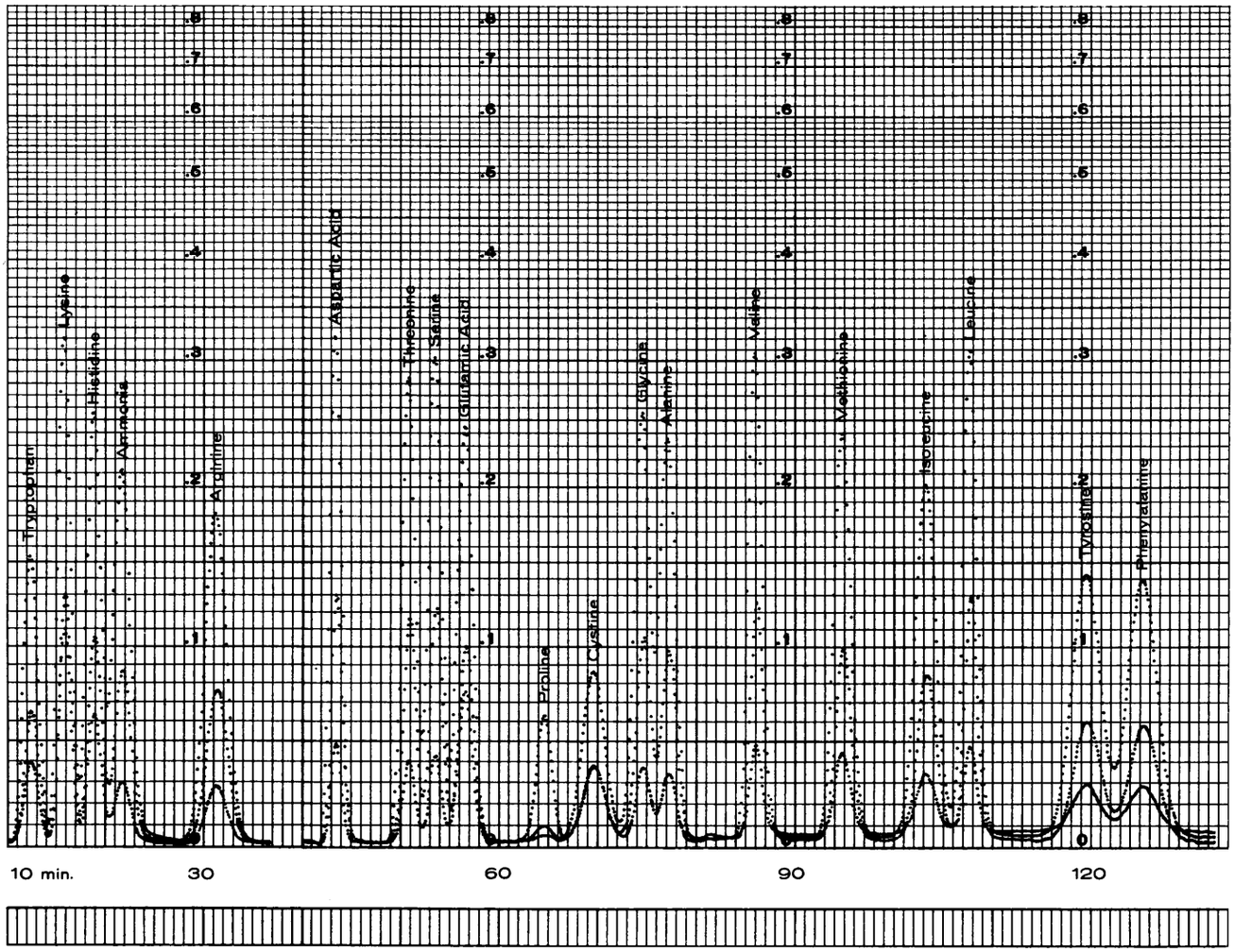
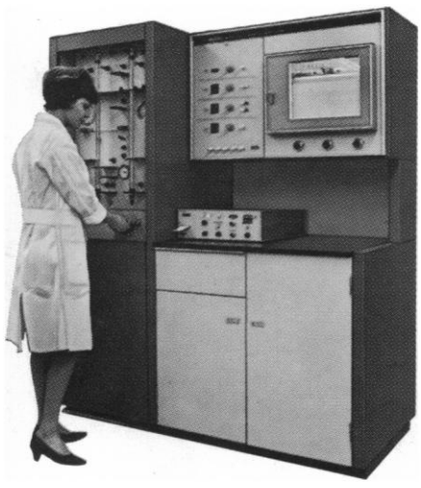
SCIENCE

22 July 1966

Vol. 153, No. 3734

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE





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It is precise, needed only 0.075 micromole of sample, and was completed in just over 2 hours.

