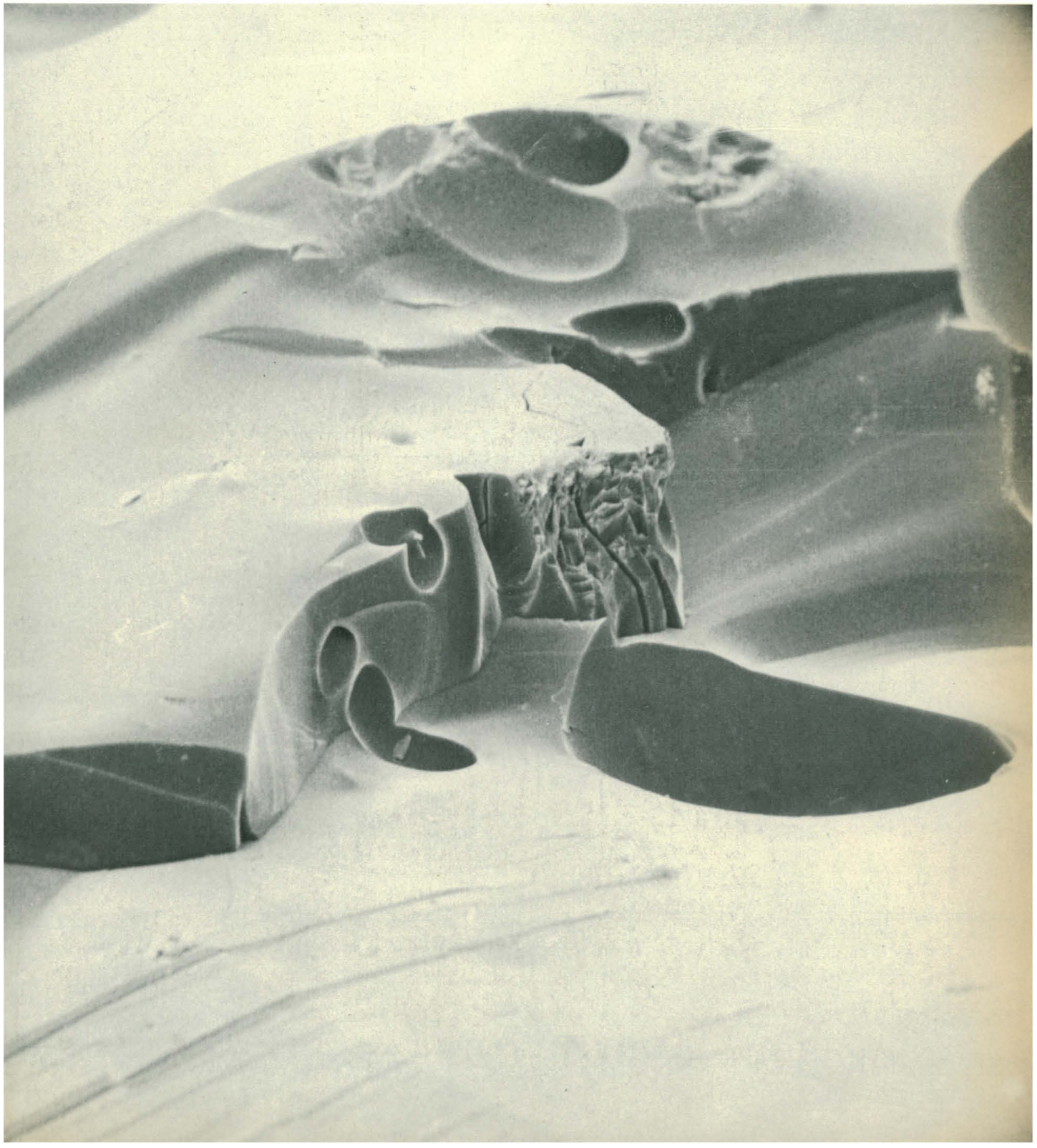
SCIENCE

12 January 1973

Vol. 179, No. 4069

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE



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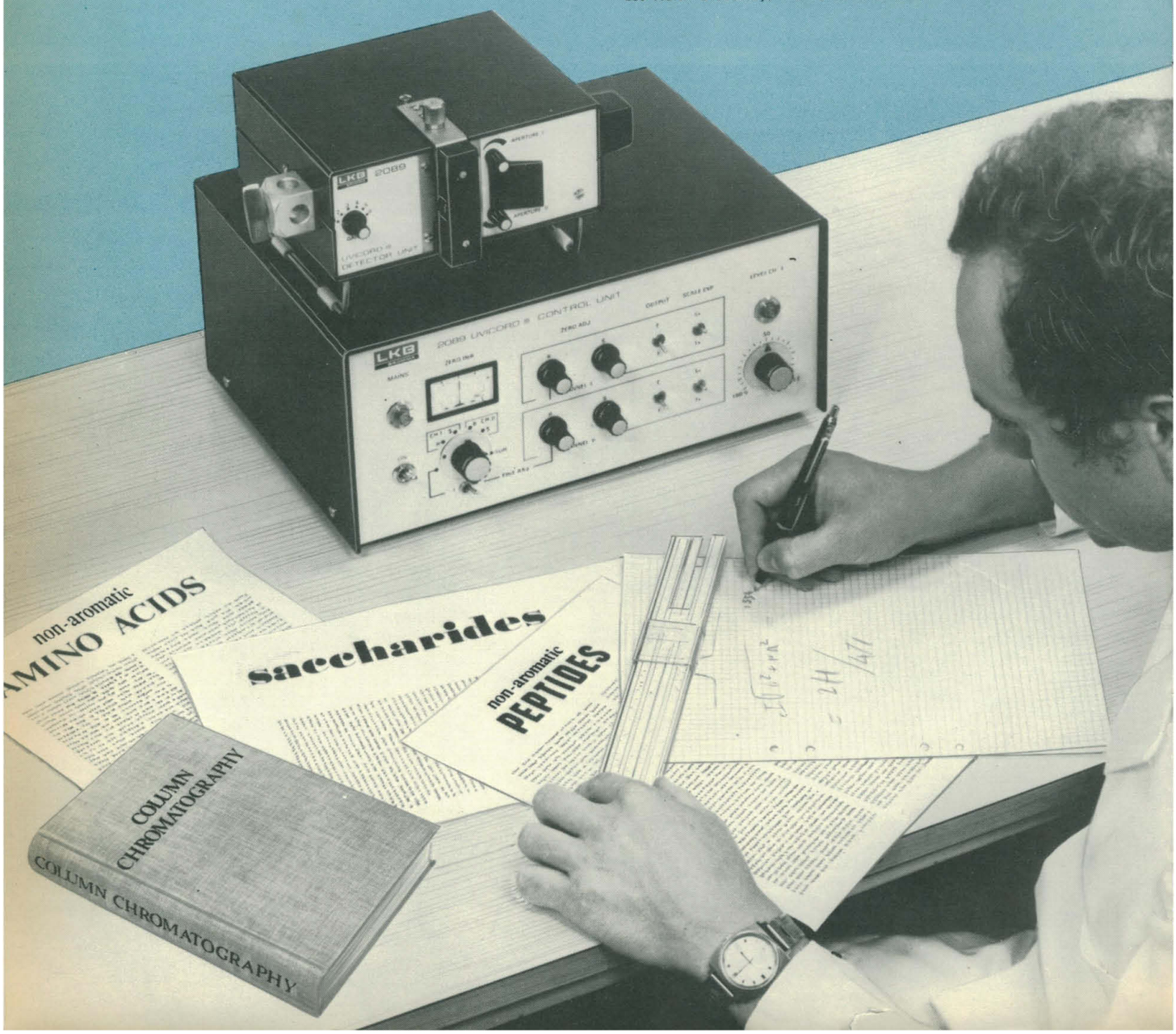

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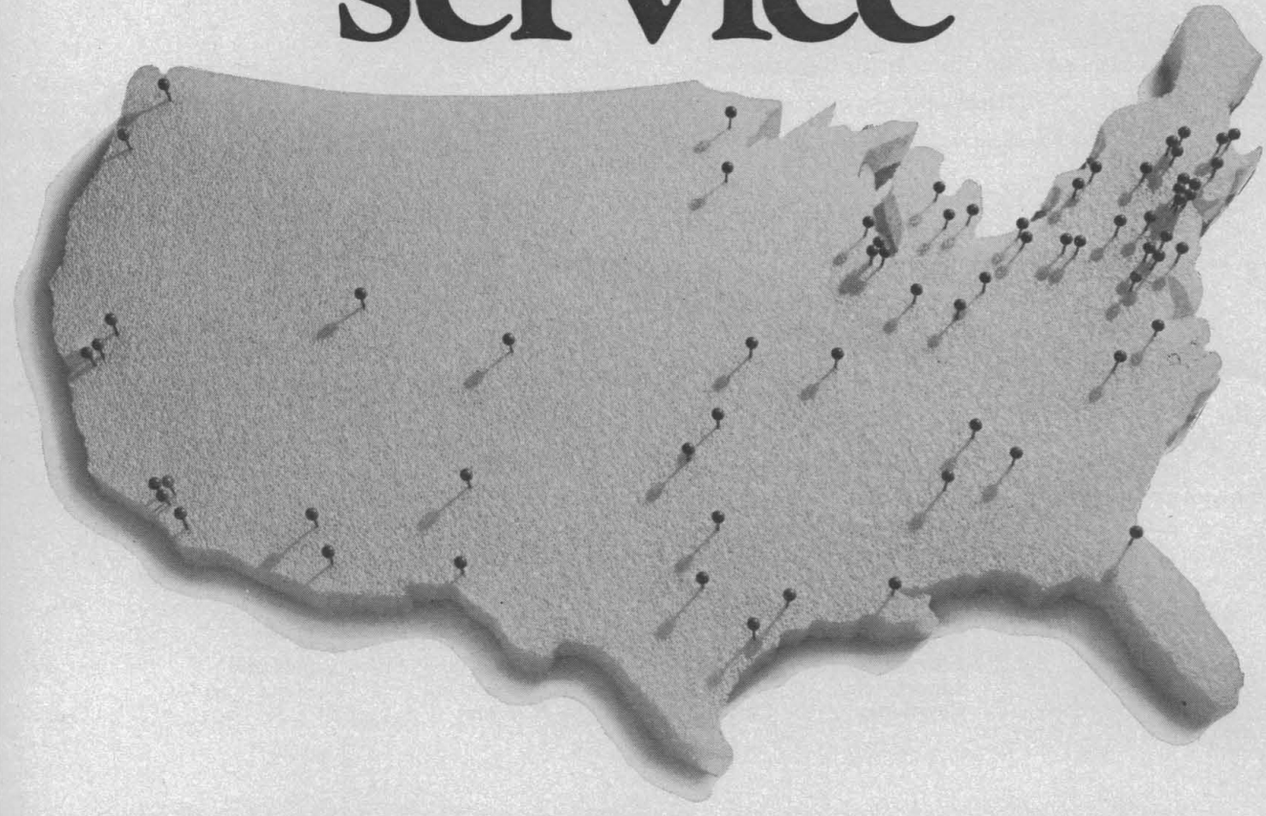

