

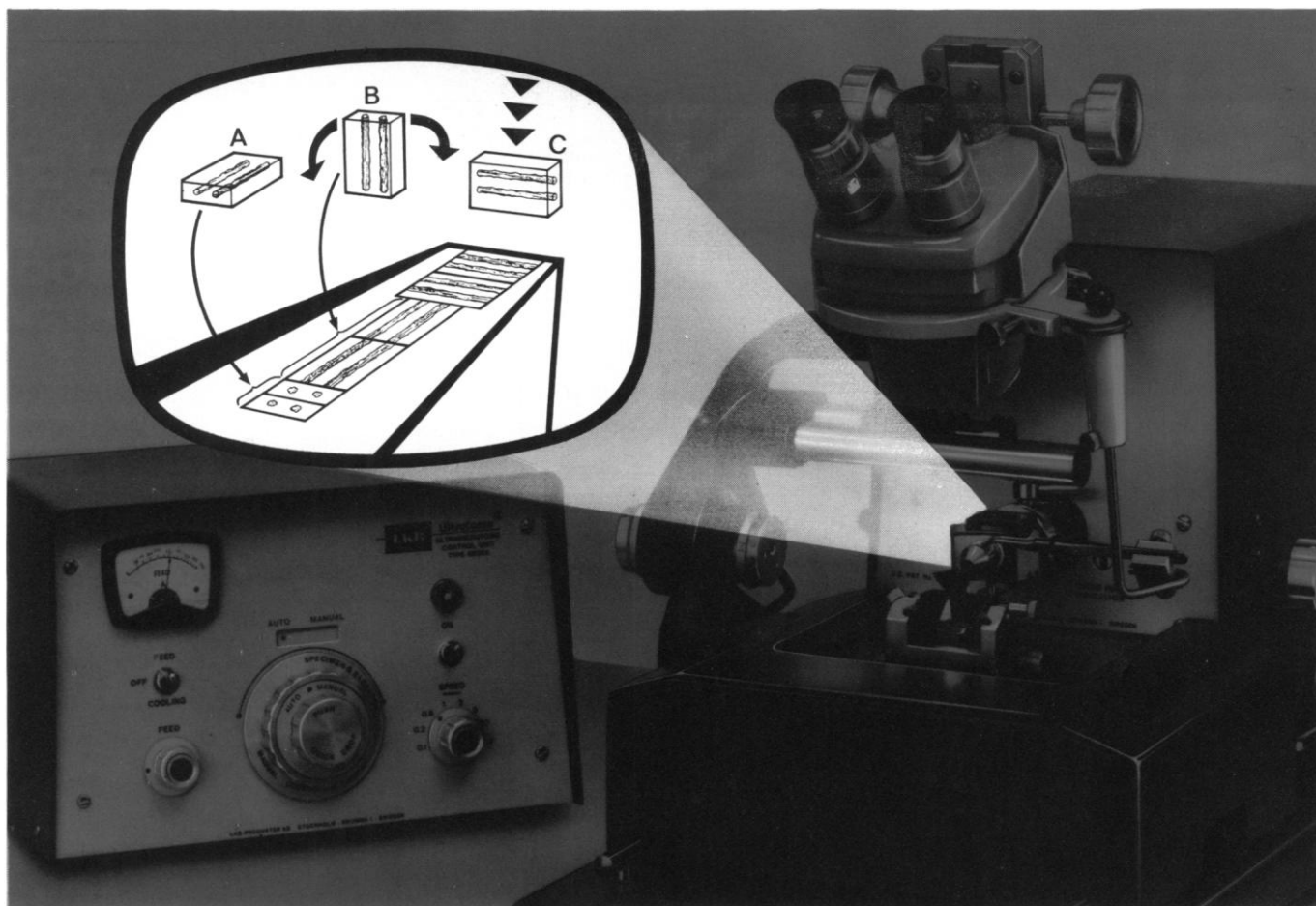
SCIENCE

23 August 1968

Vol. 161, No. 3843

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE





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COVER

Mollusk shell (*Pecten diegensis* Dall). The outer 50 growth lines were added during a period of 51 days. Height of the specimen (perpendicular distance from hinge line to margin) is 23.85 millimeters. See page 800. [George R. Clarke II, California Institute of Technology, Pasadena, California]

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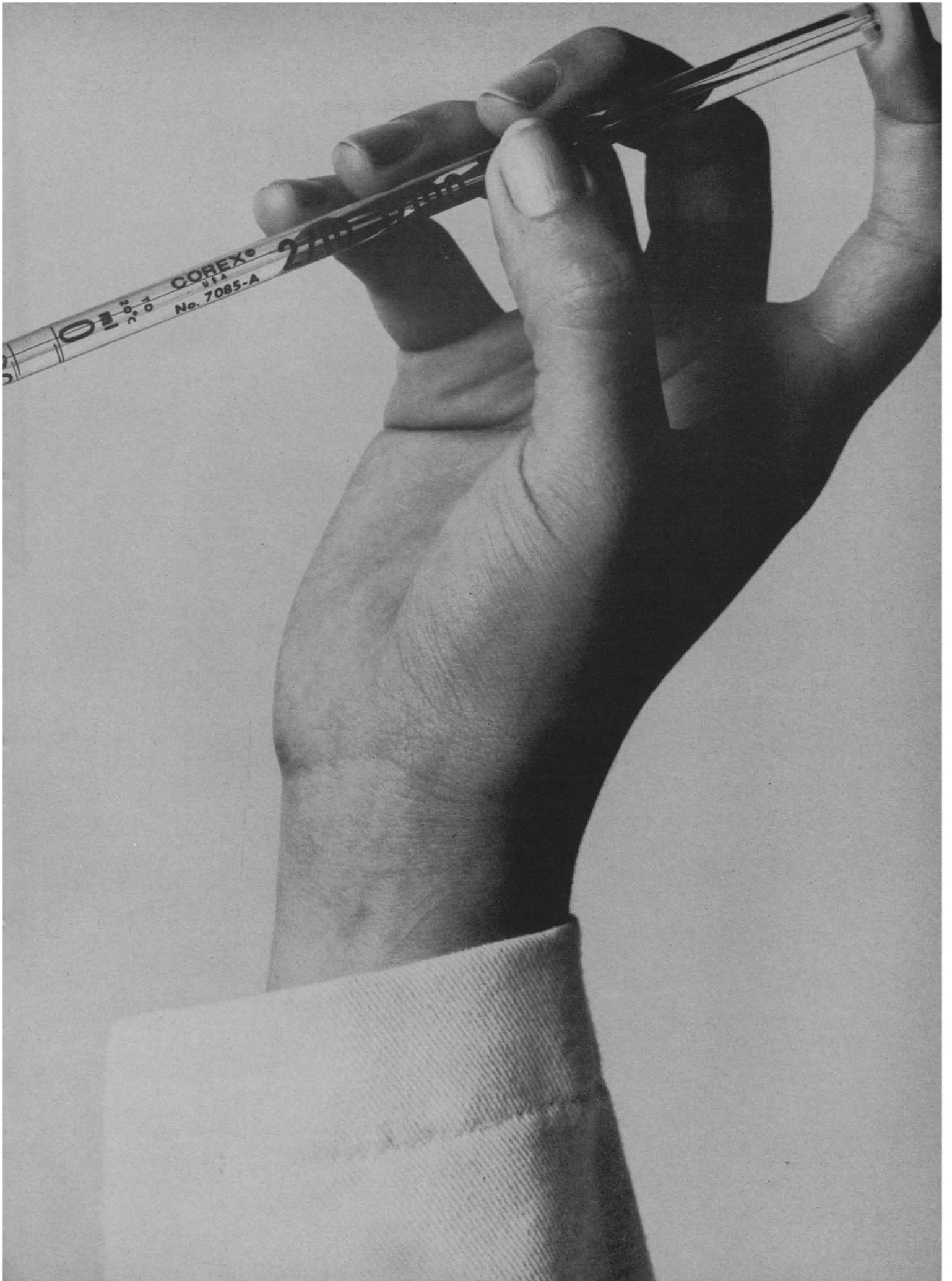
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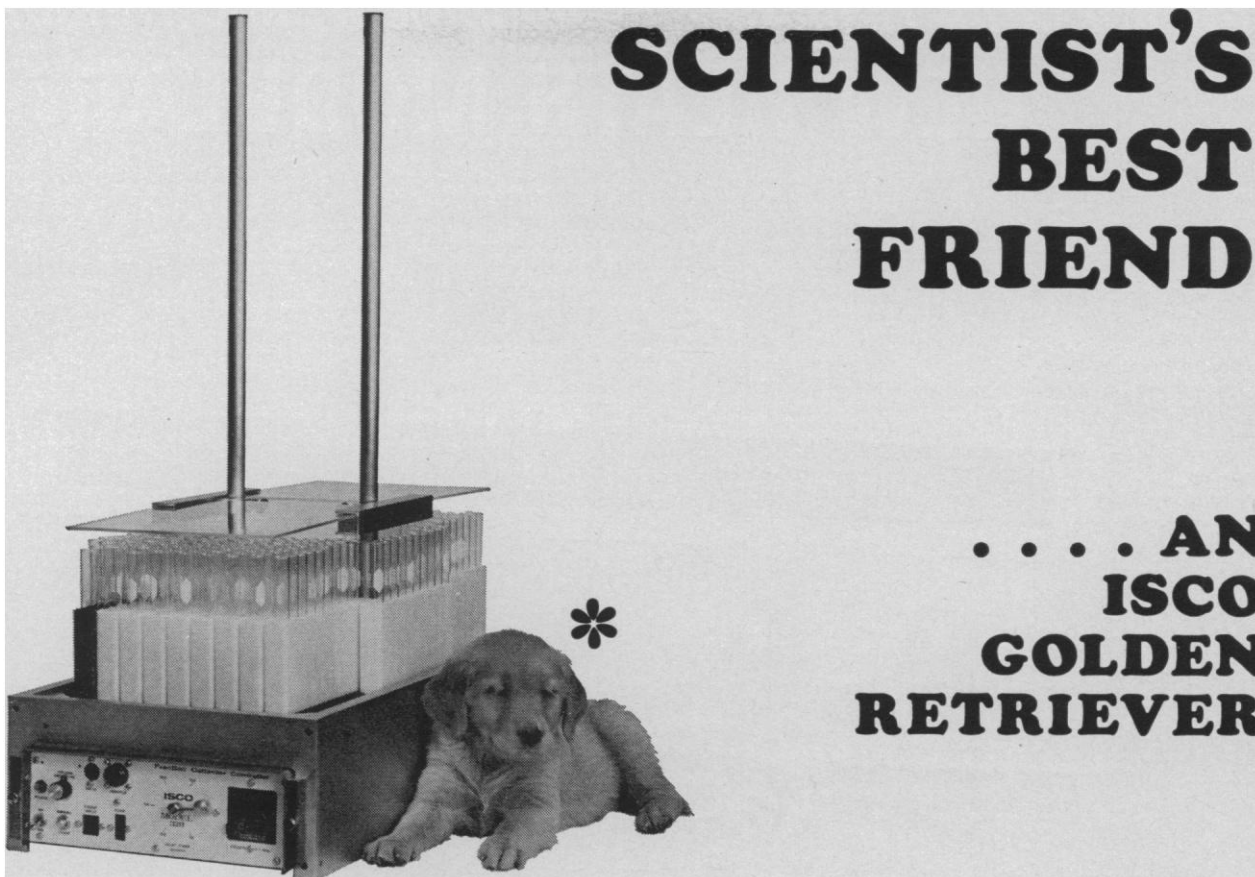
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Drop detecting photocell, dust cover, siphons, between-tube flow interrupter valve, and other accessories not included in base price are available optionally.

