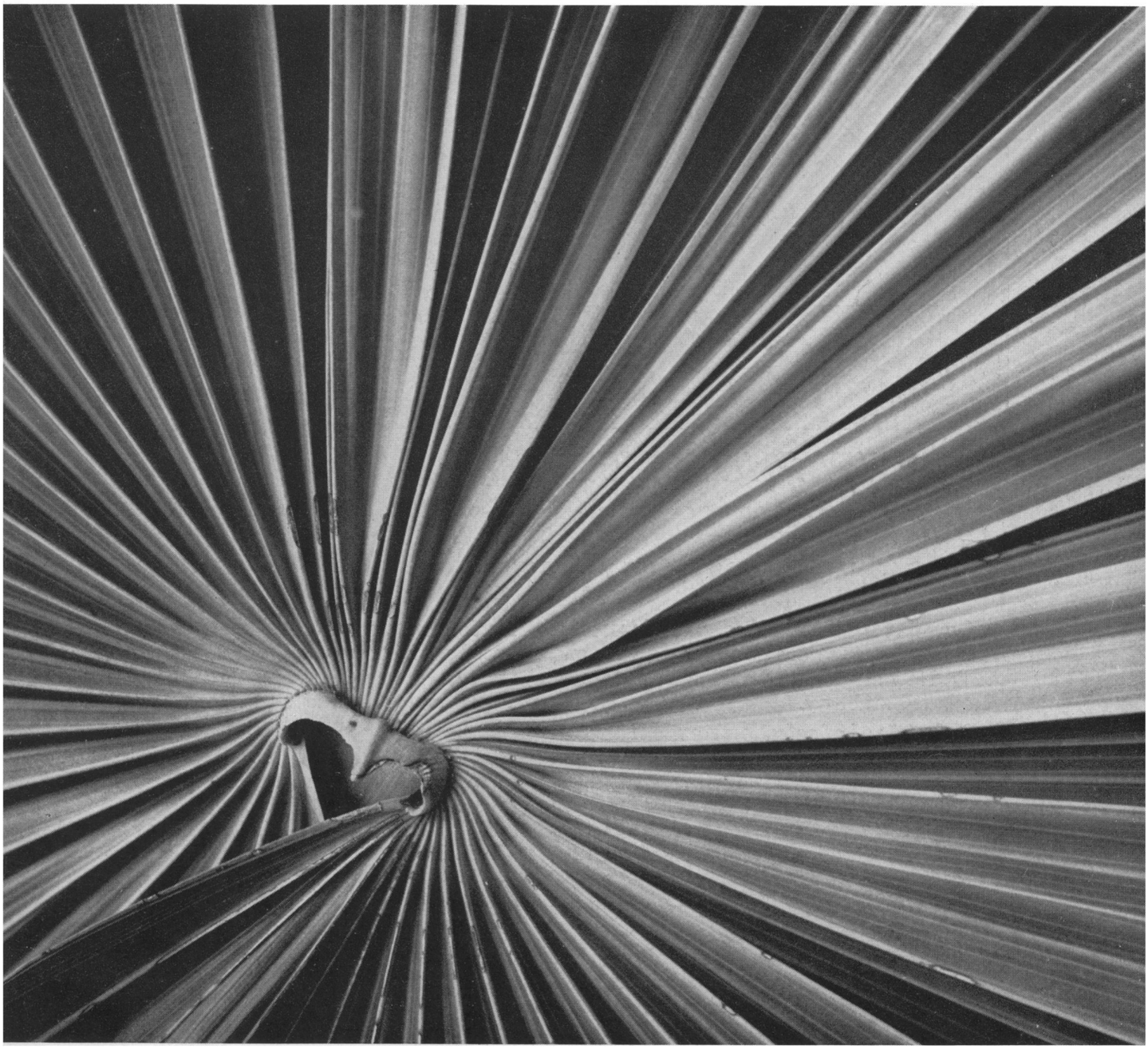
SCIENCE

3 February 1961

Vol. 133, No. 3449

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE



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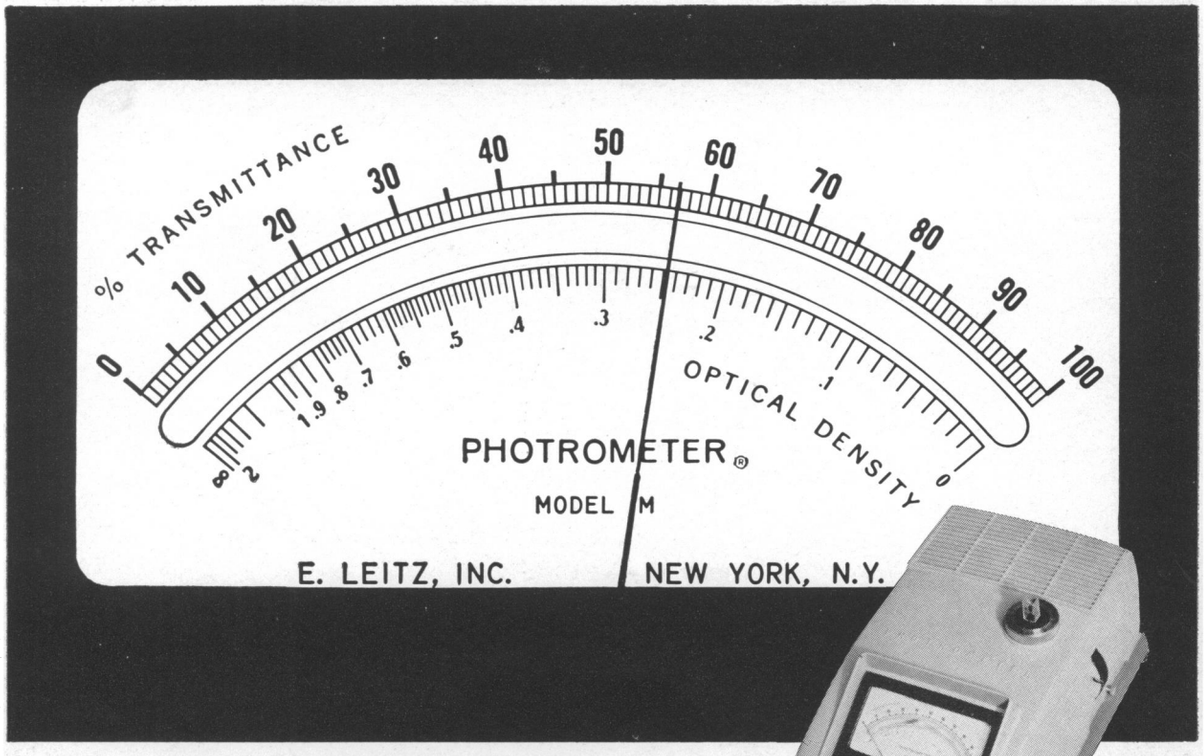

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*American Journal of Clinical Pathology Vol. 33. No. 2. February 1960, pp 144-151 "Application of