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COVER

Surface of an obsidian sample (× 215), of high silica content; a framework silicate glass in which approximately 15 percent of the silica atoms of silica glass has been replaced with aluminum atoms with the charge balancing potassium and sodium ions residing within the open framework (see page 177). [Electron micrograph courtesy of J. Arem and W. Brown, U.S. National Museum of Natural History]

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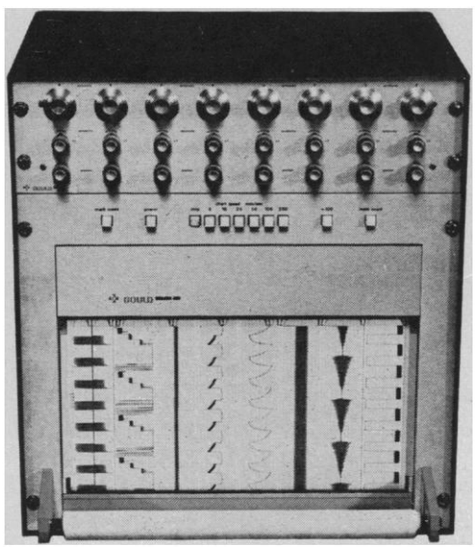

It's the Brush 481. For about $1000 less than the same components bought separately.

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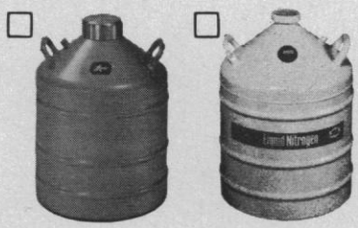

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Capacity (liters)		

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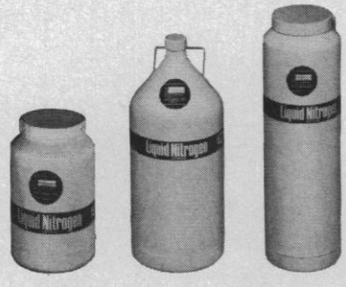

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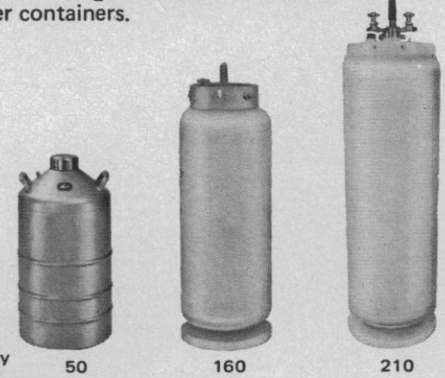

Capacity (liters)	50	160	210
Filled Weight (pounds)	130	503	625

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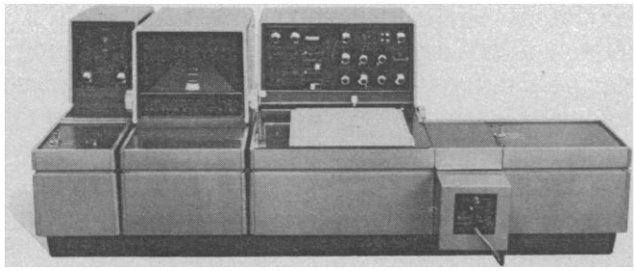

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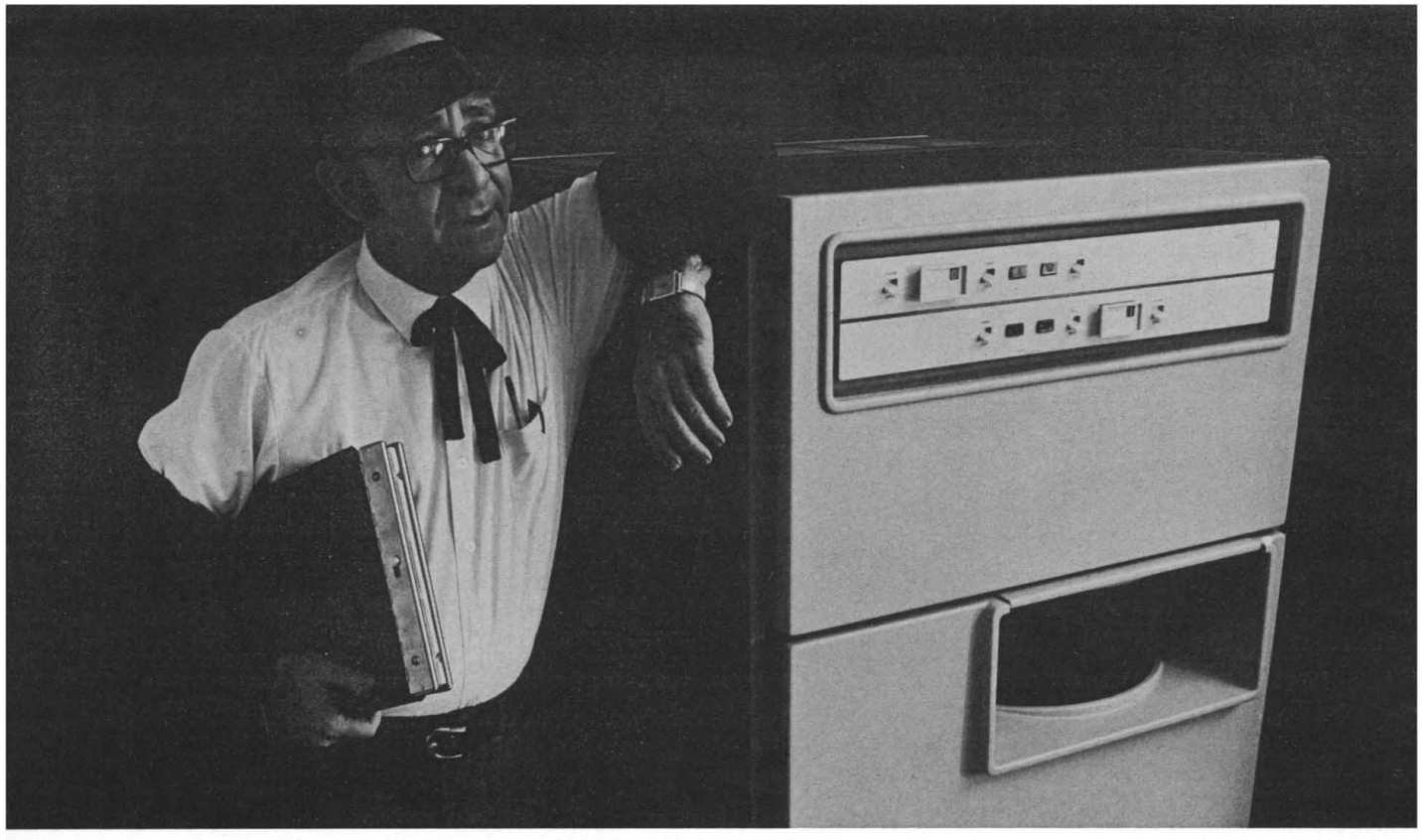

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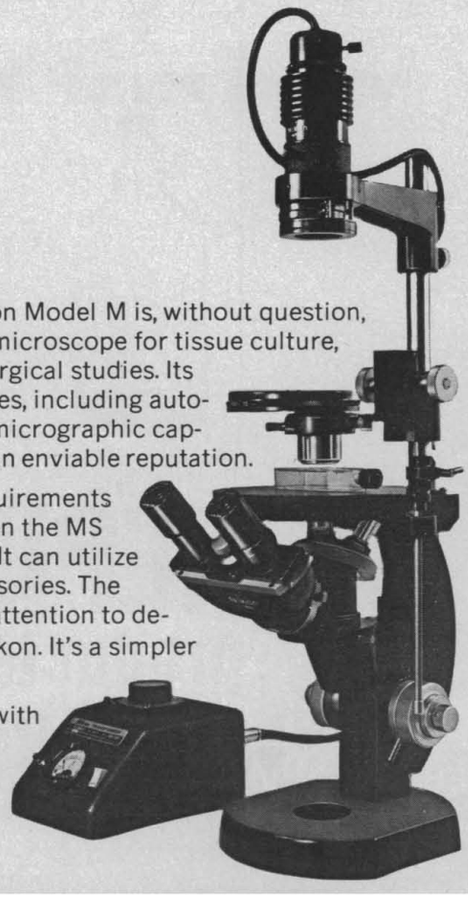
Our model MS is our model M

(simplified)



The big, beautiful Nikon Model M is, without question, the ultimate inverted microscope for tissue culture, biological and metallurgical studies. Its full range of accessories, including automatic time-lapse cinemicrographic capabilities, have given it an enviable reputation.