* The golden retriever puppy is named Steinmetz and belongs to the company president.

The Model 321 will not be available until late fall of 1968.

Patent Pending

Ask for Brochure FC17H for complete information.



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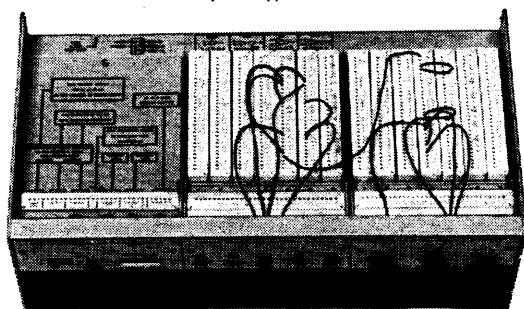
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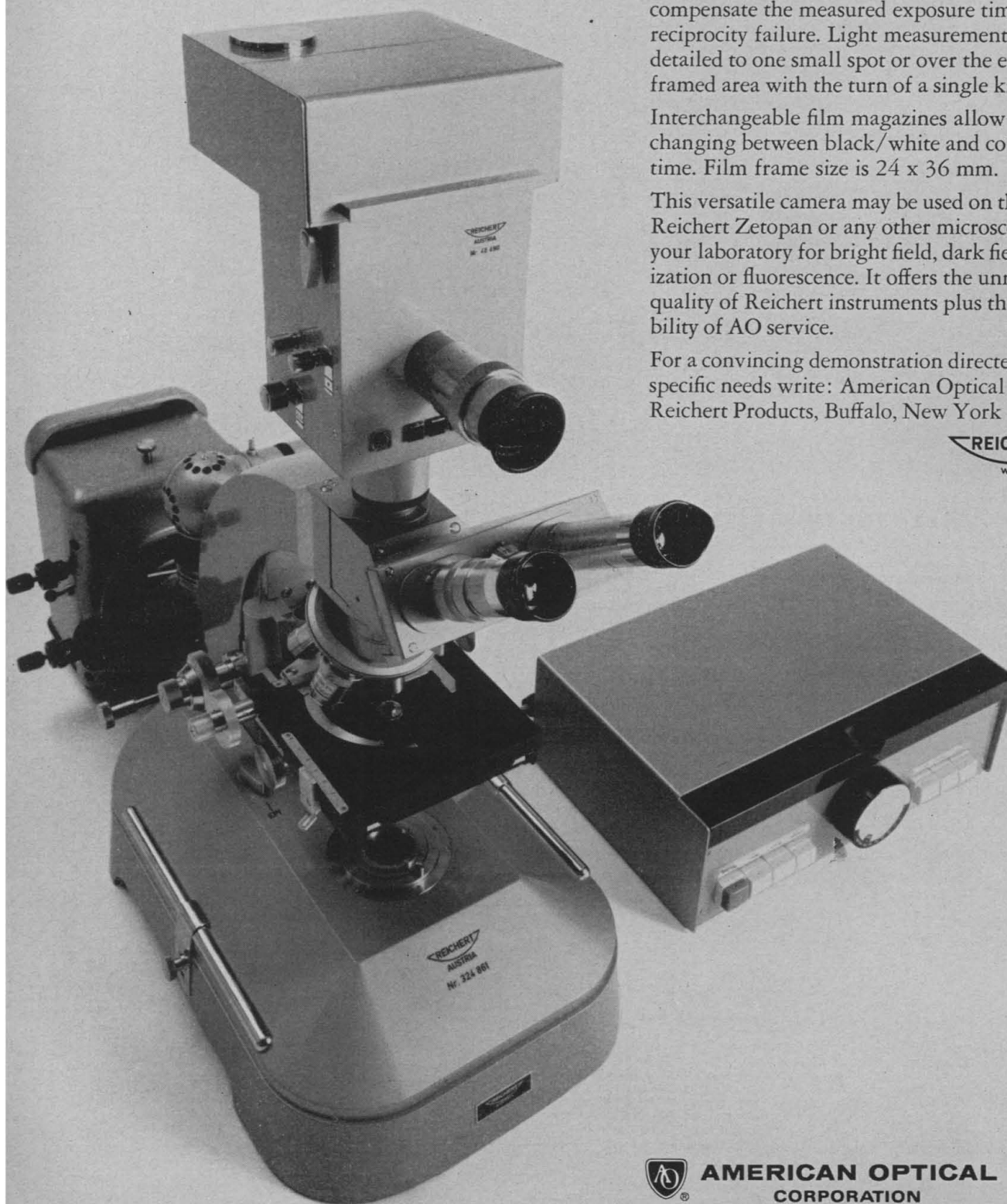
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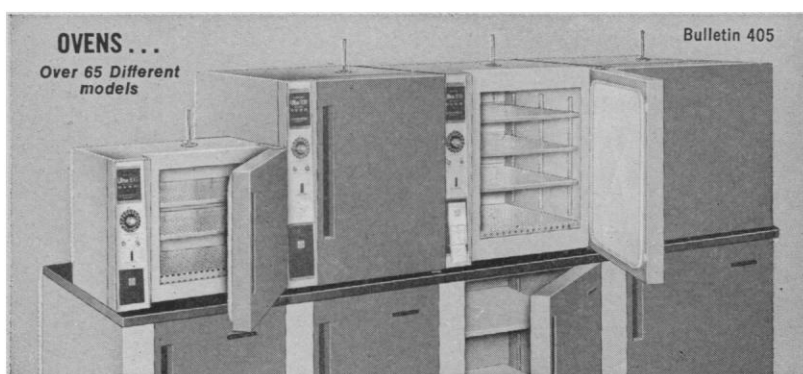
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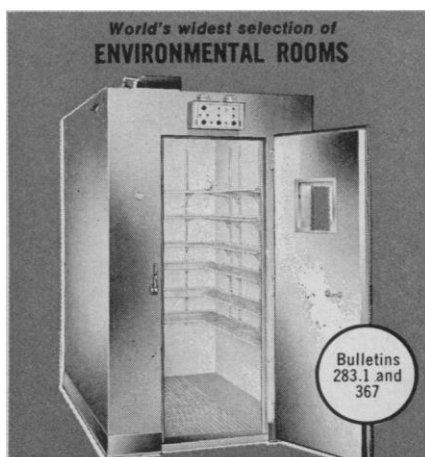
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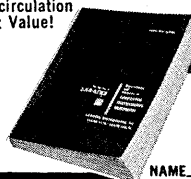


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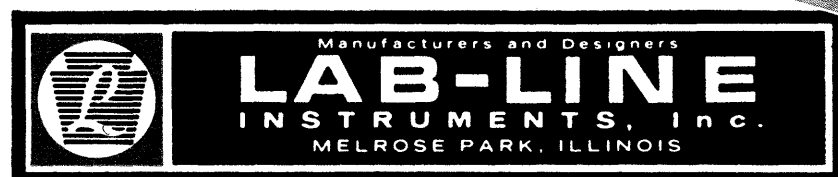
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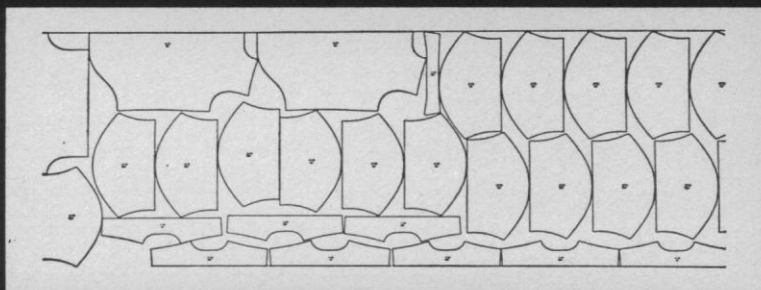


