

• First Glances at New Books

Additional Reviews
On Page 352

Military Science

IF WAR COMES—R. Ernest Dupuy and George Fielding Eliot—*Macmillan*, 369 p., illus., \$3. Two American Army officers review the world situation today from the military viewpoint. The book is neither a prophecy nor a professional treatise but rather an attempt to review the progress of military art and scientific research, applied to war, and thus to determine what may be the character of a war—any war—in the immediate future. A very complete and well-written book which ends with gripping summaries of the leading military problems of the great nations.

Science News Letter, November 27, 1937

Industry

DIRECTORY OF MATERIALS (5th ed.)—*Machine Design, Cleveland*, 46 p., 25 c.

Science News Letter, November 27, 1937

Geography

ACTIVITIES IN GEOGRAPHY—George J. Miller, Ed.—*McKnight and McKnight*, 87 p., 96c. The authors make a laudable attempt to break away from "Nebraska is bounded by.....". Material for student activities, such as games, puzzles, pageants, contributed by over sixty teachers and students, are described.

Science News Letter, November 27, 1937

Silviculture

PRACTICAL TREE SURGERY—Millard F. Blair—*Christopher*, 297 p., illus., \$4. The initial sixth of the book is given over to a condensed description of various tree and shrub types. Then follows, as the main body of the book, a series of chapters on tree pathology, arranged according to the trouble-making organisms. Finally, a group of chapters on tools, materials, and procedure.

Science News Letter, November 27, 1937

Entomology

THE HISTORICAL DEVELOPMENT OF INSECT CLASSIFICATION—H. F. Wilson and M. H. Doner—*Swift*, 133 p., \$4.50. A planographed publication, for use chiefly by systematic entomologists. Of little interest, therefore, to the general public; but of considerable importance within the limits of its field.

Science News Letter, November 27, 1937

Chemistry

OUTLINES OF THEORETICAL CHEMISTRY (6th ed.)—Frederick H. Getman and Farrington Daniels—*Wiley*, 662 p., \$3.75. A new edition of a well-known text in physical chemistry, dealing in as elementary a way as possible with a sub-

ject that is by no means elementary. This revision, prepared by Dr. Daniels alone, was sorely needed because of the sweeping changes in theoretical physics and chemistry since 1931, the date of the last edition.

Science News Letter, November 27, 1937

Language

INTERLINEAR GERMAN READER—Meno Spann—*Univ. of North Carolina*, 75 p., 40 c. Very simple German reading exercises in large print with lines spaced far apart, and in the spaces small-typed literal translation. With a guide of this kind, it is practically impossible not to learn even a reputedly "tough" foreign language.

Science News Letter, November 27, 1937

Herpetology

STRANGE REPTILES AND THEIR STORIES—A. Hyatt Verrill—*Page*, 195 p., illus., \$2.50. Poisonous reptiles, friendly serpents, snake giants, living dragons, are a few of the many chapter titles that promise fascinating reading to the person interested (as we all should be) in this important division of the animal kingdom.

Science News Letter, November 27, 1937

Chemistry

QUALITATIVE ANALYSIS BY SPOT TESTS: Inorganic and Organic Applications—Fritz Feigl; Trans. by Janet W. Matthews—*Nordemann*, 400 p., \$7. A manual on this relatively new rapid method of testing small amounts of material.

Science News Letter, November 27, 1937

Criminology

CRIME CONTROL BY THE NATIONAL GOVERNMENT—Arthur C. Millspaugh—*Brookings Institution*, 306 p., \$2. An outside agency takes a look at a difficult administrative problem.

Science News Letter, November 27, 1937

Geology

OUTLINES OF HISTORICAL GEOLOGY (3rd ed.)—Charles Schuchert and Carl O. Dunbar—*Wiley*, 241 p., illus., \$2.50. Revised, reillustrated, reindexed, this remains a standard work.

Science News Letter, November 27, 1937

Economics

EVERYDAY PROBLEMS IN ECONOMICS—Cornelius C. Janzen and Orlando W. Stevenson—*Silver Burdett*, 158 p., 60 c. A workbook for high school use.

