

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.

AAR RESEARCH ACTIVITIES 1954—*Association of American Railroads*, 40 p., illus., paper, free upon request direct to publisher, AAR, Transportation Building, Washington 6, D. C.

ANTHROPOLOGICAL PAPERS NUMBERS 43-48—M. W. Stirling, Director—*Govt. Printing Office*, Bureau of American Ethnology Bulletin 157, 415 p., illus., paper, \$2.75. Reports of recent research.

THE BOOK OF AMERICAN INDIANS—Ralph B. Raphael—*Arco*, 144 p., illus., \$2.00. For children, but also of interest to their elders.

THE BOTANY OF COOK'S VOYAGES: And Its Unexpected Significance in Relation to Anthropology, Biogeography and History—Elmer Drew Merrill—*Chronica Botanica*, 219 p., illus., \$4.75. Discussion of what plant species were or were not present in a given Pacific Island in the decade following 1769 when the first extensive collections were made in Tahiti.

CUMULATIVE INDEX TO THE FIRST FIFTEEN SEMI-ANNUAL REPORTS TO CONGRESS JANUARY 1947—DECEMBER 1953—U. S. Atomic Energy Commission—*Govt. Printing Office*, 118 p., paper, 35 cents.

DICTIONARY OF AMERICAN PROVERBS — David Kin, Ed., with preface by Mark Van Doren—*Philosophical Library*, 290 p., \$6.00. "Proverbs must be single sentences that hit and run."

EDUCATORS GUIDE TO FREE TAPES, SCRIPTS AND TRANSCRIPTIONS—Walter A. Wittich and Gertie L. Hanson, Eds. — *Educators Progress Service*, 144 p., paper, \$4.75.

THE EVOLUTION OF AN INSECT SOCIETY — Derek Wragge Morley—*Scribner's*, 215 p., illus., \$3.95. An English entomologist describes life in a commune of five separate but friendly nests of wood ants. Then he traces the origins of some of their behavior.

FINANCING HOSPITAL CARE FOR NONWAGE AND LOW-INCOME GROUPS: Volume 3 of Financing Hospital Care in the United States — Harry Becker, Ed.—*McGraw-Hill*, 110 p., illus., \$2.50. Considering the problem of how the "medically indigent" can obtain the care they need.

FORTIETH ANNUAL REPORT OF THE NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS 1954—Jerome C. Hunsaker, Chairman—*Govt. Printing Office*, 74 p., paper, 55 cents. This is the administrative report without technical reports. It tells of the struggle to keep ahead in the race of aeronautic research in spite of decreasing appropriations.

NEW TECHNIQUES FOR EFFICIENT TEACHING

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Prospectors' Supplies

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HANDY MAN'S PLUMBING AND HEATING GUIDE—Maurice H. Reid and Byron B. Courtney—*Arco*, 144 p., illus., \$2.00. To assist the home owner in making simple repairs and adjustments and to understand those done for him.

LABORATORY ANALYSIS OF SOILS: Grain Size and Liquid Limit — A. M. Wintermyer and others—*Highway Research Board*, Bulletin 95, 37 p., illus., paper, 60 cents.

A NEW PICTOGRAPHIC AUTOBIOGRAPHY OF SITTING BULL—Alexis A. Praus—*Smithsonian*, 4 p., 7 plates, paper, 35 cents. A set of self-portraits drawn and colored by the famous Indian warrior for a little girl whose parents were kind to him while he was a prisoner.

OBITUARY NOTICES OF FELLOWS OF THE ROYAL SOCIETY — *The Royal Society*, 264 p., illus., 30 s. Brief biographies and portraits of deceased leaders of science in England.

ONE HUNDRED MATHEMATICAL CURIOSITIES—William R. Ransom—*J. Weston Walch*, 212 p., illus., paper, \$3.00. A collection of amusing jokes, puzzles, games and oddities.

RAILROAD TRANSPORTATION: A Statistical Record 1921-1953—*Association of American Railroads*, 43 p., paper, free upon request direct to publisher, AAR, Transportation Building, Washington 6, D. C. Statistics assembled from reports of the Interstate Commerce Commission.

SEVENTEENTH SEMI-ANNUAL REPORT OF THE ATOMIC ENERGY COMMISSION—Lewis L. Strauss, Chairman—*Govt. Printing Office*, 138 p., illus., paper, 45 cents.