Refrigerated Microtome in Surgical Pathology" by Bernard Klionsky, M.D. and Othello D. Smith, M.D.

The Journal of Histochemistry and Cytochemistry Vol. 8, No. 5. September, 1960, pp 310 "A Frozen Section Freeze Substitutions Technique and an Improved Cryostat" by Jeffrey P. Chang and Samuel H. Hori.

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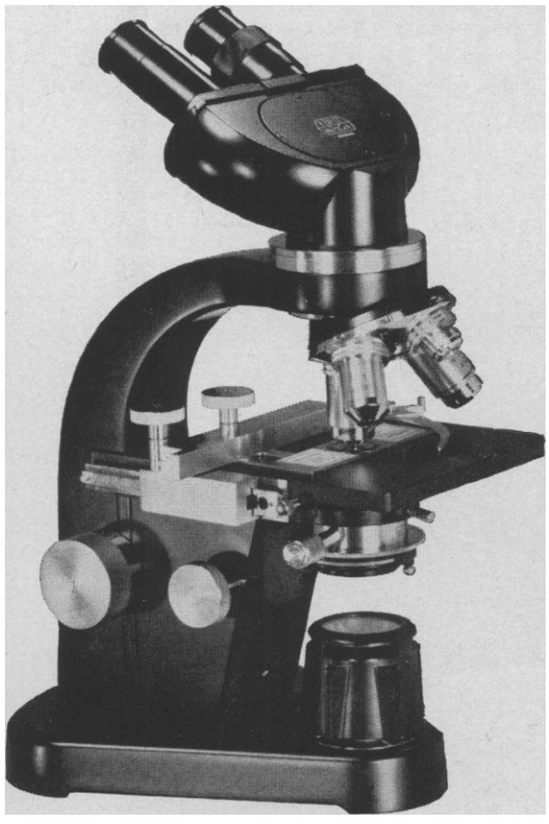

