

# Equipment

The information reported here is obtained from manufacturers and from other sources considered to be reliable. Science does not assume responsibility for the accuracy of the information. A coupon for use in making inquiries concerning the items listed appears on page 1078.

■ **FLASH-POINT INDICATOR** for the range 80° to 180°F is automatic in operation. Results do not vary more than  $\pm 2^\circ\text{F}$  from those obtained manually. Repeatability is within  $\pm 1^\circ\text{F}$ . Test time is 2 to 4 min. (Precision Scientific Co., Dept. 20)

■ **COPYING MACHINE** accepts originals up to 8½ by 11 in. and produces up to five copies from one negative. The device is a simplified compact version of previous models. (Eastman Kodak Co., Dept. 9)

■ **DOUBLE-BEAM POLARIZER** for the manufacturer's H-800 infrared spectrophotometer uses selenium films in transmission, which act as plane polarizers when the incident beam is inclined at the Brewster angle. Efficiency of the polarizer varies with wavelength but is always better than 96 percent. (Hilger and Watts Ltd., Dept. 32)

■ **HIGH-VOLTAGE POWER SUPPLIES** deliver 10 kv d-c at 1.25 ma with r.m.s. ripple of 0.25 percent at 60 cy/sec or 0.04 percent at 400 cy/sec. The supplies feature reversible polarity; they are embedded in epoxy resin and are hermetically sealed. Dimensions are 3 by 3.5 by 5.5 in. (Del Electronics Corp., Dept. 18)

■ **COMPUTER-LANGUAGE TRANSLATOR** converts magnetic tapes recorded in the format required by one computer to that required by another computer. The equipment can also transfer data from punched cards or punched paper tape to magnetic tape and from magnetic tape to punched cards, paper tape, or line printer. Internal parity-checking, marginal-checking, and error-control features are provided. (Electronic Engineering Co., of California, Dept. 21)

■ **CRYSTAL FILTERS** provide four bandwidths at center frequency of 10.7 Mcy/sec. Bandwidths for 6 db are 30, 15, 6 and 3.5 kcy/sec. Specifications include shape factor of 2 to 1, insertion loss approximately 1 db, and size 2¾ by 1 by 1 3/32 in. (Hycon Eastern, Inc., Dept. 19)

■ **OSCILLOSCOPE CAMERA** operates at a rate of one frame per second. Film size is 35 mm with capacity of 60 exposures in one loading. The instrument uses a 25-mm f1.9 lens or a 40 mm f1.5 lens. Resolution up to 90 lines/min is achieved. (OPTOmechanisms Inc., Dept. 22)

■ **CONSTANT-CURRENT POWER SUPPLY** switches over automatically to constant-voltage operation when the output voltage reaches a preselected value as a result of build-up of load resistance. Output current is adjustable from 0 to 20 amp, output voltage from 0 to 100 v. (Matthew Laboratories, Dept. 23)

■ **SHEET-METAL LAYOUT MACHINE** permits rapid placement of holes in chassis fabrication. Positioning of the drill-head, accomplished by means of crank-operated counters on x- and y-axes, is accurate to 0.002 in. in 18 in. A foot-operated switch actuates the drilling of pilot holes. (OPTOmechanisms Inc., Dept. 25)

■ **CHROMATOGRAPHY CABINET** contains four solvent assemblies accommodating 8 sheets of 18¼- by 22½-in. paper. The cabinet is Formica-lined, insulated with glass wool, and provided with a triple-pane window for observation. (Research Specialties Co., Dept. 28)

■ **HYGROTHERMOGRAPH** operates over the relative-humidity range 15 to 95 percent at temperatures from 32° to 130°F. Humidity measurements are repeatable within  $\pm 3$  percent RH. Temperature



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 (\*Patents Pending)