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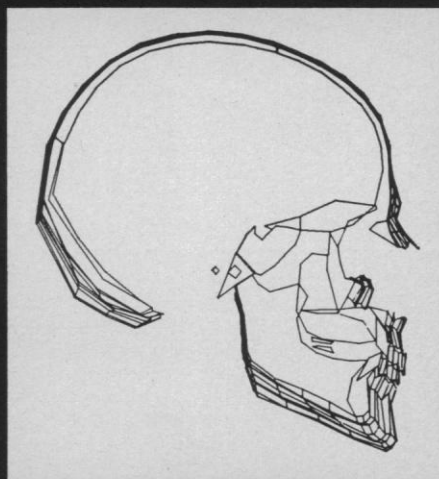
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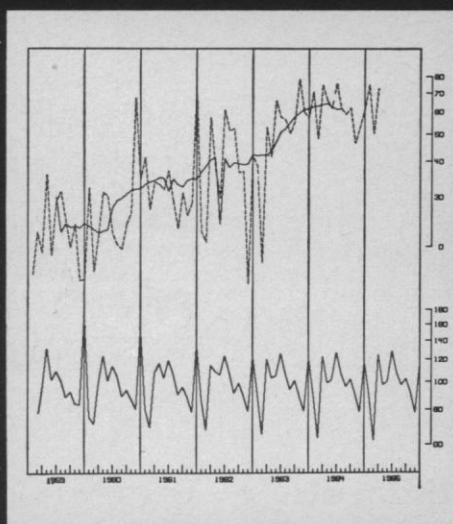
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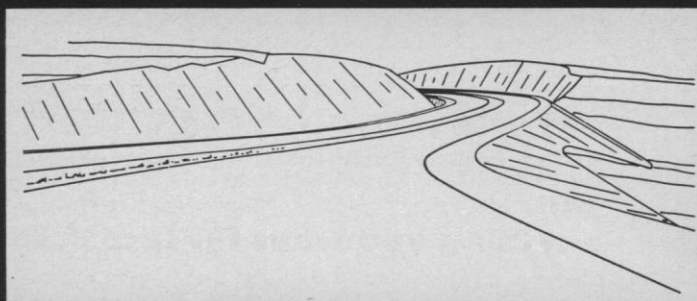
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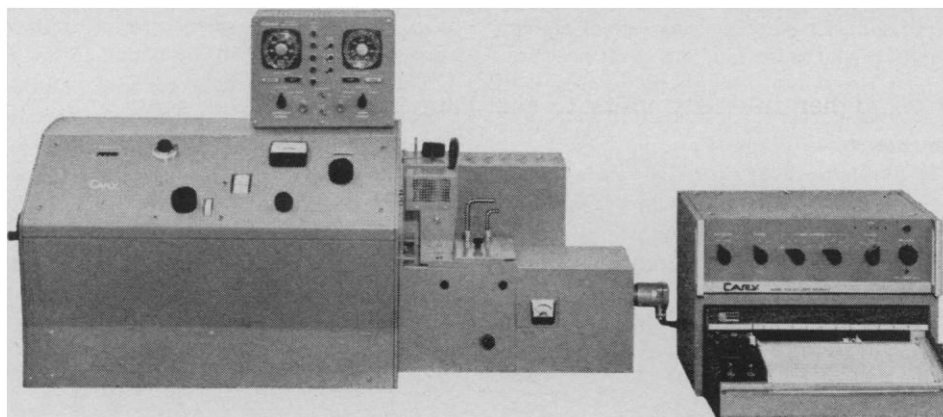
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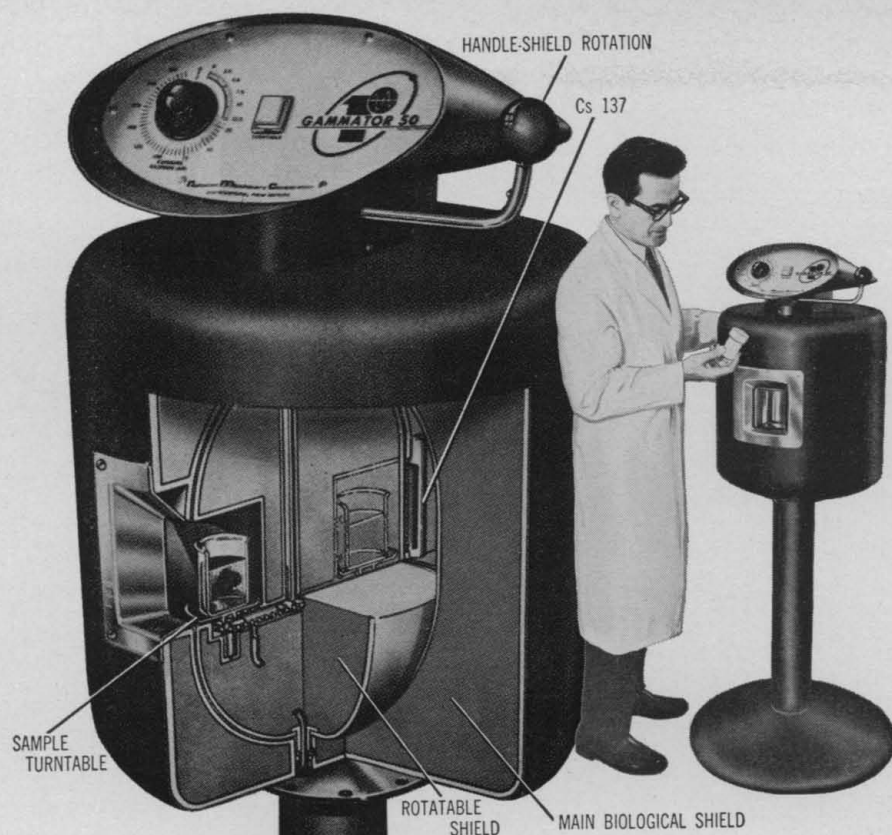
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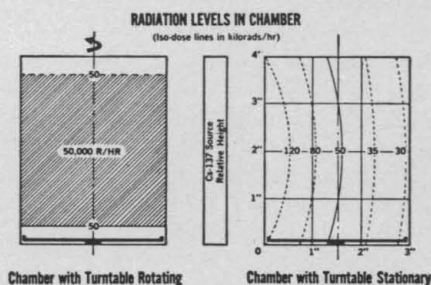
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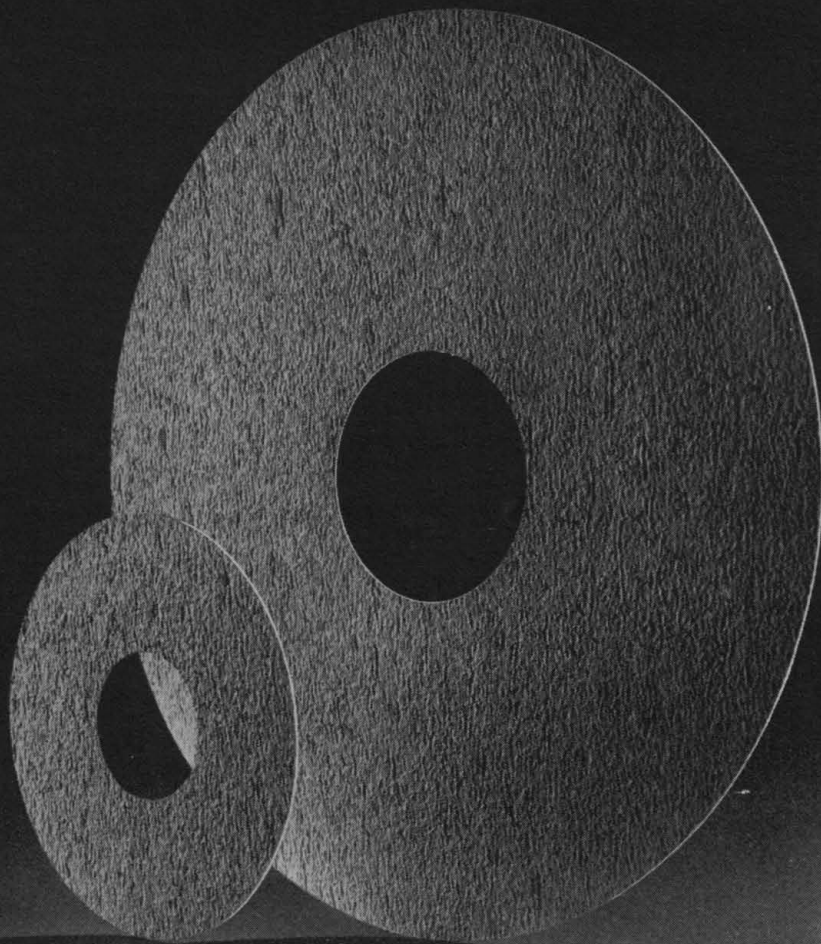


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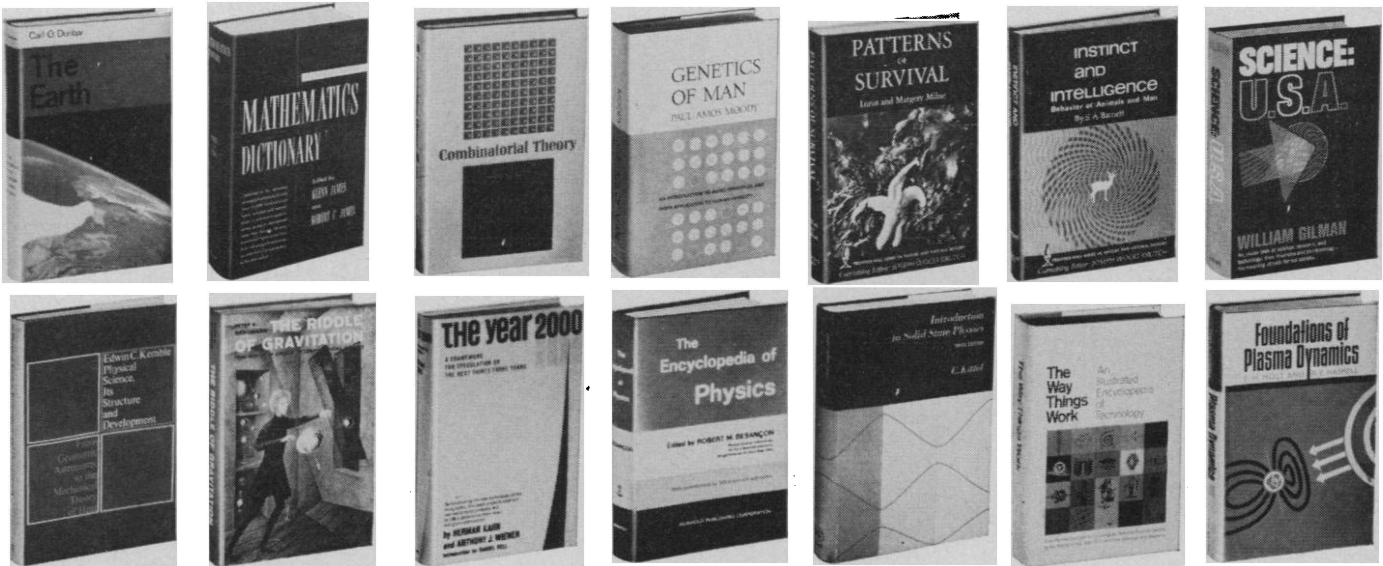
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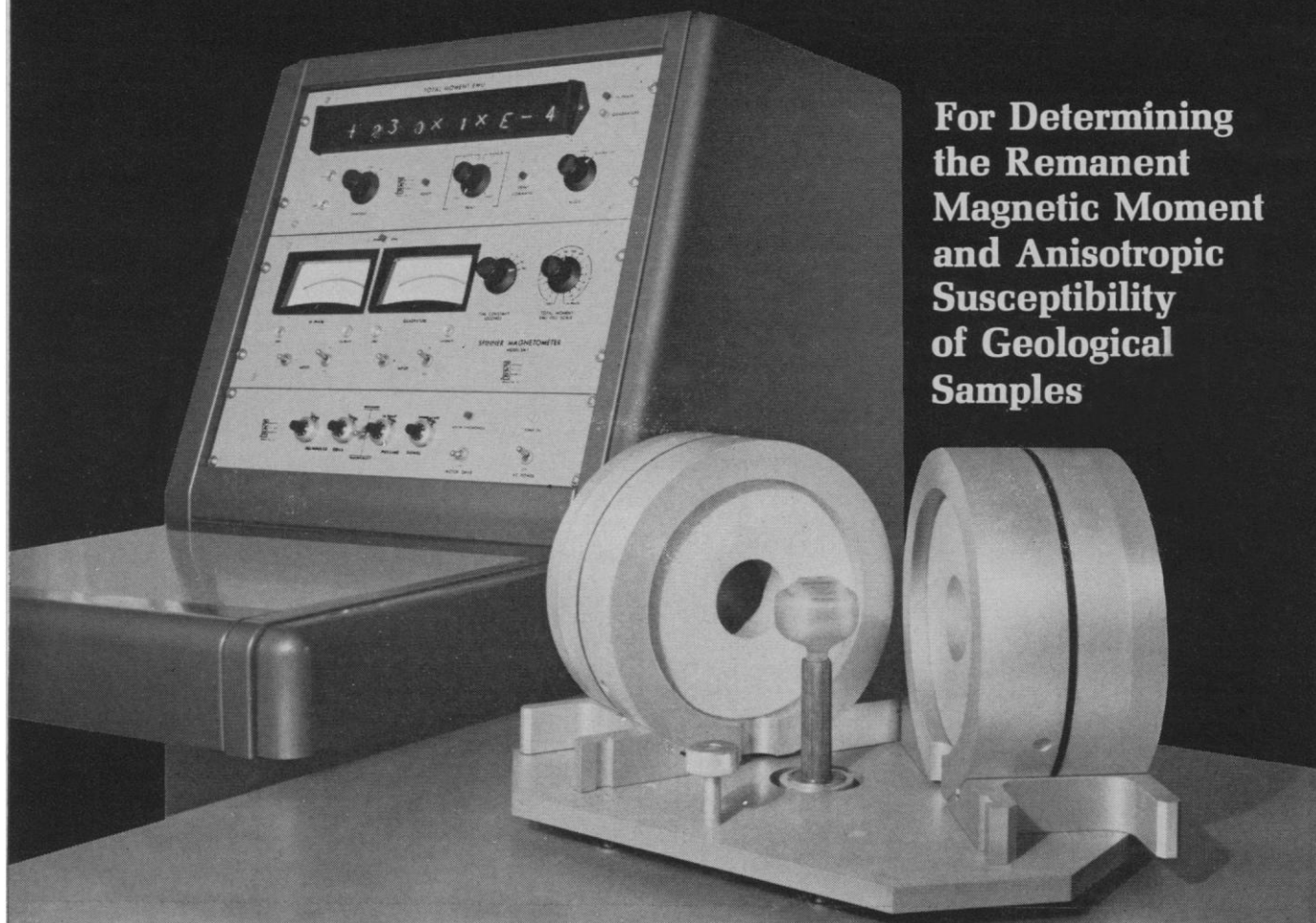
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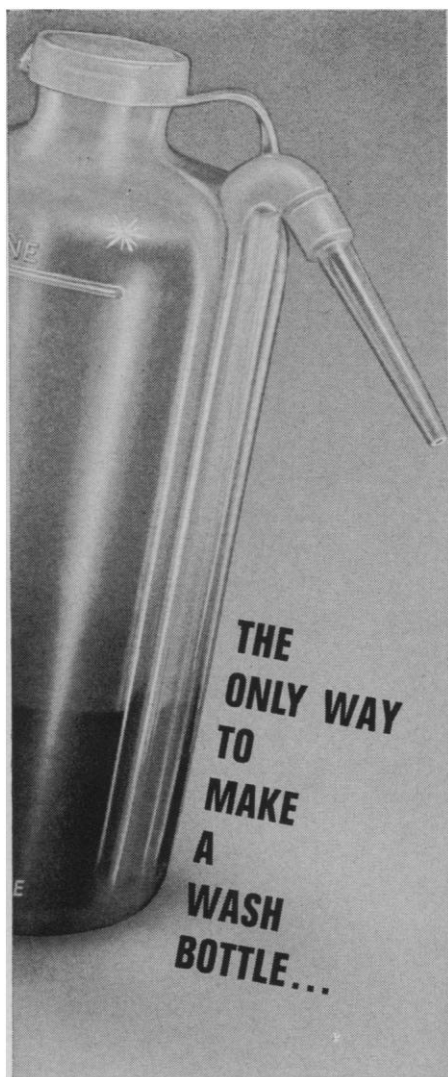
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From the Bizarre—Some Progress

