

## Kodak reports to laboratories on:

a pair of replacements for the orchard grass around the old apple tree... outdoing ourselves on film speed... when your movies don't fit the screen

### Chicken economics

When the ratio of pounds of feed to pounds of marketable chicken is carried to two decimal places (as the ag schools do in teaching that new folkway, cost accounting), little room is left in the feed bag for certain protective substances that the chickens' free-running ancestors used to get from the orchard grass around the old apple tree. Such things the chemical industry now provides. Poets of pastoral bent may rankle, but certainly not the people who make the machines that cut the gears that go into the automatic transmissions that drive the station wagons that successful farmers now buy. And chicken sandwiches taste better than ever.

As part of the chemical industry, we not only make real vitamin E for feed manufacturers in a form more than 200 times as concentrated as found in dried orchard grass, but now we have launched *Tenox BHT, Agricultural Grade*, to preserve and extend whatever vitamin A and vitamin E are already present in natural feed materials. This butylated hydroxytoluene has emerged victorious as a chemical anti-oxidant of unassailable safety even in human food. Now it is for the feedmen, the poultry growers, and their academic advisors to decide merely how much protection from what business risks is worth how much cash outlay.

Myvamin Vitamin E Feed Supplement, commercial data about it, and a spate of scientific literature are obtainable from Distillation Products Industries, Rochester 3, N. Y. (Division of Eastman Kodak Company). *Tenox BHT, Agricultural Grade*, in the form of free-flowing, non-dusting granules of a particle size to assure rapid, permanent blending is now on sale by Eastman Chemical Products, Inc., Kingsport, Tenn. (Subsidiary of Eastman Kodak Company).

### S. O. 1177

We have outdone ourselves. We have made a sheet film that is approximately four times as fast as *Kodak Royal Pan Film* when both films are forced equally in the developer. Photography has scarcely had time in two years to adjust itself

to the broader potentialities opened to it by *Royal Pan* and its roll film counterpart, *Kodak Tri-X Film*. These films had confounded 20 years of common photographic knowledge about the limits of fast film with respect to exposure time, lighting requirements, and the lens aperture requirements that determine depth of field. Now new and stronger superlatives must be found. Four times as fast as *Royal Pan*!

The new film does not have an official name yet. It is temporarily designated *Kodak Sheet Film S.O. 1177*, the "S.O." standing for the special order which your dealer places for two- to three-week delivery. Limited quantities only are being manufactured so that improvements and modifications, if any, can be effected quickly. News photographers who have tried this film out for us have reported back exposure index figures that some of our people regard as impossibly high by an order of magnitude. So we guess until there is an official determination we had better not mention a figure.

The exposure index is the parameter representing the film in the function that connects light level to the shutter and diaphragm setting on the camera. Well-meaning zealots have taken to quoting index figures as a measure of triumph over luminous insufficiency, forgetting that the index was devised as a guide to an arbitrary ideal, not a record of what you have gotten away with under certain conditions.

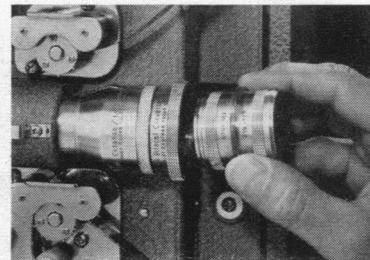
Still, what do you think of this shot made on *S.O. 1177* at 1/25 second, *f*/5.6 by the light of nothing more than the ordinary cigarette lighter with which wives light their husbands' cigarettes?



### Want your focal length changed?

You are to show movies. You bring the projector in and set it up in the logical place. Screen's all set. You thread the film. The projector lamp goes on. As you bring the lens to focus, you are confronted with one of the following three situations: 1) the rectangle of light neatly fits the screen, and the screen is big enough for all to see comfortably; 2) the picture is too small, and the room isn't long enough to get it any bigger; 3) the picture is too big for the screen, and it is inconvenient to move the projector any closer.

All this was before the era of the *Cine-Kodak Bifocal Converter*, which



commenced several months ago. This small cylinder is a telescope of 1.25 $\times$  power. It slips over the *Kodak Projection Ektanon Lens*, 2-inch *f*/1.6, that is standard on all 16mm projectors we make. Put on one way, it can expand the projected picture from about 6½ square feet to 10½ square feet for a 16-foot throw. Turned the other way for a large room, it can keep the picture within an 8-foot width when the projector is 10 feet farther from the screen than without the converter.

