

# 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.

ALL THE SOUNDS WE HEAR—Lee Nelson—*Steck*, 40 p., illus. by A. Z. Ashley, \$1.75. For young children, tries to make clear various sounds and the words used to describe them.

ALWAYS ANOTHER DAWN: The Story of a Rocket Test Pilot—A. Scott Crossfield with Clay Blair, Jr.—*World Pub. Co.*, 421 p., photographs, \$4.95. Autobiography of the pilot of the experimental plane, the X-15.

BIRTH CONTROL TODAY: A Practical Approach to Intelligent Family Planning—Leon F. Whitney—*Nelson*, 143 p., illus., \$2.95. Forthright and authoritative information on the subject.

BOX TURTLE LIVES IN ARMOR—Charles Paul May—*Holiday*, 47 p., illus. with drawings by Jane Castle, \$2.50. Makes young children aware of the life and habits of turtles.

THE CARE OF PET TURTLES—Herndon G. Dowling and Stephen Spencook—*N. Y. Zoological Soc.*, 16 p., illus., paper, 25¢. Feeding, health problems, and general care of different species of turtles.

THE CHALLENGE OF THE SEA—Arthur C. Clarke, introduction by Wernher von Braun—*Holt, Rinehart and Winston*, 167 p., illus. with drawings by A. Schomburg, \$3.95. The wonders of the ocean and what we may expect to know about it in the future.

CHARTING STEEL'S PROGRESS: A Graphic Facts Book on the Iron and Steel Industry—Introduction by Max D. Howell—*American Iron and Steel Institute*, 65 p., illus., paper, 50¢. Information based largely on the Institute's Annual Statistical Report.

CHEMISTRY AND TECHNOLOGY OF FERTILIZERS—Vincent Sauchelli, Ed.—*Reinhold*, 692 p., illus., \$18. Discussion of the raw materials used in chemical fertilizers and their conversion to suitable compounds for use on crop plants.

## ASTRONOMY

### For Everyone

Enjoy **SKY AND TELESCOPE** magazine monthly. Profusely illustrated. Observing and telescope making departments, monthly star and planet charts. Subscription in U. S.: \$5.00, 1 year; \$9.00, 2 years. Sample copy, 50¢.

**SKY AND TELESCOPE** Dept. SNL  
Cambridge 38, Mass.

## THE PURSUIT OF THE ATOM

By Werner Braunbek

Now you are invited on a "guided tour" of scientific exploration and discovery within the realm of the atom; guided, no less, by the great scientists whose brilliant work made possible the breakthrough to the atomic age. Each basic contribution to the complex pattern of research is lucidly explained, and is related to the work of others before and after.

All are here, the great ones: Rutherford, Soddy, Becquerel, the Curies, Geiger, Bohr, Hahn, Meitner, Blackett, Cockroft, Kapitza, Walton, Einstein, Planck, Born, Von Hevesy, J. J. Thomson, Hertz, Millikan, Mach, Wilson, Heisenberg, Schroedinger, Dirac, Condon, Gamov, Lawrence, van de Graaff, Urey, the Joliot-Curies, Chadwick, Bothe, Anderson, Fermi, Strassmann, McMillan, Compton, Oppenheimer, Bethe, Teller, etc., etc., etc.

"First rate."—*New York Times*. ORDER NOW!  
\$3.95 Postfree • 10-Day Money-Back Guarantee

**EMERSON BOOKS, INC., Dept. 118-M**  
251 West 19 Street, New York 11

THE CONCISE ENCYCLOPEDIA OF ARCHAEOLOGY—Leonard Cottrell, Ed.—*Hawthorn Bks.*, 512 p., illus., \$12.95. For the general reader as well as the scholar, sums up the archaeological knowledge of our times.

CONTRIBUTIONS TO THE THEORY OF NONLINEAR OSCILLATIONS: Vol. V—Cesari J. LaSalle and S. Lefschetz, Eds.—*Princeton Univ. Press*, 286 p., paper, \$5.

