• First Glances at New Books

Agricultural Economics

THE AMERICAN FARMER AND THE EXPORT MARKET—Austin A. Dowell and Oscar B. Jesness-Univ. of Minnesota Press, 269 p., \$2. Whoever has read Henry Wallace's pamphlet, America Must Choose (and all Americans ought to have read it by now), might do very well to follow it up with this book. For although Professors Dowell and Jeness have presumably written their text independently of Secretary Wallace, their discussion parallels so closely the principles he had laid down that it might almost be considered a commentary upon it. They, like he, state the dilemma, and conclude that "The answer will be supplied largely by the attitude taken by the American people. Will they decide in a short-sighted spirit of narrow selfishness or will they really seek the objective of the greatest longrun gains?"

Science News Letter, April 21, 1934

Archaeology

BETH SHEMESH (PALESTINE)—Elihu Grant-Biblical and Kindred Studies, Haverford, Pa., 222 p., \$4. A running account of the archaeological investigation of a Canaanite city later occupied by the Israelites. The account may be called popular in the sense that a layman may understand and learn from it. and there is generally interesting information about the trials and excitements of an expedition. The book is primarily a book for study, however, stressing as it does the archaeological significance of the site and its contents. There are numerous photographs and drawings, including a number of pages showing pottery shapes and designs.

Science News Letter, April 21, 1934

Automotive Engineering-Chemistry

RUBBER AND AUTOMOBILES—Colin MacBeth—Rubber Growers' Association, London, 155 p. A few years ago the automobile manufacturer used very little rubber other than in tires and tubes, a usage which now absorbs 80 per cent. of the raw rubber produced. Today rubber is being used extensively throughout the construction of automobiles. This handbook illustrates and describes where rubber can be used effectively in automobiles.

Science News Letter, April 21, 1934

Botany

THE EVOLUTION AND DISTRIBUTION OF FLOWERING PLANTS. VOL. I: THE APOCYNACEAE AND ASCLEPIADACEAE—

John Muirhead Macfarlane—Noel Printing Co. (Philadelphia), 181 p., 2 pl., \$2.50. Veteran of many years of teaching and research at the University of Pennsylvania, with a thorough European training back of that, Prof. Macfarlane here begins to set forth the fruits of his long labors on the evolution, migrations and distribution of the higher flowering plants. In the present volume, which is intended as but the first of a series, he deliberately singles out for special treatment a pair of the most difficult of the plant families. Prof. Macfarlane's work will be of interest and value alike to taxonomist, ecologist and student of evolution.

Science News Letter, April 21, 1934

Ecology—Sociology

SKY DETERMINES—Ross Calvin—Macmillan, xii+354 p., \$2.50. Rain means everything in New Mexico, and always has: cacti and tough shrubs fight each other with their spreading roots, Indian priests chant for clouds and in the old days killed the missionaries who tried to stop them, ranchers war over water-holes and politicians over irrigation dams. The always-impending danger of parching death conditions life in the Southwest in a thousand ways. Dr. Calvin has caught the drama of it, and presents it in a pleasing literary style in this book.

Science News Letter, April 21, 1934

Education—Biology

THE TEACHING OF BIOLOGY—William E. Cole—Appleton-Century, xiv—252 p., \$2. Scientific pedagogy well tempered with common sense will make this a valuable book. It will of course be especially valuable to the young teacher; but there are in it many suggestions about new apparatus and methods that will make it worth while also to the veteran who aspires to keep his teaching up to date.

Science News Letter, April 21, 1934

Embryology

LABORATORY ATLAS OF THE 13-MM PIG EMBRYO—Edward A. Boyden—Wistar Institute Press, iv+100 p., \$2. Second edition of a laboratory guide indispensable in the beginning course in vetebrate embryology.

Science News Letter, April 21, 1934

Endocrinology

RECENT ADVANCES IN ENDOCRINOL-OGY—A. T. Cameron—*Blakiston's*, 365 p., \$3.50. Prof. Cameron deserves much praise and gratitude for this compact and comprehensive summary of the voluminous endocrine research of recent years. The book is too technical for the lay reader unless he has considerable knowledge of biochemistry and of medical terms. But it will prove a boon to scientists other than endocrinologists who wish to keep abreast with the rapid developments in this important and popular field. There are numerous helpful charts and diagrams besides the usual photographic illustrations of endocrinologic subjects and an adequate index.

