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# SCIENCE NEWS LETTER

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**Malarial Shrew**

See Page 373

A SCIENCE SERVICE PUBLICATION



*These "sound jurors" record their preferences as they listen over test circuits.*

# Trial by "Sound Jury"



*The engineer in the foreground talks over the test circuits which the other engineer sets up on a "circuit simulator."*

**A**FTER Bell Laboratories engineers have designed a new talking circuit, they measure its characteristics by oscilloscopes and meters.

But a talker and a listener are part of every telephone call, and to satisfy them is the primary Bell System aim.

So, before the circuit is put into operation, a "sound jury" listens in. An actual performance test is set up with the trained ears of the jurors to supplement the meters.

As syllables, words, and sentences come in over the telephones, pencils are busy over score sheets, recording the judgment of the listeners on behalf of you and millions of other telephone users.

Targets of the transmission engineer are: your easy understanding of the talker, the naturalness of his voice, and your all-around satisfaction. To score high is one of the feats of Bell System engineering.

## **BELL TELEPHONE LABORATORIES**

• EXPLORING AND INVENTING, DEVISING AND PERFECTING FOR CONTINUED IMPROVEMENTS AND ECONOMIES IN TELEPHONE SERVICE



# BINOCULARS

## ASSEMBLE YOUR OWN BINOCULARS!



Complete Optics!  
Complete Metal Parts!  
SAVE More Than 1/4 Regular Cost

### GOVERNMENT'S 7 x 50 BINOCULARS

Here's an unusual opportunity to secure a fine set of Binoculars at a substantial saving of money. Offered here are complete sets of Optics and Metal Parts for the 7 x 50 Binoculars. These components are new and all ready for assembly. We supply full instructions. Limit—1 set of Metal Parts and 1 set of Optics to a customer.

**METAL PARTS**—Set includes all Metal Parts—completely finished—for assembly of 7 x 50 Binoculars. No machining required. Bodies factory hinged and covered. A sturdy Binocular Carrying Case is optional with each set of Metal Parts.

Stock #842-Q.....\$39.40 Postpaid plus \$4.80 for Case.....Total \$44.20

**OPTICS**—Set includes all Lenses and Prisms you need for assembling 7 x 50 Binoculars. These optics are in excellent condition—perfect or near perfect and have new low reflection coating.

Stock #5102-Q—7 x 50 Optics.....\$25.00 Postpaid

**NOTICE:** Add 20 percent Federal Excise Tax to your remittance if you buy both the Binocular Optics and the Binocular Metal Parts.

### ARMY'S 6 x 30 BINOCULARS

**COMPLETE OPTICS & METAL PARTS**—Model M-13A1, 6 x 30 Binoculars (Waterproof Model). Everything you need—ready for assembly. When finished will look like a regular factory job costing \$102 to \$120. The Optics are new, in perfect or near-perfect condition. Have new low reflection coating. Metal parts are new and perfect, all completely finished. No machining required. Bodies factory hinged and covered. Complete assembly instructions included.

Stock #830-Q.....\$40.00 Postpaid plus \$8.00 tax—Total—\$48.00

**METAL PARTS ONLY**—Model M-13A1, 6 x 30 Binoculars. No Optics. Same Metal Parts as described for Stock #830-Q.

Stock #832-Q—6 x 30 Metal Parts. \$25.00 Postpaid

**OPTICS FOR 6 x 30 BINOCULARS** (No Metal Parts.) Perfect and low reflection coated.

Stock #5130-Q.....\$15.00 Postpaid

**SAME OPTICS AS ABOVE**—Coated—but slight seconds.

Stock #5124-Q.....\$12.75 Postpaid

If you buy both the Binocular Optics and the Binocular Metal Parts, your purchase becomes subject to 20% Federal Excise Tax. Be sure to add amount covering tax to your remittance or your order cannot be filled.

Optics and Metal Parts are Available for Monoculars (1/2 a Binocular). For Complete Details, Write for Bulletin #14-Q.