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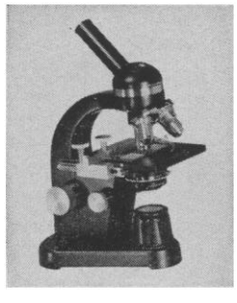

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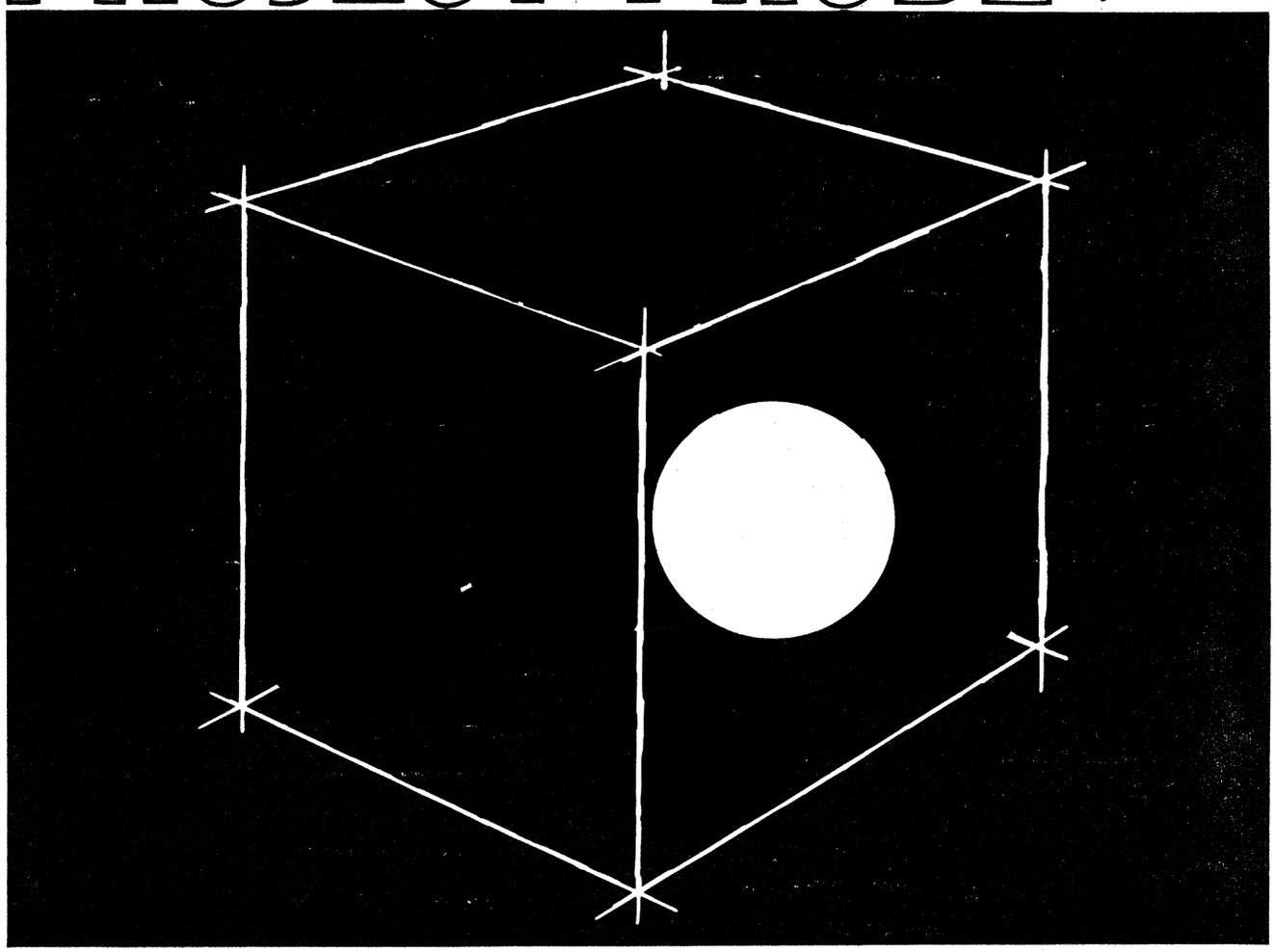

