

TOP VALUES

From the Only Store of Its Kind

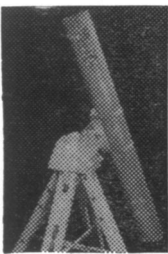
GEMSTONE COLLECTION



We guarantee this beautiful compendium of 30 genuine gemstones as the most wonderful to be seen. AT ANY PRICE! —or your money refunded. It MUST be handled to be appreciated. 5 1/2" x 4" booklet form with 30 stones only **3.25** postpaid (Agate, Ruby, Sapphire, etc.), in "semi-polish" finish. Wonderful gift, too.

40 x 80 POWER 3" TELESCOPE

Be prepared to see the "Earth Satellite." Bring the mountains and "seas" of the Moon right before your eyes—crystal sharp! Study Mars, Jupiter's 4 moons, rings of Saturn, and millions of other heavenly wonders. Enjoy astronomy, learn basic optical principles AT GREAT SAVINGS by assembling your own 3" ROSS STELLARSCOPE. Ready to use. NO LENS POLISHING REQUIRED. Thousands sold. Order this easy - to - assemble telescope today. Shipping wt. 9 lbs. (Ross Quadripod, 18.00 extra.) only **16.50** postage extra



2" x 4" RECTANGULAR MAGNIFIERS



Terrific value! Slight imperfections do not harm effectiveness. Ideal for reading very fine print, for artists, students, stamp and coin collectors, etc. Always handy to have around, and for gifting. Made in U.S.A. Our price for 6 just about what you'd pay ordinarily for 1! Order today. **6 for 1.80** postpaid

GEM CARBIDE SCRIBER

Write on Metals, Glass, Plastics!



A professional tool for scribing, engraving, marking, cutting on hardened steels, metals, glass, gems, ceramics, plastics, etc. Recommended for use by artists, chemists, designers, scientists, hobbyists. Carbide Scriber is tipped with hardest metal made, harder than sapphire. Easy to resharpen. only **1.50** postpaid

MULTI-PURPOSE ALCOHOL LAMPS



1-oz. glass alcohol lamps with metal cap and wick. Gives heat at point you need it. Ideal for heating cafes, chafing dishes; for outdoor cooking, road flares, etc. Carbon-free, clean burning, odorless flame. Each worth more than our price for 3! **3 for 1.00** postpaid

Comprehensive Catalog \$1.00. Deductible from your first \$10.00 order.

Remit with Order

Sorry, No C.O.D.'s

HARRY ROSS

TELESCOPES MICROSCOPES

(Dept. SN) 68 West Broadway, N.Y.C. 7

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.

ARISTOTLE—A. E. Taylor—*Dover*, Rev. ed., 118 p., paper \$1.00, cloth \$2.75. The life of a great Greek philosopher and scientist.

AS YOU SEE IT: Twenty-four pictures to Stimulate Group Discussion of Social and Moral Problems, With Suggestions for Their Use — Catherine E. Steltz—*Teachers College, Columbia University*, Manual 26 p., paper, pictures and manual \$2.95. Pictures are posed to suggest situations involving problems of marriage and family life, parent-child relations, in-laws, drinking, gambling, racial relations, law and order, etc.

AUTOMATA STUDIES—C. E. Shannon and J. McCarthy, Eds.—*Princeton University Press*, Annals of Mathematics Studies Number 34, 285 p., illus., paper, \$4.00. A collection of papers dealing with various aspects of automata theory. The problem of whether it is possible to build a machine that will duplicate or surpass the functioning of the human brain is discussed. (See page 277.)

CONSERVING AMERICAN RESOURCES—Ruben L. Parson—*Prentice-Hall*, 550 p., illus., \$8.65. A lighter, livelier treatment of a serious subject intended to interest more Americans in the story of our natural resources and the ways by which they can be conserved.

THE DESCENT OF PIERRE SAINT-MARTIN — Norbert Casteret, translated by John Warrington—*Philosophical Library*, 160 p., illus., \$4.75. The story of the exploration of a great cavern in the Pyrenees. In its depths, the author found what is believed to be the oldest statue in the world, a bear made of clay.

DINOSAURS, PREDATOR AND PREY: The Gorgosaurus and Lambosaurus Exhibit in Chicago Natural History Museum — Rainer Zangerl—*Chicago Natural History Museum*, 13 p., illus., paper, 25 cents. Describing what this museum exhibit tells us about perhaps the most spectacular of creatures, which lived some 75,000,000 years before the coming of man.

EFFECTS OF CHLORINATION AND MICROORGANISMS AND CONSTITUENTS OF ASPHALT:—Frederick C. Sanderson and others—*Highway Research Board*, Bulletin 118, 48 p., illus., paper, 90 cents. Of particular interest to highway engineers.