### POLARIZING VARIABLE DENSITY ATTACHMENT FOR BINOCULARS

An amazingly effective unit for controlling amount of light reaching your eyes. Cuts down glare in sky, and overwater observations. Easily snapped on and off over the eye cups of American made 7x50 Binoculars. Govt. cost, \$8.30 each.

Stock #20,000-Q.....\$2.00 Postpaid Above Polarizing Attachment also adaptable to Govt. 6x30 Binoculars with substitution of special Eyecups.

Stock #20,010-Q - 6x30 Eyecups - 75c pr. Postpaid

### POLARIZING OPTICAL RING SIGHT

(Unmounted) Used in gun sights—especially for shotguns. As you look through, you see a series of rings that you superimpose on your target. No front sight required. Increases degree of accuracy.

Stock #2067-Q.....\$4.00 Postpaid



**YOU CAN EASILY MAKE**  
Telescopes, Magnifiers, Photographic Gadgets and Hundreds of Experiments with these Low Cost Optics.  
To Translate Millimeter measurements: 25.4 mm. equals one inch.

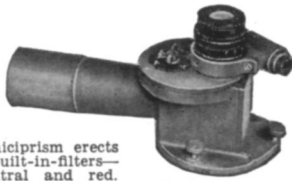
# TELESCOPES

## 6 POWER GALILEAN Telescope

(Commercial Surplus) 28mm dia. Achromatic Objective Lens Sturdily constructed of Aluminum. 7" long. extends to 9". Complete with carrying case.  
Stock #941-Q.....\$3.00 Postpaid

## 8 POWER ELBOW TELESCOPE

Gov't Cost \$200.00  
Our Price \$17.50



Big 2" diameter objective. All lenses Achromatic. Amici prism erects the image. 4 built-in-filters—clear, amber, neutral and red. Slightly used condition but all guaranteed for perfect working order. Weight 5 lbs. Can be carried but a trifle bulky. Excellent for finder on Astronomical Telescope.

Stock No. 943-Q...\$17.50 Postpaid

# SENSATIONAL BARGAINS IN WAR SURPLUS OPTICS

### ORDERING INFORMATION

Read entire page carefully each month. There are often new items of interest. Be sure to specify "stock numbers" and enclose payment with your order. Buy with complete confidence that merchandise will be exactly as represented.

**SATISFACTION GUARANTEED**  
Write for **FREE CATALOG Q**

## GOV'T'S FIRE STARTING LENSES

(Gov. cost 60c. Our Price 25c ea.)

Issued during war for emergency use to start fires if lost without matches. Double convex lens—51 mms dia. F.L. 89 mms. Edges may have slight chips as perfect edges were not required by Gov. specifications. May be used as magnifying lens. Also can be used as condensing lenses in 35 mm projectors.

Stock #1093-Q.....25c ea. Postpaid

**SPECIAL OFFER**—50 for \$11.25 or 100 for \$20.00

**RAW OPTICAL GLASS** . . . An exceptional opportunity to secure a large variety of Optical Pieces both Crown and Flint glass (seconds) in varying stages of processing. Many prism blanks.  
Stock #703-Q—8 lbs. (min. wt.)...\$5.00 Postpaid  
Stock #702-Q—1 1/2 lbs. ....\$1.00 Postpaid  
\$200.00 DRIFT METER for \$5.60

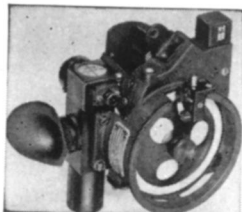


These were used for determination of drift and true air speed. You can adapt to other uses or take apart to get 2 mounted Achromatic Lenses—Mirrors—Field Lens—Pantograph—Engraved Scales—Sponge Rubber Discs—metal parts and other components. Instrument weighs 4 lbs.

