

# Books of the Week

For the editorial information of our readers, books received for review 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.

**THE ADLER BOOK OF PUZZLES AND RID-  
DLES** or Sam Loyd Up-to-Date—Irving and Peggy  
Adler—Day, 47 p., illus. by Peggy Adler, \$2.50.  
Brain twisters to be enjoyed by ages 8 to 11.

**ADVANCES IN IMMUNOLOGY**, Vol. 2—W. H.  
Taliaferro and J. H. Humphrey, Eds.—Academic  
Press, 390 p., illus., \$12. Reviews cover not only  
immunohistochemistry but all biological aspects of acquired  
and innate immunity.

**AMERICA'S BURIED PAST: The Story of North  
American Archaeology**—Gordon C. Baldwin, introd.  
by Frank H. H. Roberts, Jr.—Putnam, 191 p., photo-  
graphs, \$3.50. The story of the American Indian,  
from the earliest hunters 25,000 years before the  
arrival of Columbus.

**ANIMAL NAVIGATION: How Animals Find Their  
Way About**—J. D. Carthy—Scribner, 151 p., illus.,  
paper, \$1.45. Reprint (1956). A scientific account  
of scent trails, aerial navigators and animal waterways.

**BIOMECHANICS OF THE BODY**—E. Lloyd Du  
Brul—AIBS (Heath), BSCS Pamphlet No. 5, 32 p.,  
illus., eight pamphlets, Sept. to May, \$2.25. Anatomist  
explains the structural features of the human  
body in terms the high school student can understand.

**CASTING PROPERTIES OF METALS AND  
ALLOYS**—A. M. Korol'kov, transl. from Russian—

Consultants, 150 p., illus., paper, \$22.50. Theoretical  
and experimental studies on the structure and surface  
tension of liquid metals and alloys, viscosity and fluidity,  
and shrinkage phenomena in alloys.

**CHEMICAL AND BIOLOGICAL HAZARDS IN  
FOOD**—J. C. Ayres and others, Eds.—Iowa State  
Univ. Press, 383 p., \$4.50. Appraisal and discussion  
by scientists of food additives, both intentional and  
incidental, of harmful and/or pathogenic organisms,  
and microbial toxins.

**CHEMISTRY: A Laboratory Science by the Semi-  
micro Method**—Fred T. Weisbruch and William J.  
Chewning—Heath, 277 p., illus., paper, \$2.76. A  
complete laboratory program of special challenge to  
better-than-average students.

**COAST GUARD IN ACTION**—Erik Bergaust and  
William O. Foss, foreword by Admiral Alfred C. Rich-  
mond—Putnam, 96 p., photographs, \$2.95. Voca-  
tional guide and historical data on the U.S. Coast  
Guard.

**EARTHQUAKES AND VOLCANOES**—Alfred  
Wellman—Day, 48 p., illus. by Bernard Blatch,  
\$1.95. Shows children why earthquakes occur and  
how volcanoes act.

**ENZYME HISTOCHEMISTRY: Its Application in  
the Study of Neoplasms**—M. S. Burnstone—Academic  
Press, 621 p., illus., \$22.50. A comprehensive and  
up-to-date account of the development and application  
of microscopic enzyme histochemistry. Includes appen-  
dixes on the laboratory organic synthesis of potential  
substrates, and on specific laboratory techniques.

**FEDERAL FUNDS FOR EDUCATION: Fields,  
Levels, Recipients, 1959 and 1960**—Penrose B. Jack-  
son and Dolores A. Steinhilber—OE (GPO), 82 p.,  
paper, 60¢.

**FÓSILS: A Guide to Prehistoric Life**—Frank  
H. T. Rhodes, Herbert S. Zim and Paul R. Shaffer—  
Golden Press, 160 p., illus. by Raymond Perlman,  
\$3.50. A colorful guide covering half a billion years  
through clues in fragments of bones, shells and fossil  
impressions.