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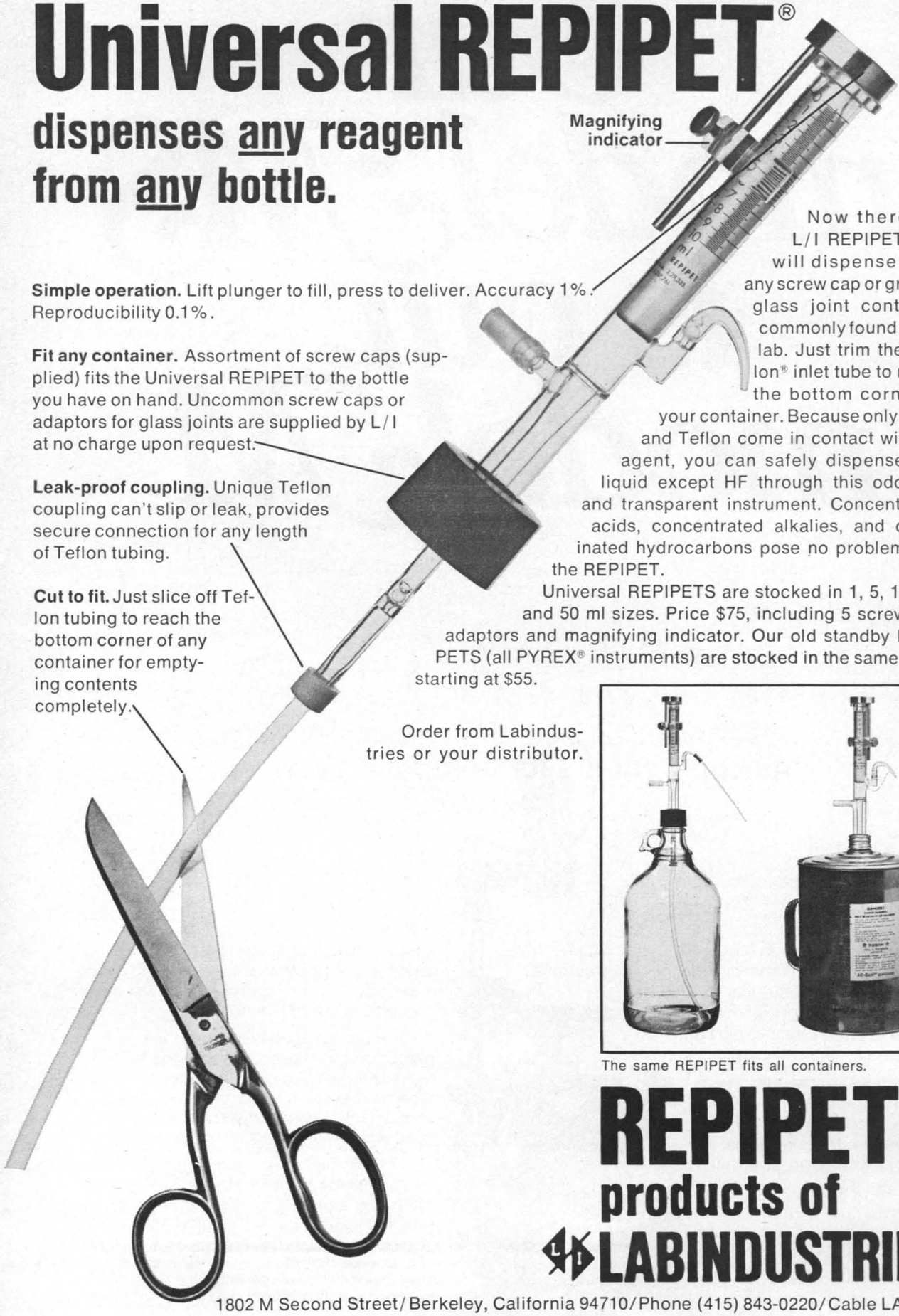

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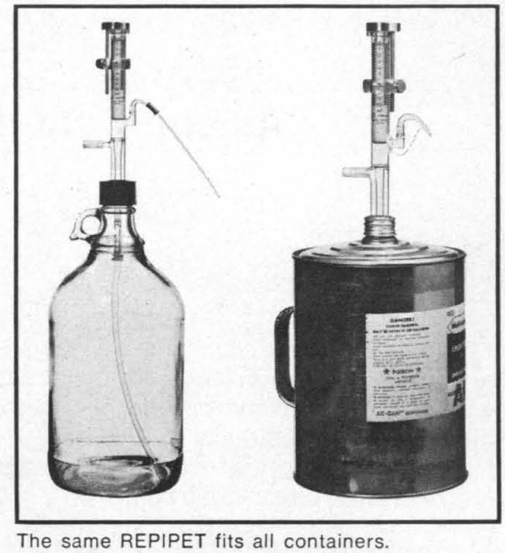

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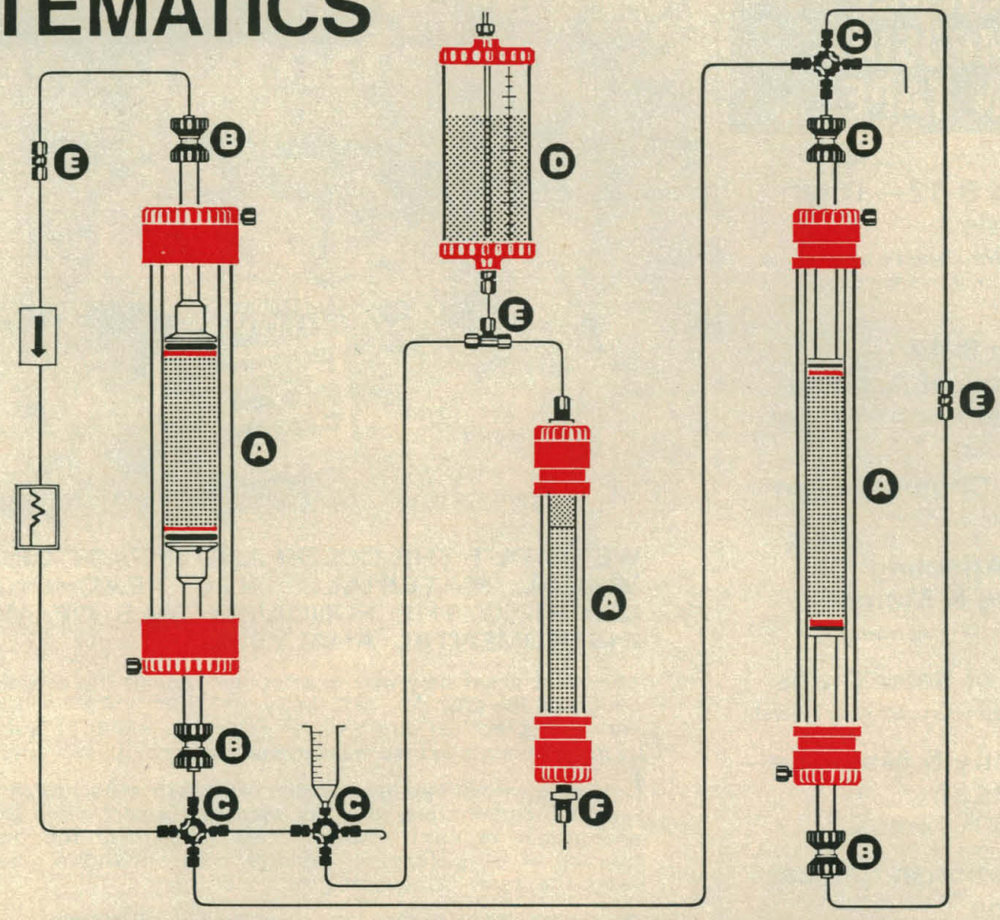

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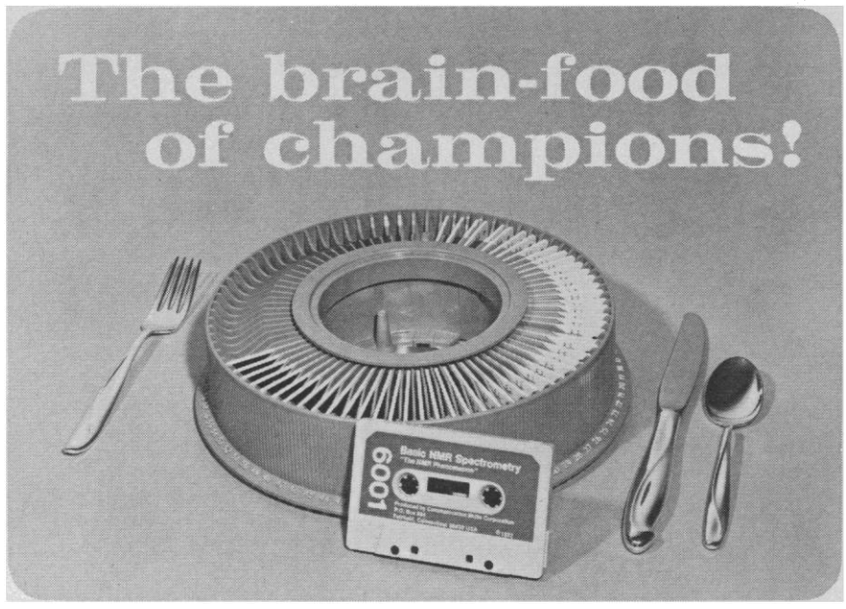

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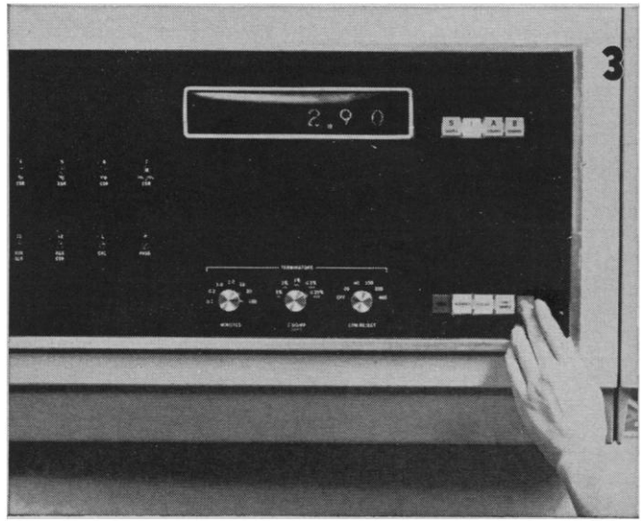

