

Biometric Soc., ENAR. (D. S. Robson, Cornell Univ., Ithaca, N.Y.)

Biometric Soc., WNAR. (S. W. Nash, Univ. of British Columbia, Vancouver, Canada)

Mathematical Statistics and Probability, 5th Berkeley symp. (J. Neyman, Statistical Laboratory, Univ. of California, Berkeley)

Science in General

Academy Conf. (J. T. Self, Univ. of Oklahoma, Norman)

Scientific Research Soc. of America. (D. B. Prentice, 51 Prospect St., New Haven, Conn.)

Sigma Delta Epsilon. (Miss A. Hanson, Univ. of Minnesota, Minneapolis)

Society of the Sigma Xi. (T. T. Holme, 51 Prospect St., New Haven, Conn.)

27-29. Academy of Management, New York, N.Y. (P. P. LeBreton, College of Business Administration, Univ. of Washington, Seattle)

27-30. Differential Equations and Dynamical Systems. Univ. of Puerto Rico, Mayaguez. (Center for Dynamical Systems, Brown Univ., Providence, R.I.)

27-30. Phi Delta Kappa, Professional Education Fraternity, Univ. of Oklahoma, Norman. (M. Bemis, Phi Delta Kappa, 8th and Union, Bloomington, Ind. 47402)

28-30. Indian Medical Assoc., 41st conf., Baroda (Gujarat). (Indian Medical Assoc. House, Indraprastha Marg., New Delhi 1)

29-4. Pugwash Conf. on Science and World Affairs, Addis Ababa, Ethiopia. (J. Rotblat, Pugwash Continuing Committee, 8 Asmara Rd., London, N.W.2, England)

January

4-7. Solid State Physics, conf., Manchester College of Science and Technology, Manchester, England. (S. F. Edwards, Dept. of Physics, Victoria Univ. of Manchester, Manchester 13)

5-8. National Soc. of Professional Engineers, winter mtg., Bal Harbour, Fla. (NSPE, 2029 K St., NW, Washington, D.C. 20006)

6-7. Society for General Microbiology, 45th general mtg., London, England. (P. H. Clarke, Biochemistry Dept., University College, Gower St., London, W.C.1)

6-10. International Council of Scientific Unions, 11th general assembly, Bombay, India. (Intern. Council of Scientific Unions, Via Sebenico 2, Rome, Italy)

7-8. Surgical Research Soc., winter mtg., London, England. (A. P. M. Forrest, Cardiff Royal Infirmary, Newport Rd., Cardiff, Wales)

10-13. Radioactive Isotopes in Clinical Medicine and Research, 7th intern. symp., Bad Gastein, Austria. (R. Hofer, Second Medical Univ. Clinic, Garnisongasse 13, Vienna 9)

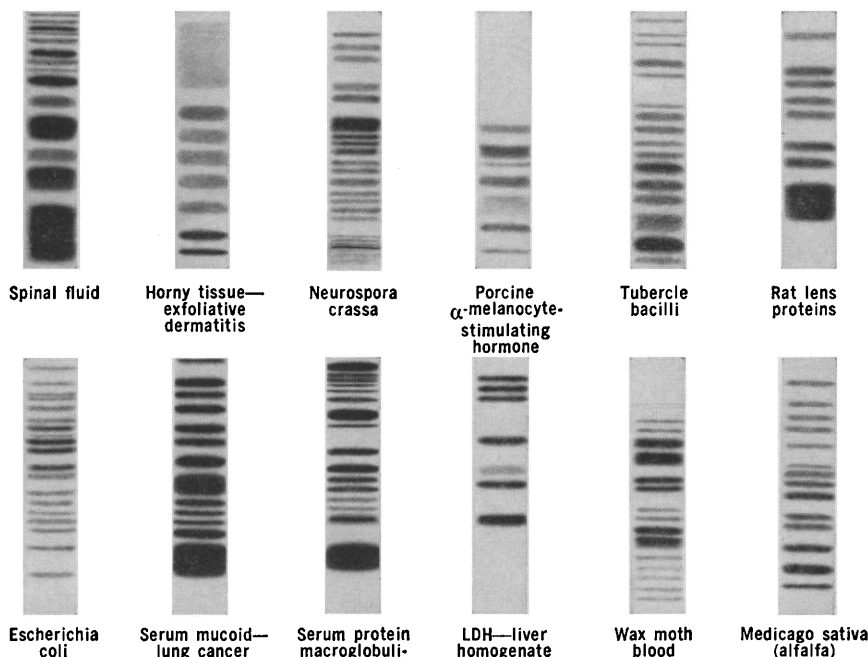
11-12. Man's Extension into the Sea, symp. on SEALAB II, Washington, D.C. (T. Evans, Conference Management Organizer, Colonial Bldg., 105 N. Virginia Ave., Falls Church, Va. 22046)