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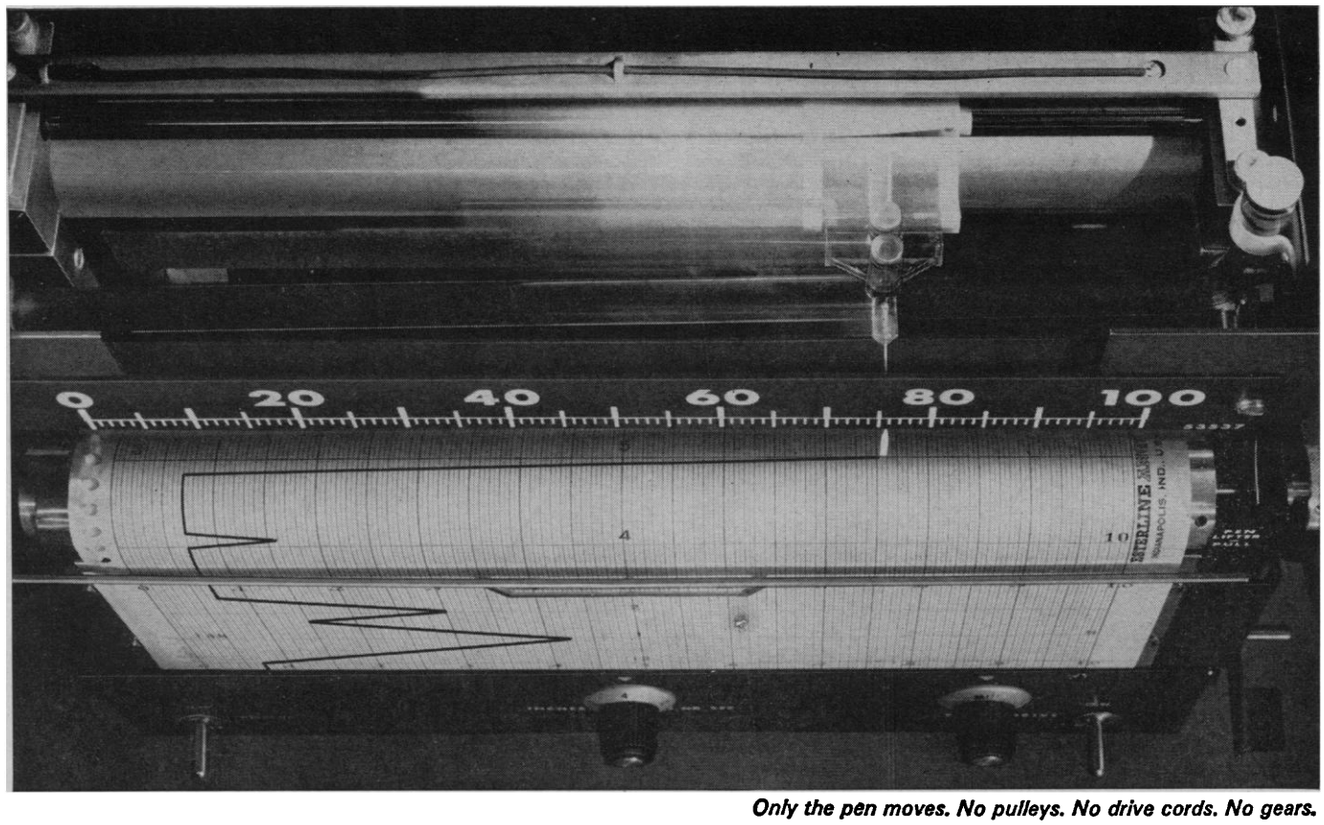
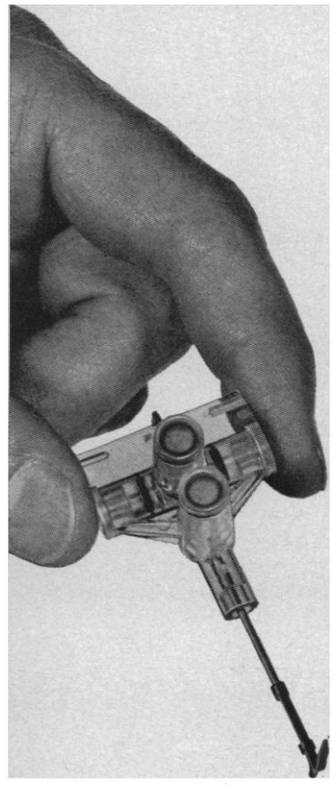


Only the pen moves. No pulleys. No drive cords. No gears.



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22 July 1966
Vol. 153, No. 3734

SCIENCE

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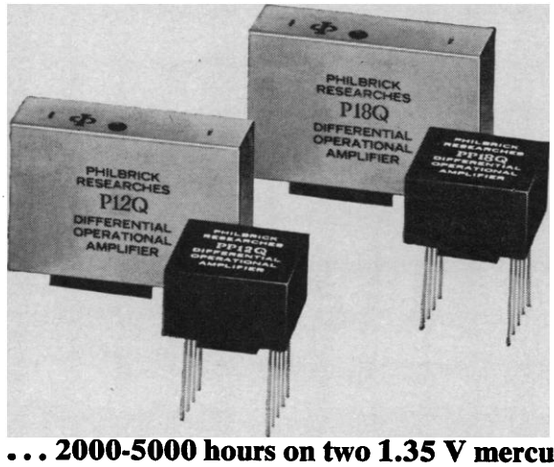
AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

COVER

Diaphragm tissue fixed in glutaraldehyde and osmium and embedded in epon. The accidental crystallization of the stain, uranyl acetate, resulted in this esthetic artifact (about × 1700). [Carl Zeiss, Inc.; O. James Inashima, College of Pharmacy, Northeastern University, Boston, Massachusetts]