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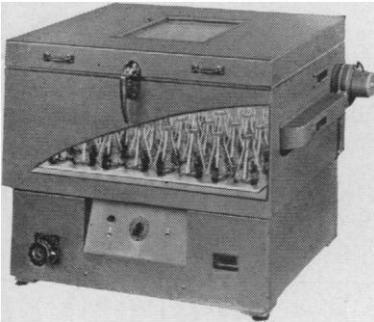
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*Patent pending*



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The Model G25 is a fully insulated incubator with a 400-watt heater. Thermal control and circulating fan maintain temperatures from ambient to 60°C.,  $\pm$  1/2°C. Interior dimensions are 34" wide, 22" long and 15 1/2" deep. The 18" x 30" interchangeable shaking platform, with a 1" eccentric rotary motion, can be set from 140 to 400 oscillations per minute without drift or variation. (Alternate range of 50 to 150 available.) Standard platforms hold Erlenmeyer flasks, test tubes or can be adapted for other types of glassware.

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## *Welch* HOT-WIRE GLASS-TUBING CUTTER

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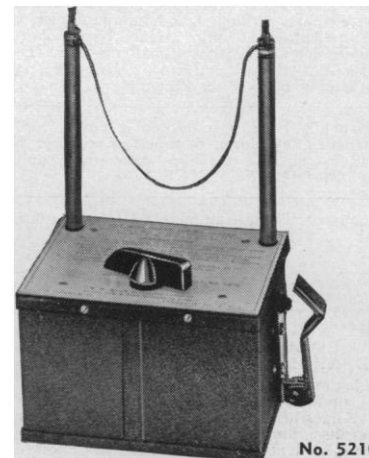
### Cuts Hard or Soft Glass with equal facility

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- Wire is readily replaceable, extra wires included

Glass tubing, bottles, or jars up to 3 inches in diameter can be cut neatly and quickly with this cutter. Soft glass, Pyrex-brand glass, or other hard-glass tubes can be cut with equal ease. The article is first encircled with a scratch made by a cutter wheel conveniently mounted on the side of the transformer, the scratch is heated by contact with a hot wire, and then cooled quickly by applying water or by blowing on it. No other equipment is required. The cutting wire is supported on two insulated posts and is heated by current from a 12-volt transformer serving as the base. No. 24 (B & S gauge) nichrome wire is used and is easily replaced. Three extra wires are included. By means of an adjustment on the transformer, the current can be controlled to give the optimum heat for whatever type glass may be used. An instruction plate is mounted near this control. The unit operates on 115 volts, 50 or 60 cycle A.C. Overall dimensions are 6 x 4 1/2 x 9 inches high.

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measurement is accurate within  $\pm 1^\circ\text{F}$  to  $100^\circ\text{F}$ . The humidity-sensing element is an animal-membrane diaphragm; temperature is sensed by a bimetal cantilever. The chart is driven by a spring-wound clock (Serdex, Inc., Dept. 26)

■ **ELECTROSTATIC GENERATOR** of Van de Graaff type develops up to 250,000 v at a maximum current of 8 to 15  $\mu\text{a}$ . The generator is self-excited and is powered by a 110-v induction motor. Accessories to be available in the future include an accelerator tube, discharge spheres, and a voltmeter. Over-all size is 29 in. (American Electrostatic Co., Dept. 35)

■ **FREQUENCY CALIBRATOR**, for the UHF-VHF range, supplies a series of simultaneous, uninterrupted, continuous-wave marker signals spaced every 50 Mc/sec or 100 Mc/sec over a frequency range 50 to 11,000 Mc/sec. Accuracy is  $\pm 0.005$  percent at all frequencies; it is not affected by temperature or variations of input power. The calibrator is designed to be used with circuits having 50-ohm input impedance and d-c return. (Control Electronics Co., Inc., Dept. 34)

■ **ENVIRONMENTAL TEST CHAMBER** has control accuracy of  $\pm 0.5^\circ\text{C}$  over the range  $-70^\circ$  to  $+200^\circ\text{C}$ . Stabilization of

temperature at  $150^\circ\text{C}$  is achieved within 10 min when the trays have been exchanged. The temperature gradient across the trays is within  $\pm 1^\circ\text{C}$ . (Statham Development Corp., Dept. 33)