Science News Letter, April 21, 1934

Engineering

THE DESIGN AND USE OF INSTRU-MENTS AND ACCURATE MECHANISM— T. N. Whitehead-Macmillan, 283 p., \$3.50. How precision machine tools and scientific design cooperate to produce the instruments and precision machinery that makes possible so much of our industrial civilization is thoroughly and comprehensively discussed. The author is the son of Prof. A. N. Whitehead. He was recently scientific officer of the British Admiralty and is now assistant professor in the Harvard School of Business Administration. The book is written for designers of instruments but the principles are of wider application. Science News Letter, April 21, 1934

Medicine

You Must Relax: A Practical Method of Reducing The Strains of Modern Living—Edmund Jacobson—McGraw-Hill, 201 p., \$1.50. Dr. Jacobson has written this book for the many people who need to relax but cannot do so suc- (Turn to Page 254)

DUST BETWEEN THE STARS

an address by

Prof. Joel Stebbins

Director of the Washburn Observatory at the University of Wisconsin

Wednesday, April 25, at 4:30 p. m., Eastern Standard Time, over Stations of the Columbia Broadcasting System. Each week a prominent scientist speaks over the Columbia System under the auspices of Science Service.

-NEW-----McGraw-Hill **BOOKS**

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By PAUL RADIN, Lecturer in Anthropology, University of California. 141 pages, \$1.50.

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By WILLIAM T. SKILLING, State Teachers College, San Diego, California. 758 pages, \$1.70.

A general science text that carries the student to a real feeling for the scientific spirit.

Introduction to Cytology. New third edition

By Lester W. Sharp, Professor of Botany, Cornell University. Mc-Graw-Hill Publications in the Agricultural and Botanical Sciences. 567 pages, \$5.00.

Deals chiefly with the structural and genetical aspects of cytology. This successful text has been brought completely up to date.

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FIFTY YEARS OF BIRD MIGRATION IN THE ANN ARBOR REGION OF MICHIGAN-Norman Wood and A. D. Tinker-Univ. of Michigan Press.

GENERAL ZOOLOGY—Frederick H. Krecker –Holt.

HANDBOOK OF FROGS AND TOADS-Anna Allen Wright and Albert Hazen Wright-

Comstock, \$2.50.
INSECTS AS MATERIAL FOR STUDY—G. D. Hale Carpenter—Oxford, \$1. LIONS WILD AND FRIENDLY—E. F. V. Wells

-Viking, \$2.50.

Man's Place Among the Anthropoids-W. K. Gregory—Oxford, \$2.50.

TERMITES AND TERMITE CONTROL-Ed. by C. A. Kofoid-Univ. of California Press,

Miscellaneous

ALCHEMY, THE CHILD OF GREEK PHILOS-OPHY-Arthur J. Hopkins-Columbia

AMERICAN SOCIAL PROBLEMS-W. G. Beach and E. E. Walker-Stanford Univ., \$2.10. THE ART OF COLORING PHOTOGRAPHIC PRINTS—J. Carroll Tobias—American Photographic Publ. Co., \$1.50.

Asymmetric Synthesis and Asymmetric INDUCTION—Patrick D. Ritchie—Oxford, \$2.75.

BERNARDO DE GALVEZ IN LOUISIANA-John Walton Caughey-Univ. of Calif. Press. THE BACKGROUND OF MODERN SCIENCE: Alchemy and Astrology in the 14th and 15th Centuries-Lynn Thorndike-Colum-

bia Univ. CREATION'S Doom—D. Papp—Appleton-Century, \$3.

DESIGN AND USE OF INSTRUMENTS AND ACCURATE MECHANISM—Thomas North Whitehead—Macmillan, \$3.50.

FIX IT YOURSELF-Popular Science Month-

GILGAMESH-W. E. Leonard-Viking, \$2. THE HISPANIOLA TREASURE—Cyrus H. Karraker-Univ. of Pennsylvania, \$2.

HISTORIC HOUSE MUSEUMS-L. V. Coleman -Amer. Assn. of Museums, \$2.50.

Infra-Red Photography—S. O. Rawlings -American Photographic Publ. Co., \$1.50. LATIN AMERICAN MUSIC—Eleanor Hague— Fine Arts Press, \$3.50.

MENACE IN THE AIR—Elvira K. Fradkin— Macmillan.

Moods of the Wissahickon — Herman Miller—Univ. of Pennsylvania, \$2. An Oriental View of American Civil-

IZATION—No-Yong Park (Pao)—Hale, Cushman and Flint, \$1.50.

