

BIND and SAVE your copies of science news

Keep your copies of SCIENCE NEWS always available for quick, easy reference in this attractive, practical binder. Simply snap the magazine in or out in a few seconds—no punching or mutilating. It opens FLAT—for easy reference and readability. Sturdily constructed, this buff-colored buckram binder stamped in gold leaf will make a fine addition to your library.

SCIENCE NEWS binders hold one six-month volume of SCIENCE NEWS. Each of the 26 issues snaps into the cover with a metal strip. \$5.00 each, 2 for \$9.00. Postage-paid.

Order Now, From

science news

Dept. 222

1719 N St. N.W.

Washington, D.C. 20036

Just Published!

The Smithsonian Institution CENTER FOR SHORT-LIVED PHENOMENA

300 page Annual Report. This report contains a comprehensive account of the activities of the Center as well as descriptions of each of the 113 short-lived events that the Center participated in during 1970. The events are listed by discipline and include photographic documentation, information source contacts, field expedition information, archive locations, in some cases preliminary results of field research, and bibliographies on published scientific papers and reports.

THE SHORT-LIVED EVENTS OF 1970

Documentation includes information on 49 earth science events: 22 volcanic eruptions in Guatemala, New Guinea, Indonesia, Japan, the U.S.S.R., Hawaii, El Salvador, the Philippine Islands, Nicaragua, Iceland, Iran, Costa Rica, and Antarctica; 19 major earthquakes in China, Peru, Ecuador, Philippine Islands, Guatemala, Turkey, Canada, Colombia, U.S.S.R., New Guinea, Iran, India, Australia, and Alaska; other earth science events such as landslides, landrises, fissuring, storm surges and tsunamis; 47 ecological events including 20 animal irruptions, migrations, colonizations, and mortalities, 16 major oil spills and pollution events; 15 astrophysical events including 9 major fireball events in India, Mozambique, Sweden, Germany, Austria, and the United States, and 6 meteorite falls in Ethiopia, Sudan, Swaziland, Venezuela, Mauritania, and the United States, and their recovery; and, 1 urgent anthropological events, a new tribe discovery (in Paraguay).

The report is now available at a cost of \$5.00 per copy including airmail postage. If you desire to receive the Smithsonian Institution Center For Short-Lived Phenomena 1970 Annual Report, please send a check, money order, or purchase order to: Smithsonian Institution, Center For Short-Lived Phenomena, 60 Garden Street, Cambridge, Mass. 02138. Please make checks payable to the "Smithsonian Institution."

Circle No. 109 on Reader Service Card

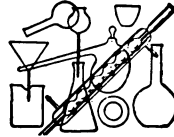
CASTOLITE LIQUID PLASTIC

pours like water, hardens like glass without heat. Embed natural flowers, biological and geological specimens, components of all kinds made of metal, plastic, wood—anything. Also make your own flexible molds and perfect reproductions in less than 60 minutes—any size from a coin to life sized sculptures. Illustrated Manual 25¢—Dept. 71 130C. THE CASTOLITE COMPANY, Woodstock, Illinois 60098.

IS THERE A CHEMIST IN THE HOUSE???

Only \$4.00 Plus \$1.50 p.p.

Will bring 49 "PLUS" individual, assorted, items of standard quality laboratory apparatus: glassware, porcelain, rubber, plastic, etc., etc. Value? 2 to 3 times our offer. None dangerous. No junk. Surprise items. Pyrex Advanced Student Assort. @ \$10 plus \$2.50 p.p.



HARRY ROSS Scientific & Lab. Projects
61-L Reade St. N.Y. 10007

SCIENCE EXPLORING AT SPRUCE MOUNTAIN CAMP FOR BOYS

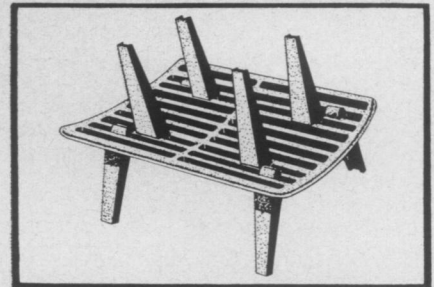
BRYANT POND, MAINE
New knowledge, new skills, new challenges in 3 major areas—Science Exploring, Outdoor Exploring and Lifetime Sports. Boys 10-15. Field, mountain, canoe trips. Outpost at Mt. Katahdin. Ham radio, photography, plants, animals, weather, geology, ecology, astronomy. Staff inquiries invited. Catalog:
William T. Harty
12 Highland St., W. Medway, Mass. 02053

CHALLENGING GAMES FOR ALL AGES, TEACH PHYSICS

Four progressively difficult games. To get all 4, send \$10 to UNIVERSAL FIELD FOUNDATION, 435 Crescent Ave., Buffalo N.Y. 14214
RACE THRU SPACE

ENJOY your FIREPLACE all the more!