COUPLED MODE AND PARAMETRIC ELECTRONICS—William H. Louisell—*Wiley*, 268 p., illus., \$11.50. Introduction to the theories of coupled modes, parametric amplifiers, oscillators and frequency converters.

CREATURES OF THE SEA—William B. Gray—*Funk, W.*, 209 p., illus., \$3.95. Vivid descriptions of marine fauna by the Director of Collections and Exhibitions of the Miami Seaquarium.

DICTIONARY OF WORD ROOTS AND COMBINING FORMS—Donald J. Borror—*N-P Publications*, 134 p., paper, \$2. Handy reference for the student of science, gives special attention to biological and scientific terms.

THE FIRST FIVE MINUTES: A Sample of Microscopic Interview Analysis—Robert E. Pittenger, Charles F. Hockett and John J. Danehy—*Paul Martineau*, 264 p., illus., \$6.50. Study of two disciplines: psychiatry and anthropological linguistics.

FIRST OF THE SPACEMEN: Iven C. Kincheloe, Jr.—James J. Haggerty, Jr.—*Duell*, 148 p., photographs, \$3.50. Biography of the pilot of the rocket-powered X-2 and first selected to take the X-15 to outer space.

FROM THEORY TO PRACTICE IN SOIL MECHANICS: Selections from the writings of Karl Terzaghi—L. Bjerrum and others, Eds.—*Wiley*, 425 p., illus., \$12. Account of the engineer Terzaghi's life and his method of working.

GENERAL CYTOLOGY—E. D. P. De Robertis, W. W. Nowinski and Francisco A. Saez—*Saunders*, 3d ed., 555 p., illus., \$10. New material has been added, putting more emphasis on the chemical, ultrastructural, genetic and physiological aspects of cytology.

HEART DISEASE, BLOOD PRESSURE AND STROKES—C. Anthony D'Alonzo—*Gulf*, 159 p., illus., \$3.50. Causes, treatment, and prevention of these disorders.

HISTORY OF LIFE SCIENCE: Outlines and References—Eldon J. Gardner—*Burgess*, 180 p., illus., paper, \$4.75. Designed as a guide for the biology student.

## COMPRESSED TABLETS

### (Non-medical) Made to Order

Very small sizes to the very largest. Experimental work undertaken. If you need tablets made, write us for quotations.

**R. P. CARGILE LABORATORIES, INC.**  
117 Liberty Street New York 6, N. Y.

## Jupiter BLUE Filter: \$1.50 p.p.

A useful accessory for your telescope. Especially for viewing the "Red Spot" on Jupiter. Improves seeing, greatly reduces glare. Enables you to see detail of green and darkish areas of this planet under strong solar illumination. 33mm diameter, 1mm thick. Plane parallel-polished. Famous mfg.

Unmounted. ONLY \$1.50 p.p. each

**HARRY ROSS** Scientific & Lab Apparatus  
61-L Reade St., N.Y. 7, N.Y.

HOMES: America's Building Business—Pauline Arnold and Percival White—*Holiday*, 379 p., illus., \$4.50. Informative book about the building trades and industry of today.

THE INDIAN AND HIS PUEBLO—Louise Lee Floethe—*Scribner*, illus. with drawings by R. Floethe, \$2.95. Informative story for children about the life of Indians whose pueblos are near the Rio Grande.

INVESTIGATION OF THE MECHANISM OF EARTHQUAKES—E. N. Bessonova and others—*Am. Geophysical Union (Consultants Bureau)*, 201 p., illus., \$7.50. Divided into the theoretical basis for seismological methodology, and data on displacements near earthquake centers of seismic areas of the U.S.S.R.

LABORATORY MANUAL FOR BOTANY—Charles LaMotte, Robert B. Stewart and Norman D. Flados—*Burgess*, 72 p., paper, \$2.75. For an introductory course in Botany.

