

Save this ad and
re-read it before
you buy:

- 1 Binoculars
- 2 Spotting Scope
- 3 Telescope

**YOU GET ALL 3 IN THIS
NEW COMPACT "MONOCULAR"
SYSTEM**

The "BICKY" is an achievement of Japan's incomparable optical industry. This new 10-power instrument comes equipped with pistol-grip handle and an adjustable professional-style table-top tripod, complete with a 360° two-plane panning head. There's even a car window adapter so your Monocular can go along on scenic drives. ■ The "BICKY" is a precision prismatic telescope, individually collimated and hand finished. Do not confuse it with mass-produced tubular (refraction) telescopes. ■ 10x 30 mm. coated Kellner achromatic optics. Light weight magnesium construction throughout. ■ In addition to the (tele) scope and the attachments you get a nice soft carry-

ing case and handstrap, which makes your "BICKY" as portable and convenient as a miniature camera (5½ inches long—weighs less than 7 ozs.) All this comes fitted beautifully in a foam-lined gift box. ■ Unless you want to buy binoculars, and a spotting scope complete with tripod, and a telescope — this new "BICKY" MONOCULAR SYSTEM is an ideal 3-in-1 instrument for making everything you look at appear 10 times bigger and better: birds, deer, outfielders, waterfalls, boats, mountain tops — The Heavens!

OPEN YOUR EYES TO 10 TIMES MORE—ORDER NOW...
HAVERHILL'S, 526 Washington St., San Francisco, Calif.
Please mail me the BICKY Monocular System, complete with attachments, in foam-lined gift box. (Refund guaranteed.)
☐ I enclose \$24.75 plus \$1.00 for postage and insurance.
California Residents: ☐ Bill Drivers' Club Acct. # _____
Add 4% Sales Tax ☐ Bill Amer. Expr. Acct. # _____
Name _____
Address _____
SN 18 **Haverhill's**
Searching the World to bring you the Finest

GOODBYE FLAB!

Doctors at the famous Max-Planck Institute have discovered a slimming system that reduces waistlines 2 inches in 30 days... puts you back in shape fast. No sweat, strain or tiring repetition. Just 10 simple, motionless isometric contractions. Acclaimed internationally for people of all ages by scientists, coaches, athletes and actresses. Free illustrated information about new guaranteed technique. Write **AWARD-WINNING-MINUTE-A-DAY METHOD**, Dept. H, 37 Centuck Station, Yonkers, N. Y. 10710.

**NOW! GET 3
REAL OLD
LINCOLN CENTS
--for only 10¢**

Only 10¢ brings you 3 old Lincoln pennies — America's most sought-after collector's coin. 1929D, 1919, 1923. (Offer limited — only one set to a customer.) For all 3 Lincoln Cents, plus free catalog illustrating coins and supplies, plus other offers on approval, send name, address and 10¢ to **LITTLETON COIN CO.**, Dept. SNL-1, Littleton, New Hampshire 03561.

ATOMIC ENERGY LAB

ATOMIC CLOUD CHAMBER WITH PROJECTOR ILLUMINATOR. See the vapor trails of alpha and beta particles, and of cosmic rays from outer space.

SPINTRASCOPE gives a dramatic, magnified ring-side view of exploding atoms.

ELECTROSCOPE. Metal-housed, with Scale and Magnifying Viewer. Measures background radiation and tests sample sources.

SAFE RADIOACTIVE MATERIALS. Alpha Source in handy container, and Uranium Ore (U₃O₈ 0.229%). Atomic Energy Manual covers theory and projects.

A complete Lab that opens up the fascinating field of Nuclear Physics—only **\$695** POSTPAID

YOUR SATISFACTION OR YOUR MONEY BACK
AMERICAN BASIC SCIENCE CLUB, INC., DEPT. L-12
501 E. CROCKETT ST., SAN ANTONIO, TEXAS 78202

INVENTION

Current U. S. Patents

► A METHOD for refining crude oil to make gasoline for automobiles, part of a process now in commercial use, was granted a patent by the U.S. Patent Office.

A few of the patents covering the entire process have already been issued, but many are still pending. The process makes possible using more of the residue left when crude oil is first distilled to make such desired products as gas.