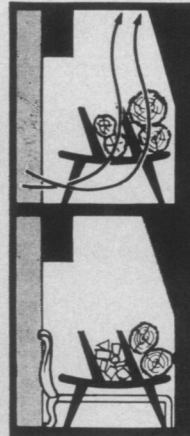
The GARDEN WAY GRATE with its patented, adjustable Log Supports takes all the guesswork out of having more beautiful, more efficient fires EVERY TIME!



U.S. Patent #3,505,986

The unique, movable Log Supports fit anywhere in any of the slots of the Grate. Maximum draft circulates freely throughout the whole fire structure. The amazing and delightful result is that this entirely new kind of Grate:

- Cures smoking problems!
- Guarantees easy starting, easier tending for beginners as well as experts!
- Burns any and every kind of good or poor firewood—beautifully!
- Cuts way down on firewood costs! Pays for itself over and over again!
- Makes any fireplace much safer!
- Permits easier ash removal!
- Lets you have hot or "cool" fires!
- Creates unusual flame patterns!
- Can be used with or without andirons. Protects them from harm!
- Adds a handsome touch to any fireplace!
- Makes any fireplace a far better investment!
- Comes in two sizes to fit small or large fireplaces!



1. CURES "SMOKING" AND OTHER DRAFT PROBLEMS. The tall legs and topside log supports keep the burning wood in the direct path of the draft and to the rear.
2. EASIER STARTING, EASIER TENDING! The adjustable log supports securely hold all kinds of wood in exactly the right position for quick, sure starting, active burning, easy tending!
3. USE WITH OR WITHOUT ANDIRONS. You can slide most andirons right under the GARDEN WAY GRATE. The simple lines of the Grate blend well with any setting, in any fireplace.
4. CUTS FIREWOOD COSTS! Makes beautiful, efficient fires with most any wood—cheap, thick, thin, old, "green", round—even huge and heavy unsplit logs.

So, if you have a fireplace of any kind, please mail coupon below for complete details about how this wonderfully different and better Fireplace Grate works, including prices. Not obtainable anywhere else, so please mail this coupon now to Garden Way Research, Charlotte, Vermont 05445.

The unique patented log supports hold any kind of wood exactly where it should be... exactly where you want it!



Circle No. 124 on Reader Service Card

GARDEN WAY RESEARCH
DEPT. G-2813
CHARLOTTE, VERMONT 05445

Please send FREE complete details and prices of the GARDEN WAY FIREPLACE GRATES, by first class mail to:

Name _____

Address _____

ZIP _____

See "live" unstained organisms
through the one microscope
that offers
three different views...

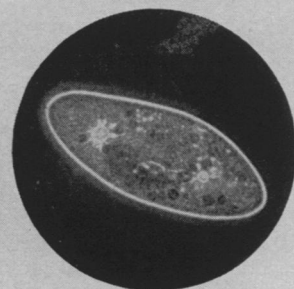
and one low price.

This new AO microscope is built for multiple use—it's like having three microscopes in one. And, importantly, the AO Phase Contrast Teaching Microscope is priced within the range of your departmental budget. Phase contrast allows your students to view living unstained specimens, does away with the time and need for treating specimens, and the distortion caused by the staining process. The AO Phase Contrast Teaching Microscope also offers darkfield and conventional brightfield viewing. It's easy to use, requires virtually no adjustments and no accessories.

A multipurpose microscope, a practical way to put life in your classroom. The AO Phase Contrast Teaching Microscope. Ask your AO Representative about it or write for literature.

 **AMERICAN OPTICAL
CORPORATION**

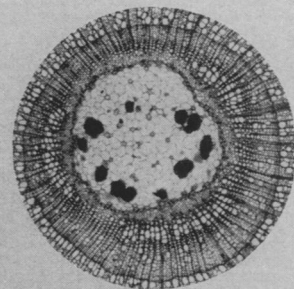
SCIENTIFIC INSTRUMENT DIVISION • BUFFALO, N.Y. 14215



Phase Contrast
unstained paramecium



Darkfield
unstained paramecium



Conventional Brightfield
stained basswood stem