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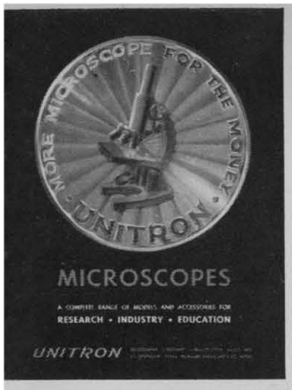

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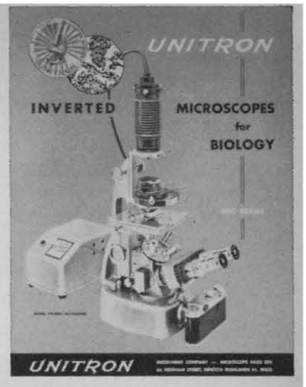

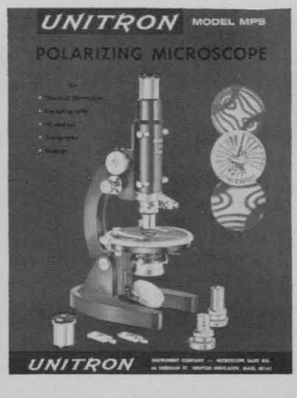

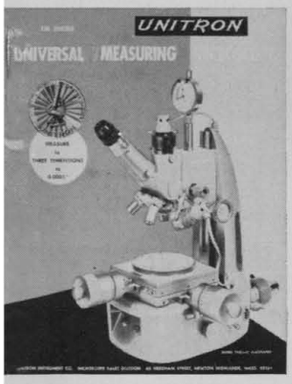

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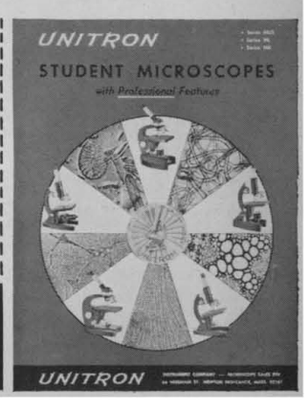

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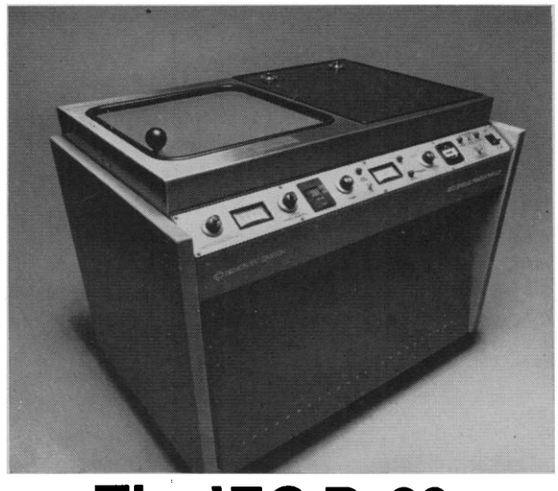

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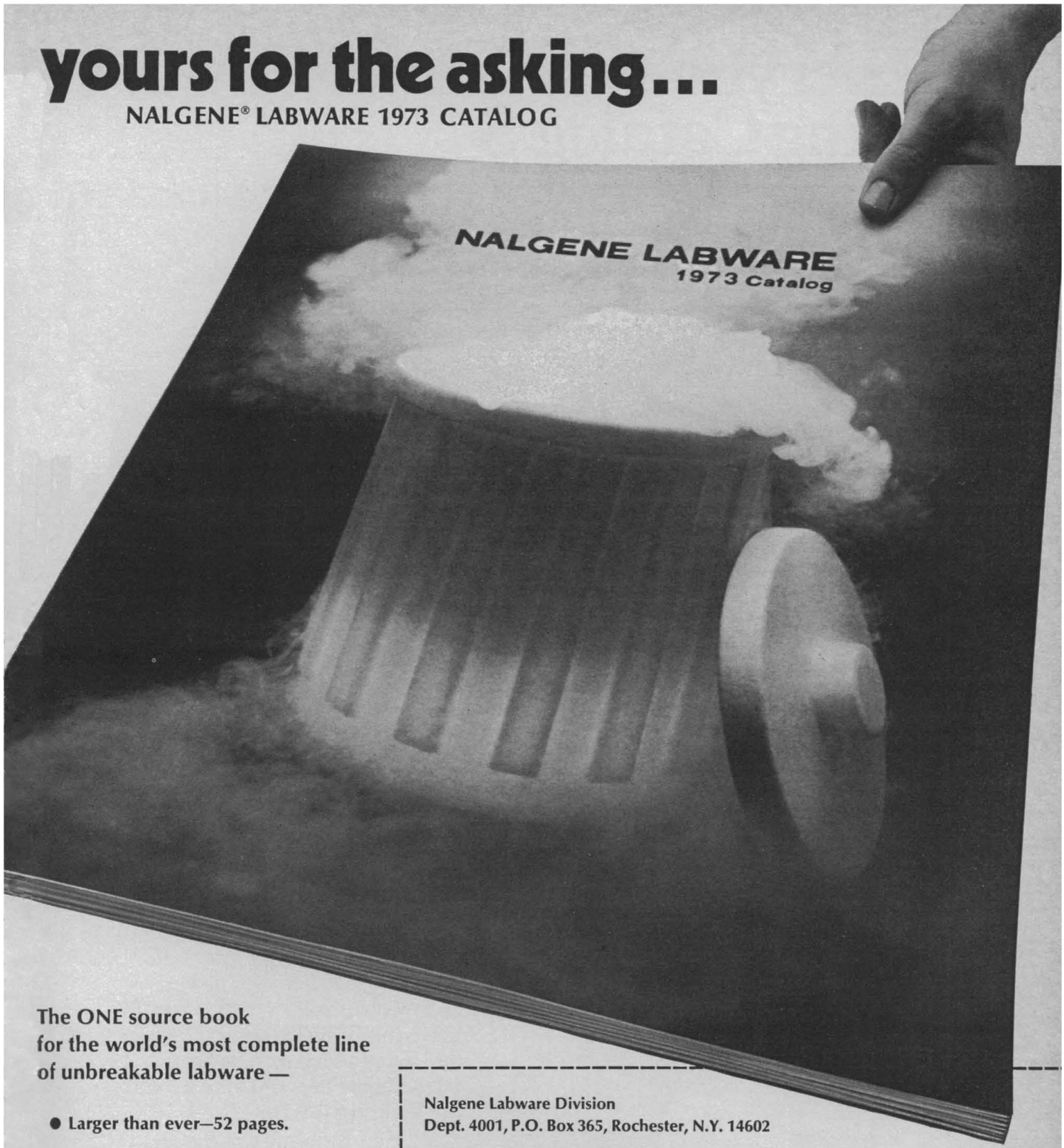

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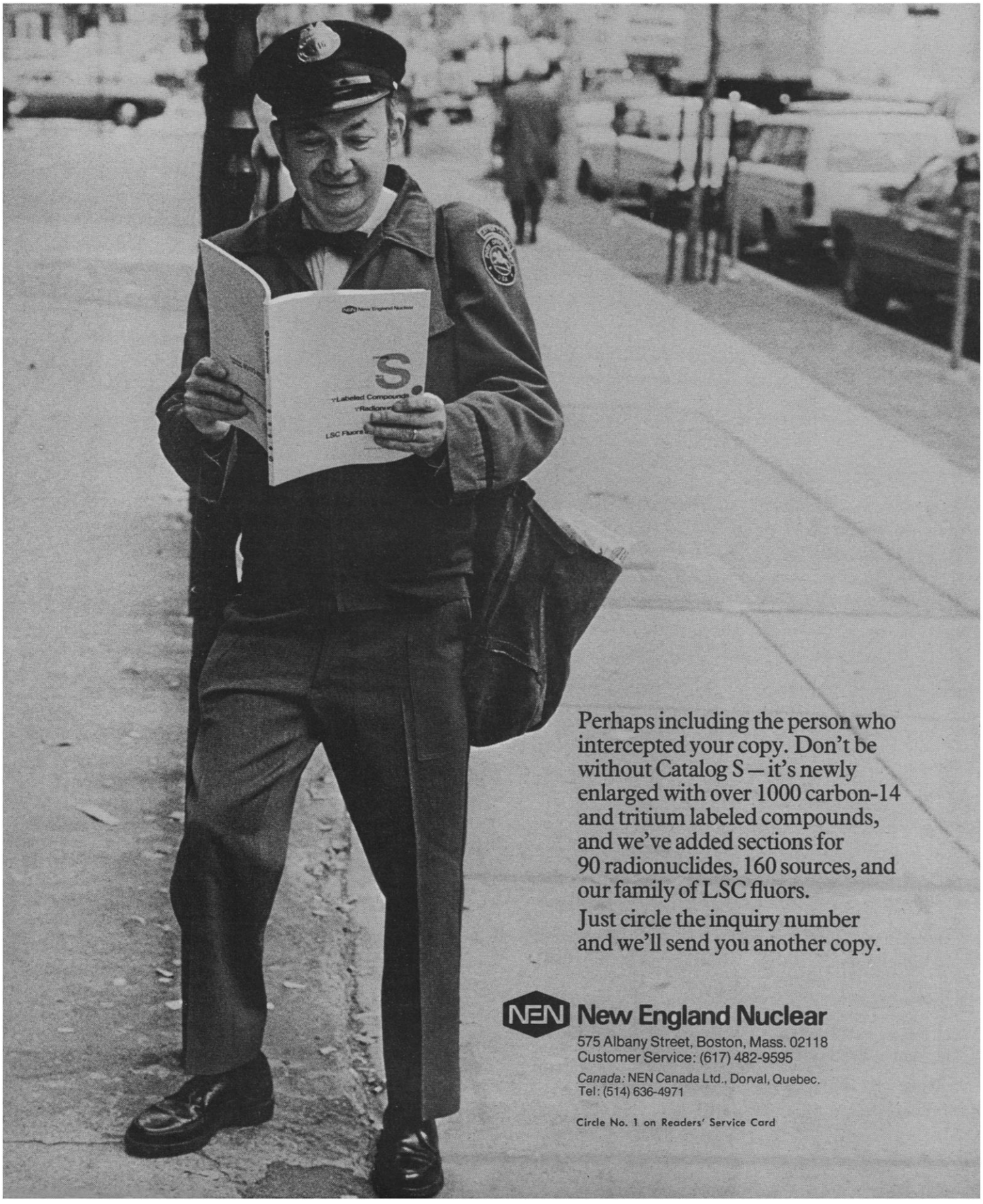