Science News Letter, November 27, 1937

Ornithology

A PICTORIAL GUIDE TO THE FAMILIES OF BIRDS—Edward T. Boardman and Elizabeth Barto—*Cranbrook Institute of Science*, 48 p., illus., 50 c. Although professedly limited to southeastern Michigan, this compact, neatly illustrated little bird book will be found useful well outside the limits it sets for itself.

Science News Letter, November 27, 1937

Zoology, Juvenile

FUZZY TAIL—Arensa Sondergaard—*Heath*, 134 p., 72 c. For children just learning to read, the story of a kitten in quite small words and nice big pictures.

Science News Letter, November 27, 1937

Psychology

THE INFLUENCE OF BARRIERS UPON STRENGTH OF MOTIVATION—Herbert Fletcher Wright—*Duke Univ.*, 143 p., \$1.50.

Science News Letter, November 27, 1937

Botany

PLANT LIFE FORMS—C. Raunkiaer; trans. by H. Gilbert-Carter—*Oxford*, 104 p., \$2. See page 348.

Science News Letter, November 27, 1937

ELEMENTARY EXPERIMENTAL CHEMISTRY

By John C. Hogg
and Charles L. Bickel

This new laboratory manual of inorganic chemistry aims to develop the desire and aptitude for original investigation in the beginning student. The book has been three years in the making, and the experiments were subjected to severe testing in the authors' classes at Phillips Exeter Academy. A unique feature is that the pages are perforated and printed on only one side, to facilitate the transference of material from the manual to the student's note-book.

Pp. 186+118 blank
\$2.00

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• First Glances at New Books

Additional Reviews
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Ornithology

THE BIRDS OF AMERICA—John James Audubon—*Macmillan*, 36 p., 500 colored plates, \$12.50. All of the 435 plates of Audubon's original "elephant folio" with 65 additional paintings made at a later date, are here reproduced on pages approximately 8 x 12 inches in size. The color printing is exceedingly faithful to the originals. At the foot of each page are a few lines of text, and there is a vigorously written introduction by William Vogt. All round, the book is a sumptuous piece of work, and will certainly be eagerly bought by ornithologists, and naturalists and booklovers generally, who have long desired Audubon plates but who could not have them because of the exceedingly limited supply and the consequently prohibitive prices. See page 347.

Science News Letter, November 27, 1937

Entomology

GRASSROOT JUNGLES: A BOOK OF INSECTS—Edwin Way Teale—*Dodd Mead*, 233 p., illus., \$3.75. A lot of really remarkable insect pictures serve as framework for chapters that tell about them, straightforwardly, vividly, in simple language yet with adequate presentation of fact. A very good book for a Christmas present to an entomologically-inclined friend.

Science News Letter, November 27, 1937

Bacteriology

MUIR'S BACTERIOLOGICAL ATLAS (2d ed.)—C. E. van Rooyen—*William Wood*, 90 p., colored plates, \$5.25. Eighty-three carefully drawn plates, from actual bacteriological preparations, colored accurately according to their appearance in stained slides, illustrate the principal genera of pathogenic bacteria. Each illustration is accompanied by concise text. This is a most useful book for both laboratory scientist and practising physician.

Science News Letter, November 27, 1937

Anthropology

THE RACES OF MANKIND. SCULPTURES BY MALVINA HOFFMAN (3rd ed.)—Henry Field—*Field Museum*, 44 p., illus., 25 c.

Science News Letter, November 27, 1937

Paleontology

THE EARTH CHANGES—Jannette May Lucas and Helene Carter—*Lippincott*, 88 p., illus., \$2.50. Geology books for the out-of-classroom reader, particularly the younger generation, multiply most satisfactorily. Here is another one that is more than just "another" one. It is care-

fully thought out and clearly stated. An especially noteworthy feature are the large, rather impressionistic maps that show where ancient seas and land masses lay, as compared with those of the present time.

Science News Letter, November 27, 1937

History

THE ROMANCE OF EXPLORATION—Karl Sundheim—*Hillman-Curl*, 568 p., \$1.50. A history of man's discoveries and adventuring, from days of the flood to exploits of modern expeditions, told for the reader who wants details, rather than a rapid summary. Numerous illustrations are included.