12-14. Medicinal and Aromatic Plants in India, symp., Central Indian Medicinal Plants Organization, Lucknow, India. (S. C. Datta, CIMPO, 4 Sapru Marg, Lucknow)

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SUBSTANCES SEPARATED: Proteins, including C-reactive proteins, glycoproteins, mucoproteins, nucleic acids, nucleo-proteins and thyroxin-binding proteins; hemoglobins and haptoglobins; globulins, histones, human and bovine growth hormones, ovine follicle stimulating hormone, human chorionic gonadotropin, enterotoxins, Hageman factor, α -crystallin, collagen, diglyceride and prolactin; amylase, aminopeptidase, phosphatases; β -galactosidase, carbonic anhydrase, carboxypeptidase, dehydrolipamide dehydrogenase, glycogen phosphorylase, lipase, lactic and malic dehydrogenase, Phosphorylase, ribonuclease, sialidase, transaminase and transpeptidase. DIAGNOSIS OF: Acute schizophrenia, cancer of the breast and lung, glomerulonephritis, liver pathology, lupus erythematosus, macroglobulinemia, milk allergy, myeloma, myocardial infarction, nephrosis, normal and abnormal pregnancy, pneumonia, primary tumor sites, rheumatic fever, sickle cell anemia, thalassemia, tuberculosis and uremic-hemolytic syndrome.

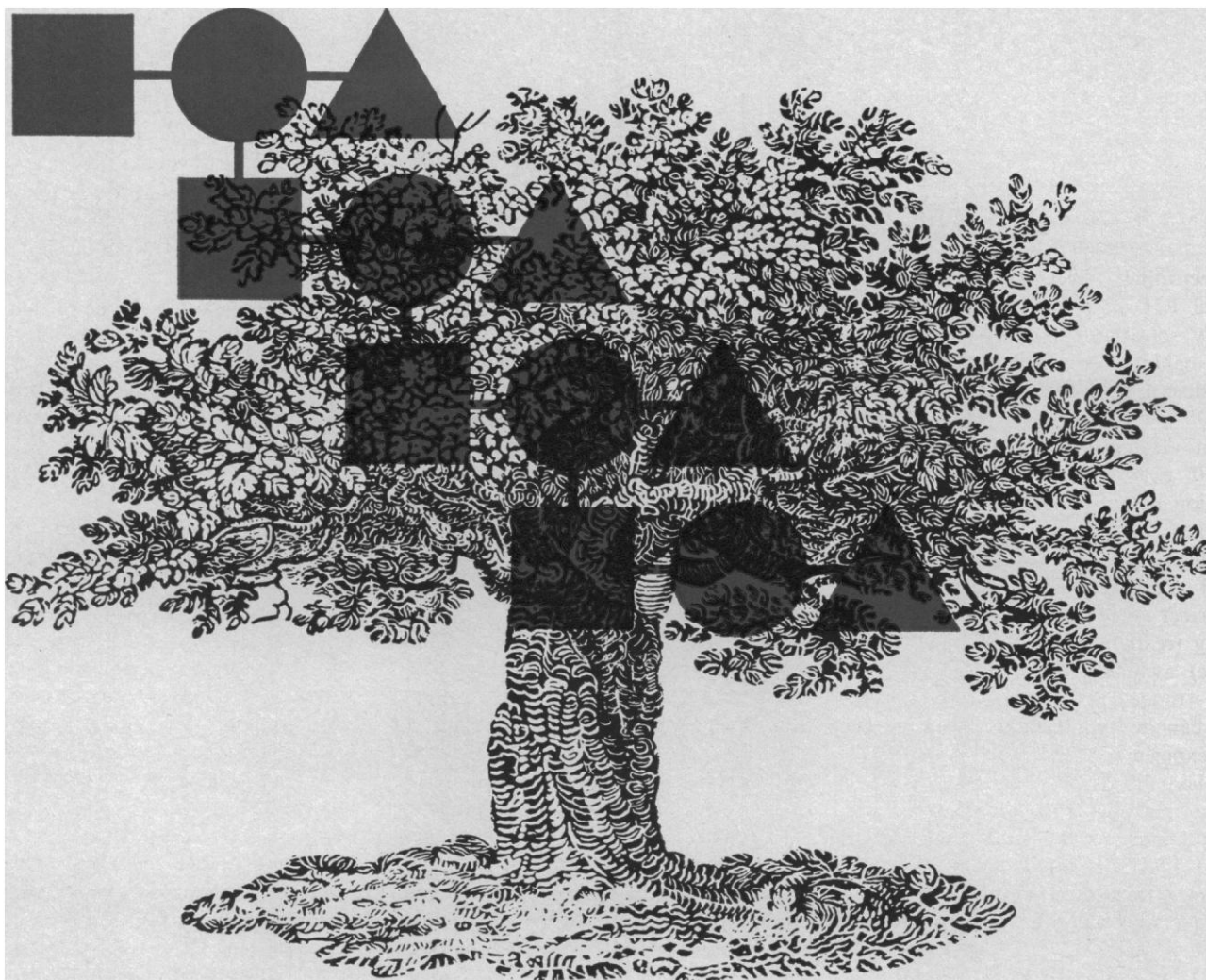
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New Products