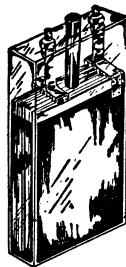
**FROM FLYING HORSE TO MAN IN THE  
MOON: A History of Flight from Its Earliest Begin-  
nings to the Conquest of Space**—Hendrik de Leeuw—  
St. Martin's, 310 p., illus., \$6. Presents factual data  
in nontechnical terms, fast moving and readable ac-  
count of man's efforts to fly.

**FRUITS WE EAT**—Carroll Lane Fenton and Her-  
minie B. Kitchen—Day, 128 p., illus. by C. L.  
Fenton, \$5.50. The history of some of the fruits man  
has been cultivating for hundreds or thousands of years.

**GLOSSARY OF TERMS FREQUENTLY USED  
IN SPACE PHYSICS**—Patrick Thaddeus—Am. Inst.  
of Physics, 19 p., paper, \$1. Covers terms of greatest  
current interest, from Agena to Voyager.

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**HELICOPTERS IN ACTION**—Erik Bergaust and  
William O. Foss, foreword by Igor I. Sikorsky—Put-  
nam, 96 p., photographs, \$2.95. Up-to-date account  
of the history and uses of helicopters, with glossary  
and information on flight schools and designation guide.

**HIPPOCRATES: Father of Medicine**—Herbert S.  
Goldberg—Watts, F., 107 p., \$2.95. Juvenile  
biography.

**HOW TO PRESERVE ANIMAL AND OTHER  
SPECIMENS IN CLEAR PLASTIC**—Cleo E. Har-  
den—Naturegraph, 64 p., illus. by David G. Harden,  
paper, \$1. Explains simple techniques for embedding  
biological specimens for the hobbyist and school teacher.

**INFORMATION PLEASE ALMANAC: Atlas and  
Yearbook 1963**—Dan Golenpaul Associates—Simon  
& Schuster, 17th ed., 928 p., illus., maps, \$2.95;  
paper, \$1.35. Yearly reviews, headline stories, facts  
and information.

**INSECTS AND PLANTS**—Irving and Ruth Adler  
—Day, 48 p., illus. by Ruth Adler, \$2. Tells boys  
and girls some facts about the interrelationships be-  
tween insects and plants.

**INSECTS ARE WHERE YOU FIND THEM**—  
Helen Damrosch Tee-Van—Knopf, 80 p., illus. by  
author, \$2.95. About collecting and preserving and  
thus learning to classify insects.

**INTRODUCTION TO DYNAMIC MORPHOLOGY**  
—Edmund Mayer—Academic Press, 545 p., illus.,  
\$16. Devoted primarily to the study of visible struc-  
tures of organisms or biological morphology.

**LECTURES ON GAS CHROMATOGRAPHY,  
1962**—Herman A. Szymanski, Ed.—Plenum Press,  
282 p., illus., \$10. Topics covered range from an  
introduction to the theory and practice, to a discus-  
sion of the Fisher Prep/Partitioner and its uses.

**LIFT-OFF: The Story of Rocket Power**—Charles  
Coombs—Morrow, 96 p., illus. by R. H. Foor, \$2.95.  
A boy's introduction to the principles of rocketry.

**MAJOR ACTIVITIES IN THE ATOMIC ENERGY  
PROGRAMS**—U.S. Atomic Energy Commission—  
GPO, 599 p., illus., paper, \$2. This annual report  
for 1962 presents highlights of programs, nuclear  
power projects, production and weapons, the Plow-  
share program and other activities.

**MARINE MOLLUSCAN GENERA OF WESTERN  
NORTH AMERICA: An Illustrated Key**—A. Myra  
Keen with Eugene Coan—Stanford Univ. Press, 126  
p., illus., \$4.50. Compilation of names, descriptive  
formulae and illustrations, organized to serve both  
the experienced malacologist and the amateur shell  
collector.

