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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.

THE ADRENAL CORTEX—I. Chester Jones—*Cambridge University Press*, 316 p., illus., \$7.00. A complete survey of what is known about the adrenal cortex of animals from marsupials to fish, with a more detailed section on the Eutheria, including man.

ALLERGY IN CHILDREN: ABC's of Allergy, Eczema, Asthma, Hay Fever and Year-Round Rhinitis—*American Foundation for Allergic Diseases*, 13 p., illus., paper, 25 cents. This booklet is intended to inform the public about allergy, which ranks third among chronic diseases in the U. S.

AMERICA'S NATURAL RESOURCES—Charles H. Callison, Ed. for the Natural Resources Council of America—*Ronald Press*, 211 p., \$3.75. Bringing together the basic facts for an understanding and intelligent handling of the problem of our natural resources and their depletion.

BOY'S BOOK OF FROGS, TOADS, AND SALAMANDERS—Percy A. Morris—*Ronald Press*, 240 p., illus., \$4.00. Describing nearly all the amphibians found in the United States and telling how to collect and study them.

CURRENT THERAPY 1957: Latest Approved Methods of Treatment for The Practicing Physician—Howard F. Conn, Ed.—*Saunders*, 731 p., \$11.00. This new volume describes the uses of many new drugs and presents therapeutic recommendations.

DISTURBED COMMUNICATION: The Clinical Assessment of Normal and Pathological Communicative Behavior—Jurgen Ruesch—*Norton*, 337 p., \$6.00. Concerning a breakdown of interpersonal communication, or its inappropriate use.

THE EARTH SATELLITE: Man's First True Space Adventure—John Lewellen, foreword by John P. Hagen—*Alfred A. Knopf*, 60 p., illus., by Ida Scheib, \$2.25. Describing for children this new kind of laboratory in the sky and telling something of what we may learn from it.

EDUCATION DIRECTORY, PART 3: Higher Education—Govt. Printing Office, Office of Education, 189 p., paper, 65 cents. One of the interesting facts revealed in this directory is that more than one-third, 744, of our institutions of higher learning are under denominational control, 282 under district or city, 369 under state, and only 10 under Federal control.

ELEMENTARY PRACTICAL ORGANIC CHEMISTRY: Part I, Small Scale Preparations—Arthur I. Vogel—*Longmans, Green*, 347 p., illus., \$4.50. The first part of an elementary text about small-scale preparations.

EXPERIMENTAL PSYCHOLOGY AND OTHER ESSAYS—I. P. Pavlov—*Philosophical Library*, 653 p., illus., \$7.50. Some selections from the work of the great Russian physiologist Pavlov with his autobiography and an evaluation of Pavlov's work by Kh. S. Koshtoyants.

FREEZE-THAW DURABILITY OF AGGREGATE IN CONCRETE—F. E. Legg, Jr., Richard D. Walker and J. F. McLaughlin—*Highway Research Board*, Bull. 143, 26 p., illus., paper, 60 cents.

FROM THE CLOSED WORLD TO THE INFINITE UNIVERSE—Alexandre Koyré—*Johns Hopkins Press*, 313 p., illus., \$5.00. Tracing the path which led from the closed world of the ancients to the open one of today, a path which took only a relatively few years to traverse.

HOME AQUARIUM HANDBOOK—Griffith Borgeson and Lillian Borgeson—*Arco*, Do-It-Your-

self Series, 144 p., illus., \$2.00. For the hobbyist.

HUMAN TYPES: An introduction to Social Anthropology—Raymond Firth—*Nelson (Barnes & Noble)*, rev. ed., 224 p., illus., \$2.25. Discussing the differences in appearance and customs among the world's peoples.

INSECT ENGINEERS: The Story of Ants—Ruth Bartlett—*Morrow*, 128 p., illus. with drawings by the author, \$2.75. The story of a child's introduction to these interesting insects.

LIVING CHEMISTRY—Maurice R. Ahrens, Norris F. Bush and Ray K. Easley—*Ginn*, 2d rev. ed., 582 p., illus., \$5.28. This beautifully presented book is intended to make the study of chemistry a "living experience" for high-school students.

