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# SCIENCE NEWS LETTER

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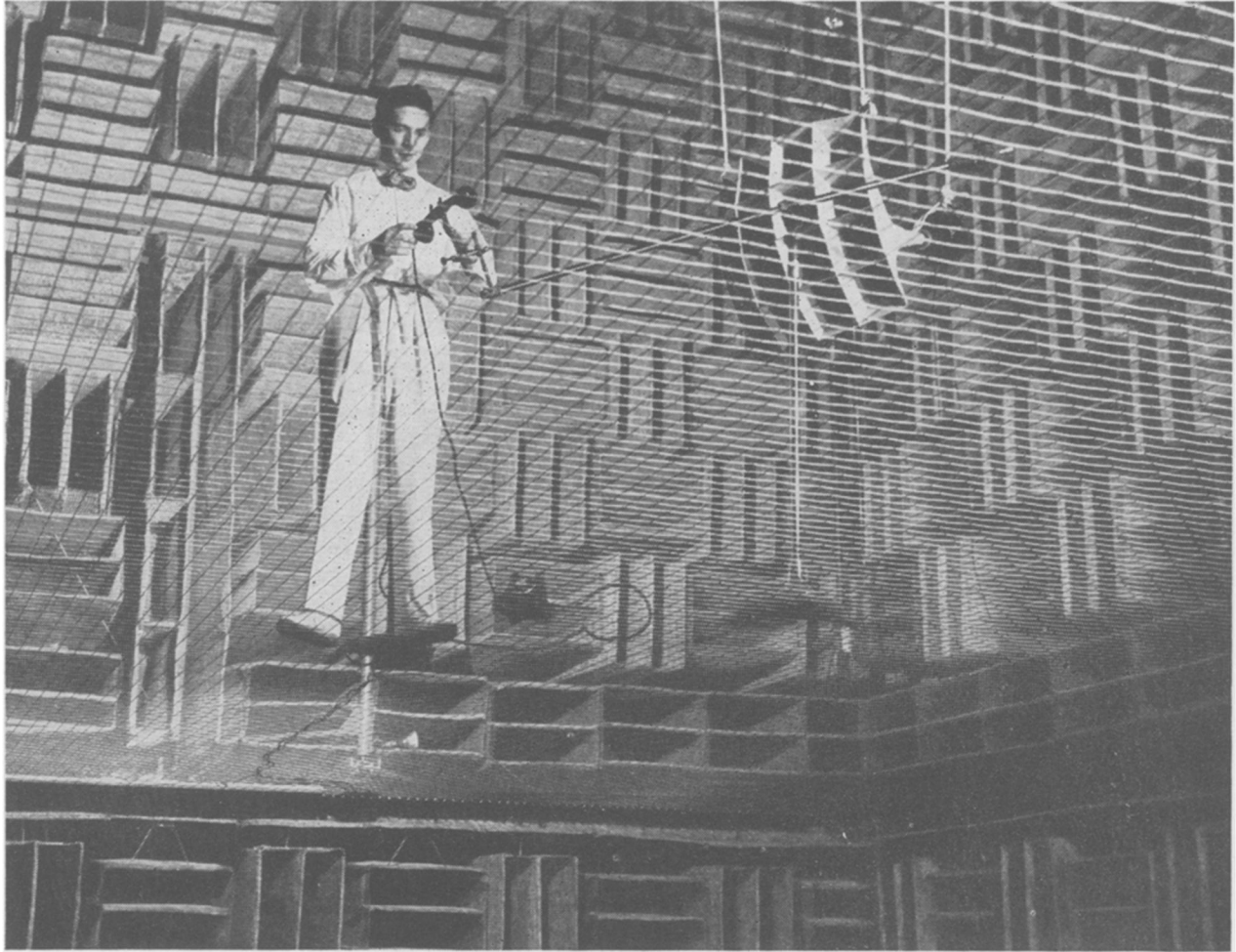
THE WEEKLY SUMMARY OF CURRENT SCIENCE • DEC. 13, 1947



**Christmas Prelude**

**See Page 378**

A SCIENCE SERVICE PUBLICATION



A telephone listens to a loud speaker in the new "free field" acoustic test room at Bell Telephone Laboratories. The sound-transparent "floor" is built of steel cables.