**MOVING INTO MANHOOD**—W. W. Bauer, fore-  
word by Morris Fishbein—Doubleday, 107 p., illus.,  
\$2.95. A physician presents the essential facts grow-  
ing boys need to know about the physiology and  
psychology of sex.

**NASA AND THE UNIVERSITIES**—Homer E.  
Newell and others—NASA (GPO), 91 p., illus.,  
paper, 55¢. Papers on NASA's role in space explora-  
tion, development of space scientists, and the role of  
the universities in the space program.

**NELSON AND THE AGE OF THE FIGHTING  
SAIL**—Oliver Warner, Admiral Chester W. Nimitz,  
U.S.N., and Eds. of Horizon Magazine—Am. Heritage  
(Meredith Press), 153 p., illus., \$3.95. Handsomely  
illustrated volume for young people.

**NUBIAN TWILIGHT**—Rex Keating—Harcourt,  
110 p., 75 photographs by author, maps, \$7.50. Very  
interesting collection of photographs illustrating the  
history of the Land of Kush, and description of the  
salvaging efforts below the New High Aswan Dam.

**NUCLEAR SHELL THEORY**—Amos de-Shalit and  
Igal Talmi—Academic Press, 573 p., \$14.50. Com-  
prehensive textbook dealing with modern methods of  
the nuclear shell model, presenting this important  
mathematical tool in its applications to two-particle  
and many-particle systems.

**THE POWER OF REASON: A Special Report**—  
Robert M. Hutchins—Center for the Study of Demo-  
cratic Institutions, 93 p., illus., paper, free upon  
request direct to publisher, Box 4068, Santa Barbara,  
Calif. Brief quotations from the Center's publications,  
offered to stimulate discussion.

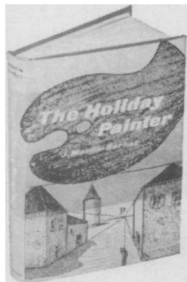
**PROGRAMMED INSTRUCTION: Today and To-  
morrow**—Wilbur Schramm—Fund for the Advance-  
ment of Education, 74 p., paper, free upon request  
direct to publisher, 477 Madison Ave., New York 22,  
N. Y. Report discusses the potential of integrating  
programmed instruction into the educational system.

**PROTEINS AND NUCLEIC ACIDS: Structure  
and Function**—M. F. Perutz—Elsevier (N. Y.), 211  
p., illus., \$9. Three lectures on the structure of pro-  
teins, structure and replication of genetic material,

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and structure and function of substances concerned with biosynthesis of proteins.

**THE PUBLIC LANDS:** Studies in the History of the Public Domain—Vernon Carstensen, Ed.—Univ. of Wis. Press, 522 p., \$6.75. Selection of articles on the history of land grants, from the origins of the system to the administration of grazing districts.

**REAL GASES**—Ali Bulen Cambel, Donald P. Duclos and Thomas P. Anderson—Academic Press, 166 p., \$6.50. Treatment of real gas phenomena at high temperatures with emphasis on the regimes encountered in aerospace applications.

**THE ROCKEFELLER FOUNDATION ANNUAL REPORT, 1961**—J. George Harrar, Pres.—Rockefeller Foundation, 262 p., illus., paper, free upon request direct to publisher, 111 W. 50th St., New York, N. Y. Summarizes training and research programs in the U.S. and abroad, for which more than \$36 million were appropriated in 1961.

**SCIENCE IS EXPLAINING**—Wilbur L. Beauchamp, John C. Mayfield and Paul DeHart Hurd—Scott, 384 p., illus., \$3.96. Intended for seventh-grade science course, includes enrichment sections to stimulate the interested student in further investigation.

**SEARCH FOR THE CITTIE OF RALEGH:** Archeological Excavations at Fort Raleigh National Historic Site, North Carolina—Jean Carl Harrington—National Park Service (GPO), 63 p., illus., paper, 60¢. Report presents all that has been learned through excavations on the ill-fated settlement on Roanoke Island.