New Philbrick Battery-Powered Instrument-Grade Operational Amplifiers



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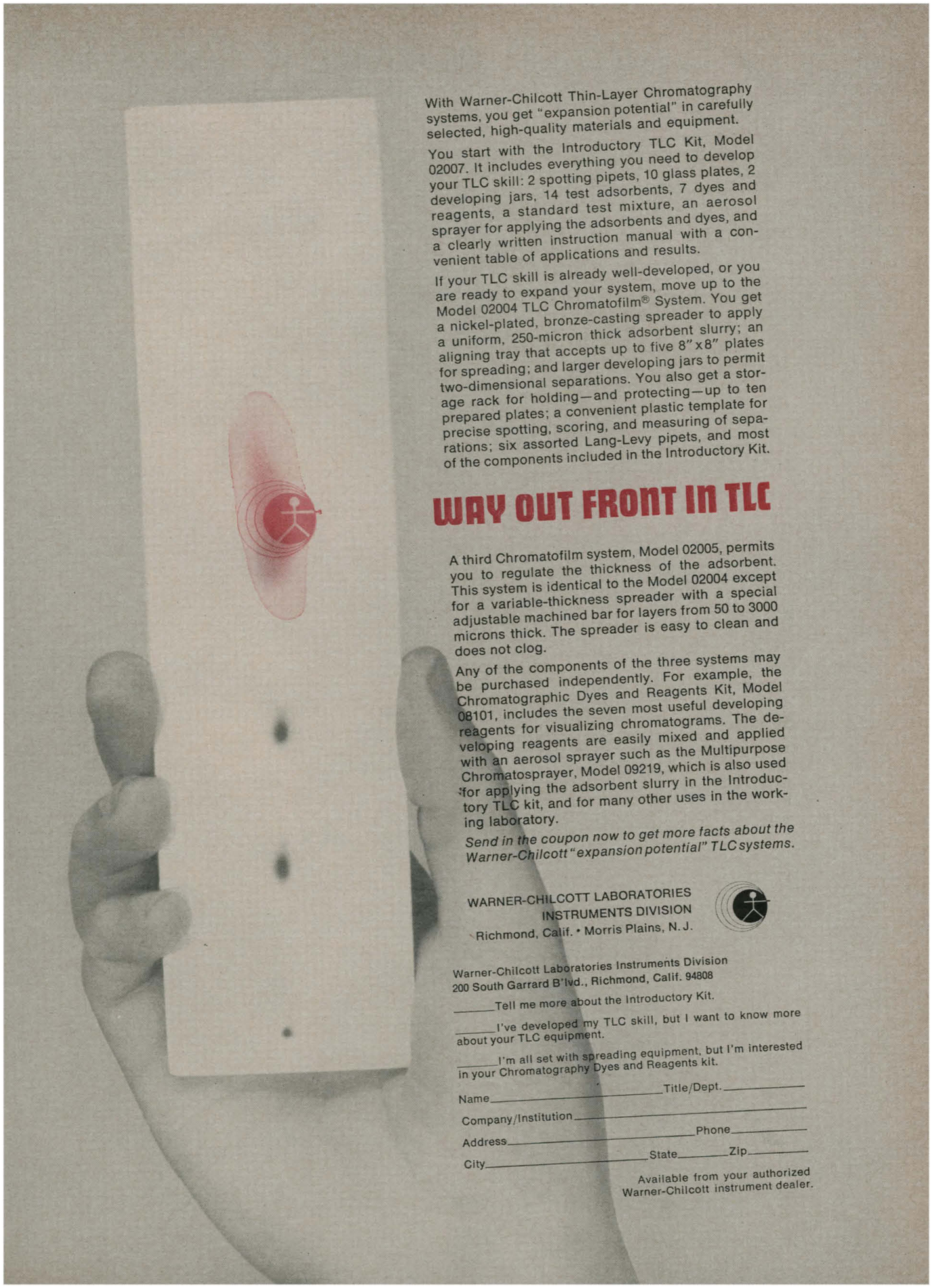

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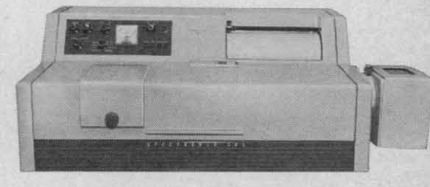

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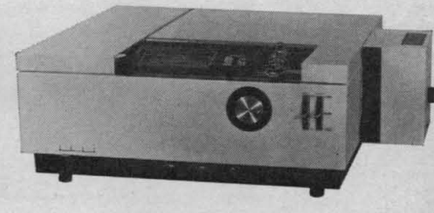

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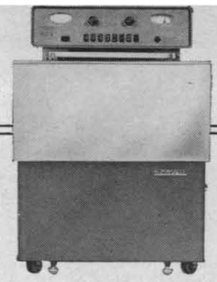

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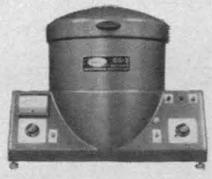

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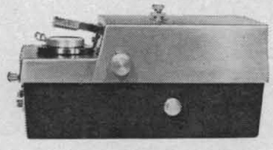

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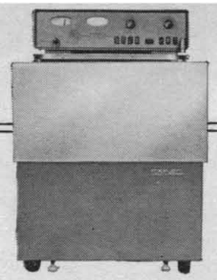

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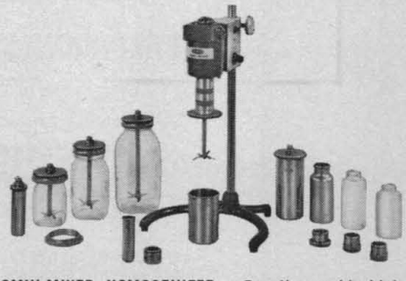

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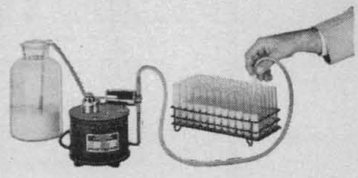

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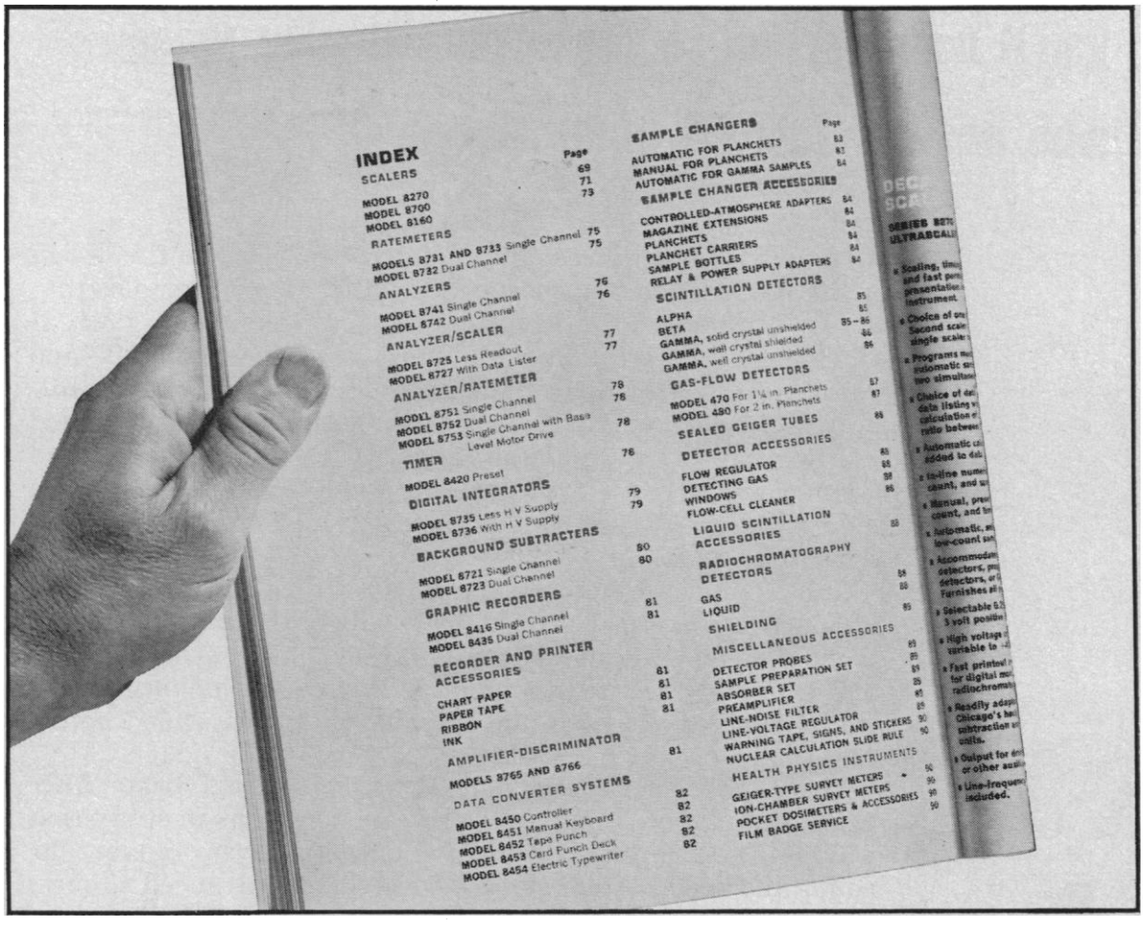