*The proposition is appealing in its simplicity. For \$26.50, a dollar less than the price of a single Ektanon lens, your Kodak dealer is in effect selling you two supplementary focal lengths. And the optical performance is good at all three focal lengths, because the designers of the converter knew exactly what projection lens it was to go on.*

*Price quoted is subject to change without notice.*

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S. Langfeld attended from the United States. The next meeting of the section will be held at Brussels, 26-27 July 1957, immediately preceding the sessions of the 14th International Congress of Psychology.

■ Scientists and others with experience in fields associated with the various aspects of aging will meet at the fourth International Gerontological Congress in Merano, Italy, on 14 July 1957. Laymen are also invited to attend this meeting.

All abstracts must be submitted to the North American Committee of Cooperation for review before acceptance. The chairman of this committee is E. V. Cowdry, Washington University School of Medicine, 660 South Kingshighway, St. Louis, Mo. This procedure for handling abstracts has been suggested by

Enrico Greppi, president of the congress, in order to have an excellent selection of presentations at each session.

Convoys Travel Agency (1133 Broadway, New York 10, N.Y.), which acted as the official travel agent for the third International Gerontological Congress in London in 1954, has been appointed the official travel agent for this congress and will also handle the registration. Convoys holds several blocks of travel accommodations, and diversified tours are being arranged for those wishing to go to the meeting with a group of their co-workers. Owing to extremely heavy travel during the summer months, early request for travel reservations is suggested.

■ The International Union of Crystallography has accepted the invitation of the National Research Council of Canada to hold its fourth general as-

sembly and international congress in Montreal, Canada, from 10-17 July 1957; it will be followed by two symposia on 18 and 19 July. At the congress papers will be presented on all aspects of crystallographic research; the subjects of the symposia will be "Physical techniques of crystallographic interest" and "Electron diffraction."

The Canadian National Committee on Crystallography is acting as the local committee of the congress and has prepared a brochure giving details of the technical program and describing accommodations. Copies of this have been forwarded to the secretaries of the national committees of the member countries of the union. In this country, copies may be obtained from the chairman of the program committee, Dr. W. N. Lipscomb, School of Chemistry, University of Minnesota, Minneapolis, Minn., or from the secretary of the U.S.A. National Committee on Crystallography, G. A. Jeffrey, Chemistry Department, University of Pittsburgh, Pittsburgh 13, Pa.

## Forthcoming Events

### December

26-31. American Assoc. for the Advancement of Science, annual, New York, N.Y. (R. L. Taylor, AAAS, 1515 Massachusetts Ave., NW, Washington 5.)

The following 56 meetings are being held in conjunction with the AAAS annual meeting.

AAAS Academy Conference (L. Taylor, West Virginia Univ., Morgantown). 29-30 Dec.

AAAS Cooperative Committee on the Teaching of Science and Mathematics (M. Meister, Bronx High School of Science, New York 68). 27 Dec.

AAAS-Gordon Research Conferences (W. G. Parks, Univ. of Rhode Island, Kingston). 27 Dec.

Alpha Chi Sigma (H. G. Seavey, 30 Church St., Room 340, New York 7). 28 Dec.

Alpha Epsilon Delta (M. L. Moore, 7 Brookside Circle, Bronxville, N.Y.). 29 Dec.

American Assoc. of Clinical Chemists (A. E. Sobel, Jewish Hospital of Brooklyn, Brooklyn 16, N.Y.).

American Assoc. of Hospital Consultants (E. D. Barnett, School of Public Health, Columbia Univ., New York 32.)

American Assoc. of Scientific Workers (R. J. Rutman, 6331 Ross St., Philadelphia 44, Pa.). 29 Dec.

American Astronomical Soc. (J. A. Hynek, Harvard College Observatory, Cambridge 38, Mass.). 26-29 Dec.

American Documentation Inst. (J. Hilsenrath, National Bureau of Standards, Washington 25). 27-29 Dec.

American Educational Research Assoc. (A. G. Wesman, Psychological Corp., 522 Fifth Ave., New York 36). 29 Dec.