■ **THERMOCOUPLE** is leak-proof at pressures up to 80,000 lb/in.<sup>2</sup> and operates at temperatures up to  $1000^\circ\text{F}$ . The plug and sheath of the thermocouple tip are made of stainless steel. Couples are welded and made of either Iron-Constantan or Chromel-Alumel. (American Instrument Co., Inc. Dept. 46)

JOSHUA STERN  
National Bureau of Standards

## PERSONNEL PLACEMENT

**CLASSIFIED:** 25¢ per word, minimum charge \$4.25. Use of Box Number counts as 10 additional words. Payment in advance is required.

**COPY** for classified ads must reach SCIENCE 2 weeks before date of issue (Friday of every week).

**DISPLAY:** Rates listed below—no charge for Box number. Monthly invoices will be sent on a charge account basis—provided that satisfactory credit is established.

Single insertion	\$26.00 per inch
13 times in 1 year	24.00 per inch
26 times in 1 year	23.00 per inch
52 times in 1 year	22.00 per inch

For **PROOFS** on display ads, copy must reach SCIENCE 4 weeks before date of issue (Friday of every week).

**Replies to blind ads** should be addressed as follows:

Box (give number)  
Science  
1515 Massachusetts Ave., NW  
Washington 5, D.C.

### POSITIONS WANTED

**Agricultural Biochemist**, Ph.D. Desires research and teaching position; 9 years' experience nutritional, physiological and food chemistry, industrial fermentation and enzymology, radiochemistry, small and large animal research. Box 123, SCIENCE. X

**Bacteriologist**, Ph.D. Desires teaching position in biological sciences at college. Box 108, SCIENCE 4/25; 5/2

**Bacteriologist**, M.Sc., 30. Teaching and research experience. Industrial or academic position desired. Box 122, SCIENCE. X

**Bacteriologist**, Ph.D.; 7 years' teaching and research; 8 years, virologist and immunologist, research institution; 6 years, chief bacteriologist and immunologist, pharmaceutical company. Medical Bureau, Burneice Larson, Director, 900 North Michigan Avenue, Chicago. X

**Biologist**, Ph.D. 1950; microbial genetics, radiation genetics, cytology, isotopes, mycology, botany. Research and teaching experience, publications. Box 110, SCIENCE. 5/2

**Biochemistry Technician** able to set up routine clinical biochemistry laboratory. Box 117, SCIENCE. 5/9, 16

### POSITIONS OPEN

#### UNIVERSITY OF SASKATCHEWAN COLLEGE OF MEDICINE DEPARTMENT OF ANAESTHESIA

Physiologist, Pharmacologist or Biochemist (Ph.D. or M.D.) required to direct newly established Anaesthesia Research Laboratory. Some teaching assignments to undergraduate and postgraduate students. Salary depending upon experience. For full particulars write to Gordon M. Wyant, F.F.A.R.C.S., Professor of Anaesthesia, University of Saskatchewan, Saskatoon, Saskatchewan, Canada. 4/25; 5/2

### POSITIONS OPEN

(a) Chemist; experienced hospital chemistry to head department, approved 250-bed general hospital; midwestern college city. (b) Chemists; B.S., M.S., experienced micromethods, for research appointments pediatric biochemistry laboratory, large teaching hospital; western mountain city. (c) Bacteriologist; M.S. for newly created post, central laboratory operated by two pathologists in charge several hospital facilities; to \$6000; resort community 30,000, Midwest. (d) Pharmacologist; Ph.D. with extensive small animal experience to head well-equipped animal laboratories; stable ethical consultant firm; to \$8000, bonus and fringe benefits; Midwest. (e) Senior Research Biochemist; Ph.D. trained analytical, organic chemistry for development work in drug metabolism, planning drug distribution in experimental animals; \$7500 up; East. Woodward Medical Bureau, Ann Woodward, Director, 185 North Wabash, Chicago. X

### DIRECTOR OF RESEARCH:

A moderate-sized, national, ethical pharmaceutical company has an unusual opportunity for an outstanding man. Ph.D. degree required. Experienced, preferably in industry; diversified scope, capable of directing various phases of research; thirty-five years of age, or older. Reorganization of department and opportunity of selecting and/or employing several associates; ideal working and living conditions in medium-sized city. Will be member of top-management team. Officership possible later. Your reply will be held in strictest confidence. Write Box 121, SCIENCE.