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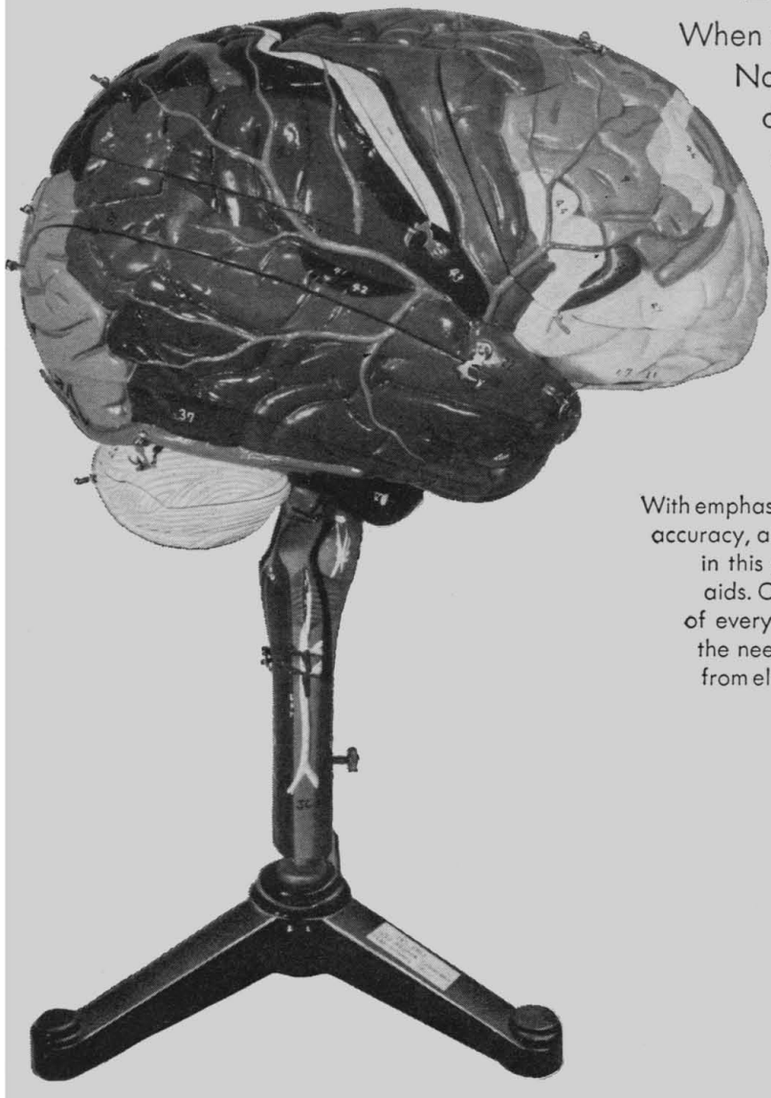

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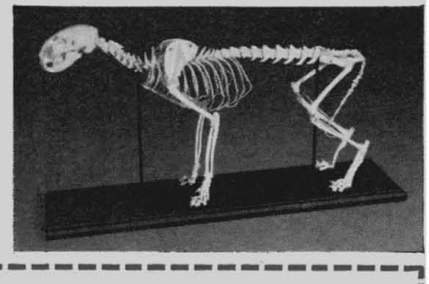

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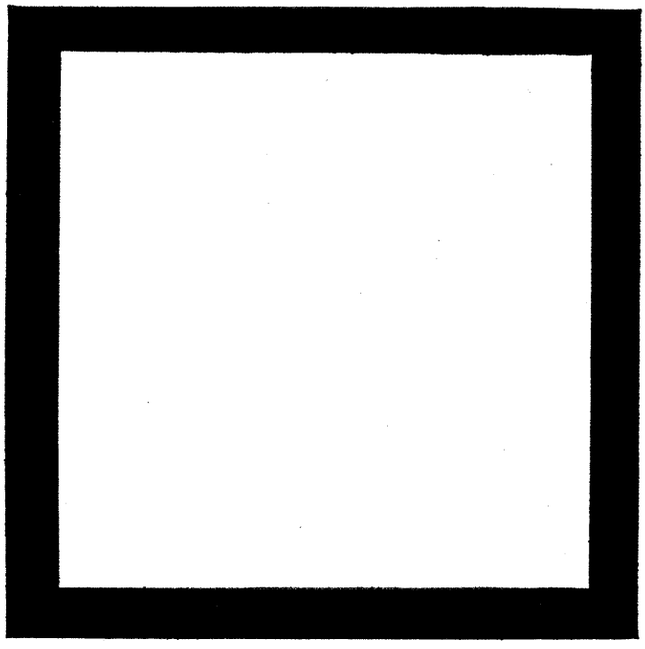
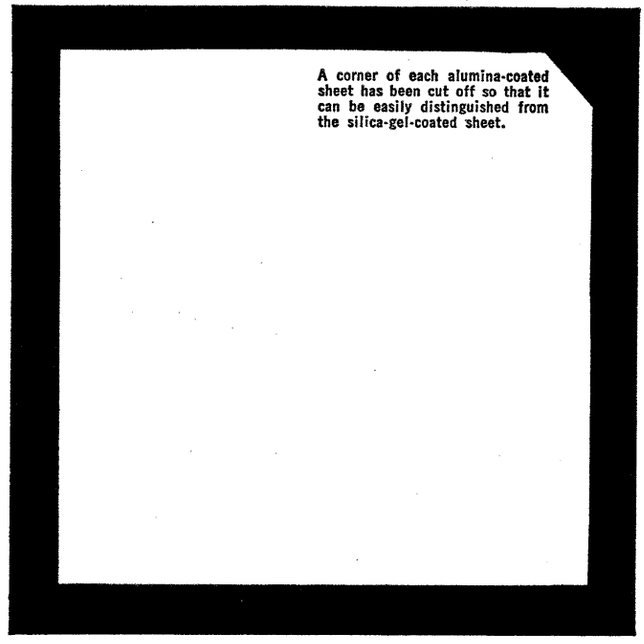