Recording electrobalance, Cahn model RH, is a high-capacity (100 g), highly sensitive ($2\ \mu\text{g}$), recording vacuum balance. A companion to the established model RG, it has a capacity of 100 g on each pan and has 19 different electrical measuring ranges, up to 20 g. Precision of readings as a fraction of the load, $1:10^7$; detectable changes in weight, $1:10^4$ of the change. Total sample weight is always indicated on the balance and recorder; electrical zero suppression. Electrical taring (readable to 0.01 percent of the range) available in 9 different ranges; each range is continuously variable and can be switched or varied during an experiment. Balance is normally supplied in a 3.5-liter glass vacuum bottle. Various hangdown tubes may be attached to the bottle for service up to 1700°C . Standard model intended for pressures down to 10^{-8} torr; the special UHV version provides for pressures to 10^{-10} torr. Designed for any 1-mv potentiometric recorder accurate within 1 percent; also compatible with digital voltmeters. Voltage: weight ratio: high range, 0.5 volt/g; low range, 10 volt/g. List: \$3850—D.J.P. (Cahn Instrument Co., Dept. S463, Paramount, Calif.)

Low-temperature incubator, model 807, features a power-driven revolving drum with perforations to hold up to 200 tissue-culture tubes 22 mm in diameter and 155 to 200 mm long. Removable drum can be slipped on and off the drive shaft, which extends 7 inches (17.5 cm) into the cabinet interior. Drum, constructed of heavy-gauge aluminum, is powered by a high-torque, gear-reduced motor with link-chain drive. Speed fixed at 0.5 rev/min. Temperature range, 5° to 50°C ; heating and cooling are controlled as desired.

The material in this section is prepared by Denis J. Prager (D.J.P.), Laboratory of Technical Development, National Heart Institute, Bethesda 14, Md. (medical electronics and biomedical laboratory equipment).

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.

Forced air circulation maintains temperature uniformity within 0.06°C . All controls are externally mounted. Chamber volume, 10 ft³ (283 liters). Two shelves, adjustable on 0.5-inch centers, provided for use with drum removed; more shelves may be added. Compressor, heaters, and thermostat have a 5-year warranty.—D.J.P. (Precision Scientific Co., Dept. S470, 3737 West Cortland St., Chicago, Ill.)