LETTERS OF SIGMUND FREUD—Ernst L. Freud, Ed., transl. by Tania and James Stern—*Basic Bks.*, 470 p., photographs, \$7.50. Presents letters selected by his son, written over a period of sixty-six years to his family and world personalities.

THE MAJOR ACHIEVEMENTS OF SCIENCE—A. E. E. McKenzie—*Cambridge Univ. Press*, Vol. I, 368 p., illus., \$5.50; Vol. II, 195 p., illus., \$3.50. The historical account of the development of science given in volume one, is supplemented in volume two by 91 extracts from original writings.

MAN AGAINST THE ELEMENTS: ADOLPHUS W. GREELY—Irving Werstein—*Messner*, 191 p., \$2.95. Juvenile biography.

THE MANNED MISSILE: The Story of the B-70—Ed Rees—*Duell*, 182 p., illus., \$3.50. Facts and figures about this new advancement in aeronautics.

MAYA: Land of The Turkey and The Deer—Victor W. Von Hagen—*World Pub. Co.*, 127 p., illus. with drawings by A. Beltran, \$2.95. Dramatization, for boys and girls, of the history, culture and achievements of this ancient people.

THE MEANING OF EVOLUTION: A Study of the History of Life and of Its Significance for Man—George Gaylord Simpson—*Yale Univ. Press*, 364 p., illus., paper, \$1.45. Synthesis of modern views on the principles of evolution.

MINERAL METABOLISM: An Advanced Treatise, Volume I, Part A: Principles, Processes and Systems—C. L. Comar and Felix Bronner, Eds.—*Academic*, 416 pp., illus., \$12.

NATIONAL SECURITY IN THE NUCLEAR AGE: Basic Facts and Theories—Gordon B. Turner and Richard D. Challener, Eds.—*Praeger*, 293 p., paper, \$1.85. Essays presenting a broad coverage of the subject.

ONE DAY AT THE ZOO—Dick Snyder—*Scribner*, illus. by photographs, \$2.95. A visit to the San Diego Zoo.

OPTICS IN THE ELECTROMAGNETIC SPECTRUM—C. L. Andrews—*Prentice-Hall*, 501 p., illus., \$12. Textbook treating the properties of wave motion common to the whole electromagnetic spectrum.

OVUM HUMANUM: Growth, Maturation, Nourishment, Fertilization and Early Development—Landrum B. Shettles, introduction by

(Continued on p. 303)

## IDENTIFY ANY TREE!

Two-volume set by foremost dendrologist. W. H. Harlow, "Trees," full text, 950 photos, covers 140 common trees of N. and N.E. USA. "Twig & Fruit Guide," enables you to identify trees & shrubs in winter, any season. Identification, folklore, uses, etc. Total 444 pp. \$2.60 plus 10¢ postage. Money-back guarantee. Dept. SNL, DOVER, 180 Varick St., N. Y. 14, N. Y.

## Books of the Week

(Continued from p. 300)

Harold Speert—*Hafner Pub. Co.*, 84 p., micro-photographs, \$6. Pictorial record of the development of the human ovum, with text in English, German and French.

PHYSIOLOGY IN INDUSTRY: Evaluation of Industrial Stresses by the Physiological Reactions of the Worker—Lucien Brouha—*Pergamon*, 145 p., illus., \$6.50. Divided into a study of the worker, the environment, and the job.

PLAGUE FIGHTERS—Herman Styler—*Chilton Co.*, 126 p., illus., \$3.50. Account of the struggle against diseases that have harassed mankind throughout history.

POLARIS!—James Baar and William E. Howard—*Harcourt*, 245 p., photographs, \$4.50. Story of the creation and development of this powerful missile.

PRINCIPLES OF PLANT BREEDING—R. W. Allard—*Wiley*, 485 p., illus., \$9. Intended as a text for the undergraduate student of agriculture.

ROME—M. Rostovtzeff, transl. from Russian by J. D. Duff—*Oxford Univ. Press*, 347 p., illus., paper, \$2.25. New bibliography prepared by Elias J. Bickerman has been added to this classical work originally published in 1927.