THE ROLLEIFLEX BOOK—Walther Heering —American Photographic Publ. Co., \$2. ROMANTIC COPPER—Ira B. Joralemon—D.

Appleton-Century, \$3.
The Rebuilding of Blighted Areas— Clarence Arthur Perry-Regional Plan Assn., \$2.

THE SCIENCE OF WORK-Morris S. Viteles

—Norton, \$3.75.
A SCIENTIST IN THE EARLY REPUBLIC; Samuel Latham Mitchell, 1764-1831—Courtney R. Hall—Columbia Univ.

THE SINGLE WOMAN—Robert Latou Dickinson and Lura Beam-Reynal & Hitchcock, \$5.

SIR ISAAC NEWTON'S MATHEMATICAL PRIN-CIPLES OF NATURAL PHILOSOPHY, AND HIS SYSTEM OF THE WORLD. Translated into English by Andrew Motte in 1729, Revised by Florian Cajori-Univ. of Calif. Press, \$10.

SKY DETERMINES-Ross Calvin-Macmillan, \$2.50.

WOODWORKER'S TURNING AND JOINING MANUAL-Popular Science Monthly, \$1.

Continued

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First Glances at New Books

cessfully because they do not know how. He has developed a system of progressive relaxation which was the subject of a scientific publication a few years ago. The present volume is written in nontechnical style and gives practical directions, with photographic illustrations, which the layman can follow himself. In addition, Dr. Jacobson discusses some of the conditions for which he believes relaxation will prove helpful. For aggravated conditions of nervous tension he points out that this book can best be used as a supplement to the physician's advice. Science News Letter, April 21, 1934

Mental Hygiene

MENTAL HYGIENE IN THE COMMU-NITY—Clara Bassett—Macmillan, 394 p., \$3.50. All persons interested in or responsible for the welfare of their community—even so small a part of it as the individual family—will find this book interesting and helpful. Especially pertinent to present problems are the chapters, Mental Hygiene and Industry, and Mental Hygiene and Recreation.

Science News Letter, April 21, 1934

Ornithology

A FIELD GUIDE TO THE BIRDS-Roger Tory Peterson-Houghton Mifflin, xxi+167 p., \$2.75. Built around some scores of beautifully drawn and scientifically accurate plates, colored and black-and-white, this book attacks the much-worked task of field ornithology from a new angle. It will be valuable alike to the teacher, the leader of field groups and the solitary student of birds and their ways. Species included are all those found in eastern North America. Science News Letter, April 21, 1934

Physics

INTRODUCTION TO MODERN PHYSICS —F. K. Richtmyer—McGraw-Hill, 747 p., \$5. This second edition, appearing six years after the first, includes new material made necessary by the rapid advance of physics. Among the revisions, the chapter on the nucleus has been rewritten to include material on new isotopes, artificial disintegration of the elements and the neutron. New chapters on "The Vector Model of the Atom" and "Matter Waves" have been added and there are new appendices on relativity and group velocity. While Dr. Richtmyer contends that it is an introduction to, and in no sense a compendium of, modern physics, it is valuable for reference purposes as well as guide for the serious student.

Science News Letter, April 21, 1934

Physics-Astronomy

THE ARCHITECTURE OF THE UNI-VERSE—W. F. G. Swann—Macmillan, 428 p., \$3.75. A very thorough look at the universe, ranging from the dogmas of natural philosophy to a discussion of science and theology, with inquiries on the way into atomic theories, the fate of the universe, relativity, space and time and vital processes. Dr. Swann is one of the leading expositors of science in America today as well as director of the Franklin Institute's Bartol Research Foundation. The book is for the educated reader and while mathematical symbolism has been avoided so far as possible the profitable technicalities of mathematical reasonings are included.

Science News Letter, April 21, 1934

Psychology

PRINCIPLES AND METHODS OF VOCATIONAL CHOICE—Maurice J. Neuberg—Prentice-Hall, 302 p., \$2.25. After six years' work in teaching a course in vocations to college students, the author has evolved this textbook which emphasizes the principles and methods underlying the choice of a vocation. Dr. Neuberg feels the importance of placing the student in an occupation in which he may be both socially efficient and personally happy. Each chapter is followed by lists of books and articles for collateral reading, and an excellent 44-page bibliography completes the volume.

Science News Letter, April 21, 1934

Psychology—Physiology

THE BRAIN AND ITS MECHANISM—Sir Charles Sherrington—Macmillan, 35 p., 50c. The Rede lecture delivered at Cambridge University, England, by the author who is professor of physiology at Oxford.