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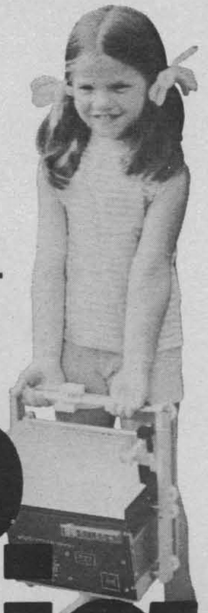

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Increased Pay, Diminished Stature

It is interesting to try to anticipate how collective bargaining will affect the judging of faculty performance. The proper basis for judgment should, of course, be the faculty's educational objectives and the extent to which those objectives are achieved. The trouble with this proposition, however, is that no one knows how to measure with any satisfactory degree of completeness or accuracy what really happens to different kinds of students as a direct consequence of their experience at different kinds of institutions of higher education.

Given this lack of complete and accurate criteria, substitutes appear. The faculty has traditionally fallen back on a number of strongly held beliefs: small classes are usually more effective than large ones; although many entrants do not graduate, students should have the right to test themselves, and this right is now being granted to a number of high-risk applicants; in a university, teaching and scholarly inquiry reinforce each other; and basic to these and other values is the position that educational decisions should be based on the informed judgment of the faculty.

State legislators, state boards of higher education, and other external critics often use different criteria. They ask for records of classroom usage, faculty contact hours, faculty-student ratios, the percentage of entrants who graduate, or other statistics concerning the academic process.

Thus both sides create substitutes for the missing measures of how well a university or college achieves the objectives that belong at the top of its agenda. Of the two, the faculty position is better, for it focuses on educational values. But the external demands come from those who control funds and who are likely to continue to insist on performance measures, efficiency of process, and even cost-benefit analyses.

Because these measures are expressed in concrete terms, they appear to be easy to evaluate, and thus appropriate to use in making budget decisions or in dealing with faculty bargaining agents. But bargaining over the conditions of academic work undermines the hard-won principle that faculty need freedom from external control—not for personal benefit, but in order that, as persons educated for and dedicated to the search for truth, they may best fulfill their obligations to students and society. While not forgetting the right to a fair wage and, after a reasonable probationary period, to tenure, this principle of academic freedom can be defended only if faculty conduct themselves for the common good and not for their private benefit, and if they are held accountable for the extent to which they fulfill their educational and scholarly obligations to students and society.

These fundamental matters cannot be negotiated at the bargaining table. What can be dealt with in collective bargaining is what can be objectively measured: dollars, of course, but also time, contact hours, or teaching arrangements. Thus the advocates of collective bargaining become allies of the external critics in emphasizing the details of process rather than the effectiveness of outcome. Two results seem inevitable: increased emphasis on an important but secondary set of variables concerning a university's performance; and a weakening of internal control over academic matters, for experience so far seems to indicate that the bargaining table for public institutions tends to move from the individual campus to the state capital. If the bargaining brings higher pay, some members of the faculty will consider the exchange a good one, but the stature of the professoriate will have been diminished by the process.—DAEL WOLFLE, *Graduate School of Public Affairs, University of Washington, Seattle 98105*

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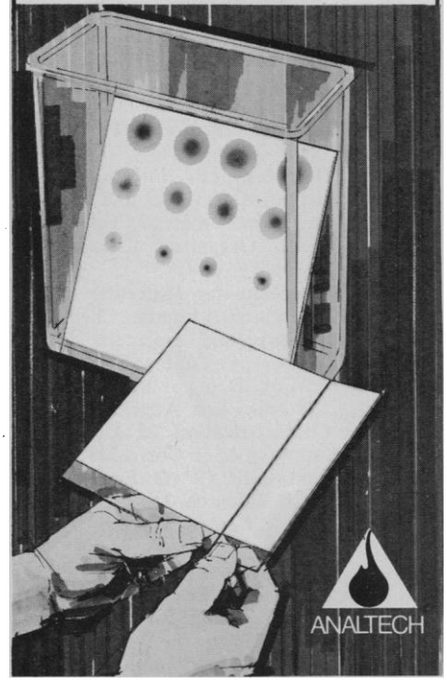

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22–24. **Clinical Chemistry Measurements**, 8th annual, Assoc. for the Advancement of Medical Instrumentation and Natl. Bureau of Standards, Washington, D.C. (F. Keutman, Suite 417, AAMI, 1500 Wilson Blvd., Arlington, Va. 22209)

23–25. **Future Status of Earth Resources in Society**, Natl. Assoc. of Geology Teachers, Central Section, Chicago, Ill. (M. K. Sood, Dept. of Earth Sciences, Northeastern Illinois Univ., Bryn Mawr at St. Louis Ave., Chicago 60625)

26–28. **Engineering Aspects of Magnetohydrodynamics**, Stanford, Calif. (M. Mitchner, Dept. of Mechanical Engineering, Stanford Univ., Stanford 94305)

26–30. Symposium on **New Developments in Radiopharmaceuticals and Labeled Compounds**, Intern. Atomic Energy Agency, Copenhagen, Denmark. (J. H. Kane, Office of Information Services, U.S. Atomic Energy Commission, Washington, D.C. 20545)

27–29. **Reduction of Pollutants in Heterogeneous Combustion Processes**, Combustion Inst., Central States Section, Champaign, Ill. (R. A. Strehlow, 105 Transportation Bldg., Univ. of Illinois, Urbana 61801)

27–29. National Assoc. for **Research in Science Teaching**, Detroit, Mich. (R. W. Lefler, Dept. of Physics, Purdue Univ., Lafayette, Ind. 47907)

27–30. Institute of **Electrical and Electronics Engineers**, New York, N.Y. (D. G. Fink, IEEE, 345 E. 47 St., New York 10017)

28–30. Conference on **Nuclear Structure and High Energy Physics** (Nuclear Physics Sub-Committee), Inst. of Physics, Liverpool, England. (Meetings Officer, IP, 47 Belgrave Sq., London SW1X 8QX, England)

29–30. **Psychometric** Soc., Chicago, Ill. (W. B. Schrader, Educational Testing Service, Princeton, N.J. 08540)

29–30. **Rural Health**, American Medical Assoc., Dallas, Tex. (B. L. Bible, AMA, 535 N. Dearborn St., Chicago 60610)

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29–1. Society for **Research in Child Development**, Philadelphia, Pa. (M. K. Harlow, 22 N. Charter St., Madison, Wis. 53706)

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1–4. **Information Industry** Assoc., 5th natl., Philadelphia, Pa. (P. G. Zurkowski, 904 Montgomery Bldg., Washington, D.C. 20014)

2–3. Conference on **Chlorinate Dibenzodioxins and Dibenzofurans: Chemistry, Analytical Methodology, Environmental Aspects, Toxicology, Biochemical Actions**, Natl. Inst. of Environmental Health Sciences, Research Triangle Park, N.C. (J. A. Moore, Natl. Inst. of Environmental Health Sciences, Research Triangle Park 27709)

2–7. American College of **Radiology**, San Francisco, Calif. (W. C. Stronach, ACR, 20 N. Wacker Dr., Chicago, Ill. 60606)

3–5. **Reliability Physics** Symp., Inst. of Electrical and Electronics Engineers, Las Vegas, Nev. (H. Lauffenburger, IIT Research Inst., 10 W. 35 St., Chicago, Ill. 60616)

3–13. **Education of Teachers for Integrated Science**, Committee on Teaching of Science, International Council of Scientific Unions, College Park, Md. (M. Dietz, Science Teaching Center, Univ. of Maryland, College Park 20742)

4–5. **Environmental Pollution**, 4th annual symp., American Ordnance Assoc., Chesapeake chapter, Edgewood Arsenal, Md. (A. Sullivan, AOA, Union Trust Bldg., 740 15th St., NW, Washington, D.C. 20005)

4–7. American **Fertility** Soc., San Francisco, Calif. (W. C. Stronach, AFS, 1801 Ninth Ave. S., Birmingham, Ala. 35205)

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5–7. National Council of **Teachers of Mathematics**, Charleston, S.C. (F. A. Kirby, Union County Public Schools, P.O. Box 629, Union, S.C.)

