ROCKETRY SIMPLIFIED

"Rocket Manual for Amateurs." By the famous expert, Capt. B. R. Brinley. 368 pages, over 80 illustrations. Brand new. The most clearly-written introduction to rocket science yet. Plus: A valuable 24-page Guidebook listing over 100 sources of free rocket information. The very best combination of two books for starting your fun and education in rocketry. Together, only \$2.00. Order today from:

PACE PRODUCTS CORP. Dept. SNL 38 E. 57th Street, New York 22, N. Y.



RIDER BOOKS

Space Age

Basics of Missile Guidance and Space Techniques by Marvin Hobbs

Basics of Missile Guidance and Space Techniques by Marvin Hobbs
Electronics is playing a vital role in the race to achieve mastery of outer space and send manned missiles rocketing to the moon and beyond. You can learn and easily understand the fundamentals of the important electronic areas that will contribute to the conquest of space with this two volume "picture-book" course. #229, 2 vols., soft covers, \$7.80 per set; #229-H, 2 vols. in single cloth binding, \$9.00.

Fundamentals of Radio Telemetry by Marvin Tepper Telemetry makes possible the collection of data on which the improvement of existing rockets, missiles and aircraft is based. This exciting book explains its purpose and explores its techniques. Special sections are devoted to missile and satellite telemetry and hardware and to data recording and processing. Specially prepared illustrations. #225, \$2.95.

Master the Basics of Digital Computers Basics of Digital Computers by John S. Murphy
This 3-volume picture book training course is the easiest, quickest, most economical way of learning all about the exciting new field of digital computers. If you have a knowledge of the fundamentals of electronics, you can master the basic of digital computers and understand the details of any specific digital computer. Written by an expert in the computer field, text matter has been tested and proven in the training of computer field engineers and technicians. More than 350 illustrations support the text.

Ideal for training of programming personnel, maintenance men, for introductory training of engineering students and for all who wish to broaden their knowledge of this new field. #196, 3 vols., soft covers, \$7.50 per set; #196-H, all 3 vols. in single cloth binding, \$8.50.

Available at bookstores, or order direct.

DEPT SN-1

Add city and state taxes where applicable Canadian prices 5% higher



Books of the Week

For the editorial information of our readers, books received for review are listed. For convenient puchase of any U. S. book in print, priced at 95¢ or over, 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.

ADOLESCENT AGGRESSION: A Study of the Influence of Child-Training Practices and Family Interrelationships—Albert Bandura and Richard H. Walters, foreword by Robert R. Sears Ronald, 475 p., \$7.50. Contribution to the theory of juvenile delinquency.

ADVANCES IN SPACE SCIENCE, Vol. 1-Frederick I. Ordway, III, Ed.—Academic, 412 p., illus., \$12. For scientists and engineers working in the many related fields of astronautics.

ADVENTURES AMONG BIRDS-Hugh M. Halliday—Pennington Press, 179 p., photographs by author, \$2.95. Communicates the excitement of bird watching and close association with wild nature, offering a wealth of first-hand observations of bird life.

Aerodynamic Phenomena in Stellar Atmospheres: A Bibliography—R. N. Thomas, Ed. —NBS (OTS), 89 p., paper, \$1.25. Working bibliography for aerodynamicists participating in Fourth Symposium on Cosmical Gas Dynamics.

THE CENTRAL NERVOUS SYSTEM AND BEHAVIOR —Mary A. B. Brazier, Ed.—Macy, 358 p., illus., \$4.75. Transactions of Second Conference held at Princeton, N. J., February 1959.

FALLOUT FROM NUCLEAR WEAPONS TESTS: Hearings in 3 Vols.—Jt. Committee on Atomic Energy, U. S. Congress—GPO, 2,618 p., illus., paper, \$2.75, \$2.75 and \$1.75. Vol. 1 summarizes new data on atmospheric and global fallout; vol. 2 contains data on uptake in milk, food and human bone, discussion of exposure levels, development in radiation biology; vol. 3 is appendix of pertinent testimony.

FEDERAL COMMUNICATIONS COMMISSION: Silver Anniversary Report for Fiscal Year 1959—John C. Doerfer, Chmn.—GPO, 191 p., paper, 65¢. Provides historical background to point up the

phenomenal growth of electrical communication since the Commission was established in 1934.