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SCIENCE, now combined with THE SCIENTIFIC MONTHLY, is published each Friday by the American Association for the Advancement of Science at National Publishing Company, Washington, D.C. SCIENCE is indexed in the *Reader's Guide to Periodical Literature*.

Editorial correspondence should be addressed to SCIENCE, 1515 Massachusetts Ave., NW, Washington 5, D.C. Manuscripts should be typed with double spacing and submitted in duplicate. The AAAS assumes no responsibility for the safety of manuscripts or for the opinions expressed by contributors. For detailed suggestions on the preparation of manuscripts, see *Science* **125**, 16 (4 Jan. 1957).

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Irony Compounded

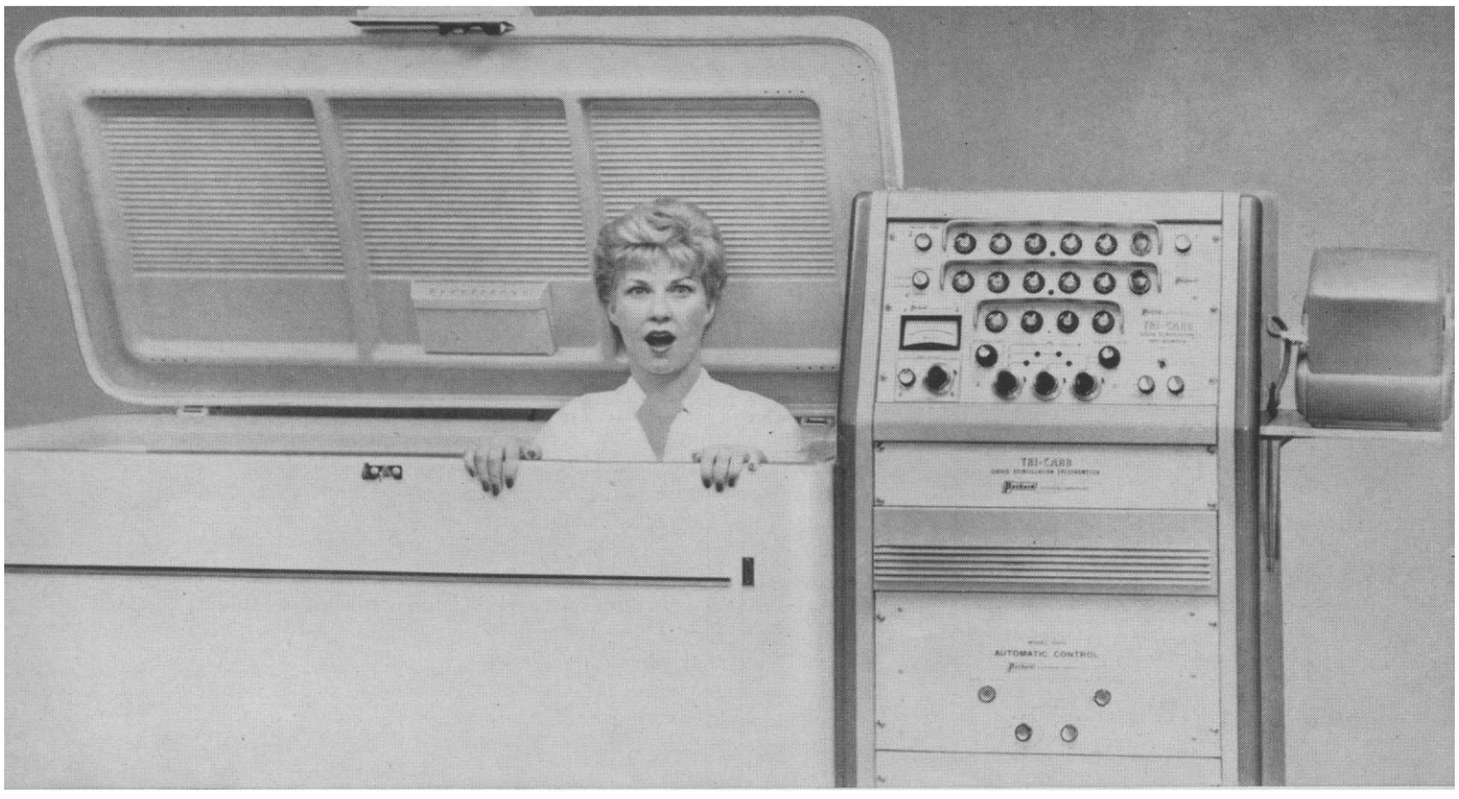
There is irony in the circumstance that the present overhauling of American education is being led in good part by the sciences, for one of the thinkers whose work helped produce the view of education under attack, John Dewey, was himself much influenced by science, and this influence is reflected in his educational doctrines. To simplify a complex matter, the change sought is from a learner-centered curriculum, favored by many professional educators, toward a subject-centered curriculum, favored by lay critics of education. In the effort at overhaul, Dewey has sometimes been taken as the symbol of what is wrong with education, but at least some of the readers of his views on science would find this symbol poorly chosen.