FACTORS INFLUENCING TRAVEL PATTERNS — William J. Mortimer and others—*Highway Research Board*, Bulletin 119, 94 p., illus., paper, \$1.80. Included is a discussion of how to develop a yardstick for measuring how many people want to go where.

FAMOUS PROBLEMS OF ELEMENTARY GEOMETRY—F. Klein, Raymond Clare Archibald, Ed., translated by Wooster Woodruff Beman and David Eugene Smith—*Dover*, 92 p., illus., paper \$1.00, cloth \$1.50. A new, corrected edition of a work first published 35 years ago. It discusses three famous problems, doubling the volume of a cube, trisecting an angle and squaring a circle.

GENERAL FEATURES OF ALGAL GROWTH IN SEWAGE OXIDATION PONDS—George F. Papenfuss and Mary B. Allen—*California State Water Pollution Control Board*, Publication No. 13, 48 p., illus., paper, 75 cents. Conclusion is that microscopic examination of a water sample can provide a useful tool for the operator of oxidation ponds. If the sample contains principally

chlorella, the ponds are working at or over their capacity. If it contains a mixed flora, the plant could handle a heavier load.

HEATING, VENTILATING, AIR CONDITIONING GUIDE 1956—*American Society of Heating and Air-Conditioning Engineers*, 34th ed., 1176 p. plus catalog data section, illus., \$12.00 plus postage. A reference work for the engineer.

HOW TO SELECT AND USE YOUR TAPE RECORDER — David Mark — *Rider*, 140 p., illus., paper, \$2.95. As more people own recorders, more and more everyday uses are developing for them both in the home and in business. Here is advice on how to pick one adapted to your requirements.

IN THE DOCTOR'S OFFICE: The Art of the Medical Assistant—Esther Jane Parsons—*Lippincott*, 2d ed., 326 p., illus., \$3.95. A handbook for the doctor's nurse, secretary or receptionist. It covers a wide variety of duties from first aid for the emergency that arrives while the doctor is out to preparation of his manuscripts for the publisher.

INDUSTRIAL RESEARCH LABORATORIES OF THE UNITED STATES—James F. Mauk with the assistance of Harold Peacock and Melvin S. Ruffner under the direction of Charles I. Campbell—*National Academy of Sciences — National Research Council*, 10th ed., 560 p., \$10.00. The number of laboratories in this directory has increased in the 35 years since it was first published from 290 to 4834.

INTRODUCTION TO THE THEORY OF GROUPS OF FINITE ORDER—Robert D. Carmichael—*Dover*, 447 p., paper \$2.00, cloth \$3.95. Introducing the student to concepts illustrating large domains of mathematics. An unabridged, student edition.

AN INVESTIGATION OF THE EFFICACY OF SUBMARINE OUTFALL DISPOSAL OF SEWAGE AND SLUDGE — Erman A. Pearson and associates — *California State Water Pollution Control Board*, Publication No. 14, 154 p., illus., paper, \$2.00. This method of disposal is practiced in some form at almost every coastal city in the United States.

JULES VERNE: His Life—Catherine O. Peare—*Holt*, 123 p., illus., \$2.25. A book for children telling of the life of a pioneer science fiction writer.

NEW WORLDS OF MODERN SCIENCE: A Treasury — Leonard Engle, Ed., with introduction by James R. Killian, Jr.—*Dell*, 383 p., illus., paper, 35 cents. Not an attempt, the editor explains, to pick the "best" writings on science but to select articles and papers, by outstanding writers, telling as simply as possible what modern science is doing. It includes also a little dip into what the future may hold.

THE PRACTICE OF PSYCHIATRY IN GENERAL HOSPITALS — A. E. Bennett, Eugene A. Hargrove and Bernice Engle and others—*University of California Press*, 178 p., illus., \$4.00. Gradually, psychiatric wards are becoming an integral part of the modern general hospital. This book includes discussion of problems of planning and administration of psychiatric wards and day hospitals.

PROCEEDINGS OF THE WORLD SYMPOSIUM ON APPLIED SOLAR ENERGY, PHOENIX, ARIZONA, November 1-5, 1955—Lewis W. Douglas, General Chairman *Stanford Research Institute (As-*

sociation for Applied Solar Energy) 304 p., illus., \$5.00. Containing highlights of symposium sessions and text of 30 papers by authorities on solar energy.