Donald Oken's criticism of Pauling's article "Orthomolecular psychiatry" (Letters, 14 June) might have been more to the point had he recalled the always amusing concept that major advances and breakthroughs are almost *always* the contributions of individuals outside the discipline in question. His label of Pauling's work as "wild speculation" to me is the highest of praise—it would seem at this point that psychiatrists (and the National Institute of Mental Health) would welcome weird guesses on etiological factors in mental disease from *anyone*.

Oken's criticism is, of course, worthy of consideration—and my personal model of mental disease does not agree with Pauling's . . . but perhaps if the NIMH would greet every bizarre idea with enthusiasm, some progress might be made.

WALLACE C. ELLERBROEK

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Scrutiny by an Outsider

Social science cannot claim to have established many "laws," but here is a proposition that might be a possibility: all groups resist objective ("scientific") scrutiny by outsiders. I think that McClure, in his review of Daniel Greenberg's book *The Politics of Pure Science* (17 May, p. 752) provides an illustration of this possible law. Even scientists as a group often resist objective scrutiny by outsiders, in this case, Greenberg. He has simply tried to show that scientists, like all other groups, have a set of values and an associated set of ideologies that justify their activities. There is nothing wrong with ideologies; they are functional and essential in social systems. But sometimes they overstate their case, just because the values they justify are so strongly held. At times ideologies not only do not recognize the importance of other values, but even brush them aside. In some instances, Greenberg is telling us, the ideology of "pure science" has done just this. Fundamental as it is to our society and our values, "pure science" is not everything. There are other values, and these must have their place in our society and they must be able to compete with the ideology of "pure science" in our political process. "Pure

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science," Greenberg is saying, must learn to adjust itself, in some measure and certainly not without limit, to these other social values and ideologies. If it does, it will be better able to realize its own values in the greatest possible measure. And if it does not, it runs the danger of being at least temporarily brushed aside by other overstated values. Science in general and *Science* in particular are much in debt to Greenberg for his news reports, and now for this book. I hope McClure's resistance is not widespread in the community of science.

BERNARD BARBER

Department of Sociology,
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Irradiated Foods Warning

The action of the Food and Drug Administration in withholding approval from irradiated foods in programs of the Atomic Energy Commission and the U.S. Army is reasonable and should be welcomed by consumers and toxicologists (12 July, p. 146). Irradiation of organic materials induces formation of poorly characterized radiomimetic compounds, including epoxides, lactones, quinones, peroxides, and hydroxyalkylperoxides (1). Such compounds are carcinogenic and mutagenic (2). So-called, lifelong feeding studies with irradiated foods, commencing conventionally in adult life, may not be sensitive enough to reveal low carcinogenic hazards. Yet, as can be seen in a recent bibliography on "Wholesomeness of irradiated foods" (3) and elsewhere, there are no published data on actual lifelong feeding studies, commencing in infancy, with extracts of irradiated foods, nor are there any data on mutagenicity tests in mammals, with either irradiated whole foods or extracts. In these circumstances, the FDA does well in reconsidering the already approved petition for bacon.

SAMUEL S. EPSTEIN

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Investment of Public Funds: What Are the Returns?

I have read with interest and concern the Harris-Wolfle editorial "The paradox of science in the universities" (19 July, p. 223). My concern is best illustrated by two consecutive sentences.

We recognize its [science's] contributions to economic growth, national security, health, and general well-being. At the same time, we are bombarded with questions and statements such as: "Is science misshaping the world?" "There is danger in growing technology." "Science, the pursuit of truth, is in trouble."

Frankly, those are not the questions or statements I hear most frequently, except, perhaps, for the last one. Rather, I hear asked over and over again, "What have we got for our enormous investment of public funds in science over the past 15 years?" It's a simple, and perhaps simple-minded, question, but until the science community either tries to answer it or demonstrates why it cannot be answered, science, the pursuit of truth, will continue to be in trouble. In the face of overwhelming demands on public funds occasioned by our domestic and overseas problems, a mere assertion, with no attempt at documentation, that "we," the scientists, "recognize its contributions to economic growth, national security, health, and general well-being" is likely to be unheard.

Congressmen are laymen who are charged with the heavy responsibility of determining national priorities. Every 2 (or 6) years they have to convince other laymen, their constituents, that they have discharged that responsibility wisely. If science is to receive a larger share of limited federal resources, our legislators need help in understanding, and then explaining, what has been and can be achieved through such an investment. I sense little distrust in Congress of the dangers of technology. But I sense declining conviction that science, as it is now constituted, can provide solutions to our problems. As a nonscientist I am convinced that, somehow, science can make a better case for itself.

JOHN F. MORSE

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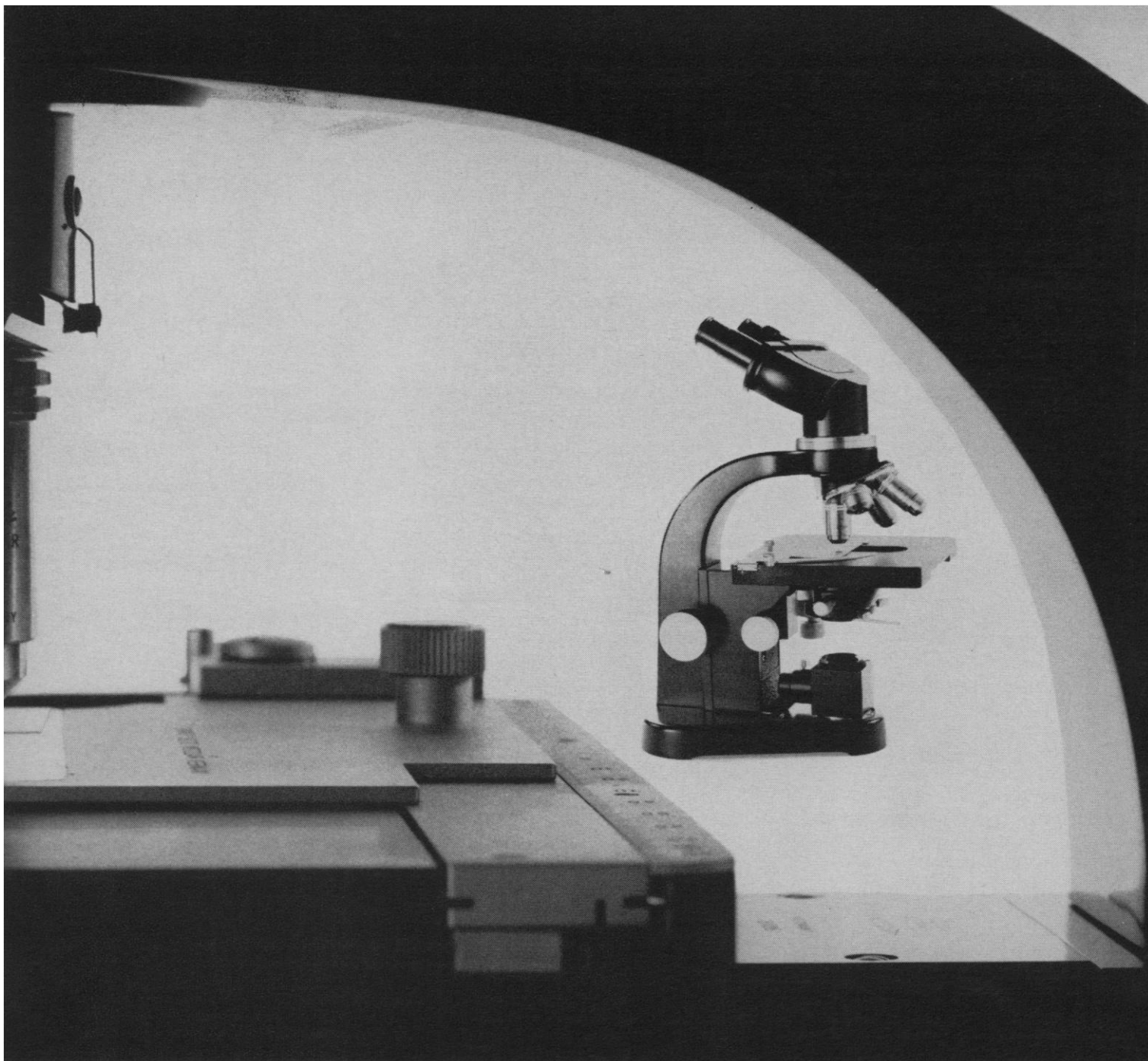
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National Science Foundation Priorities

The recently passed Daddario bill gives the National Science Foundation new and additional responsibilities. The same Congress that adopted this bill is about to give the NSF an appropriation almost 20 percent below the \$500 million level of the past 2 years. The figure will be between the \$400 million already approved by the House and the \$410 million approved by the Senate. The amount that can be spent may be somewhat different; carry-over of funds from earlier years may allow expenditure of as much as \$460 million, or the reductions required by the Revenue and Expenditure Control Act may limit expenditures to less than the appropriated amount.

