physical aspects of the world he lives in.

THE SCIENTIFIC PAPERS OF SIR GEOFFREY INGRAM TAYLOR: Volume I, Mechanics of Solids—G. K. Batchelor, Ed.—*Cambridge Univ.*

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Press, 593 p., illus., \$14.50. Some of the papers are previously unpublished.

TV AND OUR SCHOOL CRISIS—Charles A. Siepmann—*Dodd*, 198 p., \$3.50. Reporting on extensive studies of the possibilities of television as a teaching instrument.

THE THEORY OF THERMAL-NEUTRON NUCLEAR REACTORS: Supplement Nos. 2-3, Soviet Journal of Atomic Energy—In English Translation—A. D. Galanin—*Atomic Press (Consultants Bureau)*, Part I, 191 p., Part 2 106 p., diagrams, paper, \$35 each part. Based on the work of Soviet scientists who have developed a theory of nuclear reactors independently of foreign authors.

A TREATISE ON PLANE AND ADVANCED TRIGONOMETRY—E. W. Hobson—*Dover*, 7th ed., 383 p., paper, \$1.95. Students' reprint of a classic.

THE TREE IDENTIFICATION BOOK: A New Method for the Practical Identification and Recognition of Trees—George W. D. Symonds—*Barrows*, illus. with photographs by Stephen V. Chelminski, \$10. Beautiful photographic keys help you to recognize trees from their leaves, flowers, fruit, bark and other features.

THE TRUE BOOK OF DESERTS—Elsa Posell—*Childrens Press*, 47 p., illus. with drawings by Carol Rogers, \$2. Telling children about the plants, animals and people who make their homes in the deserts.

THE TRUE BOOK OF OCEANS—Katharine Carter—*Childrens Press*, 47 p., illus. with drawings by Mary Gehr, \$2. For children.

WITCHCRAFT—Geoffrey Parrinder—*Penguin*, 208 p., paper, 85¢. A critical study of belief in witchcraft in Europe in years past and in Africa today.

THE WONDERFUL WORLD OF FOOD: The Substance of Life—John Boyd Orr—*Garden City Bks.*, 69 p., illus., \$3.45. Tracing the development of man and his nourishment from the Old Stone Age.

THE WONDERFUL WORLD OF MEDICINE—Ritchie Calder—*Garden City Bks.*, 69 p., illus., \$3.45. The story of man's quest for health from the days of primitive magic to modern public health and medical science.

Science News Letter, March 22, 1958

PSYCHOLOGY

"Brainstorming" No Aid To Creative Thinking

► "BRAINSTORMING," the modern technique of thinking aloud in groups used by advertising agencies and other businesses, does not aid creative thinking as has been claimed.

Instead, it actually hinders it.

This was found in an experiment at Yale University under the direction of Prof. Donald W. Taylor. In the experiment 96 Yale students attempted to solve three different problems. Some worked in groups of four persons and others worked alone.

Those who worked alone did better, not only in terms of the total number of ideas, but also in terms of the number of original and good ideas.

Results of the experiment are reported by Prof. Taylor and two of his graduate students, Paul C. Berry and Clifford H. Block, under the title "Does Group Participation When Using Brainstorming Facilitate or Inhibit Creative Thinking?"

Science News Letter, March 22, 1958

Snoring is due to vibrations in the soft palate and other structures of the throat in response to inflowing and outflowing air.

MINERALOGY

Recently Found Mineral Is Identified and Named

► A MINERAL that has puzzled scientists since a small quantity was first found 11 years ago in New Hampshire has been identified and named in honor of a German mineralogist by an American scientist.

The new mineral challenged identification and description of its properties until recent discovery of relatively rich specimens in Bavaria, Prof. Clifford Frondel of the department of mineralogy and petrography, Harvard University, Cambridge, Mass., reports in the German scientific journal *Naturwissenschaften* (Mid-Jan.).

Prof. Frondel named the new mineral strunzite, in honor of Dr. Hugo Strunz of Berlin, Germany.

Strunzite consists primarily of iron, manganese and phosphorus, with small amounts of magnesium and zinc. It ranges in color from straw yellow to brownish yellow and weighs about two and one-half times as much as water. Prof. Frondel says strunzite forms tufts and felted coatings of tiny hair-like crystals.

Science News Letter, March 22, 1958

MEDICINE

Radioactive Strontium Aids Study of Fractures

► STRONTIUM-90, the deadly, bone-seeking fallout product of nuclear bombs, has something helpful to contribute to medical science.

A new technique, developed by Dr. Norman S. MacDonald of the Atomic Energy Project at the University of California at Los Angeles, employs a medically safe close relative of strontium-90 to trace the body processes which maintain and repair the bone.

Previous studies had shown strontium-90 sought the bone and that its pathway through the body was almost identical to that of calcium. Thus strontium concentrated in the bone as calcium does.

However, the hazardous beta radiation of strontium-90 and its long radioactive lifetime made it unsuitable for use in bone studies of humans. But another form of radioactive strontium, strontium-85, which can be produced in a cyclotron, proved useful.

In the small amounts used in tracer studies strontium-85's radiation, gamma rays, was not harmful to humans, and had a short lifetime. Furthermore the "long range" gamma rays were suitable for external radiation recording techniques.

Thus strontium-85 could be injected into humans, its pathway through the blood stream and incorporation into bone traced. Such information is automatically recorded on a chart known as an osteogram.

Through use of the new technique it has been possible to follow the healing process in bone fractures. It is thought the technique also might be useful in study and diagnosis of bone diseases. Research in this area is underway, Dr. MacDonald said.

Science News Letter, March 22, 1958

EARN EXTRA MONEY

In Your Spare Time . . . At Home

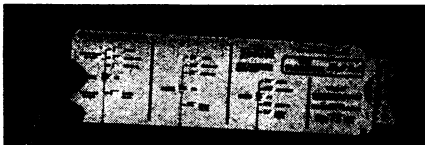
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