This is EASTMAN CHROMAGRAM
Sheet for thin-layer chromatography

(silica-gel coated)



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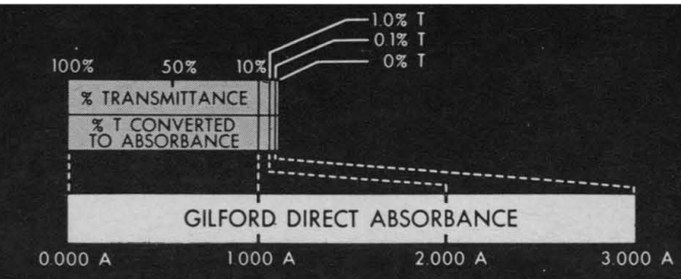

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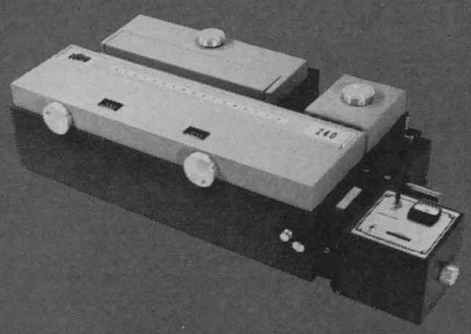

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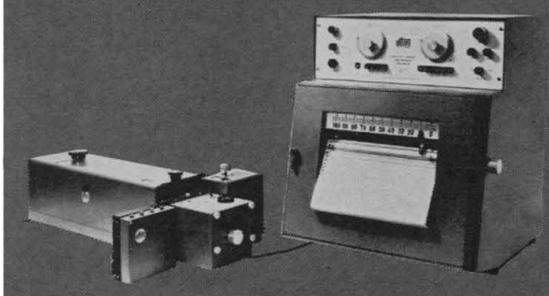

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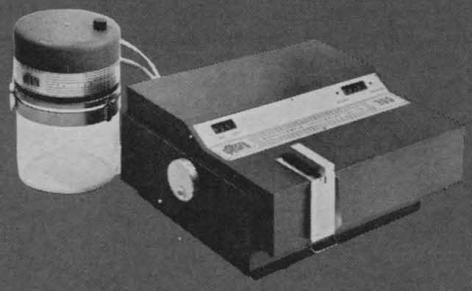

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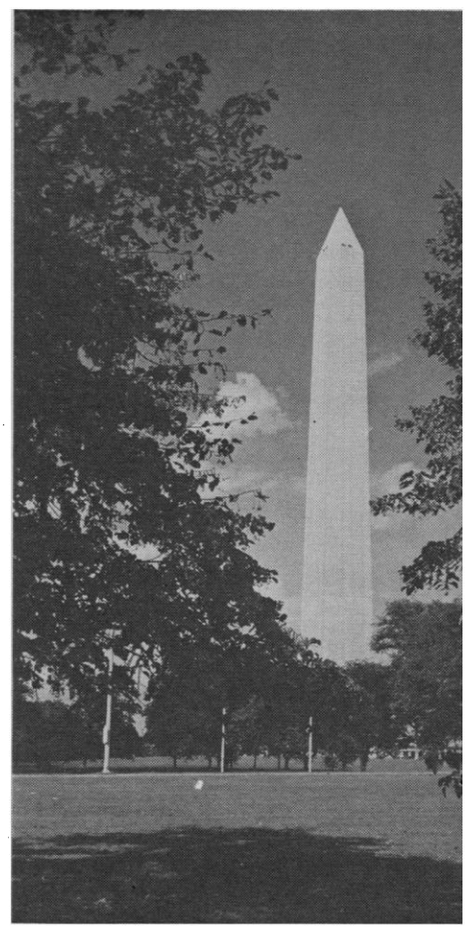

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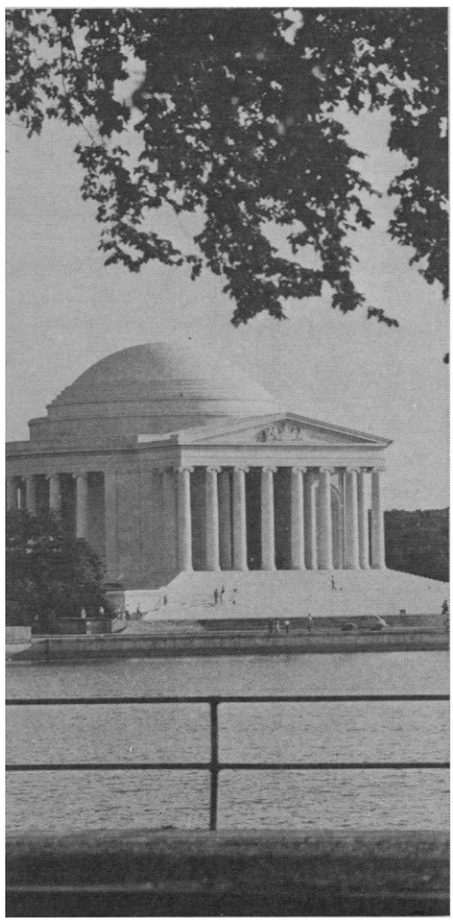