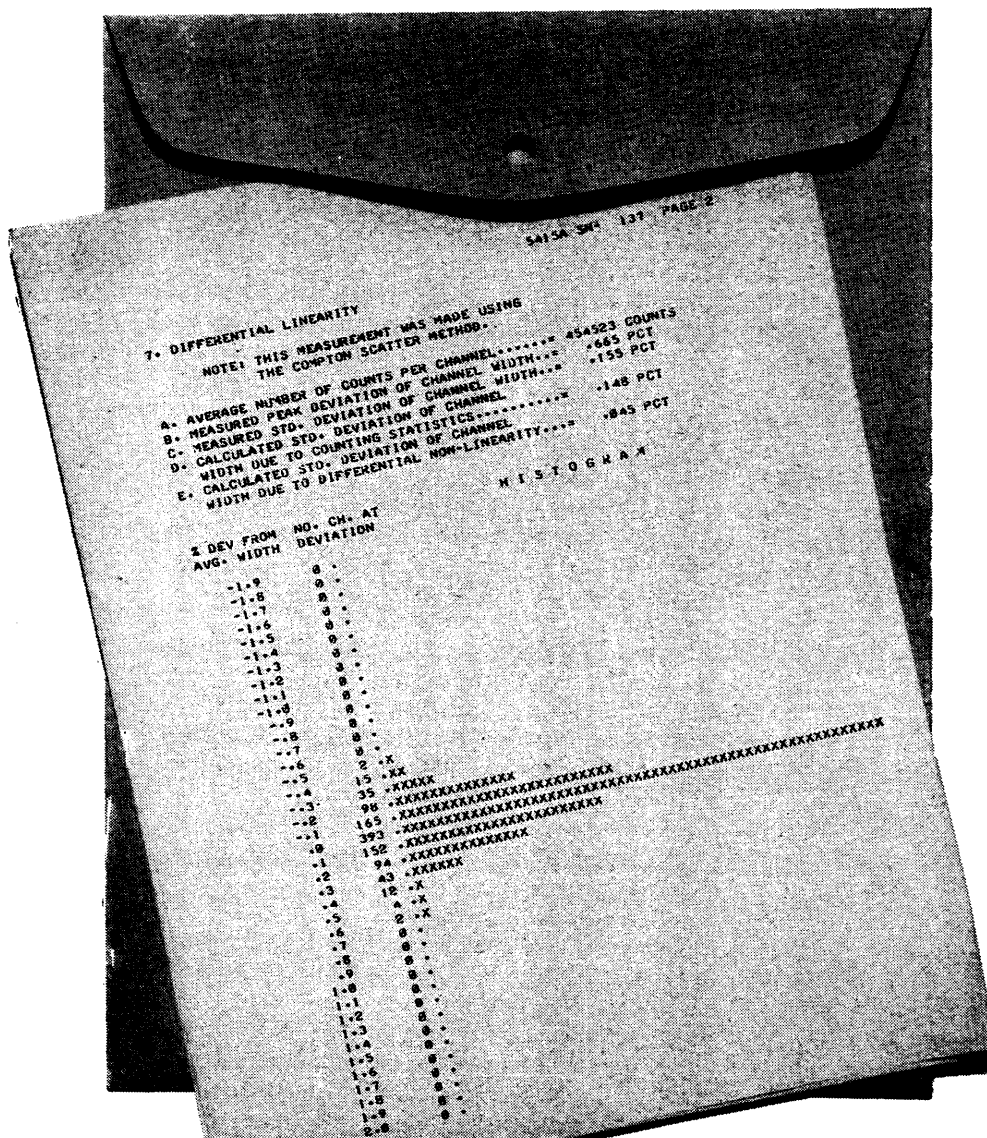
Someday soon the Bureau of the Budget will tell NSF how much it can spend in the fiscal year that started on 1 July. Present indications are that the deepest cuts will be in support for the construction of scientific facilities and for improving promising scientific institutions. New grants for these purposes will be few. Funds for research will not be so severely reduced, but, even so, research grants will probably be made to slightly fewer institutions than received them in recent years.

The new law requires NSF to report annually the amount of federal money received by each college or university and other appropriate nonprofit institution in the United States. Congressmen are always interested in what flows into their districts. This year some of them will be disappointed. Some members of Congress, however, were quite aware that they were restricting the spread of NSF funds. During the Senate discussion, Senator Pell said that the reduced appropriation would necessarily bring a disproportionate decrease in the funds available for "developing the science resources of institutions which are promising but which have not been in the top levels of science achievement because NSF cannot disrupt important ongoing activities and must honor prior commitments."

This result is inevitable. Prior commitments must be honored. Research projects and institutional development programs that are already well started must have priority over new ones. Quality must remain the primary criterion of selection. In the first annual report of the Foundation, the chairman of the National Science Board, James B. Conant, wrote: "In the advance of science and its applications to many practical problems, there is no substitute for first-class men. Ten second-rate scientists cannot do the work of one who is in the first rank."

These general policy lines are clear enough. But applying them will require the NSF staff to squeeze project budgets into tighter molds, to reject more proposals, and to contract the geographic and institutional spread of NSF funds. There will inevitably be much debate over the relative priority of different programs.

Altogether it will be a difficult year, and from this distance fiscal year 1970 does not look much brighter. Unless national and international problems have abated more than seems reasonable to expect, the new President will probably have to ask Congress to extend the income tax surcharge beyond 30 June 1969. Congress may then insist, as it did this year, on a reduction in expenditures. Even if these speculations turn out to be inaccurate, a substantial increase for the NSF seems unlikely. The policy decisions, priorities, and curtailments required this year are likely to be governing for at least another year.—DAEL WOLFLE



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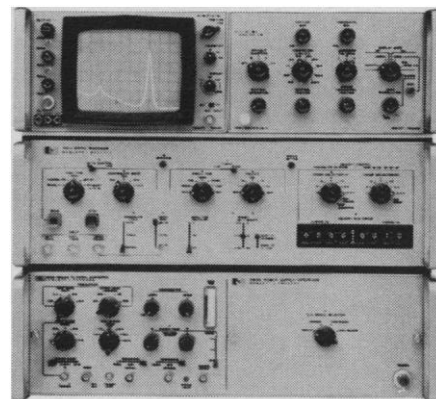
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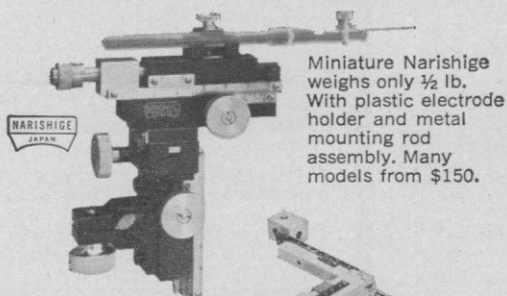


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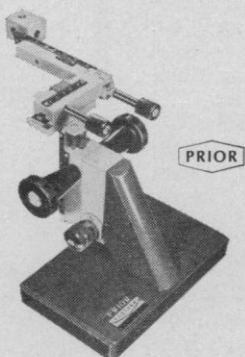
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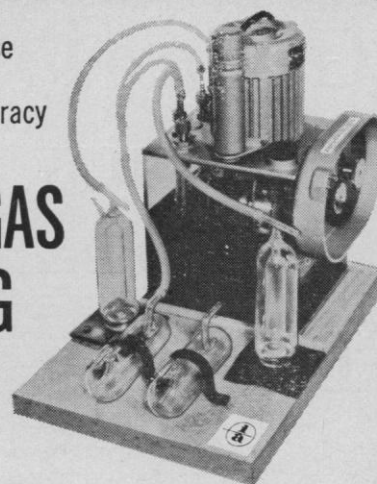
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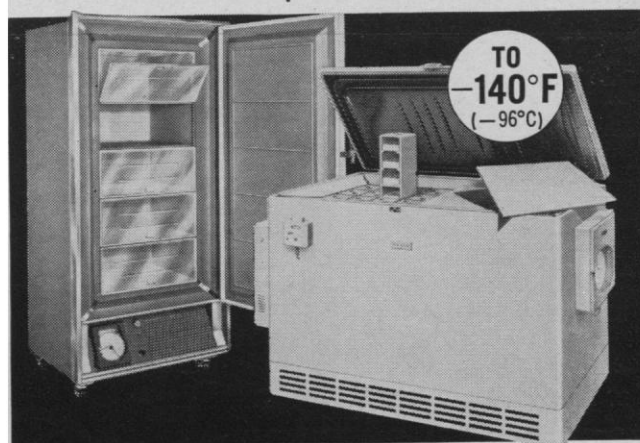
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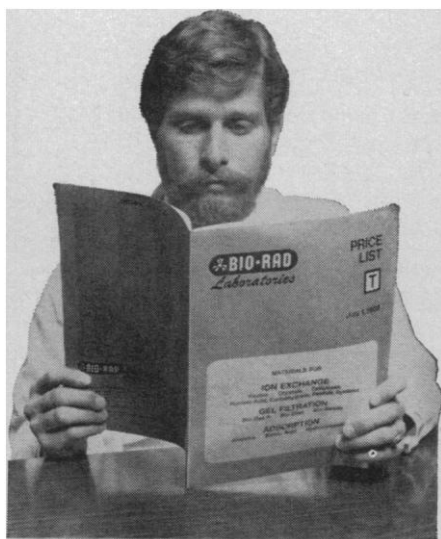
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24-27. **American Soc. for Testing and Materials**, Cincinnati, Ohio. (T. A. Marshall, Jr., 1916 Race St., Philadelphia, Pa. 19103)

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29-2. **American Soc. of Photogrammetry**, San Antonio, Tex. (E. C. Palmer, 105 North Virginia Ave., Falls Church, Va. 22046)

29-3. **Association of Medical Illustrators**, Chicago, Ill. (C. S. Holt, 738 Keystone Ave., River Forest, Ill. 60305)

30. **Society for Pediatric Radiology**, New Orleans, La. (J. L. Gwinn, Children's Hospital, 4614 Sunset Blvd., Los Angeles, Calif. 93027)

30-3. **American Psychiatric Assoc.**, 20th, Washington, D.C. (Public Information Office, 1700 18th St., NW, Washington, D.C. 20009)

30-3. **American Roentgen Ray Soc.**, Washington, D.C. (T. F. Leigh, Emory Univ. Clinic, Atlanta, Ga. 30322)

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2-4. **Symposium on Materials for Radioisotope Heat Sources**, Gatlinburg, Tenn. (Chairman, Metallurgical Soc. of AIME, 345 E. 47 St., New York 10017)

3-4. **Fiber Soc.**, Washington, D.C. (L. Rebenfeld, Box 625, Princeton, N.J.)