5–9. **Combustion Engines**, 10th intern. congr., American Soc. of Mechanical Engineers, Washington, D.C. (Meetings Officer, ASME, United Engineering Center, 345 E. 47 St., New York 10017)

6–8. American **Psychosomatic** Soc., 30th annual, Denver, Colo. (M. T. Singer, 265 Nassau Rd., Roosevelt, N.Y. 11575)

7–12. American College of **Allergists**, Atlanta, Ga. (E. Bauers, 2100 Dain Tower, Minneapolis, Minn. 55402)

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8–13. American **Chemical** Soc., 165th natl., Dallas, Tex. (Meetings Manager, ACS, 1155 16th St., NW, Washington, D.C. 20036)

8–14. **Turbulent Diffusion in Environmental Pollution**, 2nd symp., American Geophysical Union, Charlottesville, Va. (A. F. Spilhaus, Jr., American Geophysical Union, 1707 L St., NW, Washington, D.C. 20036)

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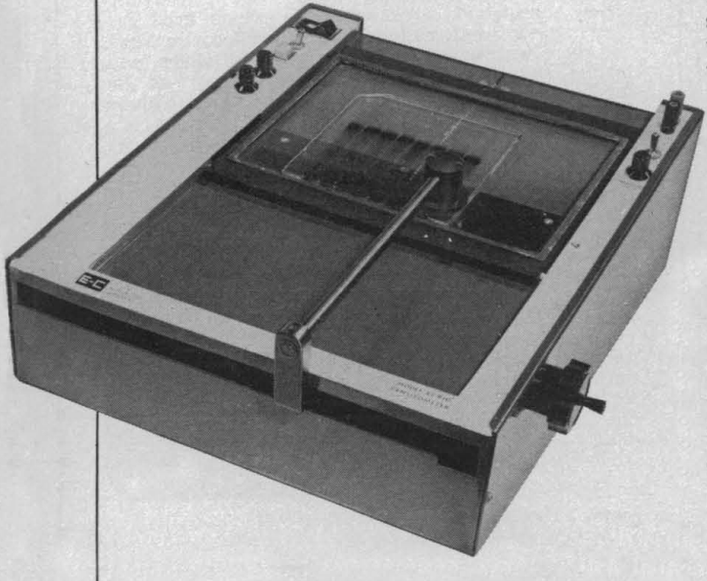

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9–12. American Assoc. of **Anatomists**, New York, N.Y. (J. E. Pauly, Dept. of Anatomy, Univ. of Arkansas School of Medicine, Little Rock 72201)

9–12. **Cancer Detection and Prevention**, 2nd intern. symp., Intern. Union against Cancer and Intern. Agency for Research on Cancer of the World Health Organization, Bologna, Italy. (2nd Intern. Symp. on CDP, Istituto di Oncologia "F. Addarii," Viale Ercolani 4/2, 40138 Bologna)

9–12. American Acad. of **Pediatrics**, Boston, Mass. (R. G. Frazier, AAP, 1801 Hinman Ave., Evanston, Ill. 60201)

10–12. **Vibration Problems in Industry**, intern. symp., United Kingdom Atomic Energy Authority, Keswick in Cumberland, England. (J. R. Wakefield, UKAEA, Windscale, Seascale, Cumberland, England, CA20 1PF)

10–13. **Acoustical** Soc. of America, Boston, Mass. (B. H. Goodfriend, ASA, 335 E. 45 St., New York 10017)

11–13. American Assoc. for **Cancer Research**, Inc., 64th annual, Atlantic City, N.J. (H. J. Creech, AACR, Inst. for Cancer Research, Fox Chase, Philadelphia, Pa. 19111)

11–14. Symposium on **Physiological Ecology of Estuarine Organisms**, Georgetown, S.C. (F. J. Vernberg, Belle W. Baruch Coastal Research Inst., Univ. of South Carolina, Columbia 29208)

12–14. Society for **Applied Anthropology**, 33rd annual, Tucson, Ariz. (T. E. Downing, Bureau of Ethnic Research, Univ. of Arizona, Tucson 85721)

12–14. American Assoc. of **Physical Anthropologists**, Dallas, Tex. (E. I. Fry, Dept. of Anthropology, Box 339, Southern Methodist Univ., Dallas 75222)

12–14. Association of **Southeastern Biologists**, Bowling Green, Ky. (M. L. Gilbert, Biology Dept., Florida Southern College, Lakeland 33802)

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15–19. **Industrial Aspects of Biochemistry**, Federation of European Biochemical Socs., Dublin, Ireland. (B. Masterson, FEBS Meeting Secretariat, IMA Conf. Centre, 10, Fitzwilliam Pl., Dublin 2)

15–20. American Soc. of **Biological Chemists**, Atlantic City, N.J. (R. A. Harte, ASBC, 9650 Rockville Pike, Bethesda, Md. 20014)

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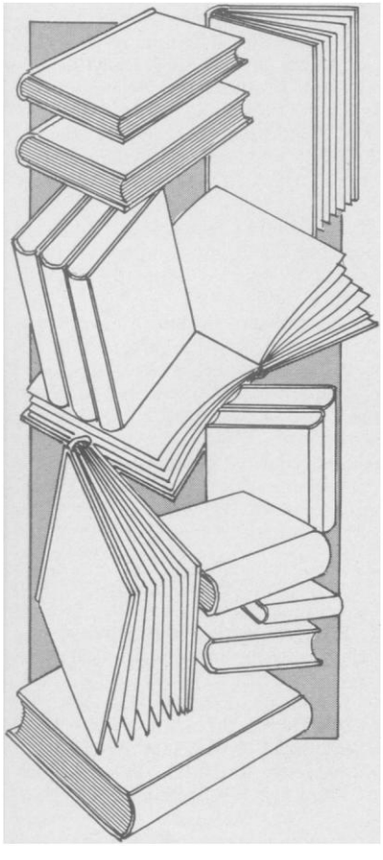

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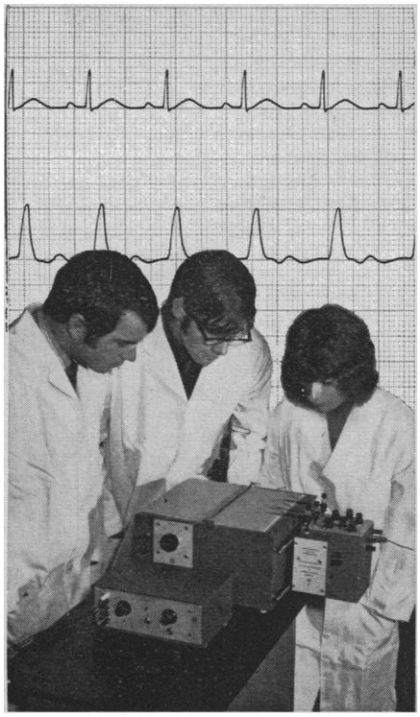

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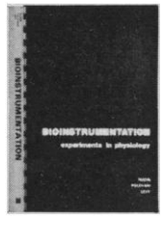

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19–20. Symposium on **Controlled Release of Biologically Active Agents**, Birmingham, Ala. (A. C. Tanquary, Southern Research Inst., 2000 Ninth Ave. S., Birmingham 35205)

19–21. Louisiana **Acad. of Sciences**, Monroe. (B. F. Dowden, Dept. of Biological Sciences, Louisiana State Univ., Shreveport 71105)

19–21. Southern Soc. for **Philosophy and Psychology**, Knoxville, Tenn. (M. Loeb, Dept. of Psychology, Univ. of Louisville, Louisville, Ky.)

20–21. Illinois State **Acad. of Science**, Urbana. (N. R. Brewer, ISAS, 5757 S. Drexel Ave., Chicago)

22–26. American **Radium** Soc., Colorado Springs, Colo. (F. N. Rutledge, 4828 Caroline St., Houston, Tex. 77004)

22–27. Council for **Exceptional Children**, 51st annual intern., Dallas, Tex. (P. W. Stavros, CEC, 1411 S. Jefferson Davis Hwy., Arlington, Va. 22202)

23–25. **Instrument** Soc. of America, 19th analysis instrumentation symp., 14th chemical and petroleum instrumentation symp., Process Measurement and Control Div. symp., St. Louis, Mo. (J. L. Kern, Monsanto Co., 800 N. Lindbergh St., St. Louis 63166)

23–28. American Acad. of **Neurology**, Boston, Mass. (S. A. Nelson, AAN, 4005 W. 65 St., Minneapolis, Minn. 55435)

23–30. American Soc. for **Clinical Investigation**, Atlantic City, N.J. (P. Calabresi, Roger Williams General Hospital, Providence, R.I. 02908)

24–27. International **Magnetics** Conf., Magnetic Soc. of the Inst. of Electrical and Electronics Engineers, Washington, D.C. (D. H. Looney, Bell Labs., Whippany Rd., Whippany, N.J. 07981)

25–26. American **Geriatrics** Soc., Beverly Hills, Calif. (E. Henderson, 10 Columbus Circle, New York 10019)

25–27. The **Ocean, Nuclear Energy, and Man**, American Nuclear Soc. and Marine Technology Soc., Palm Beach Shores (Singer Island), Fla. (M. J. Ohanian, Dept. of Nuclear Engineering, Univ. of Florida, Gainesville 32601)

25–28. International **Communication** Assoc., Montreal, P.Q., Canada. (M. Z. Sincoff, Center for Communication Studies, Ohio Univ., Athens 45201)

25–28. National Council of **Teachers of Mathematics**, Houston, Tex. (J. D. Gates, NCTM, 1201 16th St., NW, Washington, D.C. 20005)

26. **Sigma Pi Sigma**, Washington, D.C. (D. W. J. Shea, State Univ. of New York, Stony Brook 11790)

26–27. **Scanning Electron Microscope** Symp., 6th annual, Chicago, Ill. (O. Johari, IIT Research Inst., 10 W. 35 St., Chicago 60616)

26–28. Louisiana **Acad. of Sciences**, Monroe. (B. F. Dowden, Dept. of Biological Sciences, Louisiana State Univ., Shreveport 71105)

26–28. Ohio **Acad. of Science**, Cleveland. (J. H. Melvin, OAS, 445 King Ave., Columbus 43201)

26–28. American **Philosophical** Assoc., Western Div., Chicago, Ill. (N. E. Bowie, Hamilton College, Clinton, N.Y. 13323)

26–28. **Population** Assoc. of America, New Orleans, La. (J. W. Brackett, PAA, P.O. Box 14182, Benjamin Franklin Sta., Washington, D.C. 20044)

27–28. Georgia **Acad. of Science**, Atlanta. (E. A. Stanley, Dept. of Geology, Univ. of Georgia, Athens 30601)

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27–28. American Assoc. of **University Professors**, St. Louis, Mo. (B. H. Davis, AAUP, Suite 500, 1 Dupont Circle, NW, Washington, D.C. 20036)

