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—H. R. Hopkins, *Library Journal*

**The Bobbs-Merrill
Modern Science
Dictionary**

Compiled by A. HECHTLINGER



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Books of the Week

(Continued from page 243)

TEACHING THE THIRD R: A Comparative Study of American and European Textbooks in Arithmetic—Charles H. Schutter and Richard L. Spreckelmeyer, introd. by Max Beberman—*Council for Basic Education*, 46 p., paper, \$1.

THE THIRTEEN STEPS TO THE ATOM: A Photographic Exploration—Charles-Noel Martin, transl. from French by B. B. Rafter—*Watts, F.*, 256 p., 118 photographs, \$4.95. Shows objects of increasing minuteness from snowflakes to electrons, with concise scientific text.

THIS IS NATURE: Thirty Years of the Best from Nature Magazine—Richard W. Westwood, Ed.—*Crowell*, 214 p., illus. by Walter W. Ferguson, 100 photographs, \$5.95. Editor's selection of the fifty finest nature stories published since 1923.

THIS WORLD OF LIVING THINGS—Paul Griswold Howes—*Duell*, 232 p., illus. by author, \$4.50. Naturalist shares with the reader his observations about widely diversified creatures, showing nature's complexities and refinements, in simple language the general reader will enjoy.

TOO MANY ASIANS—John Robbins—*Doubleday*, 215 p., \$3.95. A journalist's account of the current population explosion in India, China and 17 other Asian countries he visited.

TROPHOBLAST AND ITS TUMORS—William B. Ober, Ed.—*N. Y. Acad. of Sciences, Annals*, Vol. 80, Art. 1, 284 p., illus., paper, \$3.50. Papers on fundamental concepts of trophoblastic growth, hydatidiform moles and aspects of choriocarcinoma in men and women.

UNDERSTANDING TRANSISTORS: Allied's Handbook of Transistor Fundamentals—Milton S. Kiver, Ed.—*Allied Radio Corp.*, 64 p., illus., paper, 50¢. Basic theory and concise introduction to transistor electronics.

UNITED STATES FOREIGN POLICY, Study No. 2: Possible Nonmilitary Scientific Developments and Their Potential Impact on Foreign Policy Problems of the United States—Stanford Research Institute—*Senate Committee on Foreign Relations*, 100 p., paper, single copies free upon request direct to publisher, U. S. Congress, Washington 25, D. C. Explores U. S. scientific developments of the next decade.

VANISHING CRAFTS AND THEIR CRAFTSMEN—Rollin C. Steinmetz and Charles S. Rice—*Rutgers Univ. Press*, 160 p., photographs, \$4.75. Portrays craftsmen who still prosper in our time in spite of assembly-line competition, such as the lime burner, the potter and the one-room school teacher.

THE WHALES GO BY—Fred Phleger—*Beginner Bks. (Random House)*, 62 p., illus. by Paul Galdone, \$1.95. A true story for the youngest readers.

WHAT DOES A SCIENTIST DO?—Harry Zarchy—*Dodd*, 64 p., photographs, \$2.50. Shows scientists at work in laboratory, observatory, factory and field.

WHAT MAKES A SCIENTIST—George H. Waltz, Jr.—*Doubleday*, 142 p., illus., \$2.95. Twelve informal biographies of American-born and American-educated scientists, among them Selman Waksman, Glenn Seaborg, Fred Whipple and James Van Allen.

WONDERS OF THE REPTILE WORLD—Helen Gere Cruickshank—*Dodd*, 64 p., illus. by Lon Ellis, \$2.95. Stories of fossils and living reptiles, from brontosaurus to the garter snake.

THE YOUNG INVENTORS' GUIDE—Raymond F. Yates—*Harper*, 104 p., illus., \$2.50. Addressed to young readers interested to apply themselves as improvers in the fields of technology and science, explaining the process of patenting inventions.

ZULU JOURNAL: Field Notes of a Naturalist in South Africa—Raymond B. Cowles—*Univ. of Calif. Press*, 267 p., photographs, \$6. Com-

pilation of selected materials based on the author's technical journals prepared during two field trips, capturing the mood of the country, its seasons and people.

Science News Letter, October 10, 1959

Questions

AGRICULTURE—What effect did irrigation with sewage water have on crop yield? p. 237.

PLANT PHYSIOLOGY—What is the probable name of a new growth inhibitor in peach buds? p. 234.

ROCKETS AND MISSILES—How far up above the earth was the satellite from which the cloud cover photograph was taken? p. 229.

SURGERY—For how long a time did a dog's heart survive without a blood supply? p. 230.

Photographs: Cover, National Aeronautics and Space Administration; p. 229, California Institute of Technology Jet Propulsion Laboratory; p. 246, The Camp Co., Inc.

PALEONTOLOGY

Fossil Plants Clues To Ancient Climate

FOSSIL PLANTS are jigsaw puzzle clues to the climate, vegetation and geologic structure of Nevada as it existed from 15,000,000 to 30,000,000 years ago.

Since 1936, Dr. Daniel I. Axelrod, professor of geology at the University of California, Los Angeles, has studied plant remains preserved in the rocks of the Far West, trying to fill a large gap in the geological history of the region.

By comparing the fossil plants with their modern relatives, he has constructed a map of ancient Nevada in which the present deserts were covered with luxuriant pine- fir forests, the climate was humid, summer rains abundant, and today's 10,000- to 14,000-ft-high Sierra Nevada range was only a gentle 2,000-foot slope.

Over millions of years, as the oceans gradually chilled, the continents grew drier, and mountains and glaciers rose, the summer rains decreased and some of the old plants died out.

Dr. Axelrod has mainly studied the plants and trees of the Pliocene epoch during past years, making annual field trips to the Great Basin, which takes in most of Nevada and neighboring parts of California, Oregon, Idaho, Utah and Arizona.

During the next three years, supported by a \$20,000 National Science Foundation grant, he will go even further back into the history of the Basin. The UCLA geologist will investigate the plant fossils of the Miocene epoch, reconstructing the topography and flora of the area some 15,000,000 to 30,000,000 years ago.

Science News Letter, October 10, 1959