3-5. **Canadian Soc. of Immunology**, Toronto, Ont., Canada. (H. Z. Movat, Dept. of Pathology, Univ. of Toronto, 100 College St., Toronto 2)

4. **Industrial Pharmaceutical Technology**, Philadelphia, Pa. (R. S. Joslin, William H. Rorer, Inc., Fort Washington, Pa. 19034)

4-5. **American Physical Soc.**, Hanover, N.H. (The Society, Executive Secretary, 528 W. 120 St., New York 10027)

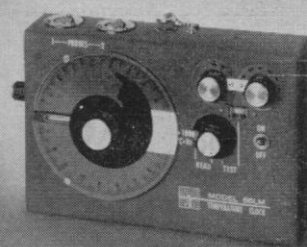
4-6. **National Conf. on Marine Sciences in Education**, Catalina Island, Calif. (R. B. Linsky, Coordinator, Marine Sciences and Director, Floating Lab Program, 1104 W. 8 St., Santa Ana, Calif. 92701)

4-8. **American College of Chest Physicians**, 10th, Washington, D.C. (M. Kornfield, 112 E. Chestnut St., Chicago, Ill. 60611)

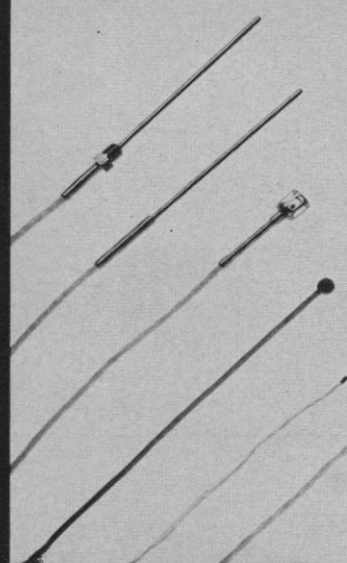
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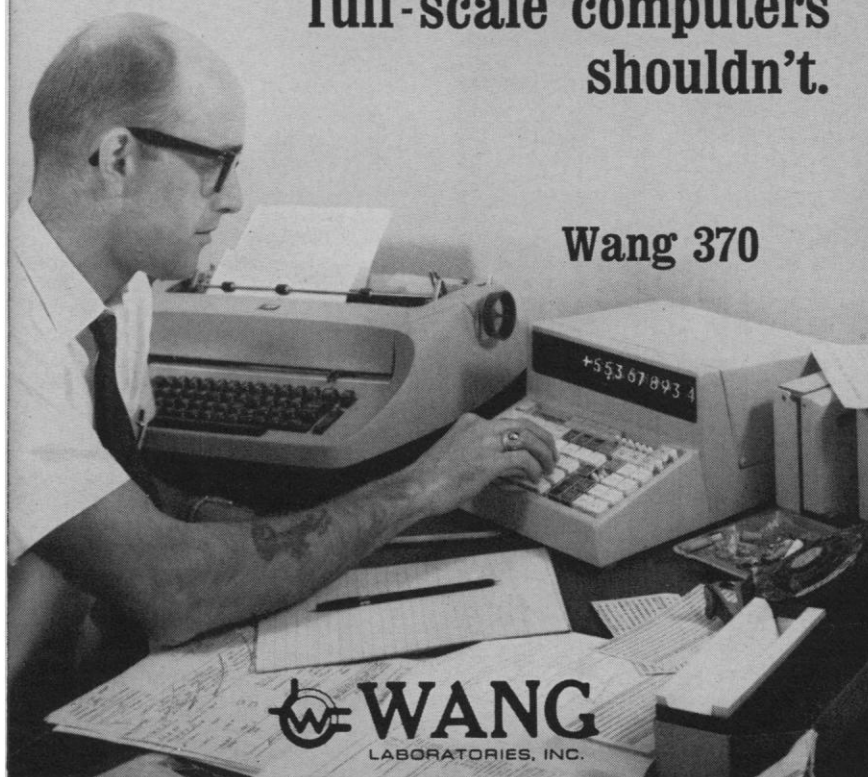
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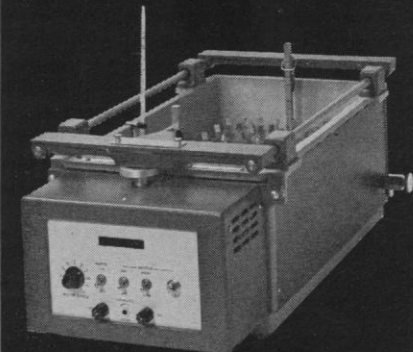
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28-1. Society for **Experimental Stress Analysis**, San Francisco, Calif. (The Society, 21 Bridge Sq., Westport, Conn. 06880)

29-31. Conference and Workshop on **Applied Climatology**, Asheville, N.C. (H. T. Harrison, Route 1, Box 266, Weather-ville, N.C. 28787)

31-1. **Educational Conf.**, 33rd, New York, N. Y. (W. S. Litterick, Educational Records Bureau, 21 Audubon Ave., New York 10032)

31-1. **Entomological Soc. of America**, 40th, Philadelphia, Pa. (J. P. Johnson, Connecticut Agricultural Experiment Sta., Box 1106, New Haven 06504)

31-2. **Gerontological Soc.**, Denver, Colo. (The Society, 660 S. Euclid, St. Louis, Mo. 63110)

31-1. American Soc. for **Microbiology**, 8th, New York, N.Y. (R. W. Sarber, 115

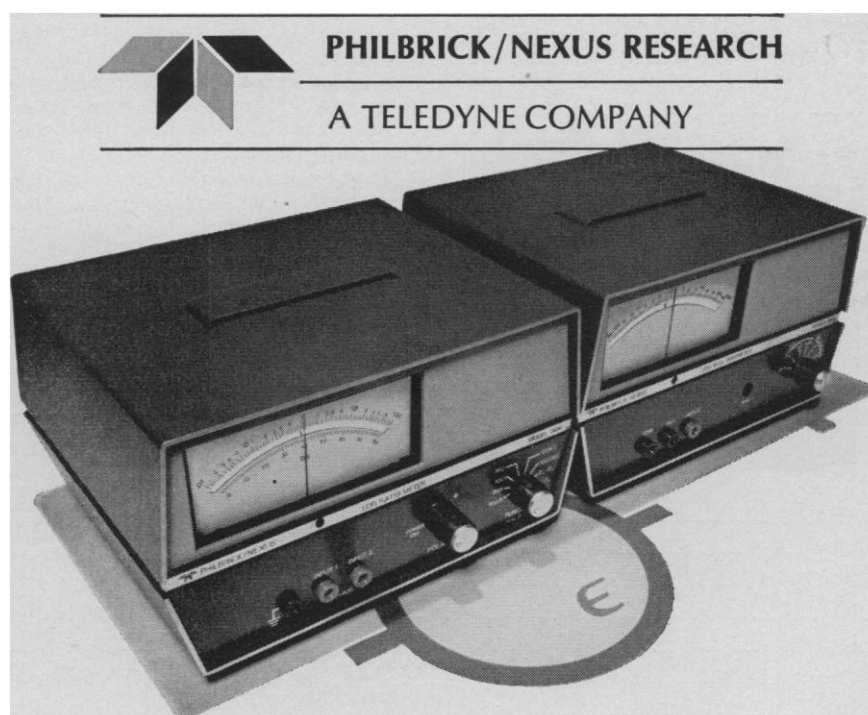
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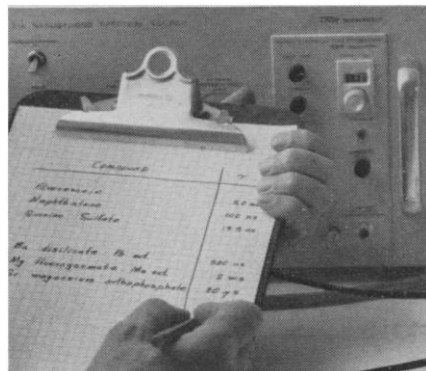
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31-1. Symposium on **Social Behavior**, 2nd, Oxford, Ohio. (R. A. Hoppe, Dept. of Psychology, Miami Univ., Oxford 45056)

31-1. American Soc. of **Tropical Medicine and Hygiene**, Atlanta, Ga. (G. M. Jeffery, P.O. Box 295, Kensington, Md.)

31-2. Society of **Photographic Scientists and Engineers**, Washington, D.C. (R. A. Jones, Papers Chairman, Mail Sta. 68, Perkin-Elmer Corp., Norwalk, Conn. 06852)

International and Foreign Meetings

September

22-28. International Congr. of **History of Medicine**, 21st, Siena, Italy. (Professor Stroppiana, Kiale Universita, 34/A Rome)

23-25. International Congr. of **Psychodrama and Sociodrama**, 3rd, Prague, Czechoslovakia. (J. L. Moreno, 259 Wolcott Ave., Beacon, N.Y. 12508)

23-26. Institute of **Physics and the Physical Soc.**, Culham, Abingdon, England. (Meetings Officer, 47 Belgrave Sq., London, S.W.1)

23-27. International Soc. of **Cybernetic Medicine**, 5th, Naples, Italy. (P. Battarra, S.I.M.C., 348 Via Roma, Naples)

23-28. South African Intern. **Ophthalmological Symp.**, 1st, Johannesburg, S. Africa. (Dept. of Ophthalmology, Medical School Hospital, Johannesburg)

24-26. **Power Sources Symp.**, 6th, Brighton, England. (D. H. Collins, Joint Services Electrical Power Sources Committee, POB 136, 26 Wellesley Rd., Croydon, Surrey)

24-28. Congress of **Neurological Surgeons**, Toronto, Ont., Canada. (J. M. Thompson, 1955 Blossom Way South, St. Petersburg, Fla. 33712)

24-28. Symposium on **Technical and Biological Problems of Control**, Erivan, U.S.S.R. (A. S. Iberall, General Technical Services, 8794 W. Chester Pike, Upper Darby, Pa. 19082)

25-30. International Union of the **History and Philosophy of Science**, 12th, Paris, France. (R. Taton, 3, rue Gay Lussac, Paris 5E)

26-28. International Congr. of **Sociometry and Social Psychology**, 1st, Prague, Czechoslovakia. (J. L. Moreno, 259 Wolcott Ave., Beacon, N.Y. 12508)

30-3. European Congr. of **Allergology**, Berlin, Germany. (H. Herxheimer, Rudolph Virchow Krankenhaus, Augustengurgen Platz 1, Berlin 65)

30-5. **Physicists Conf.**, Karlsruhe, Germany. (H. Schopper, POB 947, 75 Karlsruhe)

October

4-11. International College of **Surgeons**, 16th, Tokyo, Japan. (Secretary General, 1516 Lake Shore Dr., Chicago, Ill. 60610)

6-10. **Electrochemical Soc.**, 134th, Tokyo, Japan. (c/o Japan Cement Engineering Assoc., No. 1, Akasaka-Daimachi, Minato-Ku, Tokyo)

7-9. International **Gel Permeation Chromatography Seminar**, 6th, Miami Beach, Fla. (Chairman, The Seminar, c/o Waters Associates, Inc., 61 Fountain St., Framingham, Mass. 01701)

7-11. International Federation for Preventive **Medicine and Hygiene**, 5th, Rome, Italy. (Via Filippo Civinni 37, Rome)

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BOOKS RECEIVED

(Continued from page 777)

Press, New York, 1967. viii + 88 pp., illus. \$2.95.