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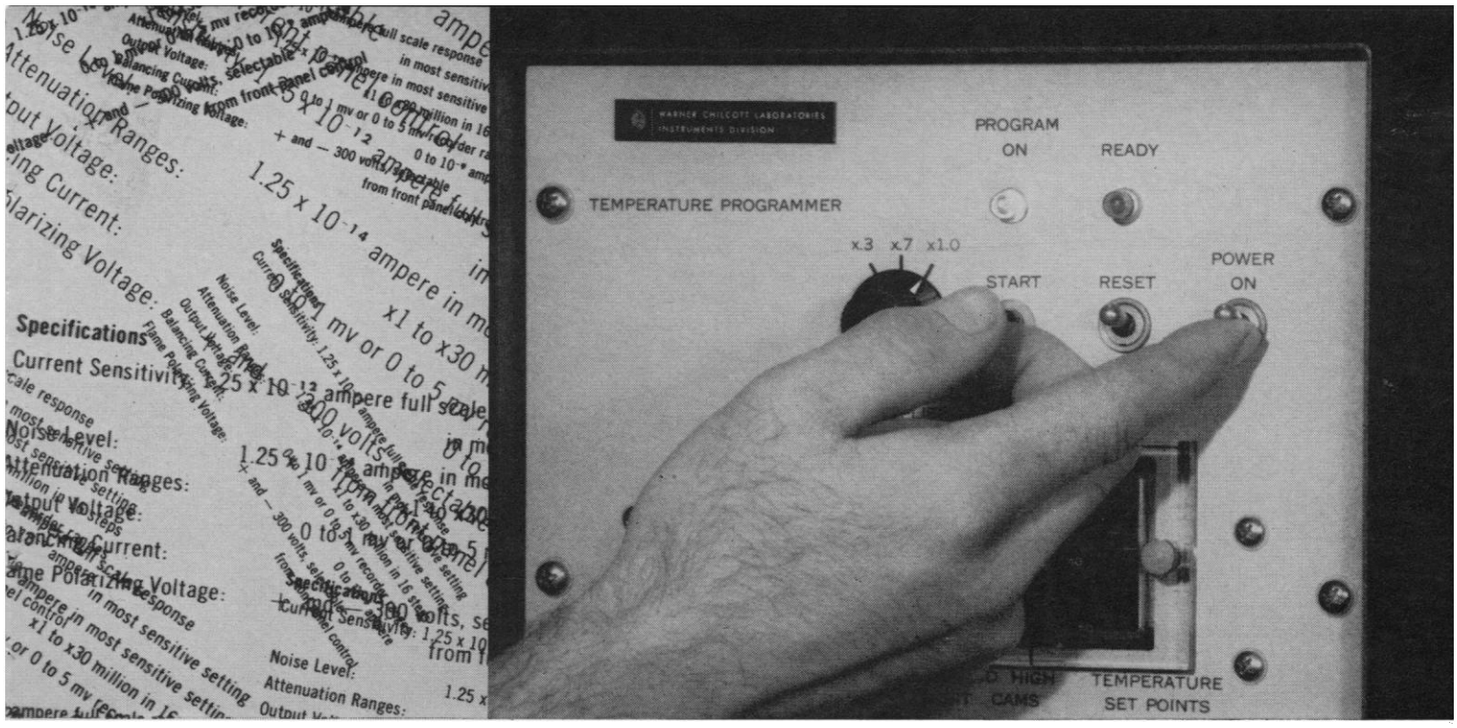

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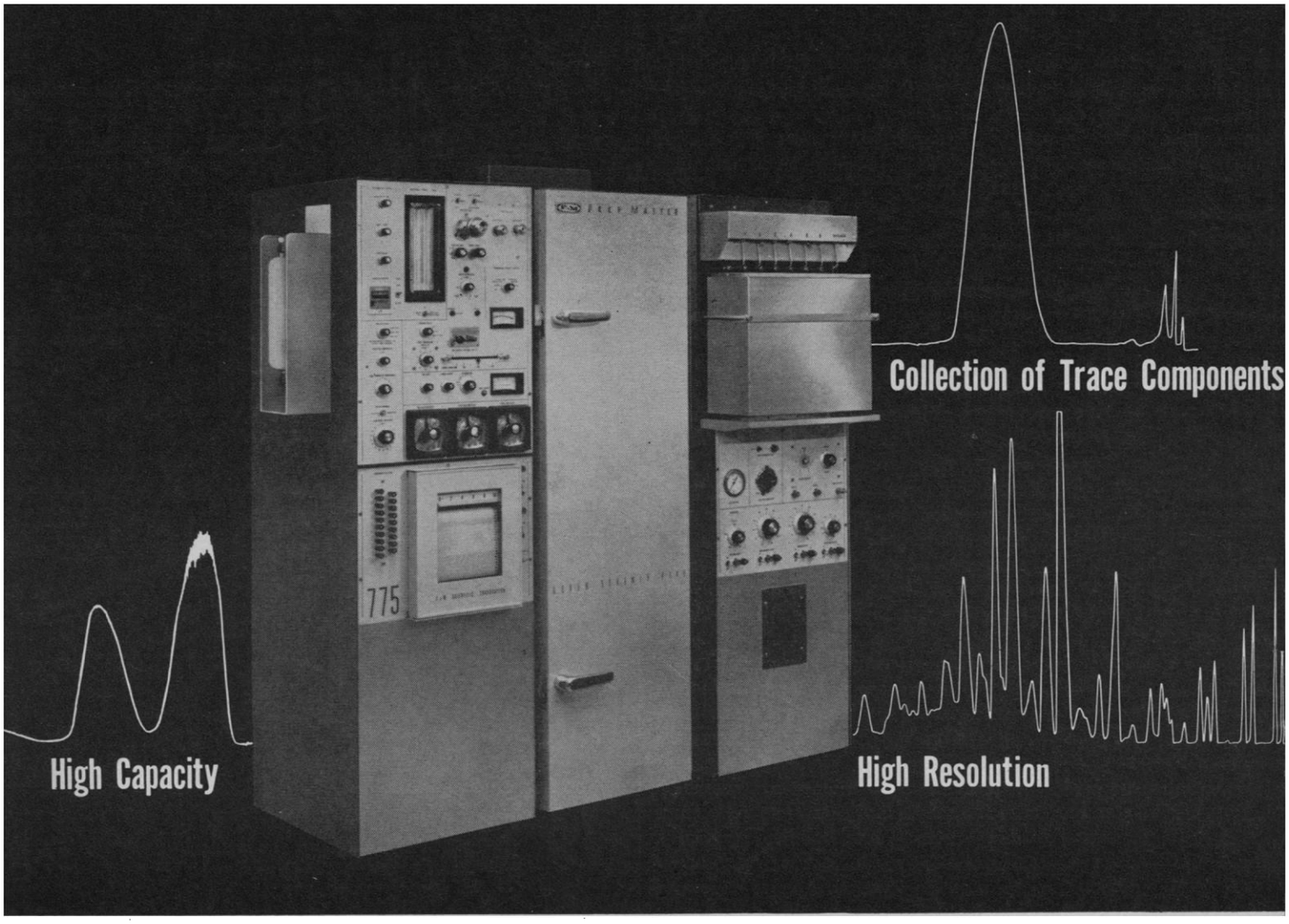