## Test-tube for Sound

This giant "test-tube" is actually an echoless sound room at Bell Telephone Laboratories. Here engineers seek new facts about sound which will help them make telephone service still better.

Bell scientists know a great deal about what happens to sound in electrical systems. This new room will give them a powerful tool to find out more about what happens to sound in the air.

In an ordinary living room, most of the sound addressed to you comes by way of reflections. At 10 feet less than 10% reaches you directly.

Sound that *bounces* at you from walls, ceilings, and your body is all right for hearing—but it poses questions for scientists who would study it uncontaminated by reflections.

The Bell Laboratories "test-tube" gives telephone people the chance to produce pure sound and analyze it reliably with respect to intensity, pitch, and direction. The entire room is lined with glass wool, contained in wire-mesh cases, wedge-shaped to give maximum absorbing area. Sound bounces along the sloping surfaces, sifts into the soft glass wool, and is gradually stifled.

This is one more example of Bell Laboratories' constant work to learn more about everything which can extend and improve telephone service.

### BELL TELEPHONE LABORATORIES

Exploring and inventing, devising and perfecting for continued improvements and economies in telephone service.





# WAR SURPLUS OPTICAL BARGAINS

## ASSEMBLE YOUR OWN BINOCULARS!

Save More Than 1/2 Regular Cost

Complete Optics!

Complete Metal Parts!



### ARMY'S 6 X 30 BINOCULARS

No Carrying Case with any Sets shown below. M-13A1 sets are waterproof model. M-3 sets are not waterproof.

**COMPLETE OPTICS & METAL PARTS**—Model M-13A1, 6 x 30 Binoculars. 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

**COMPLETE OPTICS & METAL PARTS**—Model M-3, 6 x 30 Binoculars. The Optics in this set are new, perfect or near-perfect. Prisms have new low reflection coating. Factory mounted Eye Piece and Objective Assemblies not coated. Metal Parts are perfect, new, ready for assembly. When finished, this will look like a regular factory job, except a name

### 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% Federal Excise Tax to your remittance if you buy both the Binocular Optics and the Binocular Metal Parts.

has been filed off a cover plate. No machining required. Bodies factory hinged and covered.

Stock # 831-Q .....\$35.00 Postpaid,  
plus \$7.00 tax—Total—\$42.00

**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

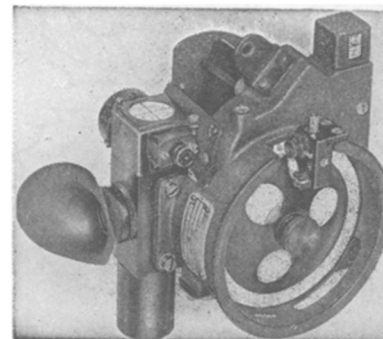
If you buy both the Binocular Optics and the Binocular Metal Parts, your purchase becomes subject to 20% Federal Excise Tax. Be sure to add amount covering tax to your remittance or your order cannot be filled.

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

## NEVER HAS THERE BEEN SUCH A SENSATIONAL BARGAIN

AS THIS!

## BUBBLE SEXTANT



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 where necessary 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

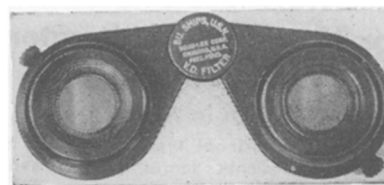
**CONDENSING LENSES**—Seconds, but suitable for Enlargers and Spotlights.