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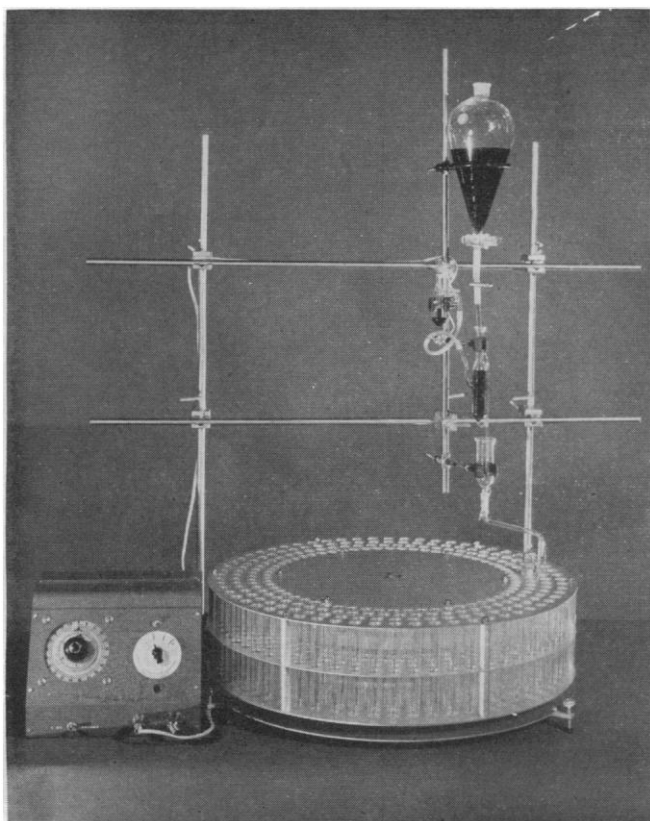


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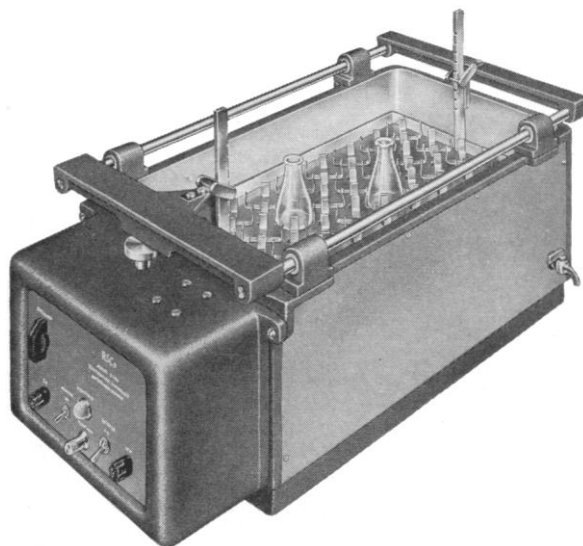
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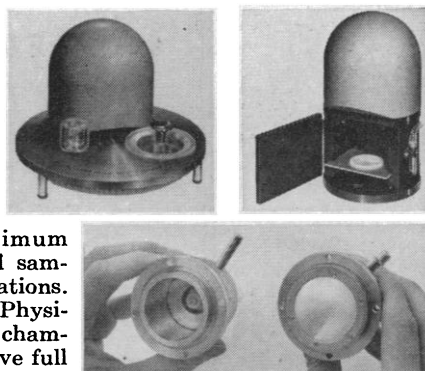
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American Meteorological Soc. (R. J. Roth, Crop-Hail Insurance Actuarial Assoc., 209 W. Jackson Blvd., Chicago, Ill.). 28 Dec.

American Museum of Natural History (G. Reekie, AMNH, Central Park West at 79 St., New York, N.Y.). 26 Dec.

American Nature Study Soc. (R. L. Weaver, Univ. of Michigan, Ann Arbor). 26-30 Dec.

American Philosophical Assoc., Eastern Div. (J. Wild, Harvard Univ., Cambridge 38, Mass.). 27 Dec.

American Psychiatric Assoc. (B. Pashmanick, Ohio State Univ., Columbus 10). 28-29 Dec.

American Soc. of Hospital Pharmacists (G. E. Archambault, U.S. Public Health Service, Washington 25). 29 Dec.

American Soc. of Range Management (F. G. Renner, Soil Conservation Service, U.S. Dept. of Agriculture, Washington 25). 28 Dec.

American Statistical Assoc. (R. E. Johnson, Western Electric Co., New York 7).

Association for Computing Machinery (J. P. Nash, Univ. of Illinois, Urbana).