(a) Scientist with pharmaceutical or allied academic training and several years' industrial experience in pharmaceutical research development; Ph.D. helpful but not required; should be qualified to project coordination, large group of technical people; university city, East; \$8000-\$12,000. (b) Research Director; Ph.D., organic chemistry with broad experience in manufacturing chemistry industry; sense of economics, flair for administration required; \$15,000-\$20,000; East. (c) Director, Clinical Chemistry, preferably Ph.D. (chemistry); new 200-bed general hospital; well-staffed department; university city, Southwest. (d) Chemist qualified in microbiology to direct research laboratory, major industrial company; university city, East; \$10,000-\$12,000. (e) Two Chemists, one with master's degree, other with bachelor's degree; full-time research, genetics department, medical school; Southwest. SS-1 Medical Bureau, Burneice Larson, Director, 900 North Michigan Avenue, Chicago. X

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#### UNIVERSITY OF WESTERN AUSTRALIA

Applications are invited for a Senior Lecturer in Zoology. Preference will be given to candidates with research experience in the fields of comparative physiology and biochemistry or entomology.

The salary range for senior lecturers is at present £A1850-£A2150 per annum plus a cost-of-living allowance (at present £42 per annum). The commencing salary will be determined on the basis of the qualifications and experience of the appointee. Salary scales are at present under review.

An allowance is made towards traveling expenses and housing assistance is available.

Further particulars and information as to the method of application may be obtained from the Secretary, Association of Universities of the British Commonwealth, 36 Gordon Square, London, W.C.1.

The closing date for the receipt of applications, in Australia and London, is 30 June 1958. X

#### UNIVERSITY OF THE WITWATERS- RAND, JOHANNESBURG

Applications are invited for appointment to a post of Senior Lecturer on the staff of the University's Department of Physiology, Medical School. Candidates with a medical qualification or a higher degree in experimental physiology and/or biochemistry are eligible for appointment. Duties to be assumed as soon as possible.

The salary scale attached to the post of Senior Lecturer is £1200 x 50 - £1500. In addition, a married man will receive cost of living allowance at the rate of £234 per annum. The commencing salary will depend upon qualifications and experience in teaching and research.