FROM Ox CARTS TO JETS: Roy Ingersoll and the Borg-Warner Story-Will Oursler-Prentice-Hall, 346 p., photographs, \$4.95. Biography of an American businessman.

THE HOWARD W. SAMS HANDBOOK OF ELEC-TRONIC TABLES AND FORMULAS—Donald Herrington and Stanley Meacham, Eds.—Sams, 128 p., illus., \$2.95. Includes six-page frequency spectrum chart in color.

Hyperons and K-Mesons, Part I: General Characteristics. Part II: Isotopic Spin and Systematics of Fundamental Particles. Part III: Interactions between Fundamental Particles and Difficulties of the Theory—M. A. Markov, transl. from Russian—AEC (OTS), 342 p., paper, \$5.

INTERMEDIATE SOCIETIES, SOCIAL MOBILITY, AND COMMUNICATION: Proceedings of the 1959 Annual Spring Meeting of the American Ethnological Society—Verne F. Ray, Ed.—Univ. of Wash., 74 p., paper, \$2.50.

THE JOY OF MUSIC-Leonard Bernstein-Simon & Schuster, 303 p., illus., \$5.95. The composer-pianist-conductor brings music to life with words.

MATHEMATICAL METHODS AND THEORY IN GAMES, PROGRAMMING, AND ECONOMICS, Vol. I: Matrix Games, Programming, and Mathematical Economics. Vol. II: The Theory of Infinite Games—Samuel Karlin—Addison-Wesley, 433 and 386 p., \$10.75 each.

MAYA HIEROGLYPHIC WRITING-An Introduction—J. Eric S. Thompson—Univ. of Okla Press, 2nd ed., 347 p., 130 p. of illus., \$10. For Mayan specialists and those interested in Pre-Columbian America, new preface outlines latest advances and new list of references.

THE MORPHOLOGY AND ANATOMY OF AMERICAN SPECIES OF THE GENUS PSARONIUS—Jeanne Morgan—Univ. of Ill. Press, 108 p., illus., \$4; paper, \$3. Monograph on the morphological characteristics of psaroniaceous tree ferns.

NATIONAL RESEARCH COUNCIL REVIEW 1959-E. W. R. Steacie, Pres.—Nat. Res. Council (Canada), 337 p., paper, 75¢. Report on pure and applied research activities.

Nuclear Ship Propulsion — Holmes F. Crouch—Cornell Maritime, 347 p., illus., \$10. Presents fundamentals of nuclear technology as they apply to nuclear merchant ships, featuring both existing ships and advanced concepts.

OF Societies and Men-Caryl P. Haskins, introd. by Vannevar Bush-Viking, 282 p., paper, \$1.45. Reprint of 1951 edition, presents evidence from the world of biology to illumine the social problems of human society.

PRACTICAL STATISTICS IN EXPERIMENTAL DESIGN—A. W. Wortham and T. E. Smith—Dallas Publishing House, 128 p., \$3.50. Introductory text of practical statistical methods and applications for engineers and scientists.

Russian Diary-Gaylord P. Harnwell-Univ. of Pa. Press, 125 p., \$3.75. American college president's impressions of Russia.

SPACE FLIGHT, Vol. I: Environment and (Continued on p. 62)

Best Book Contest For 1960

\$1600 Cash Awards plus 40% return. All types of manuscripts invited. For Contest rules and details of famous publishing plan, write for free Brochure SN. Pageant Press, 101 Fifth Ave., N. Y. 3

Announcing the NEW . . .

MONTHLY EVENING SKY MAP

"The stars brought down to earth"

- -detailed star and planet charts for each month of the year.
 -informative articles for the beginner
- in astronomy.
- advance information on current events in the skies.

\$3.00 per year Sample copy, 50¢ Published bimonthly by:

Sky Map Publications, Inc. Box 213-SA, St. Louis 5, Mo.

Modern

By David G. Johnson & Oscar Heidenstam

"A complete guide to the promotion of fitness, strength and physique. A new, authoritative, dynamic approach based on medically approved progressive-resistance exercises, suitable for home or gym use. Of use to trainers, remedial gymnasts and physiotherapists. Photographs, diagrams, index."—Library Journal.