Association of American Geographers (P. M. Stern, Conservation Foundation, 30 E. 40 St., New York, N.Y.).

Astronomical League (H. B. Davidson, 812 Park Ave., New York 21).

Conference on Scientific Editorial Problems (J. G. Adashko, Ford Instrument Co., Long Island City, N.Y.). 26-28 Dec.

Conference on Scientific Manpower (T. J. Mills, National Science Foundation, Washington 25). 26 Dec.

Ecological Soc. of America (M. F. Buell, Rutgers Univ., New Brunswick, N.J.). 26-30 Dec.

Entomological Soc. of America (P. W. Oman, Plant Industry Sta., Beltsville, Md.). 27-30 Dec.

Genetics Soc. of America (A. W. Pollister, Columbia Univ., New York 27). 28 Dec.

History of Science Soc. (Miss P. Kibre, Hunter College, New York, N.Y.). 27-29 Dec.

Honor Soc. of Phi Kappa Phi (L. R. Guild, 634 So. Western Ave., Los Angeles 5, Calif.). 28-29 Dec.

Institute of Mathematical Statistics (Miss E. Scott, Univ. of California, Berkeley 4).

International Council for Exceptional Children (M. H. Fouracre, Columbia Univ., New York 27). 26 Dec.

International Union for the Study of Social Insects, North American Section (T. C. Schneirla, American Museum of Natural History, Central Park West at 79 St., New York, N.Y.). 26-27 Dec.

Mountain Lake Biological Sta. (B. D. Reynolds, Univ. of Virginia, Charlottesville).

Mycological Soc. of America (L. S. Olive, Columbia Univ., New York 27). 26 Dec.

National Acad. of Economics and Political Science (D. P. Ray, George Washington Univ., Washington, D.C.). 27 Dec.

National Assoc. for Gifted Children (Miss A. F. Isaacs, 409 Clinton Spring Ave., Cincinnati, Ohio).

National Assoc. for Research in Science Teaching (N. Washton, Queens College Flushing 67, L.I., N.Y.). 27 Dec.

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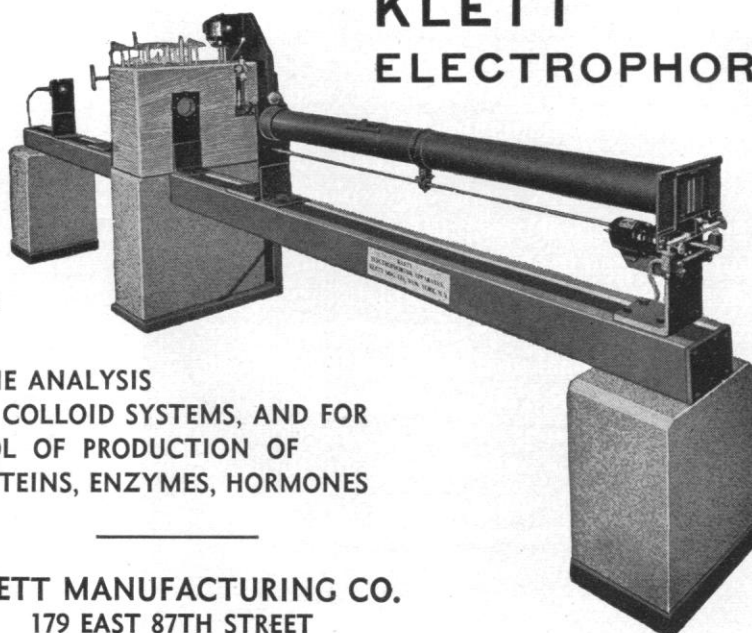
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National Assoc. of Biology Teachers (J. Breukelman, State Teachers College, Emporia, Kan.). 26-30 Dec.

National Assoc. of Science Writers (J. E. Pfeiffer, New Hope, Pa.).

National Geographic Soc. (W. R. Gray, NGS, 16 and M Sts., NW, Washington 6). 29 Dec.

National Speleological Soc. (Brother G. Nicholas, LaSalle High School, Cumberland, Md.). 29 Dec.

New York Acad. of Sciences (R. F. Nigrelli, New York Zoological Soc. and M. Kopac, New York Univ., Washington Sq., New York, N.Y.). 29 Dec.

Philosophy of Science Assoc. (C. W. Churchman, Case Inst. of Technology, Cleveland, Ohio). 29-30 Dec.