MAYA ART AND CIVILIZATION—Part I, A Study of Maya Art; Part II, The Nuclear Civilization of the Maya and Related Cultures—Herbert Joseph Spinden—*Falcon's Wing Press*, 432 p., illus., \$10.00. Based on Dr. Spinden's doctor's thesis submitted May 1, 1909, and expanded greatly under further study, the work analyzes the designs and the principles of construction of great Mayan architectural works.

THE MODERN UNIVERSE—Raymond A. Lyttleton—*Harper*, 207 p., illus., \$3.50. A considerably expanded version of a series of six programs given over the British Broadcasting Company television.

THE MONKEY KINGDOM: An Introduction to the Primates—Ivan T. Sanderson—*Hanover House*, 200 p., illus., \$6.95. There are about 750 known kinds of living primates, of which man is one. Beautiful photographs, many in color, illustrate this description of man's nearest relatives.

NON-PROFIT CORPORATIONS AND ASSOCIATIONS: Organization, Management, and Dissolution—Howard L. Oleck—*Prentice-Hall*, 460 p., \$10.00. There are hundreds of thousands of non-profit organizations in the United States. This book tells lawyers, administrators and laymen how the organizations are managed.

OUR MANPOWER FUTURE—1955-65: Population Trends, Their Manpower Implications—*Govt. Printing Office*, U. S. Dept. of Labor, 32 p., charts, paper, 30 cents. Charts showing population trends and their implications for college attendance, the labor force, etc.

THE PHYSIOLOGY OF NERVE CELLS—John Carew Eccles—*John Hopkins Press*, 270 p., illus., \$5.75. Developed from three lectures given at Johns Hopkins University. The author is professor of physiology at the Australian National University, Canberra.

THE PSYCHOLOGY OF INSANITY—Bernard Hart—*Cambridge University Press*, 5th ed., 127 p., \$1.75. This new edition is in essentially the same form as the first edition, published in 1912, because its elementary and general principles have been relatively unaffected by the advances of recent years.

SOME COST DATA ON PRESTRESSED CONCRETE BRIDGES—John C. Rundlett, W. E. Dean, John J. Hogan and Arthur L. Elliott—*Highway Research Board*, Bull. 144, 34 p., illus., paper, 80 cents.

TREATISE ON INVERTEBRATE PALEONTOLOGY: Part I, Mollusca 4, Cephalopoda and Ammonoidea—Raymond C. Moore, Ed.—*Geological Society of America and University of Kansas*

Press, 490 p., illus., \$10.00. Many specialists collaborated to produce this comprehensive and authoritative, yet compact, report.

TROPICAL RAIN FORESTS—Delia Goetz—*Morrow*, 64 p., illus. by Louis Darling, \$2.50. Around the world in a belt near the equator are these forests that are always hot, humid and rainy. This book describes for young people the teeming life of this part of the world.

WOMEN DOCTORS OF THE WORLD—Esther Pohl Lovejoy—*Macmillan*, 413 p., illus., \$5.95. Telling something of the lives and contributions of important women physicians.

THE WONDER OF SNOW—Corydon Bell—*Hill and Wang*, 269 p., illus., \$5.00. Telling of snow in its scientific, social and spectacular aspects.

THE WONDERFUL WORLD OF THE SEA—James Fisher—*Garden City Books*, 69 p., illus., \$2.95. This is a book for children of all ages who delight in the wonders of nature.

THE ZEPPELIN IN THE ATOMIC AGE—Edwin J. Kirschner—*University of Illinois Press*, 80 p., illus., \$3.50. Attempting to revive interest in rigid airships, which may hold new promise with the advent of nuclear power.

Science News Letter, April 20, 1957

CHEMISTRY

Atomic Radiation Makes Rocket Fuel Burn Faster

► **ATOMIC RADIATION** may be used to make fuels burn faster in aircraft or rocket engines, a University of Michigan chemical engineer suggested at the American Chemical Society meeting in Miami.

