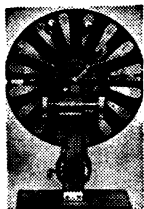


UNUSUAL BARGAINS

Order by Stock No.—Send check or M.O. Shipment same day received—Satisfaction or money back.



NEW! STATIC ELECTRICITY GENERATOR

Sturdy, Improved Model
See a thrilling spark display as you set off a miniature bolt of lightning. Absolutely safe and harmless. Sturdily made—stands 14" high. Turn the handle and two 9" plastic discs rotate in opposite directions. Metal collector brushes pick up the static electricity, store it in the Leyden jar type condenser until discharged by the jumping spark. Countless tricks and experiments. 24 page illustrated booklet included.
Order Stock No. 70,070-Q.....\$12.95 Postpaid

Remove Your Retaining Rings—Disassemble Lenses, Cameras, etc.



ADJUSTABLE SPANNER WRENCH

Made for U.S. Air Force—available at a fraction of Government cost. A top grade, versatile tool that every instrument and camera repair man or just plain tinkerer should own. Adjustable for 1/2" to 12" diameter retaining rings. Complete with six different pairs of points to fit all types of slots and holes. 3", 6", and 12" main bars. All steel and nicely plated. The finest tool we have ever come across for this type of retaining ring work AND a real bargain at our low price.
Stock No. 70,855-Q.....\$12.50 postpaid



INTRIGUING LOW-COST MOON MODEL

Exciting outer space display and conversation piece. Exact replica, 30,000 formations—peaks, craters. Ocean of Storms, etc.—all in relief. Scaled to size. Accurate distance relationships. Proper lighting shows moon phases; "black light" produces startling effects. Tough, washable plastic. Three colors. Far side blank—can be used for space data. Excellent gift item. 12" dia., wt. 3/4 lb.
Stock No. 70,515-Q.....\$12.50 Postpaid

NEW LOW PRICE FLASHLIGHT POINTER

... Point it out with Projected Arrow



Ideal for pointing out interesting features on movie and slide projection screens. Excellent lecture tool. For teacher use on maps, etc. Flashlight focuses an arrow where you point it.
Stock No. 60,117-Q—\$8.95 Pstpd.

ASTRO-COMPASS AND TRANSIT



War surplus! Astro Compass alone cost Govt. \$75. We have added a Sighting Level to improve versatility. Hundreds of uses in carpentry, brick laying, foundation work, grading, irrigation or drainage. Much below cost of ordinary surveying instruments. Ideal for do-it-yourselfers, 10 1/4" high, 6" long, 4" wide. Adjustable leveling platform—2 spirit levels for aligning—also spirit level in sighting attachment. A tremendous bargain.
Stock No. 70,287-Q.....\$19.95 Postpaid

Now... FASCINATING EXPERIMENTS with EARTH SCIENCE ACTIVITIES KIT!



For amateurs, professionals, school use. Materials—instructions for nearly 100 remarkable experiments. Identify, classify chemical and physical properties of all rocks, minerals, fossils. Contents: 12 rocks, 24 minerals, 12 fossils; Argon Bulb, goniometer, alcohol burner, streak plate, magnifying glass, all needed chemicals, plus 96-page illus. book. Comes in sturdy double 12" x 18" x 5" box.
Stock No. 70,573-Q.....\$24.95 Postpaid

CRYSTAL-GROWING KIT



Do a crystallography project illustrated with large beautiful crystals you grow yourself. Kit includes the book "Crystals and Crystal Growing" and a generous supply of the chemicals you need to grow large display crystals of potassium aluminum sulfate (clear), potassium sulfate (purple), potassium sodium tartrate (clear), nickel sulfate hexahydrate (blue green) or heptahydrate (green), potassium ferricyanide (red), and copper acetate (blue green).
Stock No. 70,338-Q.....\$9.50 Postpaid

TEACHERS! Write for Educational Catalog Q-2
Edmund Scientific Co., Barrington, N. J.

MAIL COUPON for FREE CATALOG "Q"

Now! 1,000's of BARGAINS
EDMUND SCIENTIFIC CO.
Barrington, New Jersey

Name.....
Address.....
City.....Zone.....State.....



SPACE

Headquarters for Flight To Moon Being Designed

See Front Cover

➤ ONE OF THE largest buildings in the Free World, now being designed by 200 engineers, will be the base for flights of American astronauts to the moon.