Pi Gamma Mu (B. H. Williams, Industrial College of the Armed Forces, Washington 25). 26 Dec.

Scientific Research Soc. of America (D. B. Prentice, Yale Univ., New Haven, Conn.). 26-27 Dec.

Sigma Delta Epsilon (C. Chandler, Boyce Thompson Inst. for Plant Research, 1086 N. Broadway, Yonkers 3, N.Y.).

Sigma Pi Sigma (M. W. White, Pennsylvania State Univ., University Park).

Society for the Advancement of Criminology (D. E. J. MacNamara, New York Inst. of Criminology, 2109 Broadway, New York, N.Y.). 29 Dec.

Society for the Advancement of General Systems Theory (L. von Bertalanffy, Mt. Sinai Hospital, Los Angeles 48, Calif.). 29-30 Dec.

Society for the Study of Evolution (H. Lewis, Univ. of California, Los Angeles 24). 27-29 Dec.

Society of General Physiologists (A. Shanes, National Institutes of Health, Bethesda, Md.).

Society of Systematic Zoology (R. E. Blackwelder, Box 500, Victor, N.Y.). 27-30 Dec.

Society of the Sigma Xi (T. T. Holme, Yale Univ., New Haven, Conn.). 27 Dec.

Society of Vertebrate Paleontology, annual (J. T. Gregory, Peabody Museum of Natural History, Yale Univ., New Haven, Conn.). 28-30 Dec.

Torrey Botanical Club (David Keck, New York Botanical Garden, Bronx Park, New York 58). 26-27 Dec.

United Chapters of Phi Beta Kappa (C. Billman, PBK, 1811 Q St., NW, Washington 6). 27 Dec.

27-28. Fluid Mechanics in Chemical Engineering, American Chemical Soc., Lafayette, Ind. (W. E. Ranz, Dept. of Engineering Research, Pennsylvania State Univ., University Park.)

27-28. Linguistic Soc. of America, Philadelphia, Pa. (A. A. Hill, Box 7790, University Sta., Austin 12, Tex.)

27-29. American Mathematical Soc., 63rd annual, Rochester, N.Y. (J. H. Curtiss, AMS, 80 Waterman St., Providence 6, R.I.)

27-29. American Physical Soc., Monterey, Calif. (W. A. Nierenberg, Univ. of California, Berkeley 4.)

27-29. Western Soc. of Naturalists, annual, Goleta, Calif. (D. Davenport, Santa Barbara College, Goleta.)

27-30. American Economic Assoc., annual, Cleveland, Ohio. (J. W. Bell, 629 Noyes St., Evanston, Ill.)

27-30. American Finance Assoc., annual, Cleveland, Ohio. (G. E. Hassett, Jr., New York Univ., 90 Trinity Place, New York 6.)

28. Society for the Advancement of Criminology, annual western, Fresno, Calif. (W. Dienstein, Fresno State College, Fresno.)

28-29. American Folk-Lore Soc., annual, Santa Monica, Calif. (MacE. Leach, Bennett Hall, Univ. of Pennsylvania, Philadelphia 4.)

28-30. American Anthropological Assoc., annual, Santa Monica, Calif. (W. S. Godfrey, Jr., Logan Museum, Beloit College, Beloit, Wis.)

28-30. American Historical Assoc., annual, St. Louis, Mo. (AHA, Study Room 274, Library of Congress, Washington 25.)

28-30. Archaeological Inst. of America, annual, Philadelphia, Pa. (C. Boulter, Library, Univ. of Cincinnati, Cincinnati 21, Ohio.)

28-30. Industrial Relations Research Assoc., Cleveland, Ohio. (E. Young, Sterling Hall, Univ. of Wisconsin, Madison 6.)

29. Mathematical Assoc. of America, 40th annual, Rochester, N.Y. (H. M. Gehman, Univ. of Buffalo, Buffalo 14, N.Y.)

29-30. American Chemical Soc., Div. of Industrial and Engineering Chemistry, Princeton, N.J. (A. H. Emery, ACS, 1155 16 St., NW, Washington 6, D.C.)

#### January

7-11. International Social Science Council, 3rd gen'l. assembly, Paris, France. (Secretary Gen'l., ISSC, 19, avenue Kleber, Paris 16.)

10. Technical and Clinical Applications of Radioisotopes, Assoc. of Vitamin Chemists, Chicago, Ill. (M. Freed, Dawe's Laboratories, Inc., 4800 S. Richmond St., Chicago 32.)