Fully illustrated ORDER NOW:

MODERN BODYBUILDING: A Guide to Fitness,
Strength and Physique
\$3.95 Postfree • 10-Day Money-Back Guarantee
EMERSON BOOKS, Inc., Dept. 890-L
251 West 19th St., New York 11



Accurate as a Jeweler's Scale

PRECISION POSTAL SCALE

Calibrated in 1/16 ounces

Calibrated in 1/16 ounces

Constructed with the same precision and accuracy as jeweler's and pharmacist's scales utilizing the principle of counter-balance. Should last a lifetime because there are on springs—no tension parts to go out of order. Adjusting screw at base of scale compensates for uneven surfaces. Ideal for use in sending foreign mail, air mail—any instance where accurate fractions mean savings to you. All steel construction with white engraved fractions against black background for best legibility. Compact enough to keep on desk at all times—ever ready for use.

Graduated to 4 Oz. \$2.98 ppd.
Graduated to 9 Oz. \$4.98 ppd.
Graduated to 18 Oz. \$6.98 ppd.
Send check or money order. If COD fees extra. Money Back Guarantee

NORTH AMERICAN INDUSTRIES 101 W. 31 St., N. Y. 1, N. Y.

CUP ELECTRIC PERCOLATOR



Mfrs. \$39.95

Sale Price \$18.95

Charge \$1.00

We bought up all we could get of this famous brand Electric Percolator, at bargain price, and are passing our savings on to you. At this low, low price, you can afford the luxury of this big 10 to 40 cup party perk.

John Surrey Comes to the Aid of Your Party

For little more than the cost of a smaller coffee maker, less than half the listed price, you can end those constant treks to the kitchen when you're entertaining a crowd. Of gleaming aluminum, in a sleek modern design, this handsome coffee maker is in perfect taste on any table, fits in gracefully with your fine china and silver. And . . . it makes a perfect 40 cups of coffee, time after time.

* Fully automatic with pilot light * UL & CSA Approved * Lifetime Mirror Finish * Plug in extension cord For Offices—Hospitals—Commissarles—Parties—Clubs—Churches, Etc.

Jahn Surrey, Tid., 11 West 32nd St., Dept. SN-53, New York 1, N. Y.

ATCO STANDARD THERMOMETER

Floating Type 9 ½ inches long. Printed Paper Scale ranging up to 160 degrees F, in two-degree divisions. Magnifying Lens Tube has yellow-green backing for easy reading. Mercury-filled. Bulb fused to outside of cylinder for quick registering. Shot weighted. Floats upright. Guaranteed accurate. For fishing, fish-tank dairy, etc. tank, dairy, etc.

Also a Taylor model to 230 degrees F.

Value \$3.00. Sale price 50¢ each postpaid. HARRY ROSS Scientific & Lab Apparatus 63 Reade St., N. Y. 7, N. Y.

TO MEN WHO JUST "CAN'T LEARN" MATH!

More and more in our dynamic economy, a knowledge of basic mathematics pays offl

Whether in Engineering, Electronics, Mechanics, Construction, Pure Science, etc.—or in Estimating, or Trade and Finance, or Buying and Selling, etc.—the man who gets there fustest with the mostest, MATH-WISE, is likely to be rewarded handsomest!

Fortunately, there now exists, in a single volume of 240 fact-packed pages (including 195 clarifying illustrations), a basic course in mathematics, from arithmetic to the calculus, arranged logically and in order of difficulty. Explanations of principles are followed by worked examples.

This one-volume math "library" economizes not only This one-volume math "library" economizes not only your money but, more important, your time. Amazingly, the author, with a rare talent for simplifying the complicated, covers the whole gamut: treatment of fractions, decimals, square root and cube root, logarithms, progression averages, interest, algebra, equations, graphs, plane and solid geometry, trigonometry, differential and integral calculus; useful mathematical tables; summary of mathematical formulas, etc., etc.

This remarkable work which already has aided thousands, will be of enormous help not only to those who have forgotten their mathematics but also to those now acquiring it. You may try it out at our risk. now acquiring it.
ORDER NOW.

A REFRESHER COURSE IN MATHEMATICS

by F. J. Camm

240 Pages • 195 Illustrations
2.95 Postfree • 10-Day Money-Back Guarantee

EMERSON BOOKS, Inc., Dept. 889-L 251 W. 19th Street, New York 11

Pocket Transistor Radio



Size of cigaret package, yet thrilling performance. Weighs only 3 ounces. Listen to news, sports, music, programs, etc. on your personal portable. Modern plastic case, blue & ivory with gold metal grille. Complete broadcast brand. On-off switch one end. Uses standard penlight cells (included). Guaranteed. Complete, ready for Immediate playing. Postpald, Only \$5.95

JOHNSON SMITH & CO., Dept. 868, Detroit 7, Mich.