Dewey was one of the most prolific of writers, but certain key ideas run through much of what he wrote. He saw science as *the* method of finding things out. In his interpretation of science, he was at pains to elaborate the view that scientific inquiry does not begin with the gathering of data. Rather it begins with a problem, a conflict, a difficulty. The problem suggests a possible solution, or hypothesis, and it is this hypothesis that guides the gathering of data. The data then serve to prove or disprove the hypothesis, and to solve or leave unresolved the problem. Such, very briefly, was Dewey's vision of science, a vision reflected in his educational doctrines. He was opposed to authoritarianism and believed in inculcating an experimental attitude in students. Emphasis in education was to be on method, on solving problems.

At the same time, Dewey's interpretation of science has been the subject of some criticism by scientifically oriented thinkers. Another theme running through much of his work, motivated perhaps by his great concern with social and moral matters, is his attack on "dualisms," such as the one he saw existing between theory and practice, between intelligence and conduct. This attack, so the criticism runs, has resulted in a view of science in which scientific problems arise too immediately out of practical problems, and in which the solution to scientific problems is tied too closely to the solution of practical problems. According to the critics, not all distinctions are "dualisms," and the truth of the matter is that scientific activity is related to a much wider universe than the one we meet in daily life. Astronomy is a bigger subject than navigation.

This misinterpretation of science introduces a second note of irony in the bearing of Dewey's thought on present educational tendencies. If we are to be guided in education by the values of science, and if science does make reference to this wider universe, then, so the criticism concludes, education must find a place for disinterested curiosity and understanding. Education should foster a love of subject matter for its own sake. True, the occurrence of a storm can be used in the classroom to initiate a discussion of climatic conditions in the United States, but pedagogy so conceived has its limits.

Two wrongs, of course, do not make a right, nor does irony compounded cancel itself out. A moral is suggested, however. If some of the partisans of a subject-centered curriculum too readily take Dewey as the philosopher of all they oppose, then some of our professional educators are equally hasty when they make Dewey into a philosopher who is above reproach.—J.T.