Science News Letter, November 27, 1937

Anthropology

AFRICAN GENESIS—Leo Frobenius and Douglas C. Fox—*Stackpole*, 236 p., illus., \$3. A German professor noted for his studies of African rock pictures, here tells some vivid African legends and fables which he learned from natives. In an introductory chapter, he discusses cultural backgrounds involved in the tales, and shows how the stories help to interpret rock paintings.

Science News Letter, November 27, 1937

Travel, Juvenile

CHINA QUEST—Elizabeth Foreman Lewis—*John C. Winston*, 301 p., illus., \$2. An exciting adventure tale for boys and girls, with a Chinese boy and an American boy for central characters. Since the scene shifts from America to Shanghai, there is much local color of China in the story. Mrs. Lewis writes well, and Kurt Wiese provides numerous illustrations of actual incidents in the tale.

Science News Letter, November 27, 1937

Carpentry

THE VILLAGE CARPENTER—Walter Rose—*Cambridge (Macmillan)*, 146 p., illus., \$2.50. An appreciatively reminiscent biography of a carpenter of the old school, who made everything from cogwheels to coffins, told in charmingly discursive style, and illustrated with excellently composed photographs of both the tools and the things that were wrought with them.

Science News Letter, November 27, 1937

Agriculture

CHEMICAL WEED KILLERS. A REVIEW PREPARED FOR THE ASSOCIATE COMMITTEE ON WEED CONTROL—W. H. Cook and A. C. Haferdahl—*National Research Council of Canada, Ottawa, Canada*, 111 p., 25c.

Science News Letter, November 27, 1937

Physics

THESE AMAZING ELECTRONS—Raymond F. Yates—*Macmillan*, 326 p., illus., \$3.75. Here, in layman's language, is the story of the fundamental bits of all matter known as electrons. Not only is the science of electronics—those varied applications which have produced radio, television, photoelectric cells and a host of other tools—discussed, but because electrons are fundamental the author discusses radiation, atom smashing, radio-activity, cosmic rays and indeed the whole gamut of atomic structure, modern physics and its applications.

Science News Letter, November 27, 1937

Aeronautics—Juvenile

EVERY BOY'S BOOK OF AIRCRAFT—Eric Sargent—*Appleton-Century*, 103 p., illus., \$1.50. **EVERY BOY'S BOOK OF FIGHTING PLANES**—David W. Tyrrell—*Appleton-Century*, 96 p., illus., \$1.50. Illustrated books of British origin, on the various types of aircraft.

Science News Letter, November 27, 1937

Psychology

THE EFFECT OF VOLUNTARY ACTIVITY ON THE KNEE-JERK—Sarah C. Dunlap—*Johns Hopkins*, 62 p., \$1.25. It appears that the knee-jerk is not the simple reflex it has been thought, and it can be modified voluntarily by practice.

Science News Letter, November 27, 1937

Chemistry

POISON IN THE AIR—Heinz Liepmann—*Lippincott*, 308 p., \$2.50. Written in a spirit of excitement, even hysteria, this book pictures possible chemical warfare of the future in most lurid colors. Yet who can declare categorically that the author's frenzy is not justified?

Science News Letter, November 27, 1937

Malacology

EAST COAST MARINE SHELLS—Maxwell Smith—*Edwards*, 308 p., \$4.50. A multi-lithed book, with abundant illustrations quite adequate for its purpose, that will be welcomed by malacologists both professional and amateur.

Science News Letter, November 27, 1937

Education

VARIABILITY IN RESULTS FROM NEW-TYPE ACHIEVEMENT TESTS—Earl V. Pulias—*Duke Univ.*, 100 p., \$1.

Science News Letter, November 27, 1937

Comparative Psychology

FOOD-TOKENS AS INCENTIVES FOR LEARNING BY CHIMPANZEES—John T. Cowles—*Johns Hopkins*, 96 p., \$1.50.

Science News Letter, November 27, 1937