

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.

THE ANSWER BOOK—Mary Elting—*Grosset*, 157 p., illus. by Tran Mawicke and others, \$3.95. For children who wonder why, and like to find the answers for themselves. Non-technical and fully indexed.

THE ARITHMETIC OF FLYING: A Resource Unit in Air Age Concepts—Secondary Mathematics Curriculum Committee—*Nat. Aviation Educ.*

Council, 41 p., illus., paper, 50¢. For use in 7th and 8th grade.

ASA GRAY, 1810-1888—A. Hunter Dupree—*Belknap Press*, 505 p., illus., \$7.50. Based on original sources, this is a scholarly interpretation of the work and influence of a leading American botanist of the 19th century.

CALCULUS WITH ANALYTIC GEOMETRY—Donald E. Richmond—*Addison-Wesley*, 458 p., \$8.75. Intended for a two or three-semester course in calculus.

CANALS—Fon W. Boardman, Jr.—*Walck, H. Z.*, 139 p., illus. \$3.50. Richly illustrated history of the development of inland waterways, from ancient times to the canals of Europe, Africa, the United States and Canada.

THE CAVE HUNTERS—William E. Scheele—*World Pub. Co.*, 63 p., illus. by author, \$2.50. Reconstructs the lives of Neanderthals and Cro-Magnons for grade school readers.

CLASSIC PAPERS IN GENETICS—James A. Peters, Ed.—*Prentice-Hall*, 282 p., illus., paper, \$3.95. Including Mendel's "Experiments in Plant Hybridization" and Seymour Benzer's "Fine Structure of a Genetic Region in Bacteriophage."

DICTIONARY OF SOCIAL SCIENCE—John T. Zadrozny, introd. by William F. Ogburn—*Public Affairs Press*, 367 p., \$6. Dictionary of special-

ized terms, enabling the lay reader to understand professional terminology.

EDISON: A Biography—Matthew Josephson—*McGraw*, 511 p., illus., \$6.95. Chronicle of Edison's development, based on a wealth of original material, with 13 pages of references including the Edison archives at the Edison Library in West Orange, N.J.

EDUCATION IN THE AGE OF SCIENCE—Brand Blanshard, Ed.—*Basic Bks.*, 302 p., \$4.50. An examination of American education by educators, including transcripts of round-table discussions in a seminar sponsored by the Tamiment Institute, Pa., in June, 1958.

EXPLORING EARTH AND SPACE—Margaret O. Hyde—*Whittlesey House*, rev. ed., 160 p., illus. by Clifford N. Geary, \$3. Updated to include research of space vehicles launched during the I.G.Y. and in early 1959.

GAS CHROMATOGRAPHY—A. I. M. Keulemans, C. G. Vervier, Ed., foreword by A. J. P. Martin—*Reinhold*, 2nd ed., 234 p., illus., \$7.50. Gives chemists an up-to-date account of the practical and theoretical aspects of this rapidly developing analytical tool.

GENETICS LABORATORY GUIDE—David J. Merrell—*Burgess*, 32 p., paper, \$1.50. Contains experiments with drosophila and with corn.

GRASS PRODUCTIVITY—Andre Voisin, transl. from French by Catherine T. M. Herriot—*Philosophical Lib.*, 353 p., illus., \$15. Information on the rational management of pasture lands, based on research findings in the U. S., Germany, France, New Zealand and Great Britain.

A GUIDE TO THE IDENTIFICATION OF THE GENERA OF BACTERIA with Methods and Digests of Generic Characteristics—V. B. D. Skerman—*Williams & Wilkins*, 217 p., illus., paper, \$5.50. Comprehensive key and digest of genera with guide to methods and study.

ISAAC NEWTON: Pioneer of Space Mathematics—Beulah Tannenbaum and Myra Stillman—*Whittlesey House*, 128 p., illus. by Gustav Schrotter, \$3. Biography for young persons.

LABORATORY EXPERIMENTS IN GENERAL PHYSICS—W. L. Erickson—*Burgess*, rev. ed., 174 p., illus., paper, \$4.25. Experiments ranging from physical measurements to making a continuous cloud chamber.