RESULTS OF THE ARCHBOLD EXPEDITIONS. No. 72 MICROHYLID FROGS FROM NEW GUINEA WITH DESCRIPTIONS OF NEW SPECIES — Richard G. Zweifel—*American Museum of Natural History*, Novitates number 1766, 49 p., illus., paper, 25 cents. The four expeditions brought back from New Guinea and neighboring islands a remarkable wealth of reptiles and amphibians, including nine new species.

THE ROCHESTER REGIONAL HOSPITAL COUNCIL—Leonard S. Rosenfeld and Henry B. Makover — *Commonwealth Fund (Harvard University Press)*, 204 p., illus., \$3.50. Report of an experiment in organizing medical care and hospital facilities on a regional basis.

THE SEA AND ITS RIVERS—Alida Malkus—*Doubleday*, 221 p., illus., \$2.75. Fascinating stories about the Gulf Stream and other currents, the ocean's waves and tides, the varied life and the mineral wealth in the sea.

SIGMUND FREUD: Four Centenary Addresses—Ernest Jones—*Basic Books*, 150 p., \$3.75. Commemorating the hundredth anniversary of Freud's birth, this work presents an analysis of the nature of genius.

THE SUN AT WORK: Newsletter of the Association for Applied Solar Energy, Vol. 1, No. 1—Guy Benveniste, Ed.—*Association for Applied Solar Energy*, 8 p., illus., paper, quarterly, \$2.50 per year. Intended to establish and maintain contact among those concerned with solar energy research. The principal article in this first issue is an account of the international meeting at Tucson, Ariz.

THE THIRTEEN BOOKS OF EUCLID'S ELEMENTS: Translated from the Text of Heiberg—Introduction and commentary by Sir Thomas L. Heath—*Dover*, 2d ed., in three volumes of 432 p., 436 p., and 546 p., illus., paper, \$1.95 per volume, \$5.85 for 3-vol. set. Republication of a classic in an inexpensive edition for students.

A WONDERFUL WORLD FOR CHILDREN—Peter Cardozo and Lilli Taylor, Eds.—*Bantam*, 244 p., illus., paper, 35 cents. Describing all the interesting things you can get for the asking or a small sum. Included in the list, are various materials available from SCIENCE SERVICE.

Science News Letter, May 5, 1956

GOLF: Your LEFT SHOULDER makes the amazing difference!

One of the most startling discoveries to emerge from wide research in the golf swing is that your game literally hinges on your left shoulder!

How this is so and how to use this great discovery to improve your own game beyond all expectations in a matter of short weeks is set forth in **THE GOLF SECRET** by Dr. H. A. Murray—a medical doctor, golfer, and golf researcher, who has applied his expert knowledge of anatomy in this sweeping and utterly different study of the golf swing.

His method has now been tested on a large scale and been found to yield simply astounding results! Not only do golf scores take a sudden drop, but with the new method good golf is a hundred times easier than bad—because it is **NATURAL** (not strained) golf.

You may find out "the golf secret" for yourself, without risk. See below.

Fully illustrated ORDER NOW:

THE GOLF SECRET by H. A. Murray
\$2.50 Postfree • 5-Day Money-Back Guarantee
EMERSON BOOKS, Inc., 783-K
251 W. 19th St., New York 11

SAVE ON PALLEY'S NEW & SURPLUS VALUES

NEW IMPORT

20 POWER X40MM SPOTTING SCOPE WITH TABLE TRIPOD 19.95 WITH CASE

Length 8 3/4" SMALL ENOUGH TO CARRY IN YOUR GUN CASE

Newly imported for us — the finest Spotting Scope for the money that we have seen. Has a full 20 POWER magnification with a field of view of 150 ft. at 1000 yards. Has precision ground and polished lenses throughout with fully coated objective lens. Prism type adjustable eyepiece. Length 8-3/8". Stands 10 1/4" on adjustable tripod. Weight only 15 ounces. Complete in a handsome leatherette carrying case with zipper closure. Made by the finest Japanese Optical Experts. Ideal for all types of Spotting.

27.50 VALUE



10 POWER NAVY SPYGLASS

Here's a real optical bargain. Manufactured by Wollensak for the U.S. Navy Bureau of Ships. A 10 Power Officer of the Deck Spyglass. Has top quality, fully coated, precision ground lenses. Adjustable eyepiece. Overall lgh. is 22-3/4". Complete in handsome hardwood case with brass hinges and locks. Used but excellent —

22.75 29.95

SPYGLASS—Same as above but ALL NEW



SEXTANT TYPE STADIMETER

An optical instrument for measuring the exact distance between two points. Originally used by the Navy. Complete set includes Stadimeter, a miniature telescope and instructions for use. Complete in polished, hardwood case.

