## **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 ABC OF RELATIVITY-Bertrand Russell-New Am. Lib., rev. ed. by Felix Pirani, 144 p., paper, 50¢. Discusses Einstein's theories, using analogies from everyday experiences.

THE ALGEBRA OF ELECTRONICS—Chester H. Page-Van Nostrand, 258 p., \$8.75. Guide to a practical understanding of electronic circuits, more than 100 problems with methods and answers.

ALL ABOUT TROPICAL FISH—Derek McInerny and Geoffrey Gerard, foreword by H. F. Vinall —Macmillan, 480 p., 300 illus., 100 in color, \$15. Covers the whole field of aquaria, written in non-technical language, useful to beginner as well as expert.

Annual Research Task Summary 1959, Vol. 1: Biological, Medical, Social and Behavioral Sciences and Operations Research—Army Research Office, Arthur G. Trudeau, Chief—Dept. of the Army (Off. of Tech. Serv.), 315 p., paper, \$3.25. Briefs of purpose, scope, approach and status of projects.

APPLICATIONS OF FINITE GROUPSmont—Academic, 346 p., \$11. Provides mathematical background for reading the physics literature and offers variety of examples of applications of finite groups to problems of

As the Pro Flies: Flying Expertly, in a Professional Manner—John R. Hoyt—McGraw, 271 p., illus. by Mary N. Hoyt, cartoons by Mel Lazarus, \$4.95. Covers the mechanics of

modern flight and the psychological elements a good pilot must master.

ASPECTS OF THE ORGANIC CHEMISTRY OF SULPHUR — Frederick Challenger — Academic, 253 p., \$7.50. Of special interest to organic chemists, biochemists and those working in pharmaceutical and petroleum industry.

1958 Book of ASTM Standards Including TENTATIVES, PART 5: Masonry Products, Ceramics, Thermal Insulation, Acoustical Materials, Sandwich and Building Constructions, Fire Tests —Am. Soc. for Testing Materials, 1118 p., illus., 226 standards, \$12. Reference work on asbestoscement products, brick, structural tile, refractories, glass, pipe and drain tile, and other materials.

Boston's Immigrants: A study in Acculturation—Oscar Handlin—Belknap Press, Harvard Univ. Press, rev. ed., 382 p., illus., \$6.75. Enlarged by new material covering an additional fifteen years from 1865 to 1880.

THE CANAL BUILDERS: The Story of Canal Engineers through the Ages—Robert Payne— Macmillan, 278 p., illus., \$5. Highlights engineering marvels from ancient times to the St. Lawrence Seaway.

THE CLOCK WE LIVE ON-Isaac Asimov-Abelard-Schuman, 160 p., illus. by John Bradford, \$3. Comprehensive story of the astronomy, geography and history behind man's effort to establish time and the calendar in relation to sun, earth and moon.

EVERYDAY METEOROLOGY—A. Austin Miller and M. Parry—Philosophical Lib., 270 p., illus., \$7.50. Popular work by British meteorologists explains in detail the science of the weather with advice for amateur observers.

Evolution, Marxian Biology, and the So-CIAL Science — Conway Zirkle — Univ. of Pa. Press, 527 p., \$7.50. Documented presentation of the Marxian distortion of genetics and its influence on the western scholarly world.

EXPERIMENTAL ELECTRICITY FOR BOYS-Willard Doan—Rider, 124 p.. illus., \$3.45. Instruction and experiments in electricity for the

THE FEDERAL ROLE ON HIGHWAY SAFETY:

# **Best Book**

\$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

## MODERN JUDO and Self-defence

#### by HARRY EWEN

Basic principles of judo expertly explained by use of split-second photographs. Instructions for every throw, lock and hold by an experienced successful coach. For the beginner as well as the experienced judoks. Particular attention paid to needs of those wishing to learn judo at home. "Clearly written instruction."—Library Journal.

Lavishly illustrated ORDER NOW! \$3.95 Postfree • 10-Day Money-Back Guarantee

EMERSON BOOKS, Inc., Dept. 688-L 251 West 19th Street, New York 11

Letter from the Secretary of Commerce-U.S. Congress, Comm. on Public Works — Govt. Print. Off., 232 p., paper, 60¢. Contains findings and recommendations of study made to determine federal role in promoting highway safety

FIRST UNDER THE NORTH POLE: The Voyage of the Nautilus—Commander William R. Anderson—World Pub. Co., 64 p., illus., \$2.75. Tells young readers what the crew did during the dramatic 96-hour voyage.