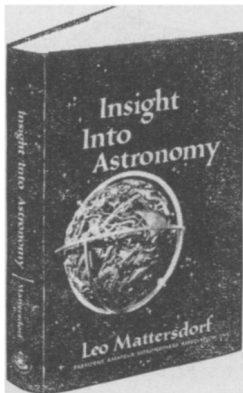
THE MAGNETODYNAMICS OF CONDUCTING FLUIDS—Daniel Bershader, Ed.—*Stanford Univ. Press*, 145 p., illus., \$4.50. Papers of a symposium, dealing with the flow of fluids such as air.

MECHANISM AND STRUCTURE IN ORGANIC CHEMISTRY—Edwin S. Gould—*Holt*, 790 p., \$12.50. Textbook devoted to the consideration of the mechanisms of homogeneous organic reactions, with descriptive chapters dealing with the structures of atoms and organic molecules.

MODERN HIGH SCHOOL BIOLOGY: A Recommended Course of Study—Dorothy F. Stone—*Teachers College*, 96 p., paper, \$1.50. Monograph designed as guide to teachers in modernizing course of biology study.

(Continued on page 278)

Just off press—



**New,
revised
2nd
edition
for the
SPACE
AGE**



Insight Into Astronomy

by LEO MATTERS DORF
Past President,
Amateur Astronomers Association

Brand new material on rocketry, man-made satellites, moon travel and space stations brings this fascinating, timely and authoritative book right up to date. The basic facts of space and time are explained clearly and understandably, in simple non-mathematical terms. Profusely illustrated with 40 photographs, drawings and diagrams. 246 absorbing pages.

The author tells all about the solar system. Explains the constellations . . . navigating by the stars . . . the milky way and other galaxies . . . the "great year" . . . eclipses . . . the tides . . . how astronomy controls the seasons and the calendar, determines times, regulates clocks, etc., etc.

Money-back Guarantee!

Order from bookseller or

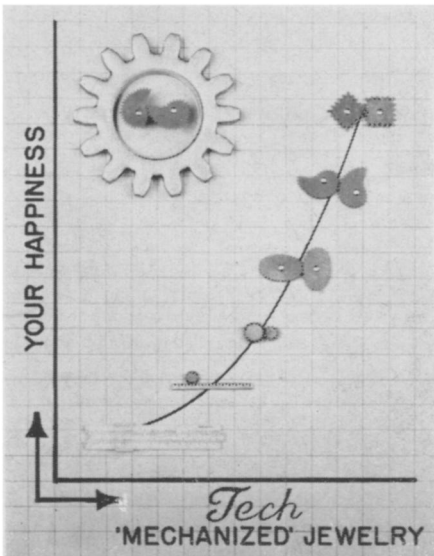
Lantern Press, Dept. S
257 Fourth Avenue, New York 10
Enclosed find \$4.00. Please send pre-paid the newly revised 2nd edition of "Insight Into Astronomy." Unless completely satisfied I may return book within 15 days for refund of purchase price.

Name

Address

City Zone State

EVOLUTION OF JEWELRY



Changing times have inspired development of our refreshingly different "mechanized" jewelry, combining beauty and function. The accurate Baby Slide Rule Tie Clasp is \$2.75 in a handsome plastic gift box. Completely mechanized, in mirror-finish heavy gold or nickel plate (specify) and in our unique gold "gear box" (cuff links come in separate meshing box in our "mechanized" plastic case). Rack and Pinion Tie Clasp \$2.75 (with pair of dual spur gear cuff links \$6.00); Spur Gear Tie Tack with guard \$2.25 (with pair of dual spur gear cuff links \$5.50); the rare and fascinating Elipse, Archimedes Spiral or Square Gear Tie Tacks \$3.75 (with pair of matching single gear cuff links \$5.25 or pair of matching dual gear cuff links \$7.50). Unconditionally guaranteed, postage paid. Add 10% Fed. Tax and send check or M.O. to

Baby SLIDE RULE CO.