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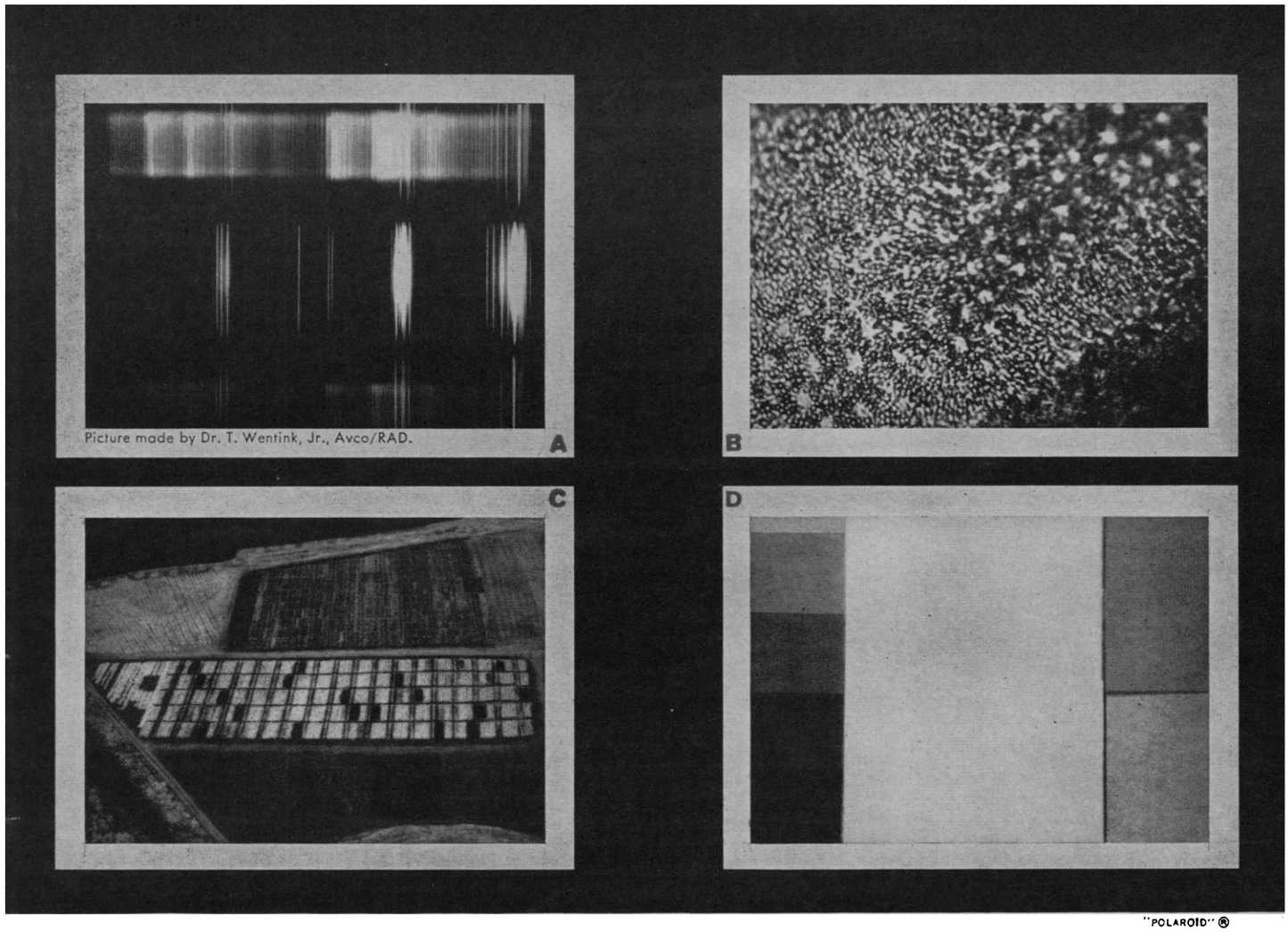

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reprints, I suggest that the authors include a mimeographed list of all their previous publications in the field, with asterisks by papers of particular note. Nothing is more frustrating than to be criticized through ignorance of one's own previous work. Such a list would increase the probability of the recipient finding and reading the author's early papers and important papers and of referring to them in his next publication.

In order to achieve immediate benefit from these professional courtesies, I further suggest that investigators review their publications in the last five years and notify authors cited, and finally that publishers include in their instructions a reminder to authors to notify authors cited.

If these professional courtesies become accepted, I believe that the interchange of ideas and information among scientists would be greatly facilitated, duplication of effort reduced, and disputed points between different schools of thought resolved more quickly.