17.95

NEW 60, 120, 150, 180, 300 or 450 POWER MICROSCOPE

WITH NEWLY DEVELOPED, SELF-CONTAINED SUB-STAGE LIGHT TO ELIMINATE NEED FOR EXTERNAL LIGHT SOURCE

Take advantage of our tremendous foreign purchase. Ideal for use by Amateur Scientist, Student, in Home Laboratory for study of plant or insect tissue, etc. Order Today!

- 1-Triple, revolving turret with 10X, 20X, 30X precision ground and polished lenses.
- 5-Large sub-stage mirror for use with external light source.
- 2-Interchangeable 6X and 15X eyepieces with precision ground and polished lenses.
- 6-All-metal body—built to incline.
- 3-SIX Magnifications for all types of work — 60, 120, 150, 180, 300 and 450 Power magnification.
- 7-Hardwood Case and 3 slides.
- 4-NEW! Sub-stage with Self-Contained Light. No external light source needed.

Only 12.95 FREE!! 8pc. DISSECTING SET in fitted wood case.

NEW ARMY SURPLUS 178mm f:2.5 CAMERA LENS

Originally designed for use on the K-21 and K-24 Aerial Cameras. A genuine EASTMAN AERO EKTAR 178mm lens. Has speeds from f:2.5 to f:16. Focal length is 7 inches. This amazing lens is NEW — in original can. Guaranteed perfect condition. Excellent for Color or Black and White. Exceptionally fine for night work or in poor light conditions. Comes with 2 filters — 1 Polarized (for haze) and 1 yellow, plus a filter adapter, a lens heater for high altitudes and a lens dust cap. Can be adapted to 35 mm or Speed Graphic Cameras as a Telephoto lens (see below).

ONLY 69.50



ALL NEW

SPEED GRAPHIC ADAPTERS for above lens —
Includes Lens Board, Extension Tube and Bed Support.

2-1/4 x 3-1/4" **21.75** 3-1/4 x 4-1/4" **18.75**
4 x 5" **14.75**

35 MM ADAPTERS FOR ABOVE LENS —
Complete — no other parts to buy. Will focus from 8 ft. to infinity — setting marked on the mount.

LEICA — CONTAX S&D — EXACTA **89.50**
CONTAX 2A . . . \$109.50 HASSALBAD . . . \$139.50

VICKERS HYDRAULIC TRANSMISSION

Gives Constant Torque at all speeds with a variable volume, reversible piston pump which supplies a piston type hydraulic motor. Has 2 H.P. automatic pressure dash pot for smooth control. Power output RPM is 0 to 1/3 input RPM in both directions. Input RPM is 1800 PSI continuous — 4000 RPM intermittently. Ideal to use for Drives, Lathes, Duplicators on Mills, Conveyors, Small Cars, etc.

A War Surplus Bargain . . . Order Now **49.50**



4" SPLINE SHAFTS for power input and take-off on above transmission. Per pair . . . **2.50**

INPUT and TAKE-OFF PLATE ASSEMBLY To adapt above transmission to a pulley drive. Has self-lubricating, high speed bearings, 1/2" keyway shaft. Price per set . . . **Only 20.00**



4-SPEED HOBBY MOTOR

Rugged, precision built electric motor — operates on 110 volt, 60 cycle current. Originally built for the Navy — NOW it's converted for YOU! Has four take-off shafts turning at 5, 25, 150 and 4000 RPM. ONLY. . . **9.95**



AN-5851-1 AIR CORPS SEXTANT

Can be used for navigation of aircraft or boats. Designed to "shoot" Sun or Stars. Unit contains a horizon indicator, an astigmatic lens, bubble level and battery case. A spring wound motor provides the drive. The exceptional optical system is internally illuminated for night use. Here's a real bargain worth many times our price.

17.95



NEW ELECTRIC ACTUATOR

Top Quality Gov't Surplus Linear Actuator. Built for use on Aircraft. Has 5-1/4" stroke. Delivers an 800 pound thrust and will stand a 1750 pound static load. The motor operates on 24 V. D.C. current at 1 1/2 amps — turns at 7500 RPM with 1/6 HP. The overall length, eye-to-eye is 13 inches.

9.95



RS-38A MICROPHONE

A carbon type with a push-to-talk button. Ideal for use where background noise is high. Can be operated with 1-1/2 volt dry-cell batteries. Comes complete with 6 ft. of 3 conductor, shielded cable. **2.49**



Palley's 2263 E. Vernon Ave. Dept. N-5 Los Angeles 58, Calif.

ORDER FROM THIS AD—Pay by Money Order or Check. 1/2 deposit with all C.O.D.'s. Prices are F.O.B. our warehouse in Los Angeles