10-12. American Group Psychotherapy Assoc., 14th annual, New York, N.Y. (C. Beukenkamp, Jr., AGPA, Room 300, 345 E. 46 St., New York 17.)

14-16. Cottonseed Processing as Related to the Nutritive Value of the Meal, 4th conf., New Orleans, La. (Southern Regional Research Lab., USDA, 1100 Robert E. Lee Blvd., New Orleans 19.)

14-16. Reliability and Quality Control in Electronics, 3rd natl. symp., Washington, D.C. (C. M. Ryerson, Radio Corp. of America, Bldg. 10-6, Camden 2, N.J.)

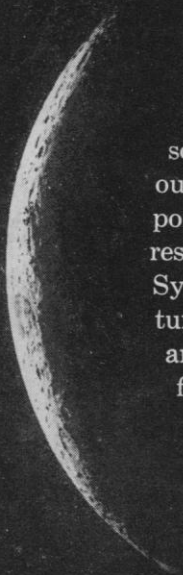
14-18. Society of Automotive Engineers, annual, Detroit, Mich. (Meetings Div., SAE, 29 W. 39 St., New York 18.)

14-20. Indian Science Cong. Assoc., 44th meeting, Calcutta, India. (General Secretary, ISCA, 1 Park St., Calcutta 16.)

15. Society for Applied Spectroscopy, Philadelphia, Pa. (F. M. Biffen, Johns-Manville Research Center, Manville, N.J.)

16-23. Australian and New Zealand Assoc. for the Advancement of Science, 32nd meeting, Dunedin, N.Z. (J. R. A. McMillan, ANZAAS, Science House, 157 Gloucester St., Sydney, N.S.W., Australia.)

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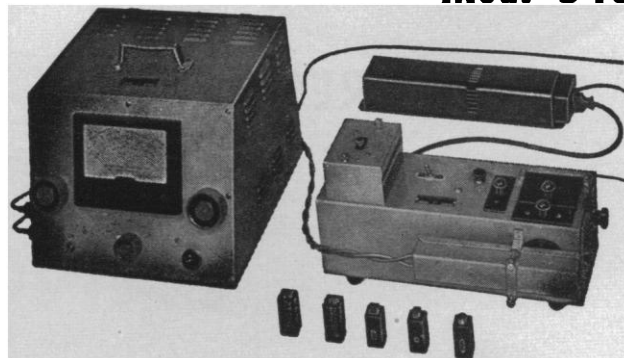
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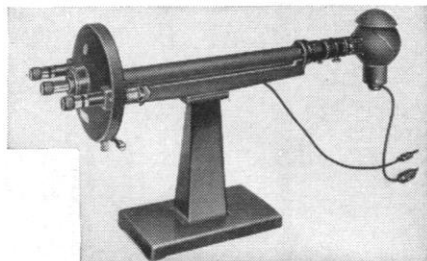
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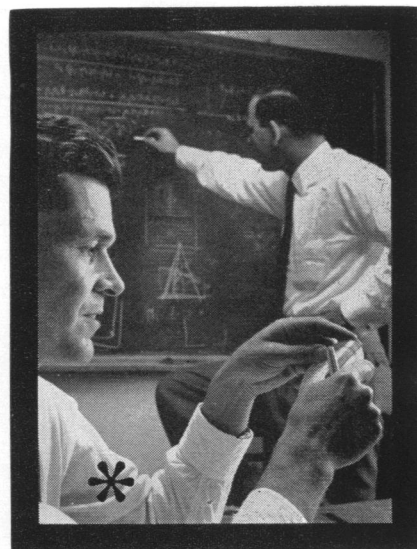
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17. Constructive Medicine in Aging: Cardiovascular Disorders in the Aged, symp., Cincinnati, Ohio. (J. B. Chewning, Wm. S. Merrell Co., Cincinnati 15.)

17-18. Engineers Joint Council, New York, N.Y. (EJC, 29 W. 39 St., New York 18.)

18-19. Symposium on Blood, 6th annual, Detroit, Mich. (W. H. Seegers, Wayne State Univ. Coll. of Medicine, Detroit 7.)

21-22. Solar Furnace Design and Operation, Phoenix, Ariz. (J. I. Yellott, Assoc. for Applied Solar Energy, 3424 N. Central Ave., Phoenix.)