THE SCIENCE BOOK LIST FOR CHILDREN—Hilary J. Deason—*Am. Assn. for the Advancement of Science*, 138 p., paper, \$1. Guide to recreational and "outside" reading in the sciences and mathematics for elementary school students including the eighth grade.

A SCIENTIFIC THEORY OF CULTURE AND OTHER ESSAYS—Bronislaw Malinowski, preface by Huntington Cairns—*Oxford Univ. Press*, 228 p., paper, \$1.50. Summing up and reformulating the author's functional theory of culture.

SEA WITHIN: The Story of Our Body Fluid—William D. Snively, Jr.—*Lippincott*, 150 p., illus., \$3.95. For the layman, describes the vital role of body fluids.

SO YOU WANT TO BE A HAM—Robert Hertzberg—*Howard W. Sams*, 2nd ed., 188 p., illus., paper, \$2.95. For the radio amateur.

THE SPACE GUIDEBOOK—William J. Weiser—*Coward-McCann*, 322 p., illus., \$4.75. For the general reader, basic, up-to-date information on the sciences as applied in space research.

THE STORY OF GEOLOGY: Our Changing Earth Through the Ages—Jerome Wyckoff—*Golden Press*, 177 p., illus. with photographs and paintings by W. Sayles, H. McNaught, and R. Perlman, \$4.95. Beautifully illustrated for young readers.

TABLE ROCK PUEBLO, ARIZONA—Paul S. Martin and John B. Rinaldo—*Chicago Natural Hist. Museum*, 298 p., illus., paper, \$5.50. Description of anthropological discoveries near St. Johns, Arizona.

THEORY AND DESIGN IN THE FIRST MACHINE AGE—Reyner Banham—*Praeger*, 338 p., photographs, \$12.50. Survey of architecture's changes in the 20th century.

THE TIBETAN BOOK OF THE DEAD—Compiled and ed. by W. Y. Evans-Wentz—*Oxford Univ. Press*, 249 p., paper, illus., \$1.75. The after-death experiences on the Bardo Plane, according to Lama Kazi Dawa-Samdup's English rendering.

TRANSPORT PHENOMENA—R. Byron Bird, Warren E. Stewart and Edwin N. Lightfoot—*Wiley*, 780 p., illus., \$13.75. Introduction to momentum, energy and mass transport for students of engineering and applied science.

THE VERTEBRATE FAUNA OF THE SELMA FORMATION OF ALABAMA; PART V: AN ADVANCED CHELONIID SEA TURTLE—Rainer Zangerl—PART VI: THE DINOSAURS—Wann Langston, Jr.—*Chicago Natural Hist. Museum*, 80 p., illus., paper, \$3.50.

• Science News Letter, 78:300 November 5, 1960

## STUDENTS, TEACHERS, HOBBYISTS... Now, 42 fascinating experiments with the



**BLE**

Dept. SN-4

**BLACK LIGHT EASTERN CORP.** 4 Manhasset Ave. Port Washington, L.I., N.Y.

## New BLACK LIGHT MAGIC-GLO Kit

Study and demonstrate the phenomenon of fluorescence.

Experiments in fluorochemistry, mineralogy, scientific research, electronics, crime detection, art, medicine and stamp collecting.

Observe fluorescence of hundreds of substances from the field, in your home and at school.

You receive an ultra violet black light lamp, socket and cord set, 4 bottles invisible fluorescent paint, invisible fluorescent ink, tracer powder and crayon, fluorescent mineral specimens, phosphorogram, fluorescent dye, fluorescent elastic braid, and a box of experiment materials, pen & brushes. **PLUS a 48 page illustrated manual "The Story of Black Light—the Unseen World Around Us" with 42 experiments in ultra violet fluorescence and phosphorescence. Black light guaranteed harmless to eyes and skin.**

Send me ..... kits. ☐ Send me further details.