New "Mechanical Educator" to IMPROVE MEMORY

DORMIPHONE MEMORY TRAINER

- Speeds up learning processes
- Aids concentration
- Provides entertainmen

Provides entertain
The Memory Trainer
records, instantly
plays back, and
when clock is set,
automatically repeats speech, music,
any material at
regular intervals
through a built-in
speaker. No reels of
tape to snarl or rewind. Portable.
Ideal aid for work,
school, child training, entertainment
—Used by educators, psychologists,
people of all ages.
Modernophone, inc., 1



Self-

Contained Recording Cartridges

from 30 seconds to 55 minutes to 55 minutes Easily removed. Can be stored or "erased" instantly and remsed repeatedly. Write TODAY for FREE folder with complete information. No salesman will call. Modernophone, Inc., 125-010 Radio City, N.Y., 20, N.Y.

Books of the Week

(Continued from p. 60)

Celestial Mechanics-Krafft A. Ehricke-Van Nostrand, 513 p., illus., \$14.50. Astronomy from the viewpoint of the astronautical engineer, and principles and methods of celestial mechanics as the foundation of space flight

SURVEYOR OF THE SEA: The Life and Voyages of Captain George Vancouver-Bern Anderson —Univ. of Wash., 274 p., \$6.75. The professional career of the British seafarer-explorer who surveyed the Pacific coastline in 1790-95.

TRENDS IN CONTENT ANALYSIS-Ithiel de Sola Pool, Ed.—Univ. of Ill. Press, 243 p., \$7.50. Papers of the work conference of the Committee on Linguistics and Psychology of the Social Science Research Council, held at University of Illinois in 1955.

Unconventional Electrical Power Sources, Part III—Paul A. McCollum—WADC (OTS), 101 p., illus., paper, \$2.50. Presents data and theory on oscillating generator, thermopiles, fuel cell, solar cell and nuclear converters.

VALENCY: Classical and Modern-W. G. Palmer—Cambridge Univ. Press, 2nd ed., 244 p., \$5.50. Deals with old established concepts of chemical valency and modern electronic theories.

WILDLIFE IN DANGER-Ivah Green, introd. by Robert Porter Allen-Coward-McCann, 128 p., photographs, \$3.50. Stories of 29 species either extinct or threatened with extinction.

World Weather Records, 1941-50—U. S. Weather Bureau, John H. Conover, Ed.—GPO, 1361 p., map, \$4.75. Continuation of three previous volumes published by the Smithsonian Institution. Official meterological data gathered by more than 80 nations.

Science News Letter, January 23, 1960

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.

ATOMIC THEORY

THE STRUCTURE OF THE ATOM—23 pages with many diagrams. A new concept of the atom, based upon the Krafft-Hilgenberg theory of particle structure. Price 25 cents pp. C. F. Krafft, 218 Columbia Road, Annandale, Virginia.

BIOLOGICAL STAINS

BIOLOGICAL STAINS FREE PRICE LIST. ESBE Laboratory Supplies, 450 Bloor St., W., Toronto, Ontario. Canada.

CHEMICALS & APPARATUS

CHEMICALS IN SMALL QUANTITIES LAB APparatus & Glassware. Telescopes & Microscopes. Catalog 25¢. Bio-Chemical Products, 30-S Somerset, Belmont 78, Massachusetts.

GOVERNMENT SURPLUS

GOVERNMENT SURPLUS RADIOS, RECEIVERS, transmitters, gadgets, parabolic reflectors, infra-red snooperscopes, aircraft camera lenses. Amazing catalog 10¢. John Meshna, Malden 48, Mass.

PLASTICS

NEW LIQUID CASTING PLASTIC, CLEAR COL-ors. Embed real flowers, minerals, biological speci-mens, delicate instruments, electronic parts. Also cold setting resin and fiberglass for laminating, casting, molding, coating. Manual 25¢. Castolite Company, Dept. A-30, Woodstock, Illinois.

RADIOACTIVE ISOTOPES

RADIOACTIVE ISOTOPE EXPERIMENTS—\$1.00 for High Schools. Isotope Price List #14C—Free. Atomic Research Laboratory, 10717 Venice Blvd., Los Angeles 34. Calif.