HELICOPTERS AND AUTOGYROS OF THE WORLD —Paul Lambermont and Anthony Pirie, foreword by Igor I. Sikorsky—Philosophical Lib., 255 p., photographs 64 p., \$10. Chronological historical survey, followed by country-by-country compilation of helicopters produced.

House Plants: For the Indoor Gardener-Editors of Better Homes & Gardens-Meredith Pub. Co., 160 p., 300 illus., \$2.95. Colorful guide to the needs of house plants, treats familiar as well as exotic plants in well organized

How to Finance a College Education -W. Bradford Craig—Holt, 79 p., paper, \$1.95. Points out plans to assist families in meeting college expenses of promising students. Author is director of Princeton University's Bureau of Student Aid.

How to Get the Best Education for Your Child—Benjamin and Lillian Fine—Putnam, 251 p., \$3.95. Tells parents how to size up schools, with chapter on helping the gifted child.

THE INEFFECTIVE SOLDIER: Lessons for Management and the Nation, 3 Vols.: The Lost Divisions, Breakdown and Recovery, and Pat-terns of Performance—Eli Ginzberg and others, foreword by Major General Howard McC. Snyder—Columbia Univ. Press, 225 p., 284 p., and 340 p. resp., \$6 each, set of three \$18. Study based on analysis of the Army and Selective Service records of men rejected or separated from service in World War II because of inaptitude, personality defects or psychoneurosis.

INSECT BUILDERS AND CRAFTSMEN-ROSS E. Hutchins-Rand McNally, 96 p., photographs by author, \$2.95. About the remarkable structures created by some insects, also tells young people how to study these insect engineers.

An Introduction to Anthropology-Ralph L. Beals and Harry Hoijer—Macmillan, 2nd ed., 721 p., illus. by Virginia More Roediger, \$6.50. College textbook.

AN INTRODUCTION TO CHEMICAL ENGINEERING Charles E. Littlejohn and George F. Meenaghan—Reinhold, 271 p., \$7.80. Beginning text explaining some of the fundamentals upon which chemical engineering theory is based.

INTRODUCTORY CALCULUS-Donald E. Richmond—Addison-Wesley, 207 p., \$5.50. One-semester course in calculus, pre-supposing no knowledge of analytic geometry or trigonometry.

ISLAND IN THE DESERT: The Challenge of the Nile-Charles R. Joy-Coward-McCann, 96 p., illus., \$2.50. In simple language tells of the challenges, achievements and problems of modern Egypt.

Island of the Dragon's Blood-Douglas

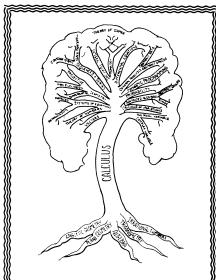
## Electric Motor Kit 祭 20c

Used by Science Classes, Schools, Camps, Army

Speedy, Dynamo-type Motor. Runs up to 6000 rev. per min. Helps to understand motors, generators, electro-magnetism, current flow, etc. All parts completely finished. Easy & fun to assemble in a few minutes. With metal base, 6-bar laminated armature, illustrated directions. About 2-in. high, 35¢ each Postpaid. 10 or more 25¢ each. 100 or more 22½ each. 500 or more only 20¢ each.



nson Smith Co., Dept. 782, Detroit 7, Michigan Catalog of 2950 Novelties, Kits, etc. 10¢



#### The TREE of MATHEMATICS

Presents epitomes of twenty-seven of the main branches of mathematics, with an invaluable index for reference work.

Starts on ground familiar to everyone who has had arithmetic.

Is written in simple language.

Puzzlements are omitted in the interest of brief presentations of basic principles, which broadens one's mathematical horizons in a minimum of time.

Extensive bibliographies are given for the ower courses such as the theory of games and dynamic programming.

Send this ad and \$5.00, or \$5.50, to

The Digest Press

Dept. C. Pacoima, Calif.

Botting-Wilfred Funk, 251 p., illus., \$3.95. Travelogue of a small expedition of scientists to the island of Socotra off the East Coast of Africa and its cave-dwelling aboriginal people.

