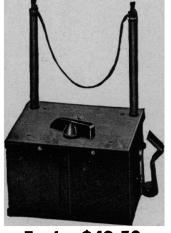


the scratch is heated by contact with a hot wire, and then cooled quickly by applying water or by blowing on it. No other equipment is required. The cutting wire is supported on two insulated posts and is heated by current from a 12-volt transformer serving as the base. No. 24 (B & S gauge) nichrome 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 $4\frac{1}{2}$ x 9 inches high.





Each, \$42.50

2 SEPTEMBER 1960

New Products

The information reported here is obtained from manufacturers and from other sources considered to be reliable. Neither Science nor the writer assumes responsibility for the accuracy of the information. All inquiries concerning items listed should be addressed to the manufacturer. In-clude the department number in your inquiry.

■ GLASS VACUUM JOINT consists of two glass arms with spherical ends. Each end is formed with a groove for seating an O-ring. The seal is effected by clamping the ends together with standard, commercially available clamps. The joint is available in four sizes with inside diameters 7, 16, 20 and 40 mm. Apparatus incorporating the joint will also be available. (Corning Glass Works, Dept. Sci745, Corning, N.Y.)

■ INFRARED SPECTROPHOTOMETER scans from 2 to 16 μ in 4 minutes or less with no loss of resolution or accuracy, according to the manufacturer. Available attachments allow wavelengths from 0.2 to 38 μ to be accommodated. Attachments include a 20-m gas cell, ultramicro liquid and gas cells, and a microbeam condensing system. Complete and expandable models can be supplied. (Baird-Atomic, Dept. Sci752, Cambridge 38, Mass.)

• OSCILLOGRAPH records up to 50 channels of test data on 12-in. wide paper. Record speeds are adjustable from 0.05 to 170 in./sec. Light-beam galvanometers with natural frequency up to 10,-000 cy/sec are used. Direct readout is accomplished by exposure of the record to low intensity light such as normal fluorescent room lighting. Writing speed capability is said to be 30,000 in./sec. Timing lines and grid lines are printed simultaneously with test data. Record storage and take-up spools are self-contained and the record does not require darkroom handling. (Midwestern Instruments, Dept. Sci757, P.O. Box 7186, Tulsa, Okla.)

NULL DETECTOR has five nonlinear ranges as well as linear ranges. The nonlinear ranges each cover three decades with full-scale sensitivities 0.001 to 10 volts. The center 10 percent of the log scale is linear. The instrument also serves as a microvoltmeter or as a d-c amplifier with eleven linear ranges from 100 μ v to 10 volts full scale and input resistance 10 megohms. A photoconductive modulator is used. Input filtering provides more than 60 db rejection of line a-c signals. Zero drift is less than 10 $\mu v/$ day. (Keithley Instrument, Inc., Dept. Sci771, 12415 Euclid Ave., Cleveland 6. Ohio)

■ GAS COMPRESSOR, manufactured in the Netherlands, uses a mercury piston to develop pressure in ranges up to 60,-000 lb/in.² Mercury is displaced by means of a hydraulically separated oil pump. Pump capacities of 400, 500, 600, 750, and 1000 cm³ are available. (High Pressure Equipment Co., Dept. Sci760, 1222 Linden Ave., Erie, Pa.)

■ MIXER is designed to mix small batches of liquid-solid combinations in volumes from $\frac{1}{2}$ to 2 oz. All parts are machined of stainless steel, and the mixer can be disassembled and reassembled in less than 1 min, according to the manufacturer. A transparent lid permits viewing of the mixing operation. (Atlantic Research Corp., Dept. Sci762, Alexandria, Va.)

ELECTROSTATIC SHIELD consists of a panel of borosilicate glass coated on one side with a thin, transparent, metallic film. The coated panel transmits 70 percent of visible light. The electrically conductive coating is permanently fired onto the surface of the glass and will not abrade, according to the manufacturer. Sizes up to 2 by 6 ft are available. (Corning Glass Works, Dept. Sci766, Corning, N.Y.)

JOSHUA STERN National Bureau of Standards, Washington, D.C.



SCIENCE, VOL. 132

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2 SEPTEMBER 1960

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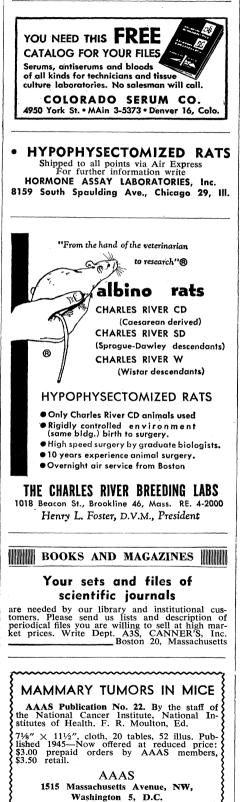
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