Cinephotomicrographic apparatus, Sage model 500, is a complete and compact instrument for taking time-lapse (1 to 60 frames per minute) and normal-speed (12 to 32 frames per second) 16-mm motion pictures through a microscope. Adjustable to work with any upright microscope fitted with a vertical tube for photography, the apparatus has an aluminum base plate, two rigid upright posts, and a bridge assembly, including camera and controls. The camera, a Bolex H-16 M, has built-in frame and footage counters and 100-ft (30-m) film capacity; is driven by a Bolex motor. A prismatic focuser (provided) permits one to view the film plane during setup to insure proper alignment of the camera relative to the optical axis of the microscope. The base plate is set on a shock-absorbent pad to isolate the unit from external vibration; the camera is mounted on the bridge by means of a vibration-proof assembly. The bridge assembly contains power supplies and controls not incorporated in the camera; these include: electronic exposure and framing-rate controls, regulated power supply for reproducibility of timing, and control for specimen-shielding shutter accessory. Time-lapse exposure times: adjustable from $\frac{1}{2}$ to 15 seconds; $1/30$ second, fixed. Base-plate: 21-inches (53-cm) square. Maximum height of camera: $27\frac{1}{2}$ inches. Weight: 50 lb (23 kg). Power required: 115 volts \pm 10 percent, 50- to 60-cy/sec a-c. List: \$1495—D.J.P. (Sage Instruments, Inc., Dept. S455, 2 Spring St., White Plains, N.Y. 10601)

Ultramicrotome, LKB Ultratome III type 8800, an improved version of the Ultratome I type 4800, has cutting speeds ranging from 20 mm/sec to 0.1 mm/sec, a knife evaluator, improved thermal feed (with higher stability), quicker response and broader range (50 to 1300 Å per section), a planetary gear for very precise manual macrofeed, and a standard accessory for picking up floating sections onto grids. The knife evaluator measures the angle of glass knives within 1 deg at any point on the edge; each new knife may be classed according to its quality and its edge angle in a few seconds. The rapid return stroke on the thermal-feed system (0.4 second) saves waiting time. Entire cutting cycle for the lowest speed (0.1 mm/sec) is 64 seconds; 4 seconds for the speed most often used (2 mm/sec) and all higher speeds. Maximum thermal feed per section is increased from 1000 to 1300 Å, even during the shortest cutting cycle of 4 seconds. The cutting stroke with constant speed is doubled to 6 mm; the new model can produce sections of area up to 3-mm square. A planetary-gear system fitted to the mechanical macrofeed knob, and independent of the mechanical microfeed, covers the thickness range 0.1 to $2\ \mu$ as well as the thermal-feed range (50 to 1300 Å). Total range, 15 mm.—D.J.P. (LKB Instruments, Inc., Dept S465, 4840 Rugby Ave., Washington 14, D.C.)

Microprobe transducer, Endevco model 8106, with full-scale sensitivity of 10 mg and capable of resolving forces of $20\ \mu\text{g}$ or less, can directly measure muscular, capillary, and cellular forces well down into the microgram region. The transducer, designed for use in standard micromanipulators, is a half-bridge, semiconductor, strain-gauge-force transducer, with full-scale output of 5 mv/v at 10 mg of force applied in one axis transverse to the center member. The sensitive member (for convenient insertion of special tips) is a tube of 0.260-inch (6.5-mm) diameter and 0.0225-inch (0.56-mm) bore; it is enclosed in a secondary tube that positively limits transverse travel of the sensing tube. Nominal impedance, 2000 ohms. Recommended for use with 6-volt strain-gauge power supplies, but voltage may be as high as 12. List: \$350.—D.J.P. (Endevco Corporation, Dept. S468, 801 South Arroyo Parkway, Pasadena, Calif. 91109)

New AAAS Symposium Volume:

MAN, CULTURE, AND ANIMALS: THE ROLE OF ANIMALS IN HUMAN ECOLOGICAL ADJUSTMENTS

Editors: Anthony Leeds and Andrew P. Vayda
304 pp., illus., bibliog., indexes, August 1965. Price:
\$8.00. AAAS members' cash orders: \$7.00.