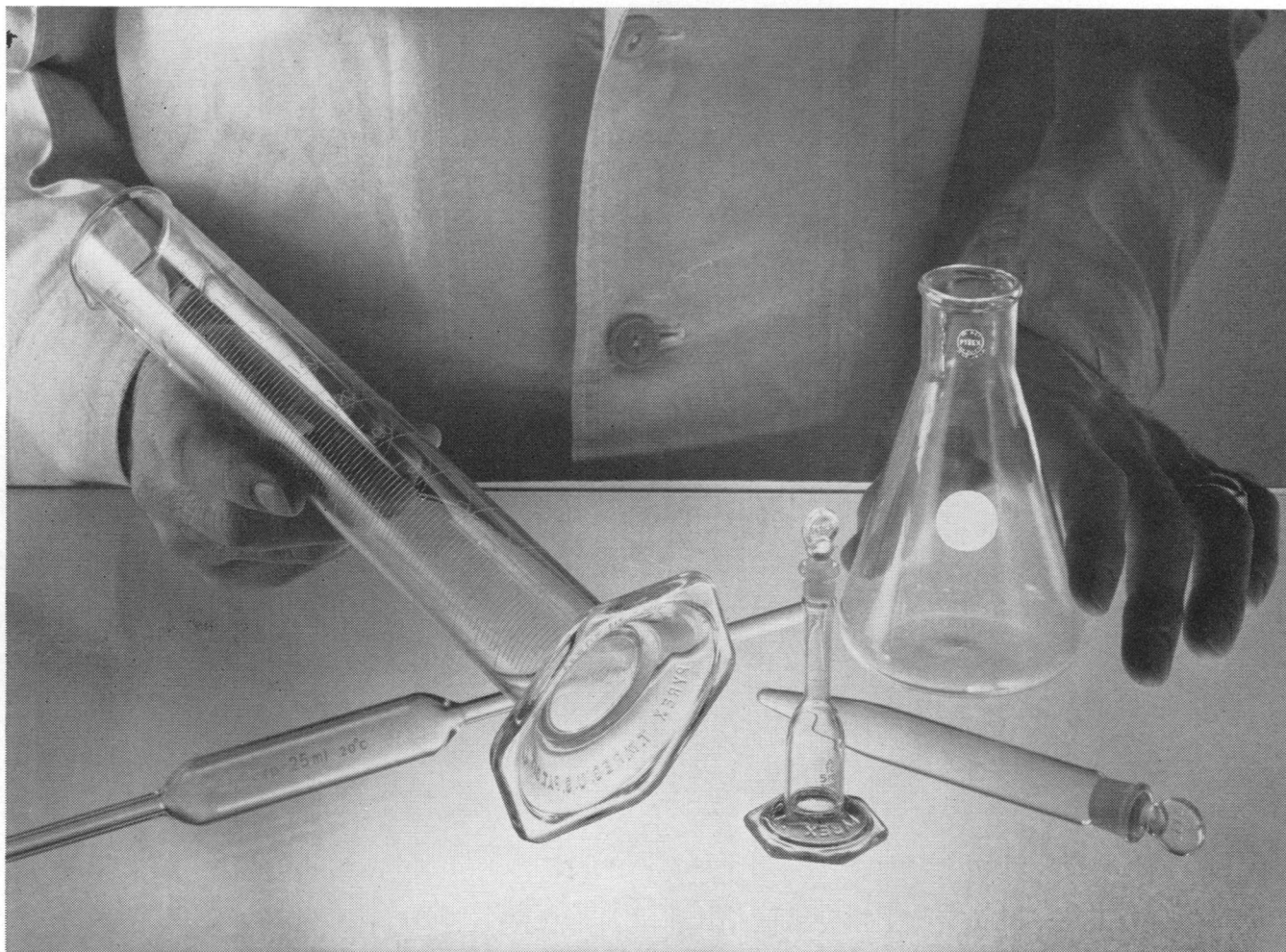
Membership of the Provident Fund is compulsory and involves a contribution at the rate of 7 percent of the salary paid, the Government and the University together contributing an equal amount. Membership of the Staff Medical Aid Fund is compulsory in the case of an officer who is found eligible for membership.

Applicants are advised to obtain a copy of the information sheet regarding the above vacancy from the Secretary, Association of Universities of the British Commonwealth, 36 Gordon Square, London, W.C.1.

Applications close in South Africa and London on 31 July 1958. X

**Zoologist**, Ph.D. Liberal arts college seeks department head. \$5480-\$5960 for 10½ months. Annual raises. Union College, Barbourville, Kentucky. 5/9





(Left to right) Transfer Pipette, Large tip opening for viscous liquids (#7101); Graduated Cylinder, A.S.T.M. specifications for distilling equipment (#3023); Volumetric Flask, micro, with hex base (#5630); Centrifuge Tube, Plain,  $\frac{3}{4}$  Pennyhead Stopper (#8062); Erlenmeyer Flask, Heavybeaded rim, white enamel markings (#4981).