27–29. Wisconsin **Acad. of Sciences, Arts and Letters**, Prairie du Chien. (J. R. Batt, WASAL, 5001 University Ave., Madison 53705)

28. Society for **Investigative Dermatology**, Atlantic City, N.J. (J. S. Strauss, Boston Univ. Medical Center, 80 E. Concord St., Boston, Mass. 02118)

28. **Societal Problems of Water Resources**, 2nd annual symp., Illinois Earth Science Assoc., Chicago. (M. Qutub, Northeastern Illinois Univ., Bryn Mawr at St. Louis Ave., Chicago 60625)

28–29. Montana **Acad. of Sciences**, Dillon. (R. E. Juday, Dept. of Chemistry, Univ. of Montana, Missoula 59801)

28–30. International Symp. on the **Genetics of Cyanophytes**, Pittsburgh, Pa. (E. Raizen, Dept. of Biological Sciences, Duquesne Univ., Pittsburgh 15219)

29–1. **Classification** Soc., North American Branch, 4th annual, Atlanta, Ga. (F. J. Rohlf, Dept. of Biology, State Univ. of New York, Stony Brook 11790)

29–2. **Off-Shore Technology**, Inst. of Electrical and Electronics Engineers, Houston, Tex. (Technical Activities Bd., 345 E. 47 St., New York 10017)

29–3. American **Ceramic** Soc., Inc., Cincinnati, Ohio. (F. P. Reid, ACSI, 65 Ceramic Dr., Columbus 43214)

29–3. American **Oil Chemists** Soc., New Orleans, La. (J. Lyon, AOCS, 508 S. 6 St., Champaign, Ill. 61820)

30–12. Lindau **Psychotherapy** Weeks, Assoc. for Psychotherapeutic Training, Lindau, Germany. (H. Stolze, D-8 München 81, Adalbert-Stifter-Strasse 31)

May

1–2. **Electron Device Techniques** Conf., Inst. of Electrical and Electronics Engineers, New York, N.Y. (D. Slater, Advisory Group on Electron Devices, 9th Floor, 201 Varick St., New York 10014)

1–3. **Industrial Waste**, 28th annual conf., West Lafayette, Ind. (D. W. Hawkins, Room 308, Civil Engineering Bldg., Purdue Univ., West Lafayette 47907)

1–4. Virginia **Acad. of Science**, Williamsburg. (R. C. Berry, 5907 Brookfield Rd., Richmond, Va. 23227)

2–4. International Conf. on **Surgical Care**, Royal College of Surgeons, Dublin, Ireland. (H. O'Flanagan, Irish Medical Assoc., 10 Fitzwilliam Pl., Dublin 2)

2–6. **Protides of Biological Fluids**, 21st colloquium, Brugge, Belgium. (Colloquium on Protides of the Biological Fluids, Simon Stevin Instituut, Jerusalemstraat 34, B-8000 Brugge)

3–5. Society for American **Archaeology**, San Francisco, Calif. (R. E. W. Adams, Univ. of Texas, Suite 250, 4242 Piedras Dr., San Antonio 78228)

3–5. American Assoc. for the **History of Medicine**, Cincinnati, Ohio. (G. Miller, Howard Dittrick Museum of Historical Medicine, 11,000 Euclid Ave., Cleveland, Ohio 44106)

3–5. Eastern **Psychological** Assoc., Washington, D.C. (M. Benimoff, Dept. of Psychology, Glassboro State College, Glassboro, N.J. 08028)

3–6. **Christian Medical** Soc., Dallas, Tex. (H. W. Robinson, 3909 Swiss Ave., Dallas 75214)

3–6. Association of **Clinical Scientists**, Tampa, Fla. (F. W. Sunderman, Jr., Univ. of Connecticut, School of Medicine, Box G, Farmington 06032)

3–7. American **Psychoanalytic** Assoc., Honolulu, Hawaii. (S. Goodman, 3021 Telegraph Ave., Berkeley, Calif. 94705)

3–7. Association for Research in **Vision and Ophthalmology**, Sarasota, Fla. (R. D. Reinecke, Albany Medical College, Albany, N.Y. 12208)

4–5. Minnesota **Acad. of Science**, Northfield. (M. I. Harrigan, MAS, 3100 38th Ave., S., Minneapolis, Minn. 55406)

4–5. North Dakota **Acad. of Science**, Grand Forks. (B. G. Gustafson, Div. of Continuing Education, Univ. of North Dakota, Grand Forks 58201)

4–6. American College of **Apothecaries**, St. Louis, Mo. (D. C. Huffman, Jr., 5291 Rock Ridge Rd., Memphis, Tenn. 38128)

4–6. American Acad. of **Psychoanalysis**, Honolulu, Hawaii. (J. Barnett, AAP, 40 Gramercy Park N., New York 10024)

6–11. American Soc. for **Microbiology**, Miami Beach, Fla. (R. W. Sarber, ASM, 1913 I St., NW, Washington, D.C. 20006)

7–9. Rocky Mountain **Bioengineering** Symp., 10th annual, Boulder, Colo. (N. B. Kindig, Dept. of Electrical Engineering, Univ. of Colorado, Boulder 80302)

7–9. Society of **Economic Paleontologists and Mineralogists**, Anaheim, Calif. (Mrs. R. Tener, SEPM, Box 979, Tulsa, Okla. 74101)

7–10. **Aerospace Medical** Assoc., Las Vegas, Nev. (M. H. Goodwin, AMA, Washington National Airport, Washington, D.C. 20001)

7–11. Society of **Manufacturing Engineers**, Detroit, Mich. (R. W. Taylor, SME, 20501 Ford Rd., Dearborn, Mich. 48128)

7–11. Society of **Plastics Engineers**, Montreal, P.Q., Canada. (C. C. Campbell, SPE, 656 W. Putnam Ave., Greenwich, Conn. 06830)

8–9. **Fluvial Processes and Sedimentation**, 9th Canadian **Hydrology** Symp., Edmonton, Alta., Canada. (C. R. Neill, Research Council of Alberta, 303 Civil–Electrical Engineering Bldg., Univ. of Alberta, Edmonton T6G 2E1)

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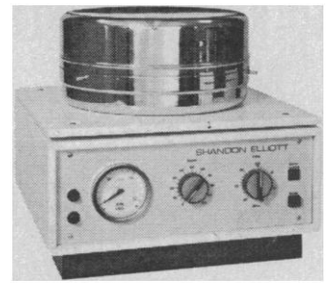

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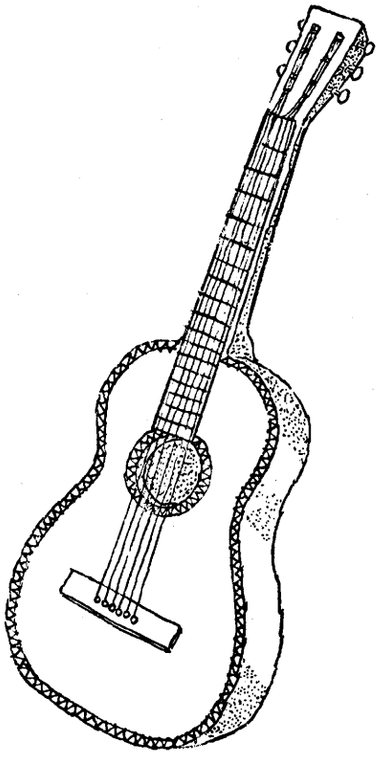

A Staff Report on Cantometrics
Editor: Alan Lomax

384 pp., 7½ x 10¼, Illustrations, Bibliography, Index, 1968. 2nd Printing 1971. AAAS members' cash orders $14.50. Regular price $16.75.

Working with a large sample of recorded songs and filmed dances from all world culture areas, the Cantometrics Project has discovered some of the ways in which song and dance style vary by culture area. Strong statistical relationships have been established between a set of basic factors of social and economic structure and performance style. The book reports on an imaginative yet rigorous exploration of the paralinguistic and parakinesic realms and a thoroughgoing test of the hypothesis that factors of culture style are primary forces in shaping all human behavior. Performance style here becomes a psychocultural indicator, and, for the first time, the social and cultural import of the expressive act is firmly established.

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9–11. Midwestern **Psychological** Assoc., Chicago, Ill. (W. F. Hill, Dept. of Psychology, Northwestern Univ., Evanston, Ill. 60201)

9–11. International Symp. on **Thrombosis and the Molecular Biology of the Platelet and Other Interacting Cells**, Chicago, Ill. (F. M. Booyse, Dept. of Biochemistry, Rush Medical College, 1753 W. Congress Pkwy., Chicago 60612)

9–12. Society for **Technical Communication**, Houston, Tex. (C. T. Youngblood, STC, Suite 421, 1010 Vermont Ave., NW, Washington, D.C. 20005)

11–12. American Assoc. of **Clinical Urologists**, New York, N.Y. (R. B. Carson, AACU, 708 E. Broward Blvd., Fort Lauderdale, Fla. 33301)

13–17. **Radiation Research** Soc., St. Louis, Mo. (R. J. Burk, Jr., RRS, 4211 39th St., NW, Washington, D.C. 20016)

13–18. **Electrochemical** Soc., Chicago, Ill. (E. G. Enck, ES, P.O. Box 2071, Princeton, N.J. 08540)

13–18. Electronics Div., **Electrochemical** Soc., Chicago, Ill. (H. R. Huff, Texas Instruments, Inc., Mail Station 202, Dallas, Tex. 75222)

13–18. Society for **Experimental Stress Analysis**, Los Angeles, Calif. (B. E. Rossi, SESA, 21 Bridge Sq., Westport, Conn. 06880)

14–16. American Assoc. of **Petroleum Geologists**, Anaheim, Calif. (T. L. Bear, Bear & Kistler, 1052 W. 6 St., Los Angeles, Calif. 90017)

14–17. **Irregularities in the Equatorial Ionosphere**, American Geophysical Union, Dallas, Tex. (A. F. Spilhaus, Jr., AGU, 1717 L St., NW, Washington, D.C. 20036)