SOUTH COL: A Personal Story of the Ascent of Everest—Wilfrid Noyce—*William Sloane*, 300 p., illus., \$5.00. This poetically written book with its lovely illustrations lets you know what it is like to reach the heights.

THE TRUE BOOK OF ANIMAL BABIES — Illa Podendorf—*Childrens Press*, 47 p., illus., \$2.00. A book of colored pictures and easy text telling how baby animals need and receive care.

THE TRUE BOOK OF DINOSAURS — Mary Lou Clark—*Childrens Press*, 47 p., illus., \$2.00. Introducing young children to the strange beasts of long, long ago.

THE TRUE BOOK OF WEEDS AND WILD FLOWERS—Illia Podendorf—*Childrens Press*, 47 p., illus., \$2.00. A beautiful book for little children.

VERY MUCH ALIVE: The Story of a Paraplegic—Terry McAdam—*Houghton Mifflin*, 146 p., \$3.00. Telling how men can learn to live with a handicap that results in paralysis from the waist down (or from the neck down), to work and even have fun.

WHEN THE MIGRANT FAMILIES COME AGAIN: A Guide for Better Community Living—Interdepartmental Committee on Children and Youth—*Govt. Printing Office*, 27 p., illus., paper, 15 cents. The coming of migrant laborers for a brief stay during the harvest presents the community with varied problems of health, education, and social opportunity. Here are suggestions for handling them.

WORLD OUTSIDE MY DOOR—Olive Bown Goin—*Macmillan*, 184 p., illus., \$3.50. For the reader interested in animals and how they live and the ways biologists have of finding out about them. The author's door is at the edge of a woodland in Gainesville, Fla.

Science News Letter, February 26, 1955



Spring Flowers Now

► THIS IS the time of year when one is apt to take a pessimistic view of the poet's rhetorical query, "If winter comes, can spring be far behind?" It seems, indeed, very far behind as we approach the middle of winter's last half.

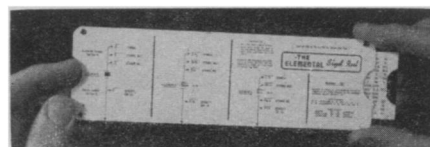
Yet you can have spring flowers now. They will brighten up your home, conjure you out of your late-February blues and convince you that perhaps the poet was right after all.

All you have to do is to go out and cut a few sprigs from one of the spring-flowering trees or shrubs. Lilac, cherry, apple, or perhaps, best of all, forsythia or golden bells will usually give good results. Select a branch that has rather large buds, for these are most likely to conceal the coming flowers.

Put your sprigs in a vessel of water in a warm place and be sure to see that the water does not dry out or become foul or sour. In not too long a time, about a week or two, you should see the twigs respond to the artificial spring temperature you have created with an offering of foliage and bloom.

Actually, this is what the florists have done in essence when they force the woody branches now offered in the early spring market. There are other tricks, too, that the ambitious layman can do if he wishes to get his spring flowers ahead of time. The simplest is merely to pre-immense the

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PHILOSOPHICAL LIBRARY BOOKS

☐ **THE GYROSCOPE APPLIED** by K. I. T. Richardson. A book, *The Gyroscope and Its Applications*, was published in 1946 when secrecy restrictions prevented reference to many interesting achievements and possibilities. Since then considerable technical advances have been made and the secrecy restrictions have been relaxed to some extent, although they still apply in many instances. The present book therefore, based on that published in 1946, has been almost entirely rewritten describing much that is new but at the same time incorporating most of the information given in the first version, although this is presented in a different manner and in some cases from a different viewpoint. \$15.00

☐ **THE ELEMENTS OF CHROMATOGRAPHY** by T. I. Williams. Although less than a decade has passed since the appearance of *An Introduction to Chromatography*, so much new work has been published that a completely new book, rather than a revised edition of the old one, seemed called for. In particular, paper partition chromatography has developed enormously since 1946, and ion-exchange chromatography, which proved so spectacularly successful in Manhattan Project, had then scarcely been described at all. Both these methods have received due attention here. \$4.75

☐ **FLIGHT HANDBOOK.** The fundamental theory of aerodynamics is simply explained, and the design principles of each class of aircraft, from balloons to missiles, are lucidly described. Engineering principles in piston engines, gas turbines, ramjets, pulse-jets and rockets are discussed, and the theory of aerial navigation is also covered.