Prof. Stuart W. Churchill reported that beta particles emitted by a powerful bit of radioactive gold can increase the burning speed of fuel by 50%.

The discovery means smaller engines with radioactive "sources" might be used to do the job of bigger ones, since every pound saved in an aircraft part gives an additional saving of ten pounds elsewhere in the plane.

It also suggests that existing engines could be made more efficient or could operate at higher altitudes. Conceivably aircraft rockets or missiles could be equipped with radiation sources to whittle down engine weight in the space required for combustion.

Prof. Churchill emphasized the study was a preliminary one and that the results show an increase in burning speed of a given amount of fuel, not an increase in the power from it.

When the reaction was tested with radioactive sources less intense than the gold, rated at 10,000-curies, the flame's speed "fell off rapidly to the normal value," Prof. Churchill reported. He said the radiation caused certain parts of the fuel to be more reactive chemically and thus to burn faster.

The results with the 10,000-curie source were roughly the same for all fuel air mixtures tried and at pressures ranging from those found between 30,000 and 50,000 feet above the earth's surface.

The studies were sponsored by the U. S. Air Force's Office of Scientific Research through the University of Michigan's Engineering Research Institute.

Science News Letter, April 20, 1957

PUBLIC SAFETY

Chemists Stress Safety For Labs and Factories

► **INDUSTRIAL AND ENGINEERING** chemists attending the American Chemical Society meeting in Miami discussed the need for active safety programs and increased safety precautions to keep pace with the rapid advance of their field.

Prof. Mathew M. Braidech of the National Board of Fire Underwriters told the chemists "rapid technological advances are bringing about the use of new and more hazardous materials and processes, which are posing important safety and protective problems."

The chemical industry could not have reached its present remarkable growth without giving primary consideration to safety codes and technical standards, he said.

Prof. Braidech urged the pooling of practical skills and technical talents through national technical committees representing the various fields concerned. More than 75 laboratories employing nearly 1,800 scientists and technicians are devoting their attention to technical problems of fire and explosion safety.

Dramatic accidents such as explosions and fires are not the only safety problems faced by the chemical industry. J. B. Williamson, chairman of the labels and precautionary information committee, Manufacturing Chemists' Association, said it is the responsibility of the chemical manufacturers to educate customers in the proper and safe use of their products.

The most practical means for giving needed information, he stated, is by warning labels and precautionary statements affixed to the containers.

Science News Letter, April 20, 1957

PUBLIC HEALTH

Mud Pies and Paper Hats Guilty of Murder

► **MUD PIES** made from liquid solutions of insecticides and hats made from empty bags containing residues of insecticides were named as two typical killers of children at the American Chemical Society meeting.

Careless use of pesticides causes the death of 100 to 150 persons each year, Dr. Bernard E. Conley, secretary of the American Medical Association's committee on pesticides, reported.

"Most of these accidents," Dr. Conley warned, "could be prevented if those sirens of disaster, ignorance and carelessness, could be thwarted. For example, deaths regularly occur because insecticides are temporarily stored in bottles that once contained wine, whiskey or soft drinks."

Cautioning the meeting that pesticide poisoning is a complex problem with no simple or pat solution, Dr. Conley asked for a wider publicity program to alert the public to safety awareness in the use and handling of the insect-killers.

Science News Letter, April 20, 1957

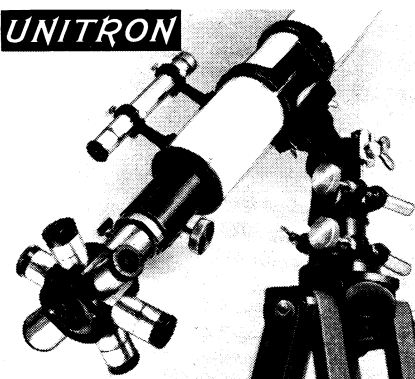
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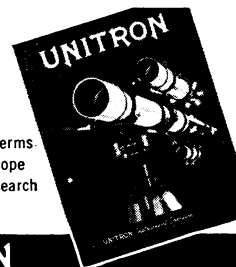
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