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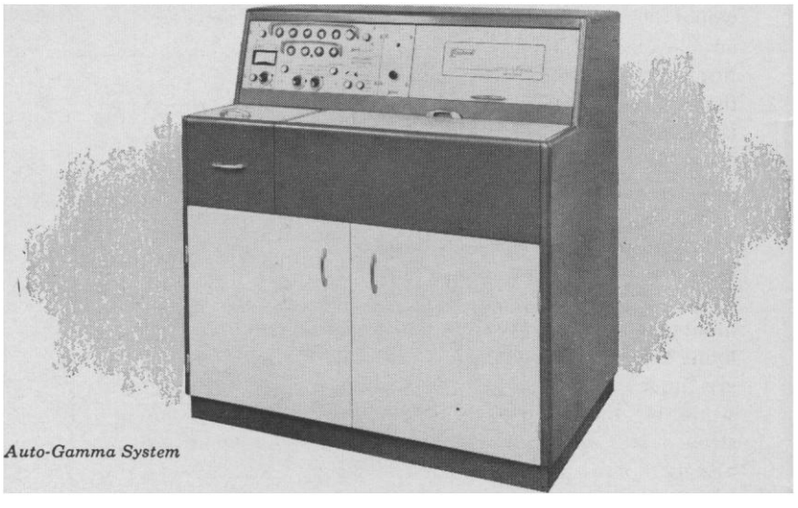

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Meetings

Forthcoming Events

February

26–1. American Inst. of Chemical Engineers, natl., New Orleans, La. (F. J. Van Antwerpen, AICHE, 25 W. 45 St., New York 36)

26–2. American Inst. of Mining, Metallurgical, and Petroleum Engineers, annual, St. Louis, Mo. (AIME, 29 W. 39 St., New York 18)

27–3. Conference on Analytical Chemistry and Applied Spectroscopy, 12th, Pittsburgh, Pa. (L. P. Melnich, U.S. Steel Corp., Monroeville, Pa.)

March

1–3. Chemistry Symp., intern. (by invitation), Stanford, Calif. (B. Lamar, Stanford Univ. News Service, Stanford, Calif.)

2–4. Optical Soc. of America, spring meeting, Pittsburgh, Pa. (Miss M. Warga, 1155 16th St., NW, Washington 6, D.C.)

2–5. National Wildlife Federation, 25th annual, Washington, D.C. (Natl. Wildlife Federation, 1412 16th St., NW, Washington 6)

5–9. Gas Turbine Conf. and Products Show, 6th annual, Washington, D.C. (Meetings Dept., American Soc. of Mechanical Engineers, 29 W. 39 St., New York 18)

6–8. North American Wildlife and Natural Resources Conf., 26th, Washington, D.C. (C. R. Gutermuth, Wildlife Management Inst., 709 Wire Bldg., Washington 5)

7–9. American Railway Engineering Assoc., annual, Chicago, Ill. (N. D. Howard, 59 E. Van Buren St., Chicago 5)

8–10. Instrument Soc. of America Conf., 11th annual, Pittsburgh, Pa. (R. R. Webster, 900 Agnew Ave., Pittsburgh 30)

8–11. Neurosurgical Soc. of America, Boca Raton, Fla. (R. K. Thompson, 803 Cathedral St., Baltimore 1, Md.)

9–10. Magnetohydrodynamics, symp. on engineering aspects of, Philadelphia, Pa. (N. W. Mather, Project Matterhorn, P.O. Box 451, Princeton, N.J.)

12–17. American College of Allergists, annual, Dallas, Tex. (P. Gottlieb, 818 Medical Arts Bldg., Philadelphia, Pa.)

13–17. National Assoc. of Corrosion Engineers, annual, Buffalo, N.Y. (W. A. Mapler, 18263 W. McNichols Rd., Detroit 19, Mich.)

13–24. Radiological Health, course in, Cincinnati, Ohio. (Chief, Training Program, Sanitary Engineering Center, 4676 Columbia Parkway, Cincinnati 26)

14–16. Clinico-Pathological Significance of Renal Biopsy, Ciba Foundation symp. (by invitation only), London, England. (Ciba Foundation, 41 Portland Place, London, W.1)

14–16. Inter-Station Supersonic Track Conf., 6th symp., China Lake, Calif. (U.S. Naval Ordnance Test Station, Code 307, China Lake, Calif.)

15–17. Medical Photography and Cinematography, intern. cong., Cologne, Germany. (Deutsche Ges. für Photographie, Neumarkt 49, Cologne)