MAN . . . IN THE UNIVERSE: What you should know about our Solar System-Michael Stoiko and Donald Cox—Winston, 42 p., illus. by N. Stanilla, \$2.95. Astronomy and space flight facts for young people.

Outdoor Reference Guide-Amelia Reynolds Long, Ed.-Stackpole Co., 288 p., illus., \$7.50. Encyclopedia to help the average outdoorsman identify animals and plants by their common names.

PLANTS AND ENVIRONMENT: A Textbook of Plant Autecology-R. F. Daubenmire-Wiley, 2nd ed., 422 p., illus., \$6.95. New edition features among others, evaluation of stoniness of the soil, significance of dew for plants, urban microclimate, atmospheric pollution and frostchurning of soil.

Power Unlimited: The Story of Power from Windmill to Nuclear Energy-Abraham and Rebecca B. Marcus—Prentice-Hall, 152 p., illus., \$3.50. Explains diesels, dynamos, turbo-jets, fission, fusion and solar energy for the general reader.

PSYCHOANALYSIS, SCIENTIFIC METHOD AND PHILOSOPHY: A Symposium—Sidney Hook, Ed. -N. Y. Univ. Press, 370 p., \$5. Interchange of views on the scientific status of psychoanalysis between a distinguished group of psychoanalysts and philosophers of science.

RADIATION BIOLOGY AND CANCER: 12th Symposium on Fundamental Cancer Research, 1958 -Jacob Furth and others, introd. by R. Lee Clark-Univ. of Texas Press for M. D. Anderson Hospital & Tumor Inst., 493 p., illus., \$8.50. Collection of papers.

REFERENCE BOOKS: A Brief Guide for Students and other Users of the Library—Mary Neill Barton, Compiler—Enoch Pratt Free Lib., 4th ed., 117 p., illus., paper, \$1.25.

RESEARCHES IN GEOCHEMISTRY -Philip H. Abelson, Ed.—Wiley, 511 p., illus., \$11. Collection of essays reviewing the present status of U.S. geochemical research, with bibliographies.

THE SOCIOLOGICAL IMAGINATION-C. Wright Mills—Oxford Univ. Press, 234 p., \$6. Cultural critique of the ascendant "schools" of sociology in the U.S., restating the tradition of classic sociological analysis.

Teacher Supply and Demand in Public Schools, 1959—Ray C. Maul—Research Div., Nat. Educ. Assn., 52 p., paper, 50¢. Highlights shortages, imbalance between elementary and high-school new teacher supply, and prospects of help in high-school fields of greatest short-

THEORIES OF FIGURES OF CELESTIAL BODIES -Wenceslas S. Jardetzky, foreword by Otto Struve-Interscience, 186 p., \$6.50. Deals with the figures of equilibrium and distortions of rotating bodies. For astronomers.

THEY FLEW THE ATLANTIC-Robert de la Croix, transl. from French by Edward Fitzgerald-Norton, 225 p., illus., \$3.95. Story of the aviators and pioneers, their first attempts, failures and triumphs.

WHAT DOES A JET PILOT DO?—Robert Wells Dodd, unpaged, photographs by Harvey Lippman, \$2.50. Acquaints young reader with the technical details of a jet pilot's job.

WINGS OVER ALASKA: The Story of Carl Ben Eielson — Edward A. Herron — Messner, 192 p., \$2.95. Biography for young people about the pioneer pilot of Alaska.

YOUR MIND CAN MAKE YOU SICK OR WELL - Curt S. Wachtel — Prentice-Hall, 244 p., \$4.95. Explains to the layman the psychosomatic element in disease.

Science News Letter, May 16, 1959

## SPUTNIKS I & IIFREE!

Fabulous collection of stamps showing: Sputnik 1 in Orbit, SPUTNIK
PHERE BALLOON, METEOR. Station, Radio
Telescope, actual TV set, TV station. Microscope,
Microbe Hunter, BRUSSELS FAIR SET showing
puppets, etc. All this is yours Free, to introduce our
bargain approval offers. EXTRA: 48 PAGE STAMP
DICTIONARY included. Send 10¢ to over mailing
costs. STAMPEX, Box 47-HNL, White Plains, N. Y.