**A SELECTED LIST OF U.S. READINGS ON DEVELOPMENT** prepared for the U.N. Science Conference—Saul M. Katz and Frank McGowan—AID (GPO), 363 p., paper, \$1.25. Annotated current bibliography on the application of science and technology to the problems of less-developed nations.

**SPECTRAL WELL LOGGING:** Geochemical Studies of Sedimentary Rocks—B. K. Kudymov; V. A. Sokolov, Ed., transl. from Russian by Paul T. Broneer—Elsevier (N. Y.), 77 p., illus., \$7.50. Presents the results of spectroscopic analysis of samples from Devonian, Carboniferous and Permian layers.

**THE STABILITY OF SLOPES**—I. V. Popov and F. V. Katlov, transl. from Russian—Consultants, 83 p., illus., paper, \$17.50. Concerns patterns of landsliding processes, reworking process of reservoir banks, and types of displacement in hard fractured rocks on slopes.

**SUPERCONDUCTORS**—M. Tanenbaum and W. V. Wright, Eds.—Interscience (Wiley), 149 p., illus., \$7. Symposium papers covering such subjects as metallurgy from superconductors, superconducting niobium-zirconium alloys, and the niobium-tin system.

**TECHNICAL WRITING**—Richard W. Smith—Barnes & Noble, 181 p., paper, \$1.25. An outline on the writing of manuals, reports, proposals and articles for industry and government.

**THE TELEPHONE**—Henry Brinton—Day, 48 p., illus. by Bernard Lodge, \$1.95. Explains for children in pictures and simple language how the telephone works.

**A TREASURY OF SCIENTIFIC PROSE:** A Nineteenth Century Anthology—Howard Mumford Jones and I. Bernard Cohen, Eds.—Little, 372 p., illus., \$6.75. Selections of lucid scientific writing by such men as Paley, Herschel, Faraday, Chambers and Darwin.

**UNDERSTANDING SCIENCE**—William H. Crouse—Whittlesey House, 224 p., 3rd rev. ed., illus. by Jeanne Bendick and Dabney Mahanes, \$3.95. Provides young readers with explanations of the world of science and the inventions that have come out of it.

**UNITED NATIONS CONFERENCE ON THE APPLICATION OF SCIENCE AND TECHNOLOGY FOR THE BENEFIT OF THE LESS DEVELOPED AREAS:** United States Papers, Vols. 1 to 12—GPO, paper, \$7.15. Vols. I and II: Natural Resources, 378 p., 355 p., illus., \$1.25, \$1; III, Agriculture, 262 p., 75¢; IV, Industrial Development, 190 p., 55¢; V, Transportation, 155 p., 50¢; VI, Health and Nutrition, 196 p., 60¢; VII, Social Problems of Development and Urbanization, 89 p., 35¢; VIII, Organization, Planning and Programming for Economic Development, 144 p., 45¢; IX, Scientific and Technological Policy, Planning and Organization, 60 p., 30¢; X, International Cooperation and Problems of Transfer and Adaptation, 63 p., 30¢; XI, Human Resources, 204 p., 60¢; XII, Communications, 162 p., illus., 50¢. For stories see pp. 99, 100, 114, 115, 116, 131, 143.

**VITAMINS AND HORMONES:** Advances in Research and Applications, Vol. 20—Robert S. Harris and Ira G. Wool, Eds.—Academic Press, 707 p., illus., \$16. This volume contains collection of invited papers presented at Symposium on Vitamin E and Metabolism, at Zurich, in 1962.

**WHERE WINTER NEVER COMES:** A Study of Man and Nature in the Tropics—Marston Bates—Scribner, 316 p., illus., paper, \$1.65. Reprint (1953). About the general nature of the tropical environment in relation to man.

**THE WONDERS OF THE ATMOSPHERE**—Louisa Wolfe—Putnam, 128 p., photographs, \$1.95. Tells boys and girls about different properties of the air.

• Science News Letter, 83:156 March 9, 1963

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