Dr. Warren G. Schlinger of Pasadena, Calif., assigned rights to patent 3,224,958 covering one method of refining to Texaco, Inc. Among the catalysts used in the process are the oxides or sulfides of cobalt, nickel and molybdenum, either alone or in combination.

Private Message System

A system to "scramble" either wire or radio messages so that only those to whom such secret communications are sent can tell what is being transmitted earned patent 3,225,142.

Dr. Manfred R. Schroeder, who has some 30 other patent applications pending, assigned rights to this one to Bell Telephone Laboratories, Inc., New York.

His system for scrambling a message signal to render it unintelligible to an unauthorized person consists of a device on the transmitter that adds randomly delayed copies of the desired message to the original signal. The receiving station cancels out the message replicas, so that only the original communication is received.



Brunton Type Pocket Transit \$37.50 p.p.

ONLY A FEW LEFT AT THIS LOW PRICE! New! Complete with leather case. For any phase of preliminary survey work. Determine horizontal and vertical angles. Also a prismatic compass level, a clinometer, a plumb or an alidade. Three inches diameter. Movable circle 0° to 60° each direction. Circular and vial-type levels. Folding sights. Sales bulletins 25¢.

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

EXPLORE THE SKIES!

COLOR MAP OF THE NORTHERN HEAVENS: 30"x34½", shows stars to magnitude 5.1. \$1.50
COLOR CHARTS OF THE MOON: 2 maps of first and last quarter, 23"x33". \$2.00
ASTRONOMY AS A CAREER: 32-page booklet on becoming an astronomer. \$1.00

Write for free folder N.

SKY AND TELESCOPE Dept. SNP
Cambridge 38, Mass.

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, D.C. 20036

BOOKS ON MUSHROOMS AND FUNGI. Comprehensive lists. Lew's, 2510 Van Ness Ave., San Francisco, Calif. 94109.

SURPLUS OPTICS-ELECTRONICS CATALOG. 72 pages 25¢. Meshna, Nahant, Mass. 01908.

Optical Reading Machine

A clever idea by which machines can read the printed word using fiber optics was awarded patent 3,225,329.

Dr. Jacob Rabinow, president of Rabinow Electronics, Inc., Rockville, Md., assigned patent rights to Control Data Corporation, Minneapolis, Minn.

The method involves solving problems in logic using fiber optics, whereas most machines now operating solve the same problems with parts made of solid-state materials.

Other Interesting Patents

A super-sensitive microbalance earned patent 3,224,263 for Vernon L. Rogallo of the National Aeronautics and Space Administration's Ames Research Center, Moffett Field, Calif., who assigned rights to the Government through NASA.

A method for coding the kinds of information used to guide missiles or other vehicles earned patent 3,225,309 for Dr. John H. Phelps of Liverpool, N.Y., who assigned rights to the Government through the Secretary of the Air Force.

Use of a plastic glue that sets in a few minutes and hardens in a day for mending broken bones was granted patent 3,223,083. Dr. Milton C. Cobey, inventor of this method for holding skin and other tissue together, assigned patent rights to the president and directors of Georgetown University, Washington, D.C.

An optical maser that operates in the infrared portion of electromagnetic radiation earned patent 3,225,306 for Leo F. Johnson of Plainfield, N.J., and Kurt Nassau of Springfield, N. J., who assigned rights to Bell Telephone Laboratories.

Use of ultrasound to weld plastic materials was awarded patent 3,224,916. Robert S. Soloff of Stamford, Conn., and Seymour G. Linsley of Bridgeport, Conn., assigned rights to Branson Instruments, Inc.

• Science News Letter, 89:30 January 8, 1966

AN AFRICAN ZOO IN THE FAMILY

by Joan Winifred Taylor

The wife of a game ranger in Northern Rhodesia tells the wonderful story of her adopted "wild orphans," how her project to care for animals injured or orphaned by thoughtless hunters grew until she had a home zoo which included baboons, a leopard, lions, zebras, a buffalo, a mongoose, and other wild creatures. Mrs. Taylor's account of life in central Africa with four children and an exotic animal nursery is a thrilling story.

Delightful photos. Order Now!
\$4.95 Postfree • 10-Day Money-Back Guarantee

EMERSON BOOKS, Inc., Dept. 702-P
251 West 19 Street, New York, N. Y. 10011