### ATOMIC RADIATION-

IN THE HIGH SCHOOL SCIENCE CLASS

#### A NEW PROJECT EXPERIMENT REFERENCE

developed by Joe W. Tyson

Over 40 experiments & projects arranged and graded for achievement at all levels. Encompasses Biology, Chemistry, & Physics. Extensive general information sections. How to do it & where to obtain materials, largely at little or no cost.

\$1.65 Postage Paid — Discount on quantity orders

**OLDFRIENDS BOOKS 4923 Strass Drive** Austin 3, Texas

#### **ELECTROSTATIC GENERATORS**

(Van de Graaff Type)

500,000 VOLTS. This model available in kit form is over 3 feet tall and has a 15" diameter spherical charge collector. Kit includes 15" hemispheres, plastic tube, pulleys, bearings, belt, frame, and assembly directions. \$29.80 Postpaid

\$28.80 Postpaid

200,000 VOLTS. This model (shown at left) is 17" high and has a 6 \( \frac{1}{2} \) diameter spheroidal charge collector. Operates on 110 volt AC. Fully assembled, postpaid \$39.50. Kit form \$19.50. Other models to 1,000,000 V.

Vacuum Equipment. Mech. pumps for pressure range 1 Aimosphere down to 150 Microns \$32.50. Diffusion pumps for pressure from 1mm Hg. down to 01 Microns \$25.00. McLeod guages for range 1 Micron to 1000 Microns \$11. Write for free spec. sheets. Dept. SN.

Morris & Lee • 439 Elm, Buffalo 3, N.Y.

### **GEMSTONE** COLLECTION

30 Rough Specimens of Crystal Gems in individual compartments; pocket size,  $4" \times 5 \frac{1}{2} i''$ ; contains gems from all over the world. Ruby, Aquamarine, Amethyst, etc. Price, \$3.75 pre-

Booklet: "Introduction to Geology for the Layman," **50**¢. Geological Catalogue \$1.00, refunded with purchases over \$10.00.

#### ECKERT Mineral Research Inc.

PROSPECTORS SUPPLIES Dept. SNL, 110 E. Main, Florence, Colorado

## **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. ppd. or 4 for \$5.00. Same as above—1" long (no silver backing) \$1 ea. 5 for \$4. Postage paid on prepaid orders. Calif. res. add sales tax.

Volume Sales Co., War Assets Div., Dept. L516 3930 Sunset Bivd. Los Angeles 29. Calif.

#### 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, I year; \$9.00, 2 years. Sample copy, 50¢.

SKY AND TELESCOPE

Dept. SNL-2 Cambridge 38, Mass.

RAND McNALLY'S

#### First MAP of OUTER SPACE



THOUSANDS SOLD ALL OVER THE WORLD. EMPATHY! True space colors make you feel actual space travel! Covers billions of space miles. Accurate and reliable. Special close up pictures and illustrations. Provides outer space and space age information. A quick and easy way to understand the solar system. Special 60 lb. weight map stock. A unique and modern decoration. A must for schools, offices, the military, libraries, professional waiting rooms, laboratories, etc.

WALL SIZE, 42" X 33" Postage included, \$1.95 each. Two for \$3.69.

DICK KENT, Trader

P.O. Box 264, Camp Hill, Penna.

"World Wide Scientific, Educational Specialties"

## Try UNITRON'S new

ICROSC

The Model MPS is a precision instru-ment designed to meet the exacting requirements of science, education and industry. Ideal for work in chemistry, crystallography, biology, as well as the technology of paper, glass, textiles and petroleum.

- Evepieces: 5X (micro.), 10X (cross.)
- Objectives: 4X, 10X, 40X, achromatic, strain-free, centerable
  Nosepiece: quick-change type
- Substage condenser: focusable, 3-lens, swing-out top mount, iris diaphragm
- Polaroid polarizer: rotatable 360° Polaroid analyzer: in sliding mount
- Bertrand lens: centerable
- Stage: 115mm diameter, revolves 360°, reads to 6' with vernier
- 2 Compensators: quarter-wave plate and first order red plate
   Focusing: both coarse and fine
- FREE TEN-DAY TRIAL

Quantity prices on three or more Accessory mechanical stage \$14.75



## INSTRUMENT DIVISION of UNITED SCIENTIFIC CO.

204-206 MILK STREET . BOSTON 9, MASS.

Please rush	UNITRON's	Microscope	Catalog	5Q-3	
Name					

Company\_

Address