21-25. American Inst. of Electrical Engineers, winter general, New York, N.Y. (N. S. Hibshman, AIEE, 39 W. 39 St., New York 18.)

23-25. Very Low Frequency Electromagnetic Waves, symp., Boulder, Colo. (J. R. Wait, National Bureau of Standards, Boulder.)

24-25. Western Spectroscopy Assoc., 4th annual, Los Angeles, Calif. (S. S. Ballard, Scripps Inst. of Oceanography, San Diego 52, Calif.)

25-26. Protein Metabolism, 13th annual conf., New Brunswick, N.J. (W. H. Cole, Rutgers Univ., New Brunswick, N.J.)

28-29. Many Body Problem, symp., Hoboken, N.J. (G. J. Yevick, Dept. of Physics, Stevens Inst. of Technology, Hoboken.)

28-31. American Meteorological Soc., New York, N.Y. (K. C. Spengler, AMS, 3 Joy St., Boston 8, Mass.)

28-31. Modern Methods of Analytical Chemistry, 10th annual symp., Baton Rouge, La. (P. W. West, Louisiana State University, Baton Rouge.)

30-1. American Assoc. of Physics Teachers, New York, N.Y. (F. Verbrugge, Carleton College, Northfield, Minn.)

30-2. American Physical Soc., annual, New York, N.Y. (K. K. Darrow, APS, Columbia Univ., New York 27.)

30-31. College-Industry Conf., 9th annual, American Soc. for Engineering Education, Los Angeles, Calif. (Univ. of California Extension, Engineering, Los Angeles 24.)

31-2. Western Soc. for Clinical Research, 10th annual, Carmel-by-the-Sea, Calif. (A. J. Seaman, WSCR, Univ. of Oregon Medical School, Portland 1.)

## February

4-8. American Soc. for Testing Materials, Philadelphia, Pa. (R. J. Painter, ASTM, 1916 Race St., Philadelphia 3.)

10-12. Canadian Ceramic Soc., 55th annual, Niagara Falls, Ont., Canada. (L. C. Keith, 49 Turner Road, Toronto, Ont.)

14. Present Status of Heart Sound Production and Recording, symp., Buffalo, N.Y. (R. M. Kohn, Univ. of Buffalo, 2183 Main Street, Buffalo 14, N.Y.)

14. Significance of Nucleic Acid Derivatives in Nutrition, Assoc. of Vitamin Chemists, Chicago, Ill. (M. Freed, Dawe's Laboratories, Inc., 4800 S. Richmond St., Chicago 32.)

(See issue of 16 November for comprehensive list)