P.O. Box 9, Dept. J, East Lansing, Mich. Ph. ED 2-4969
Write for catalog of our original "mechanized" jewelry.

MICROSCOPE 675X

A precision built instrument for the amateur. Sturdy and mechanically well constructed. Gives clear images with little astigmatism or residual color, at all powers. Includes: 3 objectives and 2 eyepieces, giving low (50) and high (675) power. Rack and pinion adjustment. Stage 2 3/4" square with clips. Over-all height 8 1/2". Includes beautiful case 11" high by 5" x 4". Shipping weight 5 lbs. I have waited years to offer this desirable microscope and am pleased to offer it at the very low price of only \$14.00 plus \$1.00 postage. "Absolutely free" with each of these microscopes I send: blank slides, 1/2 oz. glass cover slips, Canada balsam and my instruction booklet. TODAY: Send only \$12.00 for all the above. **HARRY ROSS, Microscopists, 63 Reade St., N.Y. 7.**



STEAK TESTER

STEAK JUST THE WAY YOU WANT IT

Rare . . . medium, well-done, IT'S UP TO YOU. Just set this adjustable steak tester to the way you like your steak. The glowing bulb tells you when it's cooked to your taste.

Precision made, easy to clean. Use indoors or out.

\$4.95

A MUST—if you care about good food! Postpaid



John Surrey, Ltd., 11 West 32nd St., Dept. SN-40, New York 1. N. Y.

INVENTORS NEEDED AT ONCE

If you have an invention you wish to sell outright or license on royalty, write us at once. We are seeking inventions of household items, games, toys, sports items, tools, and mechanical and technical devices. Patented or unpatented. For further information and free brochure outlining manufacturers' requirements, royalty rates, send name (no drawings, please) on letter or postcard at once. **KESSLER CORPORATION, Dept. D-4110, Fremont, O.**

Free catalogues of SCIENCE BOOKS!

State your interest! Mathematics, physics, history of science, general science, biology, social sciences, earth sciences, chemistry, languages, philosophy, engineering. Dover publishes over 75 books per year; quality production standards, priced for your budget. Dept. SNL, Dover Publications, 180 Varick, N. Y. 14, N. Y.

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 DIVISION of UNITED SCIENTIFIC CO.
204-206 MILK STREET • BOSTON 9, MASS.

Please rush to me, free of charge, UNITRON'S new Observer's Guide & Telescope Catalog 5V-3.

Name.....
Street.....
City..... State.....

MICRO-ADS

Equipment, supplies and services of special interest to scientists, science teachers and students, science-minded laymen and hobbyists. 25¢ per word, payable in advance. Closing date 3 weeks prior to publication (Saturday).

SNL, 1719 N St., N.W., Washington 6, D. C.

DEMONSTRATIONAL STEAM TURBINE

CLASS DEMONSTRATIONAL STEAM TURBINE. Accurately machined. Efficient (2,500 rpm). Runs on heat from bunsen burner or solar reflector. Dramatically demonstrates Newton's third law of motion. \$3.00 Complete. Negravco, Box 414, Redwood City, Calif.

MICROSLIDES

MICROSLIDES: INSECTS, MARINE LIFE, ZOOLOGICAL, Botanical, British Fresh Water Algae. Send for Complete list Free. Esbe Laboratory Supplies, 459 Bloor St., W., Toronto, Ontario, Canada.

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¢.

Dept. SNL-9
Cambridge 38, Mass.

The Pursuit of the ATOM

By WERNER BRAUNBEK

"Here is the detective story of the Atomic Age. Its 'private eyes' are hundreds of scientists."—Merle Oliver, Detroit News.

"First-rate report of how science progresses . . . Conveys the excitement that makes scientists . . . Very fine scientific history."—Robert Plumb, New York Times.

Now at last comes the stirring account of how the world's top-flight scientists succeeded in exploring the realm of the atom, and of what they discovered.