Stock #942-Q.....\$5.60 Postpaid

# SEXTANTS

## UNUSUAL BARGAIN BUBBLE SEXTANTS



These Army Air Forces Bubble Sextants cost the Govt. about \$125.00 each. A real bargain at our price of \$12.50! Included with Bubble Sextant shipment is wooden Carrying Case, 5 spare waxed paper discs, flashlight with rheostat for night use (uses ordinary flashlight cells—not furnished) aux. 2-power Galilean Telescope, Allen wrench, 1 spare marking point. Wartime used, BUT COMPLETELY REPAIRED, COLLIMATED AND PUT IN GOOD WORKING ORDER. Light bulb has been tested—Bubble is in working condition. Because of wartime use, we make this guarantee: If not satisfied that Sextant is exactly as represented, return within 10 days and money will be refunded. Full directions for use accompany each shipment.

Stock #924-Q.....\$12.50 Postpaid

Same Sextant as above but BRAND NEW and with Automatic Electric Averaging Device and Illuminated Averaging Disc for nighttime use. Govt. cost \$217. Though brand new we have rechecked Bubble and Collimation and GUARANTEE perfect working order.

Stock #933-Q.....\$22.50 Postpaid

# LENSES

## SIMPLE LENS KIT

Some gov't surplus, some commercial surplus, some chipped rejects, some perfect, few coated....in any event an excellent bargain. Containing Plano Convex, Double Convex, Concave, Miniscus Lenses. Dia. range 8mm to 4mm. Assorted focal lengths.

Stock #5-Q.....45 lenses.....\$5.00 Postpaid

Stock #10-Q.....80 lenses.....\$10.00 Postpaid

Set #1-Q—"Our Advertising Special"—15 lenses for \$1.60 Postpaid, plus 10-page idea booklet. For copying, ULTRA CLOSE-UP SHOTS, macrophotography, experimental optics, magnifying and for making a two power 1/16 Telephoto Lens, "Dummy Camera," Kodachrome Viewer, DETACHABLE REFLEX VIEWFINDER for 35 mm. camera, stereoscopic viewer, ground glass and enlarging focusing aids, TELESCOPES, low power Microscopes and for many other uses.

**LENS CLEANING TISSUE**—1st quality sheet size 11" x 7 1/2". Made to Gov. spec. High wet strength. Free of abrasives. ....

Stock #721-Q.....500 sheets.....\$1.00 Postpaid

**CONDENSING LENS SET**—Consists of 2 Condensing Lenses with diameter of 2". Used for making 35mm projector or many other purposes.

Stock #4034-Q.....75c Postpaid

**CONDENSING LENSES**—Seconds, but suitable for Enlargers and Spotlights.

Stock #1061-Q—6 1/2" dia., 9" F.L.....\$2.50 Postpaid

Stock #1080-Q—5" dia., 7" F.L. ....\$1.00 Postpaid

We Have a Limited Quantity of Condensing Lenses—seconds—ranging from 4 1/2" to 8 1/2" in dia. with various focal lengths. Send for Free Bulletin titled "MISCELLANEOUS CONDENSING LENSES—Q".

### MOUNTED PROJECTING LENS SYSTEM

F.L. 91.44 mm. (Just right for 35 mm. Projectors). Speed of F 1.9. Outside dia. of mount at one end 60 mm. Length of mount 64 mm.

Stock #4033-Q...\$3.00 Postpaid

### THREADED OUTSIDE MOUNT FOR FOCUSING ABOVE SYSTEM (Not illus.)

Stock #715-Q.....\$1.00 Postpaid

**35 MM KODACHROME PROJECTING LENS SET**—Consists of 2 Achromatic Lenses for projecting, plus 2 Condensing Lenses and a piece of Heat Absorbing Glass with directions.

Stock #4029-Q.....\$3.10 Postpaid

### NEW 50-PAGE IDEA BOOK "FUN WITH CHIPPED EDGE LENSES"

Contains wide variety of projects and fully covers the fascinating uses of all lenses in set listed above . . . only \$1.00 Postpaid.

**IF YOU'RE INTERESTED IN OPTICAL BARGAINS**  
Write for **FREE CATALOG Q**  
We Have Literally Millions of War Surplus Lenses and Prisms for Sale at Bargain Prices. Numerous Types of Instruments Too!

**ORDER BY SET OR STOCK NO.**

**EDMUND SALVAGE COMPANY · P. O. AUDUBON, NEW JERSEY**