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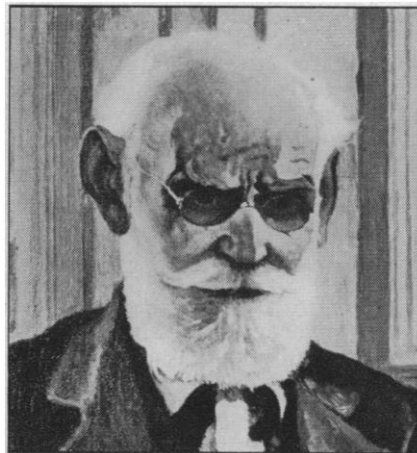
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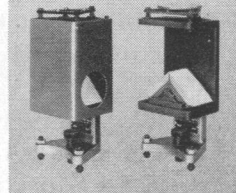
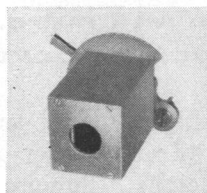
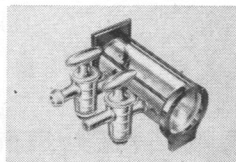
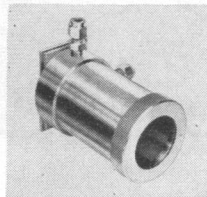
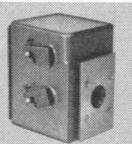
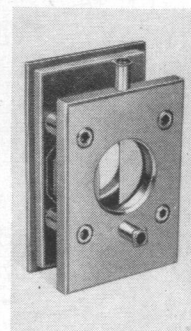
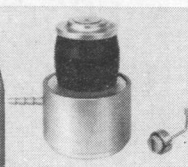
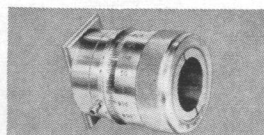
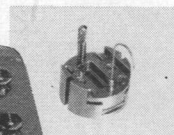
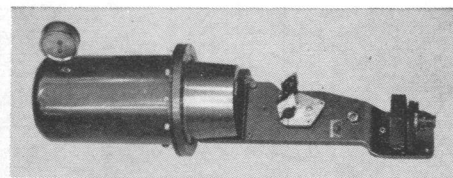
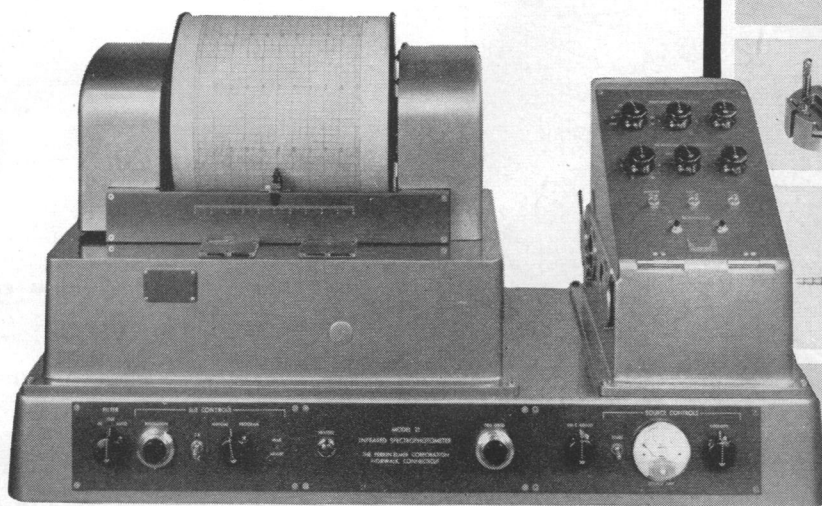
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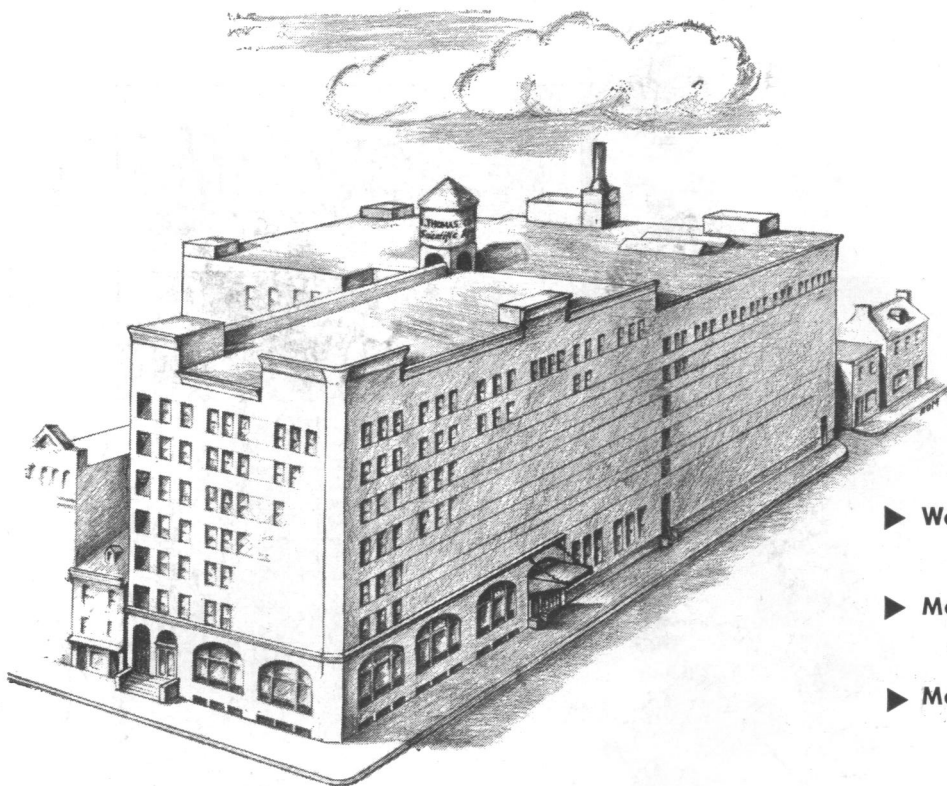
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