Atmosphärische Spurenstoffe und ihre Bedeutung für den Menschen. Proceedings of a symposium, St. Moritz-Bad, June 1966. Christian Junge, Ed. Birkhäuser, Basel, 1967. 131 pp., illus.

Atmospheric Electricity. J. Alan Chalmers. Pergamon, New York, ed. 2, 1967. x + 515 pp., illus. \$15.

Australian Freshwater Life. The Invertebrates of Australian Inland Waters. W. D. Williams. Sun Books, Melbourne, 1968. x + 262 pp., illus. Paper, \$2.50.

Bases et Techniques d'une Cartographie des Sols. M. Jamagne et al. Institut National de la Recherche Agronomique, Paris, 1968. 142 pp., illus., maps. Paper, 45 F. Annales Agronomiques, vol. 18.

Basic Biological Chemistry. Henry R. Mahler and Eugene H. Cordes. Harper and Row, New York, 1968. xii + 527 pp., illus. \$10.75. An adaptation of *Biological Chemistry* (1966), by the same authors.

Basic Techniques in Human Metabolism and Respiration. G. J. R. McHardy, D. Shirling, and R. Passmore. Blackwell Scientific Publications, Oxford, 1967 (distributed in the U.S. by Davis, Philadelphia). 64 pp., illus. Paper, \$1.25.

The Battered Child. Ray E. Helfer and C. Henry Kempe, Eds. University of Chicago Press, Chicago, 1968. xvi + 268 pp., illus. \$12.50.

Beginnings. W. and R. Chambers and John Murray. Wiley, New York, 1968. viii + 101 pp., illus. Paper, \$2.50.

Behavior. William G. Van der Kloot. Holt, Rinehart and Winston, New York, 1968. x + 166 pp., illus. Paper, \$2.95.

Beyond the Therapeutic Community. Social Learning and Social Therapy. Maxwell Jones. Yale University Press, New Haven, Conn., 1968. xxii + 150 pp. \$5.75.

Bibliography of Vitamin E, 1965-1967. Vol. 7. Compiled by Wilma F. Kujawski. Distillation Products Industries, Rochester, N.Y., 1968. Unpaged. Paper, \$3.

The Biochemistry of Foreign Compounds. Dennis V. Parke. Pergamon, New York, 1968. x + 274 pp., illus. \$10. International Series of Monographs in Pure and Applied Biology: Biochemistry, vol. 5.

Biogénèse. Colloque sur les Systèmes Biologiques Élémentaires et la Biogénèse, Nov. 1965. J. André Thomas, Ed. Masson, Paris, 1967. xii + 368 pp., illus. Paper, 98 F. Exposés Actuels de Biologie Cellulaire 1967, Collection Biocytologia.

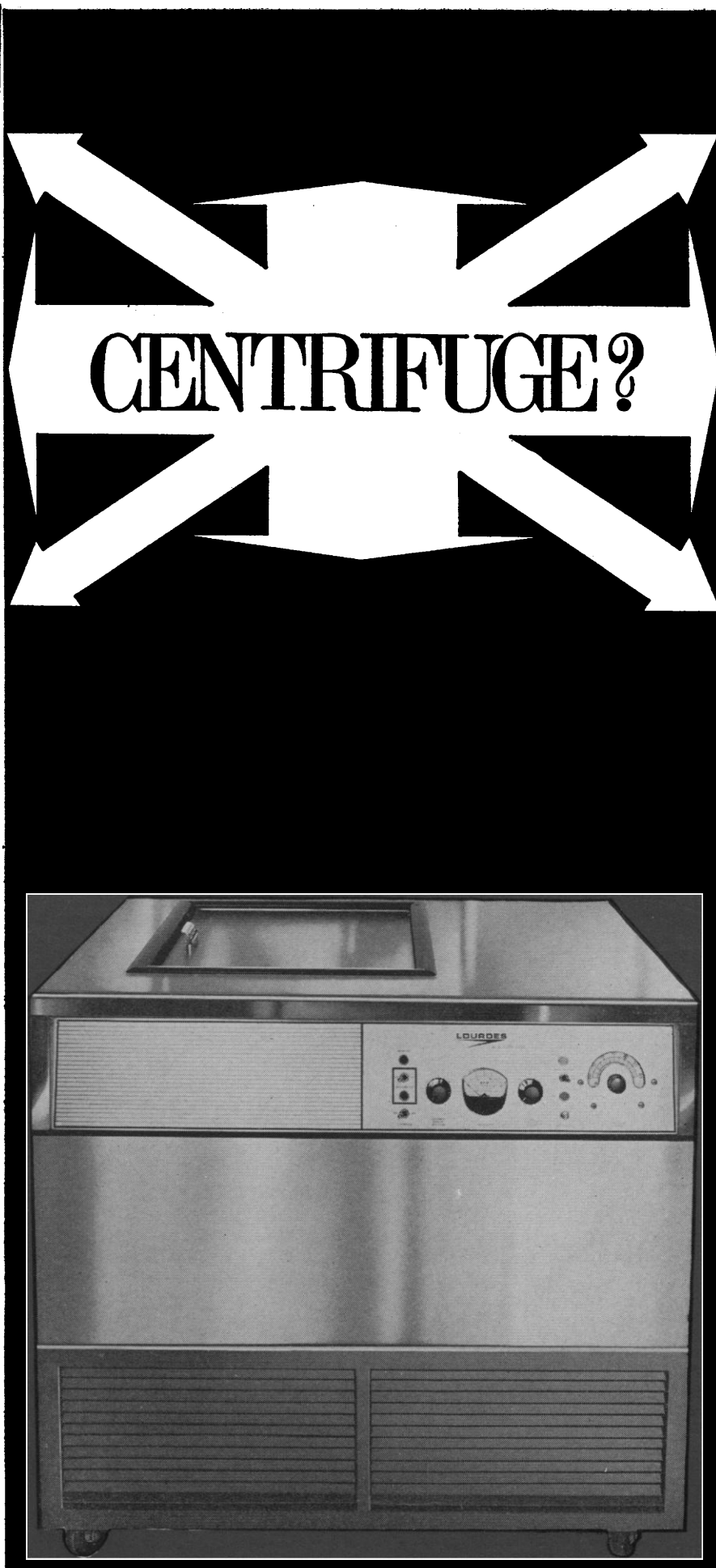
Biological Oxidations. Thomas P. Singer, Ed. Interscience (Wiley), New York, 1968. x + 722 pp., illus. \$19.75.

Biology as Inquiry. A Book of Teaching Methods. Burton E. Voss and Stanley B. Brown. Mosby, St. Louis, 1968. xviii + 239 pp., illus. \$8.

Biology of Gestation. Vol. 1, The Maternal Organism. N. S. Assali, Ed. Academic Press, New York, 1968. xiv + 507 pp., illus. \$27.

Chemistry. A Survey of Laboratory Techniques and Procedures. Lawrence P. Eblin. Harcourt, Brace and World, New York, 1968. x + 255 pp., illus. Spiral binding, \$4.50.

Chemistry and Physics of Carbon. A



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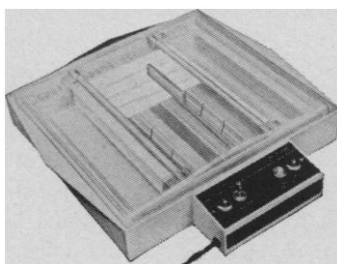
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Series of Advances. Vol. 3. Philip L. Walker, Jr., Ed. Dekker, New York, 1968. xii + 449 pp., illus. \$22.75.

Chemistry of Life Processes. Raymond P. Mariella and Rose Ann Blau. Harcourt, Brace and World, New York, 1968. x + 630 pp., illus. \$8.95.

Chemistry of Life Processes. Selected Laboratory Experiments. Raymond P. Mariella. Harcourt, Brace and World, New York, 1968. xii + 144 pp., illus. Spiral binding, \$3.95.

The Chemistry of Sulfides. Proceedings of a conference, Princeton, N.J., June-July 1966. Arthur V. Tobolsky, Ed. Interscience (Wiley), New York, 1968. xii + 279 pp., illus. \$12.95.

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Cloud Studies in Colour. Richard Scorer and Harry Wexler. Pergamon, New York, 1968. xii + 44 pp., illus. \$7. Commonwealth and International Library, Meteorology Division.

Combinatorial Identities. John Riordan. Wiley, New York, 1968. xiv + 256 pp. \$15. Wiley Series in Probability and Mathematical Statistics.

Commutative Matrices. D. A. Suprunenko and R. I. Tyshkevich. Translated from the Russian edition (Minsk, 1966) by Scripta Technica. Academic Press, New York, 1968. viii + 158 pp. \$7. Academic Paperbacks.

Comparative Biochemistry of the Flavonoids. J. B. Harborne. Academic Press, New York, 1967. viii + 383 pp., illus. \$16.

Comparative Genetics of Coat Colour in Mammals. A. G. Searle. Logos Press, London; Academic Press, New York, 1968. xii + 308 pp., illus. \$17.50. Logos Press Scientific Publications.

Contrôle et Electronique des Réacteurs Nucléaires. J. Furet. Masson, Paris, 1968. xviii + 252 pp., illus. 90 F.

Cours de Mathématiques. J. Bass. Vol. 1, Algèbre de Boole, Matrices et Tenseurs, Intégrales Simples, Convergence Uniforme, Séries et Intégrales de Fourier, Fonctions de Carré Intégrable, Courbes, Surfaces, Intégrales Multiples (xiii + 721 pp., illus., 75 F.); vol. 2, Fonctions Analytiques, Equations Différentielles, Transformation de Laplace, Calcul des Variations, Equations aux Dérivées Partielles, Fonctions Harmoniques, Méthodes Numériques (vi + 536 pp., illus., 60 F.). Masson, Paris, ed. 4, 1968.