The volume is based on a symposium held at the AAAS meeting in Denver, December 1961. It presents case studies of the relationships among human populations, the animals they use for food or food-getting, the plants significant for maintaining both animals and men, and the socio-cultural usages by which plants, animals, and men are linked in ecosystems.

Anthropologists and geographers discuss animal characteristics, populations dynamics, diets, and other ecosystem variables, including culture. The case material is used for a unique effort to rethink the logic of functional analysis in anthropology in terms of general systems approaches.

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Faculty positions. Ph.D., assistant professor or higher. Embryology, genetics, biometry, histology, fish physiology, invertebrate zoology, or other specialization. To teach undergraduate course and develop graduate work in rapidly expanding department in new buildings. Apply to:

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Ph.D. in Bacteriology with 2-4 years industrial experience in the development & production of microbial products. Individual will be in charge of expanding microbiological facility and will supervise several people. Submit resume to **Charles C. Worthington, Worthington Biochemical Corporation, Freehold, New Jersey 07728**

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2125 13th Street, NW
Washington, D.C. 20009**

(a) **Ph.D. Geneticist**, human chromosome background; research; Mideast. (b) **Biochemistry Department Director**, experienced B.S.; to \$12,500; E. (c) **Ph.D. Clinical Microbiologist**; eastern hospital. **Faculty Appointments:** (d) **M.S./Ph.D. Biologist**; second semester; Mideast. (e) **Microbiologist**; medical; second semester; Midwest. (f) **Ph.D. Embryologist/Histologist**; developmental biology course; Mideast; to \$12,000. (g) **Ph.D. Physiologist**; (neuro- or bioelectric); Southeast; to \$10,000. Write **Science Service, The Medical Bureau, 900 North Michigan Avenue, Chicago, Illinois 60611.**

Two positions, Ph.D., available Sept. 1966. Research and teaching; research specialties desired are endocrinology, experimental embryology, molecular biology, and biometrics. Salary and rank commensurate with training and experience. Send resume to **Chairman, Department of Zoology, University of Arkansas, Fayetteville, Arkansas 72701.**

UNIVERSITY OF GUELPH HEAD OF DEPARTMENT OF MATHEMATICS AND STATISTICS

Applications are invited for the position of Head of a recently established Department of Mathematics and Statistics. Applications with qualifications and interests in the fields of applied mathematics, numerical analysis, or mathematical statistics will be favoured, but all applications will be considered. Duties will involve the development of an undergraduate program in honours mathematics with emphasis in applied mathematics and the development of graduate programs in applied mathematics and statistics. The Department is responsible for the teaching of mathematics for students in Arts and Science, Agriculture and Agricultural Engineering. The Department will require a faculty of 9 members in 1966-67 and 13 members by 1970-71. Starting salary, according to qualifications, will be in the neighborhood of \$15,000.

Applications, complete with curriculum vitae, a recent photograph and the names and addresses of three referees should be sent as soon as possible to: **Dean M. H. M. MacKinnon, Wellington College, University of Guelph, Guelph, Ontario, Canada.**

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Two positions are available for persons with a Ph.D. in pure or applied mathematics and with teaching and research experience. One position is available for a person with a Ph.D. in biological statistics. Duties will involve teaching general, honours and graduate courses in mathematics and statistics; research; consultation on experimental design and analysis with research workers in agriculture and biology. Candidates who have not completed a Ph.D. program will be considered.

Appointments will be made in the ranks of lecturer, assistant professor, associate professor or professor, depending upon qualifications and at starting salaries competitive with other Ontario universities. Applications, complete with curriculum vitae, a recent photograph and the names of three referees, should be sent as soon as possible to: **Dr. E. B. MacNaughton, Department of Physics, Wellington College, University of Guelph, Guelph, Ontario.**

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University of California, Riverside Biometrical Laboratory Citrus Research Ctr. and Agric. Expt. Sta.

Applications are invited from qualified persons with a Ph.D. or equivalent degree for a regular staff appointment as Assistant or Associate Professor of Biometry. Preference will be given candidates with some training in agronomy, forestry, horticulture, or related fields. Applications with vita should be submitted to Walter Reuther, Chairman, Department of Horticultural Science.