On the practical side, there is a vast amount of information on modern aircraft and engine construction, on auxiliaries, controls and instruments, furnishings and fittings, armament, landing gear and similar matters. Types of aircraft dealt with in detail include balloons, airships, gliders, sailplanes, piston-engined and jet fixed-wing machines, helicopters and other rotorcraft, and even guided missiles. *More than 200 photographs and drawings.* \$6.00

☐ **GLASS REINFORCED PLASTICS** edited by Phillip Morgan. Glass reinforced plastics is a many-sided subject, and a proper study of it involves organic chemistry, design, moulding processes and the major applications. Each of these branches might, in itself, fill a small book, and the present volume is therefore an attempt to gather together the essential facts for the general reader, yet explained in sufficient detail for the specialist. \$10.00

☐ **DEVELOPMENT OF THE GUIDED MISSILE** by Kenneth W. Catland. This edition has been completely revised and greatly enlarged, a number of useful features having been added. New chapters deal with problems of propulsion, research into rocket techniques and requirements, and post-war work on guided bombs. Of particular importance is the detailed survey of Russian potentialities for long-range rocket development. An appendix reveals some details of the telemetering equipment used in British missiles, and another appendix shows photographs, to scale, of over 40 notable rockets from various countries. The table of characteristics which was an important feature of the first edition has also been enlarged, and now provides data on 140 powered rockets from eight countries. *Illustrated.* \$4.75

☐ **ASPECTS OF DEEP SEA BIOLOGY** by N. B. Marshall. After tracing the growth of deep sea biology, one of Mr. Marshall's aims has been to build up, chapter by chapter, an integrated account of oceanic life. This life is seen to be disposed in patterns—patterns related to the physical structure of the ocean and to the interplay of living activities. *Illustrated.* \$10.00

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• RADIO

Saturday, March 5, 1955, 5:00-5:15 P.M. EST
"Adventures in Science," with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS station.

Dr. Kalman Jacob Mann, director general of Hadassah's Medical Organization in Israel, will discuss "Medicine in Israel."

twigs in a pan of rather warm water for a few minutes. For best results, the temperature should be just above that which is comfortable to your hand. This extra stimulus will speed up blossoming by several days.

Some florists get good results from hardy, woody branches by pounding the bottom of the stem to a pulp. This maceration opens up the vessels carrying water to the buds, speeding up the blossoming process. It will not work with soft, pulpy sprigs.

Another of the tricks involves a little more in the way of materials and labor. This is to expose the sprigs in a closely covered vessel to the fumes of ammonia, chloroform or several other chemicals. If this is tried, the twigs should be left in the fumes for at least half an hour.

These treatments will work with almost any free-flowering, woody plant that blossoms in the spring. Earlier in the winter they would not have worked because many buds have to go through a somewhat obscure physiological process to which we have given the convenient but not wholly clarifying name of "ripening."

This process goes on slowly during the winter and by the time the corner of the season is turned and spring, though still distant is approaching, the buds are ready to respond to the proper stimuli of water and warmth, even if they are applied a little prematurely.

Science News Letter, February 26, 1955

Questions

BIOLOGY—How are parakeets used to study cancer? p. 136.

☐ ☐ ☐

CHEMISTRY—How much pressure and how high a temperature was used to produce the first man-made diamonds? p. 131.

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ELECTRONICS—The sunspot cycle will change the properties of which atmospheric layer, perhaps allowing foreign TV reception? p. 130.

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MEDICINE—What effect does smoking have on the heart? p. 133.

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PUBLIC SAFETY—About how large an area would an H-bomb contaminate? p. 134.

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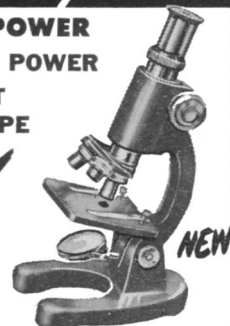
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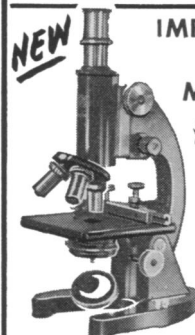
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