Criteria for Scientific Development: Public Policy and National Goals. A Selection of Articles from *Minerva*. Edward Shils, Ed. M.I.T. Press, Cambridge, Mass., 1968. xvi + 208 pp., \$8.95.

The Cultural Development of Managers, Executives and Professionals. Joseph Basile. Translated from the French edition (Belgium, 1965) by Betty F. Adler. Helicon, Baltimore, 1968. 159 pp., illus. \$4.95.

Curious Naturalists. Niko Tinbergen. Published in cooperation with the American Museum of Natural History by Doubleday, Garden City, N.Y., 1968. xvi + 301 pp., illus. Paper, \$1.75. Natural History Library. Reprint of the 1958 edition.

The Development of Medicine as a Profession. The Contribution of the Me-

dieval University to Modern Medicine. Vern L. Bullough. Karger, New York, 1966 (distributed by Hafner, New York). vi + 126 pp. \$7.50.

A Dictionary of Electronic Terms. Concise Definitions of Words Used in Radio, Television and Electronics. Robert E. Beam, Ed. Allied Radio, Chicago, ed. 8, 1968. 112 pp., illus. Paper, \$1.

A Dictionary of English Weights and Measures. From Anglo-Saxon Times to the Nineteenth Century. Ronald Edward Zupko. University of Wisconsin Press, Madison, 1968. xvi + 224 pp. \$10.

La Diversité Humaine en Afrique Subsaharienne. Recherches Biologiques, Etudes Ethnologiques. Jean Hiernaux. Editions de l'Institut de Sociologie, Université Libre de Bruxelles, Brussels, 1968. 261 pp., illus. Etudes Ethnologiques.

Epithelial-Mesenchymal Interactions. 18th Hahnemann Symposium. Raul Fleischmajer and Rupert E. Billingham, Eds. Williams and Wilkins, Baltimore, 1968. xiv + 326 pp., illus. \$15.75.

Essentials of Fluid Balance. D. A. K. Black. Davis, Philadelphia, ed. 4, 1968. x + 182 pp., illus. \$5.50.

Evolution et Biocinèse. Les Invertébrés dans l'Histoire du Monde Vivant. Henri Termier and Genevieve Termier. Masson, Paris, 1968. 241 pp., illus. 155 F.

Experimental Psychology. A Methodological Approach. F. J. McGuigan. Prentice-Hall, Englewood Cliffs, N.J., ed. 2, 1968. xiv + 400 pp., illus. \$8.50.

Experiments in Social Psychology. Paul G. Swingle, Ed. Academic Press, New York, 1968. x + 258 pp., illus. \$7.50. Social Psychology Series.

Explanation in Social Science. Robert Brown. Aldine, Chicago, 1968. viii + 198 pp. Cloth, \$6.50; paper, \$2.95. Reprint of the 1963 edition.

Exploration Geophysics. Vol. 47. Mikhail K. Polshkov, Ed. Translated from the Russian edition (Moscow, 1966). George V. Keller, Translation Ed. Consultants Bureau, New York, 1968. viii + 154 pp., illus. Paper, \$22.50.

Exploratory Concepts in Muscular Dystrophy and Related Disorders. Proceedings of the International Conference convened by Muscular Dystrophy Associations of America, Harriman, N.Y., Oct. 1966. A. T. Milhorat, Ed. Excerpta Medica Foundation, Amsterdam, 1967. xii + 420 pp., illus. \$25. International Congress Series, No. 147.

Familiar Medical Quotations. Maurice B. Strauss, Ed. Little, Brown, Boston, 1968. xxii + 968 pp. \$15.

Fatty Acids and Their Industrial Applications. E. Scott Pattison, Ed. Dekker, New York, 1968. xii + 390 pp., illus. \$8.

Fisheries Biology. A Study in Population Dynamics. D. H. Cushing. University of Wisconsin Press, Madison, 1968. xii + 200 pp., illus. \$7.50.

The Frog. A Practical Guide. T. A. G. Wells. Dover, New York, 1968. viii + 44 pp., illus. Paper, \$1.35. Reprint of the 1964 edition.

G = Mmxc/r². A New Road to Relativity. Morris Redman Spivack. Published by the author, Reykjavik, Iceland, ed. 2, 1968. 8 pp. Cloth, \$2; paper, \$1.

Galaxies and the Universe. The Vetlesen Symposium, New York, Oct. 1966. Lode-

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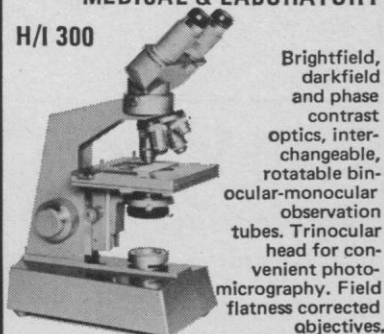


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wijk Woltjer, Ed. Columbia University Press, New York, 1968. xvi + 112 pp., illus. \$6.

Gas Lasers. Arnold L. Bloom. Wiley, New York, 1968. xii + 712 pp., illus., \$8.50. Wiley Series in Pure and Applied Optics; University of California Letters and Science Extension series.

Genetics. Proceedings of a conference, New York, Nov. 1966. David C. Glass, Ed. Rockefeller University Press and Russell Sage Foundation, New York, 1968. x + 260 pp., illus. \$7.50. Biology and Behavior Series.

Geographers in Government. Series of papers given at meetings of the Geography Section of the AAAS, New York, Dec. 1967. American Geographical Society, New York, 1968. vi + 55 pp., illus. Paper, \$3. American Geographical Society Mimeographed and Offset Publication No. 5.

The Geography of Air Transport. Kenneth R. Sealy. Aldine, Chicago, ed. 2, 1968. 198 pp., illus. Paper, \$2.45. University Library of Geography.

A Geography of China. T. R. Tregear. Aldine, Chicago, 1968. xx + 342 pp., illus. Cloth, \$7.95; paper, \$2.95. Reprint of the 1965 edition.

The Geography of Towns. Arthur E. Smailes. Aldine, Chicago, 1968. 160 pp., illus. Paper, \$2.45. University Library of Geography. Reprint of the 1953 edition.

Geologic Time. Don L. Eicher. Prentice-Hall, Englewood Cliffs, N.J. x + 150 pp., illus. Cloth, \$5.95; paper, \$2.50. Foundations of Earth Science Series.

The Golden Hamster. Its Biology and Use in Medical Research. Roger A. Hoffman, Paul F. Robinson, and Hulda Magalhaes, Eds. With a Master Bibliography by Hulda Magalhaes and including a Stereotaxic Atlas of the Brain of the Golden Hamster by Karl M. Knigge and Shirley A. Joseph. Iowa State University Press, Ames, 1968. xii + 545 pp., illus. \$19.50.

Ground Water Problems. Proceedings of an international symposium, Stockholm, Oct. 1966. E. Eriksson, Y. Gustafsson, and K. Nilsson, Eds. Pergamon, New York, 1968. vi + 226 pp., illus. \$13. Wenner-Gren Center International Symposium Series, vol. 11.

Immunopharmacology. Proceedings of the 3rd International Pharmacological Meeting, São Paulo, July 1966, vol. 11. H. O. Schild, Ed. Pergamon, New York, 1968. x + 170 pp., illus. \$13.

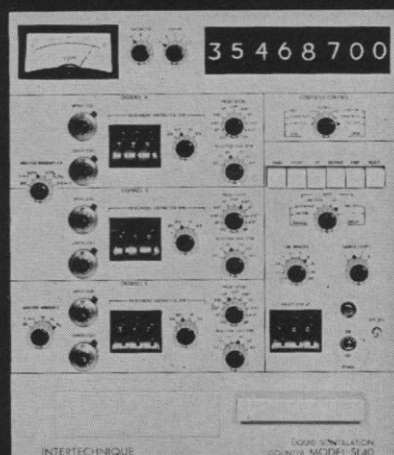
Industrial Psychology. Its Theoretical and Social Foundations. Milton L. Blum and James C. Naylor. Harper and Row, New York, 1968. xvi + 640 pp., illus. \$9.95. Revised edition of *Industrial Psychology and Its Social Foundations*, ed. 2.

Insects and Physiology. Essays presented to Sir Vincent Wigglesworth on his retirement from the Quick Chair of Biology and Directorship of the Unit of Insect Physiology in the University of Cambridge. J. W. L. Beament and J. E. Treherne, Eds. Elsevier, New York, 1968. viii + 378 pp., illus. \$25.

The Inspiration of Science. Sir George Thomson. Anchor Books (Doubleday), Garden City, N.Y., 1968. x + 184 pp., illus. Paper, \$1.25. Reprint of the 1961 edition.

Interpretation of Lunar Probe Data. Proceedings of an AAS Specialist Sym-

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The Interpretation of Psychological Tests. Joel Allison, Sidney J. Blatt, and Carl N. Zimet. Harper and Row, New York, 1968. x + 342 pp., illus. \$8.75.

Introduction to College Mathematics. Vincent H. Haag and Donald W. Western. Holt, Rinehart and Winston, New York, 1968. xii + 676 pp., illus. \$9.95.

Introduction to Fluid Mechanics. Jerzy A. Owczarek. International Textbook Co., Scranton, Pa., 1968. xviii + 516 pp., illus. \$10.95.

Introduction to Theoretical Organic Chemistry. Arno Liberles. Macmillan, New York; Collier-Macmillan, London, 1968. xiv + 722 pp., illus. \$14.50.

Instrument Maintenance Management. Vol. 3. Proceedings of the 3rd National Instrument Society of America Instrumentation Maintenance Management Symposium, Newark, N.J., April 1968. Wilton E. Williams, Ed. Plenum, New York, 1968. viii + 95 pp., illus. \$8.50. ISA Publication.

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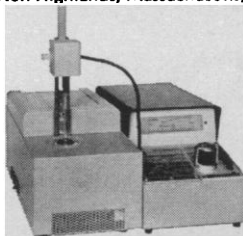
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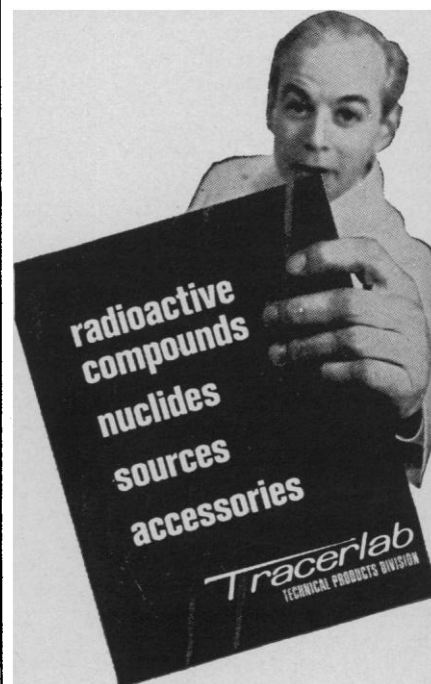
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