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Seeking a Ph.D. with strong formal training in endocrine physiology and experience or interest in the biochemistry or endocrine functions. Duties will involve aiding in the design, direction, and evaluation of fundamental research efforts in various aspects of the endocrine system as well as some future product development. Prior experience in diabetes would be helpful. In addition, individual will supervise a group of two or three junior scientists.

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Conditions for the fellowship may be obtained from the **Australian Consulate-General, 636 Fifth Avenue, New York, N.Y. 10020, U.S.A.,** or from **L. R. D. Pyke, Secretary for Graduate Studies**

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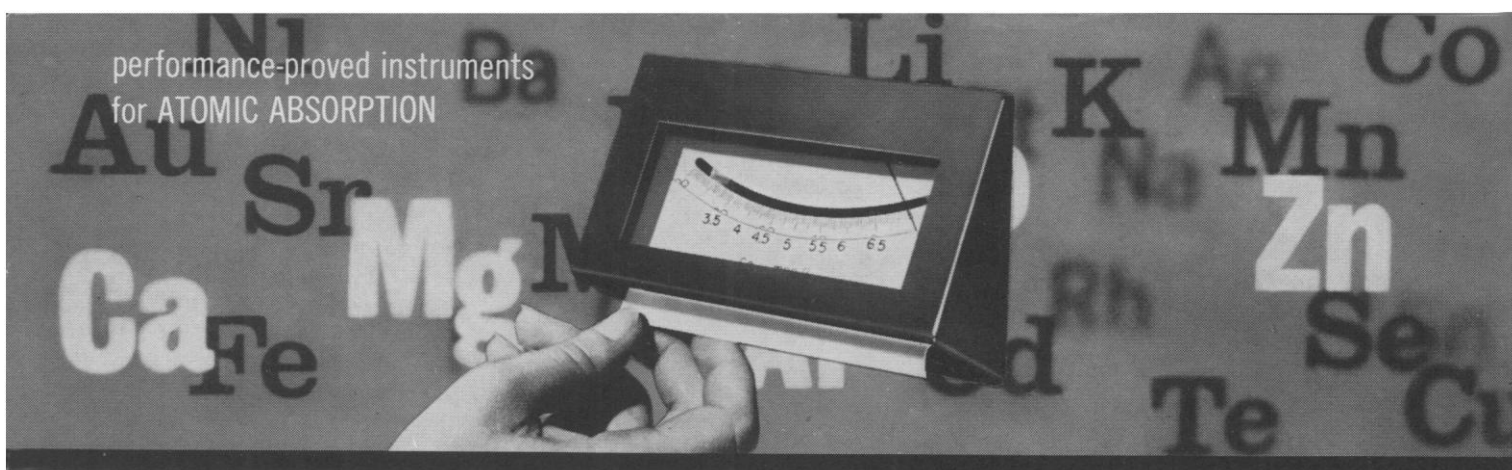
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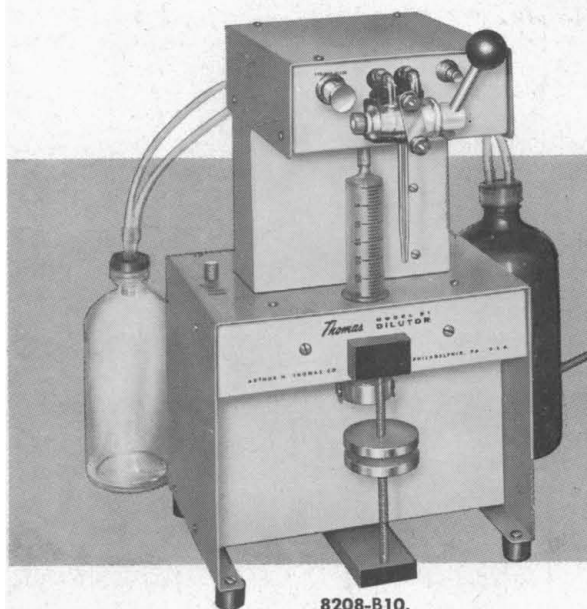
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