14–18. Symposium on **Environmental Behaviour of Radionuclides Released in the Nuclear Industry**, Intern. Atomic Energy Agency, Aix-en-Provence, France. (J. H. Kane, Office of Information Services, U.S. Atomic Energy Commission, Washington, D.C. 20545)

14–18. American **Psychiatric** Assoc., Montreal, P.Q., Canada. (B. W. Hogan, APA, 1700 18th St., NW, Washington, D.C. 20009)

15–17. American Inst. of **Chemists**, Houston, Tex. (P. B. Slawter, Jr., AIC., 79 Madison Ave., New York 10016)

15–17. **Electrical and Electronic Measurement and Test Instrument** Conf., Ottawa, Ont., Canada. (G. R. Symonds, 4-261 Fifth Ave., Ottawa K1S 2N4)

15–20. American **Physiological** Soc., Atlantic City, N.J. (R. G. Daggs, APS, 9650 Rockville Pike, Bethesda, Md. 20014)

16–18. National Soc. for the **Prevention of Blindness**, New York, N.Y. (W. D. David, NSPB, 79 Madison Ave., New York 10016)

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20–22. Council of **Biology Editors**, Bethesda, Md. (K. F. Heumann, Federation of American Socs. for Experimental Biology, 9650 Rockville Pike, Bethesda, Md., 20014)

20–23. American **Thoracic** Soc., New York, N.Y. (R. G. Weymueller, ATS, 1740 Broadway, New York 10019)

20–23. National **Tuberculosis and Respiratory Disease** Assoc., New York, N.Y. (R. J. Anderson, NTRDA, 1740 Broadway, New York 10019)

20–25. Conference on **Mass Spectrometry and Allied Topics**, 21st, San Francisco, Calif. (F. E. Saalfeld, Naval Research Lab., Code 6110, Washington, D.C. 20390)

20–26. American **Gastroenterological** Assoc., New York, N.Y. (J. A. Benson, Jr., 3181 SW Sam Jackson Park Rd., Portland, Ore. 97201)

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21–23. American Soc. for **Quality Control**, Cleveland, Ohio. (R. W. Shearman, ASQC, 161 W. Wisconsin Ave., Milwaukee, Wis. 53203)

21–24. American College of **Obstetricians and Gynecologists**, Bal Harbour, Fla. (M. Newton, ACOG, 79 W. Monroe St., Chicago, Ill. 60603)

21–25. American **Industrial Hygiene** Assoc., Boston, Mass. (G. D. Clayton, AIHA, 25711 Southfield Rd., Southfield, Mich., 48075)

21–26. World Congr. of **Otorhinolaryngology**, 10th, Venice, Italy. (M. Arslan, Clinica ORL, Policlinico, Univ. of Padua, Padua, Italy)

23–25. American Inst. of **Industrial Engineers**, Chicago, Ill. (J. F. Jericho, AIIE, 345 E. 47 St., New York 10017)

27–30. International Congr. of **Bronchoesophagology**, 14th, Lausanne, Switzerland. (J. P. Taillen, Clinique ORL, Hopital Cantonal, 1011 Lausanne)

28–30. American **Ophthalmological** Soc., Hot Springs, Va. (R. W. Hollenhorst, AOS, 200 First St., SW, Rochester, Minn. 55901)

29–1. American **Orthopsychiatric** Assoc., 50th annual, New York, N.Y. (M. F. Langer, AOA, 1790 Broadway, New York 10019)

30–1. Canadian **Meteorological** Soc., 7th annual congr., Halifax, N.S. (Miss N. Waller, Maritime Command Headquarters, FMO Halifax, N.S.)

30–1. **Laser Engineering and Applications**, 4th biennial joint sponsorship of the Inst. of Electrical and Electronics Engineers and the Optical Soc. of America, Washington, D.C. (D. Edgar, Courtesy Associates, Suite 700, 1629 K St., NW, Washington, D.C. 20006)

30–1. European Conf. on the Use of **Low Energy Accelerators**, Polytechnic of the South Bank and Inst. of Physics, London, England. (A. H. Jiggins, Dept. of Physics, PSB, London, S.E.1 OAA)

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3–5. **Royal Soc. of Canada**, Kingston, Ont. (Public Relations Dept., RSC, Queen's Univ., Kingston)

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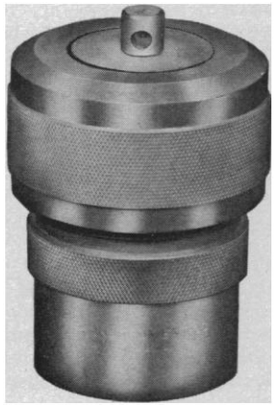

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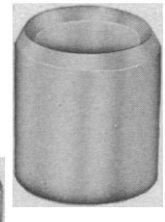

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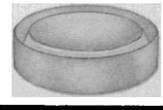

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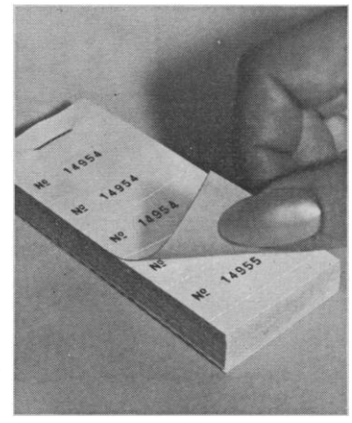

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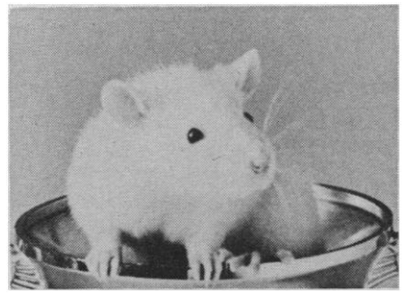

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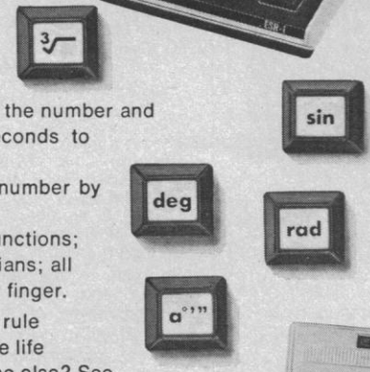

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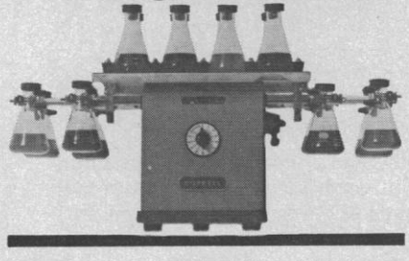

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4–8. American Federation of **Information Processing** Soc., New York, N.Y. (T. C. White, AFIPS, 210 Summit Ave., Montvale, N.J. 07645)

4–8. Symposium on **Rapid Methods and Automation in Microbiology,** Stockholm, Sweden. (Miss S. Olsen, Dept. of Applied Microbiology, Karolinska Institutet, S-104 01 Stockholm 60, Sweden)

4–8. American Assoc. for the **Study of Neoplastic Diseases,** Heidelberg, Germany. (R. H. Jackson, 10607 Miles Ave., Cleveland, Ohio 44105)

4–9. International Assoc. of **Hydrological Sciences,** Madrid, Spain. (D. R. Dawdy, Engineering Research Center, U.S. Geological Survey, Colorado State Univ., Fort Collins, Colo. 80521)

6–8. **Alaska State Medical** Assoc., Fairbanks. (R. G. Ogden, ASMA, 1135 W. 8 Ave., Anchorage, Alaska 99501)

7–9. International Congr. on **Immunology in Obstetrics and Gynaecology,** Padua, Italy. (N. Carretti, Obstetrics and Gynaecology Clinic, Univ. of Padua, Via Giustiniani No. 3, Padua 35100)

7–9. American **Rheumatism** Assoc., Los Angeles, Calif. (Miss L. Bonfiglio, ARA, 1212 Avenue of the Americas, New York 10036)

8–10. Society of **Biological Psychiatry,** Montreal, P.Q., Canada. (I. F. Small, Larue D. Carter Memorial Hospital, 1315 W. 10 St., Indianapolis, Ind. 46202)

8–13. **Astronomical** Soc. of the Pacific, Los Angeles, Calif. (L. Salanave, California Acad. of Sciences, Golden Gate Park, San Francisco 94118)

10–14. Institute of **Food Technologists,** Miami Beach, Fla. (C. L. Willey, IFT, 221 N. LaSalle St., Chicago, Ill. 60601)

10–14. Special **Libraries** Assoc., Philadelphia, Pa. (F. E. McKenna, SLA, 235 Park Ave. S., New York 10003)

10–15. **Neurosurgical** Soc. of America, Pembroke, Bermuda. (S. N. Chou, Univ. of Minnesota Medical School, Minneapolis 55455)

10–15. American **Nuclear** Soc., Chicago, Ill. (O. J. Du Temple, ANS, 244 E. Ogden Ave., Hinsdale, Ill. 60521)

11–13. International Conf. on **Communications,** Seattle, Wash. (S. Tashiro, ICC, P.O. Box 648, Bellevue, Wash. 98009)

11–13. American **Neurological** Assoc., and Canadian Congr. of Neurological Sciences, Montreal, P.Q., Canada. (S. A. Trufant, Cincinnati General Hospital, Cincinnati, Ohio 45229)

11–13. **Power Electronics Specialists** Conf., Inst. of Electrical and Electronics Engineers, Inc., Pasadena, Calif. (R. D. Middlebrook, Electrical Engineering Dept., 116-81 California Inst. of Technology, Pasadena 91109)

11–14. Symposium on **Remote Sensing of Water Resources,** American Water Resources Assoc., Burlington, Ont., Canada. (Mrs. E. Fosdick, AWRA, Canada Center for Inland Waters, 867 Lakeshore Rd., P.O. Box 5050, Burlington)

11–16. American Assoc. for the **Advancement of Science, Pacific Div.,** Salt Lake City, Utah. (R. T. Orr, California