The more than 500 feet tall structure, shown on this week's front cover in the artist's conception of the flight facilities, will be used to match and checkout rockets and spacecraft being developed under Project Apollo. Four vehicles can be built simultaneously in these facilities of the future under preparation for the National Aeronautics and Space Administration at Merritt Island, Fla.

The Launch Operations Center will have the world's highest doors, which will stand 45 stories from the ground. A separate four-story building will be used as the control facilities center.

The design team, a combine of four New York City architectural and engineering firms, known as Urbahn-Roberts-Seelye-Moran, is working on the project under the supervision of the Jacksonville (Fla.) District of the U.S. Army Corps of Engineers.

• Science News Letter, 83:30 January 12, 1963

TECHNOLOGY

Sonic Device Pinpoints Gas Leaks

➤ A NEW SONIC device pinpoints leaks in gas mains from the ground. Developed by the Institute of Gas Technology at Illinois Institute of Technology, the detector, which operates by introducing a constant sonic signal into the pipe, is based upon the discovery that any sound present in the gas stream inside the pipe will issue from a leak with the escaping gas. The use of the new technique will enable utility distribution networks to quickly pinpoint underground leaks.

• Science News Letter, 83:30 January 12, 1963

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.

LEARN DIGITAL COMPUTERS, MINIVAC 6010, very good condition, \$120, with 7 manuals. R. King, 1027 Yellowstone, Cleveland 21, Ohio.

GOVERNMENT SURPLUS RADIOS, AIRCRAFT cameras, lenses, snooperscopes. 50 page illustrated catalog, 10¢. Meshna, Malden 48, Mass.

INDEPENDENT THINKERS—INVESTIGATE Humanism, the scientific personal philosophy! Ethical, humanitarian, nonpolitical, nonsupernatural. Free literature. American Humanist Association, Dept. SNL-1, Yellow Springs, Ohio.

MEDICAL, CHEMICAL-SCIENTIFIC GLASS blowing. Special or Standard designs. Send requirements and detailed sketches for estimate. Blair Industries, Dept. En., 1822 Arnold Industrial Highway, Concord, California.

PROFESSIONAL MAGIC IS A WONDERFUL Hobby! Rush 10¢ for Giant 160 Page Catalog of 1,000 Tricks, Stunts, Gags, Puzzles! Magicland, Dept. SNL, Monroe, Connecticut.

TECHNOLOGY

Solar Energy Produces Drinkable Water in India

➤ THE SUN'S HELP is being sought to produce drinkable water in northern India.

Although a considerable amount of research has been done in Algeria, Australia and the United States on demineralizing water using solar energy, the methods so far devised are still expensive.

Solar energy is available in those areas where there is greatest difficulty in obtaining water for drinking but a cheap method of producing pure water is needed. In northern India where the sun shines brightly most of the year, efficient methods for evaporating and distilling water in solar stills are being studied.

The stills are in general airtight glass-roofed enclosures exposed to the sun in which brackish water or sea water is allowed to evaporate and condense along the walls. The distilled water is then collected in troughs along the sides of the still.

Experiments so far have indicated that a low-roof type of solar still is the most practical in the remote arid areas where the only water supply is underground brackish water.

The yield from these stills is fairly constant and installation fairly inexpensive. About 14 to 20 square feet of distilling area is required to produce a gallon of distilled water per day. A daily yield of about 1,500 gallons per acre would be sufficient to maintain a village community of about 250 persons.

The study was reported by Mohan Lal Khanna, National Physical Laboratory, New Delhi, in the Indian Journal of Scientific and Industrial Research.

• Science News Letter, 83:30 January 12, 1963

TECHNOLOGY

"Wurlanizing" May Give Shrink-Proof Wool

➤ SHRINK-PROOF, easy-care woollens that are as machine washable as cottons may soon be a reality.

The U.S. Department of Agriculture has developed a new treatment, "wurlanizing" (named after the Western Utilization Research Laboratory), that prevents wool from shrinking. It is now being evaluated by industry.

Utilization research which changes familiar farm foods and fibers to increase their usefulness has also developed new leather tanning materials, such as glutaraldehyde, which gives leather entirely new properties.

Corn, cotton, wool, wheat, animal fats, edible vegetable oils and many other familiar products are being transformed into new and valuable industrial products.

Industrial use of agricultural products began early in this country's history and was given a big boost when the four USDA Utilization Research Laboratories were established in California, Louisiana, Illinois and Pennsylvania.

• Science News Letter, 83:30 January 12, 1963

Art measures the degree of civilization in any culture.