Here is a full-blown behind-the-scenes view of the SCIENTIFIC MIND IN ACTION and of SCIENTIFIC METHOD AT WORK. Here we see at close range the endless series of baffling problems that arose, and learn how these were tackled. We can relish the brilliant play of scientific thought among the foremost physicists, chemists, mathematicians, and theoreticians of the world—Einstein, Rutherford, the Curries, Geiger, Bohr, Millikan, Condon, Fermi, Compton, Oppenheimer, Teller, etc., etc. AS WE READ WE COME TO UNDERSTAND EACH BASIC CONTRIBUTION TO THE COMPLEX PATTERN OF RESEARCH, AND TO SEE HOW IT IS RELATED TO THE WORK OF OTHERS BEFORE AND AFTER.

Full of scholarship, yes, but full also of magnificent, absorbing drama, this nontechnical book is for the intelligent reader seeking better to comprehend the world of today—AND TOMORROW! ORDER NOW!

\$3.95 Post free • 10-Day Money-Back Guarantee

EMERSON BOOKS, Inc., Dept. 831-L
251 W. 19 St., New York 11

Books of the Week

(Continued from page 276)

MY FIRST PICTURE ENCYCLOPEDIA—transl. from French and adapted by Marie Ponsot—Grosset, 68 p., 275 illus. by P. Brasseur and others, \$2.95. Large format, colorful picture book showing the child the world it lives in.

ORGANIC CHEMISTRY, An Outline: Problems and Answers—Corwin Hansch and George Helmkamp—McGraw, 258 p., paper, \$2.95. Provides drill problems and answers for the beginning student.

THE PHENOMENON OF MAN—Pierre Teilhard de Chardin, transl. from French by Bernard Wall, introd. by Sir Julian Huxley—Harper, 318 p., \$5. French Jesuit biologist-paleontologist seeks to effect a three-fold synthesis: of the material and physical world with the world of mind and spirit, of the past with the future, and of variety with unity.

PLANT PATHOLOGY: Problems and Progress 1908-1958—C. S. Holton, Ed.—Univ. of Wis. Press, 588 p., illus., \$8.50. Reference work published for the Golden Jubilee of the American Phytopathological Society.

POINT FOUR ASSIGNMENT: Stories from the Records of Those Who Work in Foreign Fields for the Mutual Security of Free Nations—Russell Davis and Brent Ashabranner—Little, 246 p., illus. by Gil Miret, \$3.50. Stories of American technical assistance in far-away places.

A REVIEW OF THE SIRENIA AND DESMOSTYLIA—Roy H. Reinhart—Univ. of Calif. Press, 145 p., illus., paper, \$3. Describes recent fossil discoveries in Colombia, Puerto Rico, Mexico, California and Egypt, and reevaluates desmostylid fossils from the American Pacific Coast and Japan.

ROCKS ALL AROUND US—Anne Terry White—Random House, 82 p., illus. by Evelyn Urbanowich, \$1.95. Easy-to-read introduction to geology for young boys and girls.

SIMPLE MACHINES AND HOW THEY WORK—Elizabeth N. Sharp—Random House, 83 p., illus. by Ida Scheib, \$1.95. Primary level reading about what the physicist calls simple machines, such as wheels and axles, wedges and screws, with simple experiments.

Science News Letter, October 24, 1959

Questions

ASTRONAUTICS—Which radio band is Explorer VII using? p. 268.

MEDICINE—Who are the recipients of the 1959 Nobel Prize in Medicine? p. 269.

PHYSICS—What is the fundamental basis for Einstein's general theory of relativity? p. 267. Photographs: Cover, Doak Aircraft Co., Inc.; p. 267, General Electric Company; p. 269, United Press-International News Photo; p. 271, International Cooperation Administration; p. 280, Vi-Jo Sales Co.

Do You Know

The color of the hair depends on the degree of melanin pigment present; total absence of melanin results in white hair.

Each year more than one percent of all industrial workers in the U. S. (not including clerical workers) are afflicted with skin diseases resulting from exposure at work to irritating substances.