Science News Letter, April 21, 1934

Psychology

PREDICTION OF VOCATIONAL SUC-CESS—Edward L. Thorndike and others —The Commonwealth Fund, 284 p., \$2.50. A follow-up study of 1,807 persons who in 1922 at the age of 14 years were given psychological and vocational tests. Dr. Thorndike concludes that vocational advisors relying too zealously on their technique may err in so doing.

Science News Letter, April 21, 1934

Publication

THE WISTAR INSTITUTE STYLE BRIEF—Wistar Institute Press, 170 p., 37 pl., \$2. Scientists, particularly biologists, who have matter to prepare for publication will find this brochure invaluable. It gives the customary suggestions as to writing of text and handling of manuscript and proofs. It tells also what kind of illustrations to use, giving excellent examples of how to prepare them for most advantageous reproduction by the various processes. Further (and perhaps even more important) it gives some "awful examples" of the bad cuts and added expense that can result from careless or unskilled handling of illustrations.

Science News Letter, April 21, 1934

Recreation-Education

THE LEISURE HOURS OF 5,000 PEO-PLE—National Recreation Association, 83 p., Mimeographed, \$1. A report of a study conducted by the National Recreation Association to determine what people are doing in their free time, what changes have occurred in the use of free time during the past year or so, and what they would really enjoy doing if the opportunity were offered. The leisure occupation most frequently reported is reading newspapers and magazines; the things people most want to do but cannot, include tennis, swimming, boating and golf.

Science News Letter, April 21, 1934

Sociology

SOCIAL SCIENCE RESEARCH ORGANIZATION IN AMERICAN UNIVERSITIES AND COLLEGES—Wilson Gee—D. Appleton-Century, 275 p., \$3. A comprehensive survey. Of course a book on social science would not be complete without its "case studies." The cases, here, are certain institutions selected for personal visit; a detailed description is given of the organization, functions, and projects of these particular cases.

Science News Letter, April 21, 1934

Science News Letter will secure for its subscribers any book or magazine in print which was published in the United States. Send check or money order to cover regular retail price (\$5 if price is unknown, change to be remitted) and we will pay postage in the U. S. When publications are free, send 10c for handling. Address Book Dept., Science News Letter, 21st and Constitution Ave., Washington, D. C.

Blakiston Books

Commercial Fertilizers—

It gives the latest research data and a composite of the best opinions and conclusions in the fertilizer industry and the experimental station experts. 85 Illustrations. 356 Pages. Cloth \$3.25. By Gilbeart H. Collings, B.S., M.A., Ph.D., Associate Prof. of Agronomy, Clemson Agric. College, S. C.

Commercial Flower Forcing-

A concise treatise on fundamentals of growing flower crops for commercial purposes. Economy and efficiency are the basis of recommendations. By Alex Laurie, B.S., M.A., Prof. of Floriculture and L. C. Chadwick, B.S., Ph.D., Asst. Prof. of Floriculture, Ohio State University. 49 Illus. 519 Pages. Cloth \$4.00

Small-Fruit Culture-

Much highly significant information is now available on various phases of small-fruit culture which should be more generally known and utilized. This book presents in usable form material of great commercial value. By James Sheldon Shoemaker, Ph.D., B.S.A., M.S., Ph.D. Assoc. in Horticulture, Ohio Agri. Exp. Sta., Asst. Prof., Ohio State Univ. 52 Illus. 434 Pages. Cloth \$3.50.

Plants Useful to Man-

This book discusses in a direct manner those phases of botany that are of genuine human interest—the ecological, cultural, commercial, medicinal ornamental features. 241 Illus. 428 Pages. Cloth \$3.00. By Prof. W. W. Robbins, Univ. of California, and Prof. F. Ramaley, Univ. of Colo.

Botany of Crop Plants-

A text and reference book on the botany of common orchard, garden and field crops. 269 Illus. 639 Pages. Cloth \$4.00. By Prof. W. W. Robbins, Univ. of California.

Plant Viruses, Recent Advances

The first account of the vast amount of work done in the study of plant virus diseases. 68 Illus. 423 Pages. Cloth \$4.00. By Kenneth M. Smith, Fh.D. Potato Virus Research Station, (Univ. of Cambridge.)

College Physical Science— An Orientation Course

This book was designed for those who plan no further science course. It correlates the various fields of physical science. 153 Illustrations. 327 Pages. Cloth \$2.00. By Paul McCorkle, Ph.D., and J. Arthur Lewis, M.A., State Teachers College, West Chester, Pa.

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