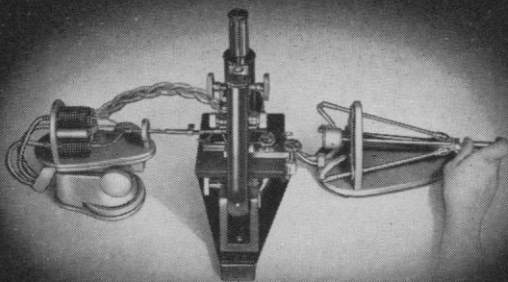


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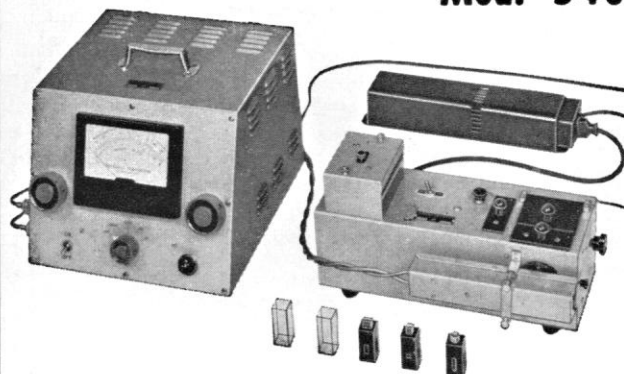
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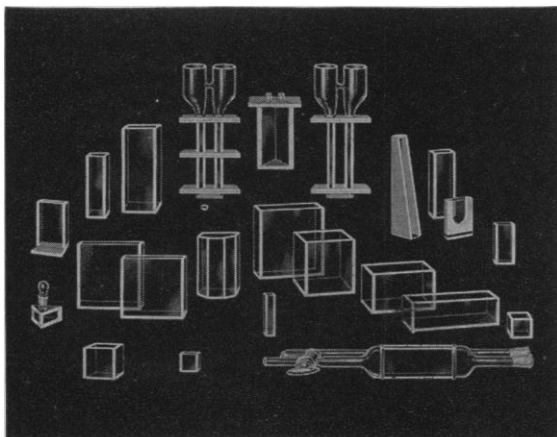
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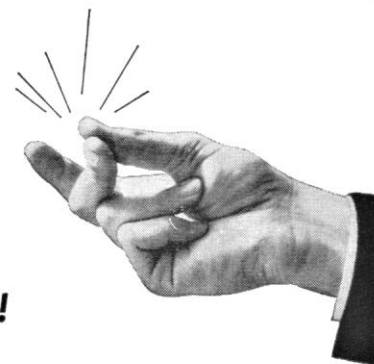
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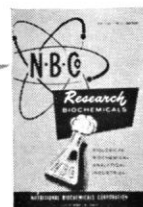
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Equipment

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■ **GAMMA SOURCES** provide flux from 600 r/hr to 3×10^6 r/hr and higher. The source is contained in a welded steel case. Surface flux is said to be so low that the source can be used in an office or laboratory without special construction or connections. (Isotopes Specialties Co., Dept. S997)

■ **DIGITAL READOUT** for displaying data from digital counters presents a series of 2.5-in.-high numerals on a flat plane in straight-line sequence. The numerals are formed by a large number of high-intensity neon bulbs so that failure of individual bulbs does not falsify data. (Computer-Measurements Corp., Dept. S996)

■ **PLATINUM RESISTANCE THERMOMETERS** can be installed by cementing or welding on flat or curved, metallic or non-metallic surfaces. Units are available in ranges from -400° to $+1550^\circ\text{F}$. Resistance change over the operating temperature interval is 100 ohm. Output without amplification is 5 v maximum. Accuracy of calibration is ± 1 percent of range below 1000°F . Repeatability is ± 0.2 percent of range. (Trans-Sonics Inc., Dept. S993)

■ **PULSE MODULATOR** produces 0- to 50-kv pulses at currents from 0 to 15 amp and at repetition rates from 10 cy to 10 kcy/sec. For pulse-group operation, triggered by an external generator, the modulator will recover and respond to pulses of varying widths occurring less than 1 μsec apart with approximate rise times 0.25 μsec and fall times 0.5 μsec . An internal trigger generator is provided for single-pulse operation. (Levinthal Electronic Products, Inc., Dept. S998)

■ **DECONTAMINATING UNIT** uses ultrasonic excitation to scrub radioactive particles from small articles. The tank, of stainless steel, measures 9 by $5\frac{3}{4}$ by $5\frac{3}{4}$ in. The apparatus operates on 115v a-c power and is portable. (Atomic Accessories Inc., Dept. S979)

■ **AUTOMATIC ULTRASONIC WASHER** for surgical instruments and laboratory glassware operates unattended except for loading. Filling, washing, draining, and rinsing are automatically sequenced. Up to 100 surgical instruments are accommodated. (American Hospital Supply Corp., Dept. S995)

■ **NEBULIZER** generates aerosol particles of size 0.5 to 3.0 μ at flow rates as low as 3 lit/min and up to 15 lit/min. A whistle warns of obstruction of the outlet tubing throughout the flow range. (Air Reduction Co., Inc., Dept. S970)

JOSHUA STERN
National Bureau of Standards

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Medical Microbiologist, M.S. Desires to relocate. Challenging hospital or public health appointment. Box 101, SCIENCE. X

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Ph.D. (majors: chemistry, biochemistry; minors: organic, physical chemistry); research fellow, 2 years; 3 years, instructor in physiology; 8 years, research chemist, pharmaceutical company. Medical Bureau, Burneice Larson, Director, 900 North Michigan, Chicago. X