Stock # 1061-Q, 8 1/2" dia., 9" F.L., \$.25 Postpaid

Stock # 1082-Q, 4 1/2" dia., 5 1/2" F.L., 70c 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".

**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 7 x 50 Binoculars. Govt. cost, \$8.30 each.

Stock # 20,000-Q .....\$2.00 Postpaid  
Above Polarizing Attachment also adaptable to Govt. 6 x 30 Binoculars with substitution of special Eye-cups.

Stock # 20,010-Q, 6 x 30 Eye-cups, 75c pr., Postpaid  
**SPECTROSCOPE SETS**... These Sets contain all Lenses and Prisms you need to make a Spectroscope, plus FREE 15-page Instruction Booklet.

Stock # 1500-Q—Hand Type .....\$3.45 Postpaid

Stock # 1501-Q—Laboratory Type.....\$6.50 Postpaid

**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

WE HAVE LITERALLY MILLIONS OF WAR SURPLUS LENSES AND PRISMS FOR SALE AT BARGAIN PRICES. WRITE FOR CATALOG "Q"—SENT FREE!

## AIR FORCES GUNSIGHT

With Polarizing Variable Density Attachment—Can be used as Slide Viewer, or take it apart and you can get polarizing variable Density Attachment, Mangin Concave Mirror, Reflector Plate, Metal Reticule, Window, Lamp Housing, Ring and Bead Sight. The Polarizing attachment alone is worth many times the price of entire unit. Consists of 2 Polarizing Filters mounted with small handle which rotates one around the other. May be used in Photography, Research, Experiments, as Light Dimmer, etc.

Stock # 908-Q .....\$5.00 Postpaid

Same Unit Without Polarizing Attachment

Stock # 916-Q .....\$2.50 Postpaid



**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.....\$1.50 Postpaid

**SCHMIDT OPTICAL SYSTEM**—These were used in the Navy's Infra-Red Sniperscope and Signalling Units. Black Plastic body, size 3 15/16" x 5 1/2". F.L. 2.4". with amazing speed of F 0.9. Govt. cost, \$134.00. Can be placed in front of Cathode Ray Tubes for enlarging images of Wave forms. Also used to project images of miniature Television Receivers employing 1" tubes. Useful, too, with Oscilloscopes, Pan-Analyzers.

Stock # 720-Q .....\$6.00 Postpaid

**BOMBER SIGHTING STATION**—A double end Periscope Type Instrument of highest precision. Brand new and in perfect condition. 6 ft. tall, shipping wt. 360 lbs. Orig. cost \$9,850. Consists of numerous Lenses, Prisms, Mirrors, Gears, Motors, Metal Parts and Electrical Gadgets.

Stock # 914-Q .....\$50.00 F.O.B. Oklahoma

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 f/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.

### 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.

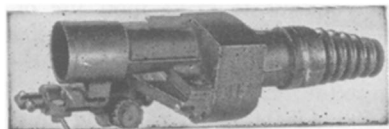
**35 MM KODACHROME PROJECTING LENS SET**—Consists of 2 Achromatic Lenses for projecting, plus 2 Condensing Lenses and a piece of Heat Absorbing Glass with directions.

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

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

Stock # 4025-Q .....\$1.95 Postpaid

### \$15.00 BUYS A \$500.00 TELESCOPE WITH BIG 3" OBJECTIVE



3 power instrument, brand new, with plastic Optics and fixed focus. Objective Lens has F. L. of 14.9", 23" long. Wt. 31 lbs. Wide field of view.

Stock # 929-Q .....\$15.00 f.o.b. Chicago, Ill. (Shipping Wt. about 70 lbs.)

**LENS CLEANING TISSUE**—1st quality, sheet size 11" x 7 1/2". Made to Gov. specs. Won't dust. Free of abrasives and lint.

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

ORDER BY SET OR STOCK NO.

SATISFACTION GUARANTEED

# EDMUND SALVAGE COMPANY, P. O. Audubon, New Jersey