

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.

ADRENAL FUNCTION IN INFANTS AND CHILDREN A Symposium—Lytt I. Gardner, Ed.—*State University of New York*, 112 p., paper, \$1.00. The editor points out that the scientific worker in this field can quite properly be looked upon as a creative artist. Abstracts in Interlingua are included.

THE BOMB, SURVIVAL AND YOU: Protection for People, Buildings, Equipment—Fred N. Severud and Anthony F. Merrill—*Reinhold*, 264 p., illus., \$5.95. Designed to show that it is possible to plan and to take action to protect yourself and your family from the effects of bombings.

THE CHEMISTRY OF PETROLEUM HYDROCARBONS Volume I — Benjamin T. Brooks and others, Eds.—*Reinhold*, 664 p., illus., \$18.00. An important reference work for chemists and petroleum engineers.

THE CITY OF HOPE—Samuel H. Golter—*Putnam's*, 177 p., illus., \$3.50. Describing a large sanatorium in California originally intended for tuberculosis patients, but now treating victims of cancer and heart trouble as well.

EXISTENCE THEOREMS FOR ORDINARY DIFFERENTIAL EQUATIONS—Francis J. Murray and Kenneth S. Miller—*New York University Press*, 154 p., \$5.00. Presenting mathematical theories necessary for the understanding use of analog electronic "brains."

FOOD ACCEPTANCE TESTING METHODOLOGY: A Symposium Sponsored by the Quartermaster Food and Container Institute—David R. Peryam, Francis J. Pilgrim, and Martin S. Peterson, Eds.—*National Academy of Sciences—National Research Council*, 115 p., illus., paper, free upon request to Quartermaster Food and Container Institute, 1819 West Pershing Road, Chicago 9, Ill. Of interest to those concerned with buying food on a large scale.

HOW TO BE A SUCCESSFUL TEEN-AGER—William C. Menninger and others—*Sterling*, 256 p., illus., \$2.95. A noted psychiatrist offers help to young people on their personal problems.

HOWARD W. SAMS AUTO RADIO MANUAL—*Howard W. Sams*, illus., paper, \$3.00. Covering 1953 and 1954 models and their servicing.

RELATIVITY FOR THE LAYMAN: A Simplified Account of the History, Theory, and Proofs of Relativity—James A. Coleman—*William-Frederick*, 131 p., illus., \$2.75. An instructor in physics and astronomy at Connecticut College here attempts to make a difficult theme clear to the layman.

Understanding Yourself

By Dr. Ernest R. Groves

This inspirational book, now in its well-merited 8th printing, has helped thousands to live more wisely, more fully, more happily, more effectively—in the best sense, more profitably; for a thorough understanding of self is the very bedrock foundation on which to build for peace of mind and sound mental health.

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THE SCIENTIFIC REVOLUTION 1500-1800: The Formation of the Modern Scientific Attitude—A. R. Hall—*Longmans, Green*, 390 p., illus., \$3.50. By a lecturer in the history of science at Christ's College, Cambridge, where so much of the scientific revolution took place.

TOBATI: Paraguayan Town—Elman R. Service and Helen S. Service—*University of Chicago Press*, 337 p., illus., \$7.00. An anthropologist couple present this study of a small town in far away Paraguay, a country about which pitifully little is known in this part of the world.

WALT DISNEY'S LIVING DESERT: A True-Life Adventure—Jane Werner and the Staff of the Walt Disney Studio—*Simon and Schuster*, 124 p., illus., \$2.95. The story of a famous motion picture with gorgeous pictures in color from the film.

WALT DISNEY'S 20,000 LEAGUES UNDER THE SEA—Elizabeth Beecher from the original story by Jules Verne—*Simon and Schuster*, 64 p., illus., \$1.00. An old classic presented in a new form to delight a new generation of readers.

WANTED — YOUR MAGIC — Joan Gray — *National Association for Mental Health*, 16 p., illus., paper, 10 cents. Showing in brief text and drawings how volunteers can help the mentally ill to recover.

YOUR CANARY—William W. Denlinger—*Denlinger's* 24 p., illus., paper, 60 cents. Written for those who are considering the purchase of a canary.

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BIOCHEMISTRY

Protection From Radiation

➤ PROTECTION AGAINST radiation injury and death, including perhaps that from atom bombs, may come from an alcohol found in yellow bone marrow.

The alcohol is called batyl alcohol. It has also been made synthetically. Its potential effectiveness as a remedy for A-bomb and other radiation damage appears in two reports in *Nature* (Dec. 11).

The reports state that:

1. Patients suffering from too few white blood cells as a result of radium and X-ray treatments were helped by a preparation containing batyl alcohol and related chemicals (alkoxyglycerols and their esters).

2. White mice were saved from radiation death by injections, two hours after radiation exposure, of batyl alcohol.

The patients got the batyl alcohol and related chemicals in a concentrate that they took by mouth. Of the 36 studied so far, 25 responded to the treatment by an immediate increase in white blood cells. In nine, there was no increase but neither was there any further decrease in white cells. Only two continued to have decreases in white cells.

A "striking effect" of the treatment appeared in a nurse who had worked in ra-

HORTICULTURE

Shade Trees Threatened By Bulldozer Blight

➤ SHADE TREES in new communities are succumbing to what Dr. Rush P. Marshall, director of the Bartlett Tree Research Laboratories of Stamford, Conn., has termed "bulldozer blight."

"The blight is decline and death of trees that home owners thought would give them shade long years to come, and the bulldozer is the indirect cause," Dr. Marshall reported to the Connecticut Forest and Park Association in New Haven, Conn. Shade trees on land bought for housing development look fine for a while, but in one to five years many of the trees die, he stated.

The Connecticut scientist pointed out that the bulldozer blade removes the top soil around the trees, depriving the plants of vital food sources as well as ripping up feeding roots.

In addition, the heavy machine packs the soil so tightly that it takes years for such packed soils to recover. This mechanical injury is often coupled with the construction of fills, that change the water table and suffocate the surviving roots.

Bulldozer blight can easily be prevented, Dr. Marshall said, if the heavy machinery is kept away from the trees and if the undergrowth beneath an existing tree is cleared away by hand. If fills are necessary, he advised, wells with proper drainage should be provided around the base of the trunk.

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dium treatment for some years and who had the low white blood cell count of about 2,000.

After four days of treatment with the alkoxyglycerol ester concentrate, her white count had gone up to 3,600. It stayed at this level for five months with only one additional treatment of four days. Then a third course of four days of treatment was given and her white count went to 4,200.

In the studies with the white mice, 13 of 30 survived radiation treatment for 30 days when given batyl alcohol, compared to only four out of 30 untreated animals. The difference is statistically significant, states Dr. T. Edlund, University of Uppsala, Sweden, in his report of the mouse studies.

The studies of patients were made by Drs. Astrid Brohult of Radiumhemmet, Stockholm, and Dr. John Holmberg of the Forskningslaboratoriet LKB at Appelviken, Sweden.

These scientists call the treatment "promising" against the white blood cell anemia caused by irradiation and state that the chemicals "might also give a more general protection of the blood-forming tissues against radiation damages."

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