Physiologist-Entomologist, Ph.D. Desires teaching and research position. Major interests (i) general and invertebrate physiology; (ii) entomology and toxicology. Research and teaching experience. Training in use of radioisotopes. Box 103, SCIENCE. X

Social Psychologist, Ph.D., seeks academic or research position permitting decision making, game theory research. Box 99, SCIENCE. 4/18

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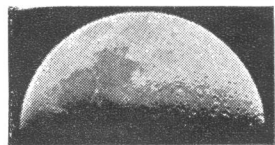
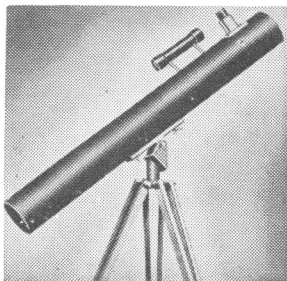
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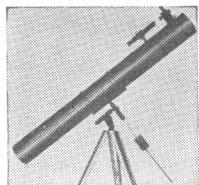
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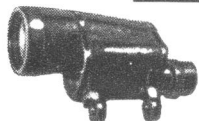
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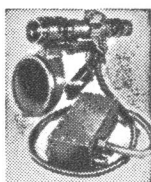
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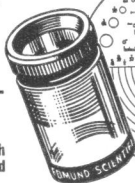
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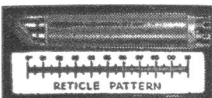
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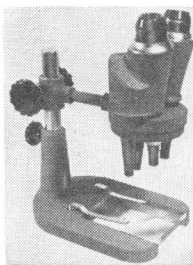
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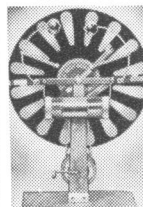
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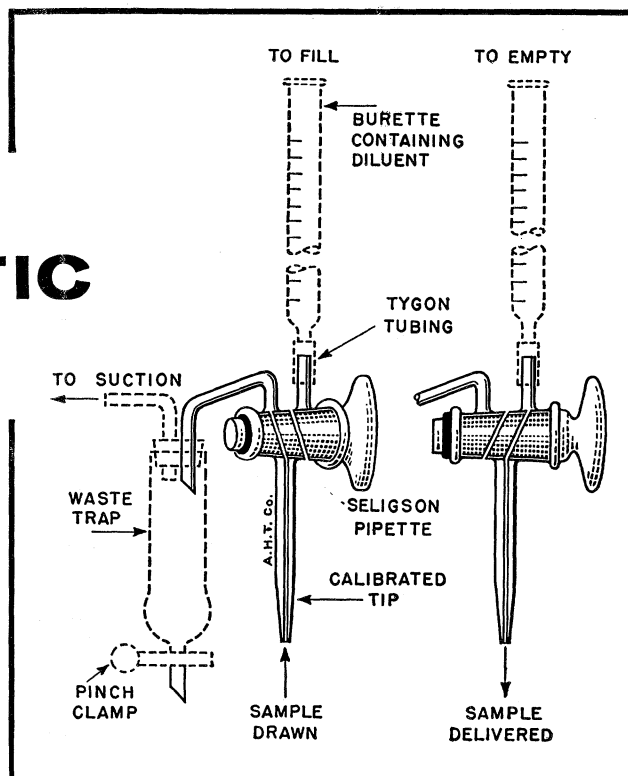


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Sampling
Delivery
Dilution
- SELF CLEANING



... eliminates individual sampling pipettes
and repeated filling of dilution pipettes

A fixed volume pipette permanently attached to a double bore stopcock, which permits rapid filling without adjustment to a reference mark, and complete washout delivery of the contained sample by a measured amount of a second liquid from a burette, pipette, or arbitrarily calibrated tube connected to upper arm. Eliminates need for individual sampling pipettes, and repeated filling of dilution pipettes, realizing a highly significant economy of time and glassware, and assuring reproducible sampling, delivery, and dilution which are especially important in routine clinical chemistry. Applicable, however, to any type analysis in which a standard volume is diluted or reacted directly with a measured volume of a second liquid.

In use, the pipette is attached to the dispensing burette by means of the upright arm of the stopcock, and to a suction device by means of the bent tube at the left. A waste trap is inserted into the line prior to the suction connection.

Samples are taken by setting stopcock to connect tip with suction line. A small excess is drawn

*Patent applied for.

over into the bent tube to serve as an initial rinse for the pipette wall. The sample is delivered by reversal of the stopcock plug to allow solution in the burette to expel the sample through the tip, and to rinse it clean. Following delivery of the required amount of reagent from the burette, the tip, filled with diluent which keeps it clean, is ready for immediate intake of the next sample.

The pipette, devised by Dr. David Seligson of the Graduate Hospital of the University of Pennsylvania, has been applied to more than twenty-five clinical chemistry procedures as described in *American Journal of Clinical Pathology*, Vol. 28, No. 2 (August, 1957) pp. 200-207, and *Technical Bulletin of the Registry of Medical Technologists*, Vol. 27, No. 7 (July, 1957) pp. 152-159.

The pipettes are designed for attachment to standard burettes or to similar dispensing vessels. Connection is best made with Tygon tubing, which makes a transparent, flexible joint.

8209-B. Pipettes, Seligson, as above described.

To contain, ml.....	0.05	0.1	0.2	0.5	1.0
Tolerance, ml (\pm)...	0.005	0.005	0.01	0.01	0.05
Tip length, mm.....	65	55	65	160	140
Each.....	11.00	11.00	11.00	11.00	11.00



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