Name.....

Address.....

City..... State..... Zone.....

Only \$11.95 Post Free. Send check or M.O.

## Follow-the-action BINO-TACH attachment \$3.00 p.p.

Makes it **EASY** for everyone to use the highest powered binoculars. Bino-tach secures any make of prism binocular to any photographic tripod or pan-head. On/off in seconds. Reduces fatigue, seeing improves 100%! It's steady! Precision turned aluminum, brush finish. Original price almost \$7.00. Closing out, limited stock, \$3.00 each p.p.



**HARRY ROSS**

Scientific & Lab Apparatus  
61-L Reade St., N.Y. 7, N.Y.

## GOLD • SILVER • URANIUM



LEARN How to Know and Identify Ores and Minerals. This Prospector's set of 24 Ores and Minerals, including Gold, Silver, Uranium, Copper, Lead, Zinc, Nickel and 17 others—**PLUS a 192 page, fully illustrated book**, with you how to identify hundreds of minerals—Complete with magnifying glass—\$4.95

**MERRITT MINERALS**  
2112-L Fort Dearborn Sta., Dearborn, Michigan

## For the Amateur Scientist



An unusual microscope and dissecting kit, powered by two standard pen-light batteries.

- 4 turret nosepiece has 4 objectives
- 2oculars are supplied, giving magnifications of 100X, 150X, 200X, 300X, 450X, 600X
- Opposite side of lamp has a plane mirror so that the instrument may also be used by reflected light.
- Dissecting set contains: 1 pair surgical type dissecting scissors, 1 spatula, 1 dissecting forceps (tweezers), 1 long handled dissecting needle, 1 scalpel, 1 hand magnifier, rack containing 6 specimen slides.
- All fitted in hardwood carrying case.

Price **\$10** Ppd.

**WINN SCIENCE CENTER, Dept. C300,**  
124 West 23 Street, New York 11.

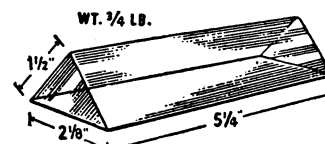
Please rush me my microscope & dissecting kit plus a **FREE** catalog of microscope accessories.

Name.....

Address.....

City..... State.....

## PRISMS \$1.50



Made for U. S. govt. for tank periscopes. Fine optically ground, big precision prisms with silvered base. Terrific for all types of spectrographic work, in homemade telescopes & other optical systems for bending rays. Makes unusual paper weight (paint your name on it) or conversation piece for mantel. You'll find many other uses. **NEW, PERFECT!** Cost U. S. govt. \$25 ea. **NOW—\$1.50 ea. p.p. or 4 for \$5.00.** Same as above—1" long (no silver backing) \$1. ea. 5 for \$4. Postage paid on prepaid orders. (Chit. res. add sales tax.)

**Volume Sales Co., War Assets Div., Dept. L115**  
3828 Sunset Blvd. Los Angeles 28, Calif.

## Get UNITRON's FREE Observer's Guide and Catalog on ASTRONOMICAL TELESCOPES

This valuable 38-page book  
is yours for the asking!

With artificial satellites already launched and space travel almost a reality, astronomy has become today's fastest growing hobby. Exploring the skies with a telescope is a relaxing diversion for father and son alike. UNITRON's handbook contains full-page illustrated articles on astronomy, observing, telescopes and accessories. It is of interest to both beginners and advanced amateurs.

Contents include—

- Observing the sun, moon, planets and wonders of the sky
- Constellation map
- Hints for observers
- Glossary of telescope terms
- How to choose a telescope
- Amateur clubs and research programs



**UNITRON**

INSTRUMENT COMPANY • TELESCOPE SALES DIV.  
66 NEEDHAM ST., NEWTON HIGHLANDS 61, MASS.

Please rush to me, free of charge, UNITRON's new Observer's Guide & Telescope Catalog. 5-1-1

Name.....

Street.....

City..... State.....