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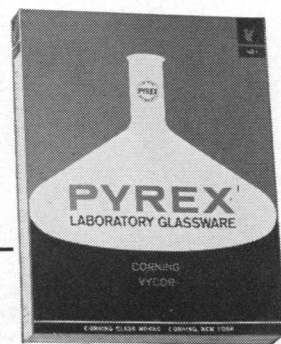
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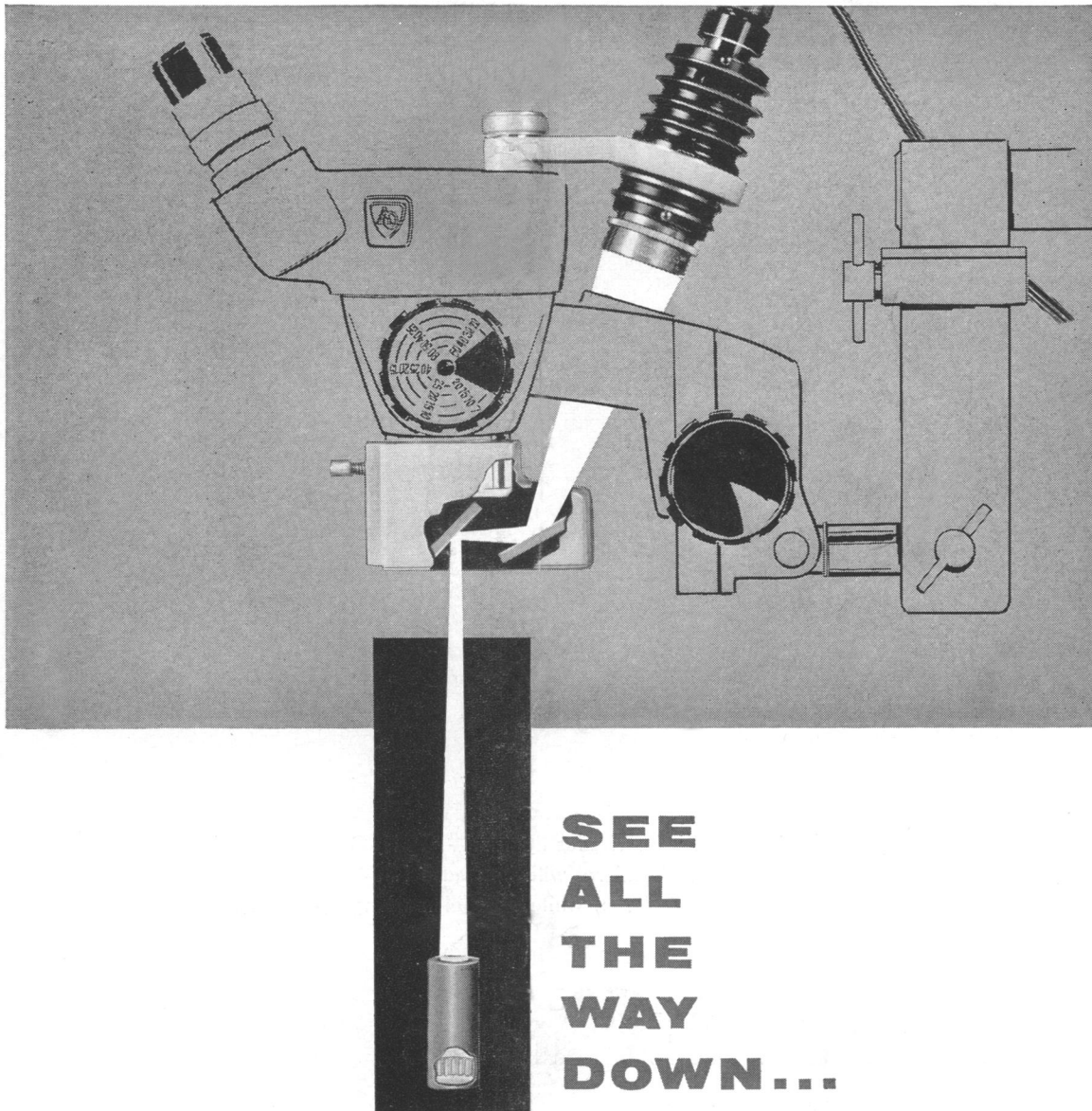
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