DAVID A. MILLER
Department of Physiology, School of Medicine, Tulane University, New Orleans, Louisiana 70112

Observations on Observational and Other Astronomy

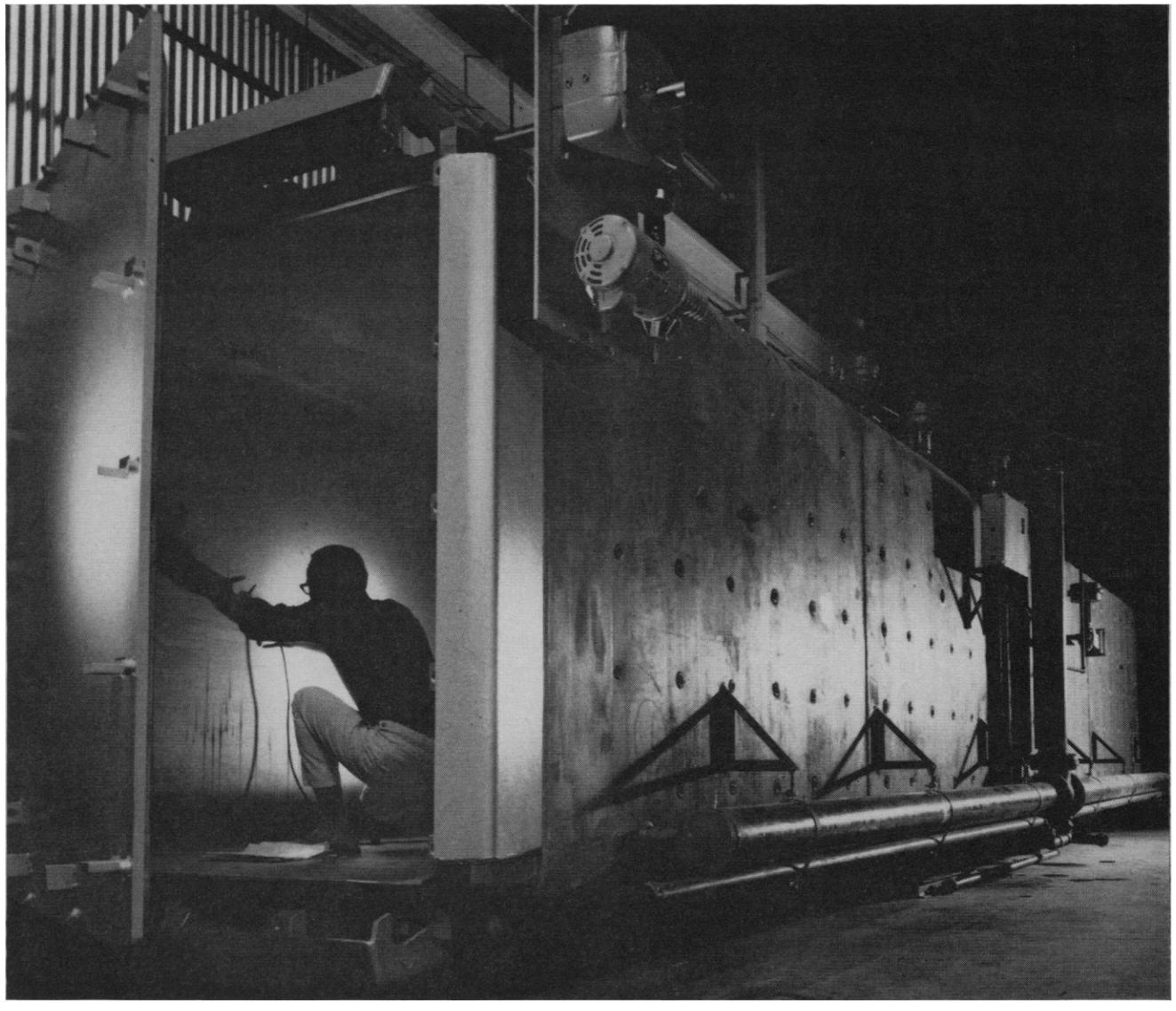
K. S. Thorne's article "gravitational collapse and the death of a star" [*Science* **150**, 1671 (1965)] forms a good illustration of whither science is going and indicates a change which, to us old-timers, is not an improvement. The author starts off by saying, "What is the fate of a star. . . ? This is a question which observational astronomy has done but little to answer . . ." and he then continues, "Despite the paucity of observational data, theoreticians are now able. . . ." Since Thorne admits that, theoretically, there are no equilibrium configurations for dead stars containing more than 1.2 times as many baryons as the sun, that such objects must collapse into a singularity, and that the prospect for observing these is nil, it is hardly fair to blame the observers for not having observed them, and I shall confine my remarks to the dead start of smaller mass.

Having spent more than 40 years trying to find faint stars with large motions, largely for the dual purpose of determining the luminosity function and of finding more white dwarfs—the dying stars of which Thorne speaks—I can only marvel at the author's disregard of what observational astronomy has accomplished. I have found and published data on more than 1300 white dwarfs; Greenstein, using the 200-inch telescope, has done a great deal of very important work on the spectra of the brighter specimens. But don't the theoreticians realize (i) that probably at least half the white dwarfs now known are too faint for spectroscopic observations, even with the 200-inch telescope, and (ii) that to obtain spectra for the other half would probably tie up the 200-inch telescope for the equivalent of several full years, as well as a similar 200-inch in the Southern Hemisphere—which we haven't got yet? Most astronomers think there are a few other problems in observational astronomy that deserve the attention of the 200-inch.

Thorne says that "Astronomical measurements of the masses and radii of radiating white dwarfs are in fairly good agreement with the predictions. . . ." The proper way to state this would be to say that present theoretical predictions are in fairly good agreement with the observed masses—the mass of Sirius B having been known for more than 50 years. No radii have ever been observed; they are calculated from the assumed laws of radiation.

Finally, in a discussion of the central densities of white dwarfs, neutron stars, and so on, the curves drawn are continued to 10^{22} g/cm^3, and in the text the discussion of the theoretical singularities resulting from supernova explosions of massive stars is continued to densities of 10^{49}, beyond which the admission is made that theory is "far from completion." Since we are now talking about nuclear densities of the order of 10^{14} to 10^{15}, these new values represent extrapolations by factors of at least 10^7 to 10^{34}. This brings to mind William Whewell's comment: "The cultivation of ideas is to be conducted as having for its object the connexion of facts; never to be pursued as a mere exercise of the subtlety of the mind, striving to build up a world of its own, and neglecting that which exists about us. For, although man may in this way please himself, and admire the creations of his own brain, he can never, by this course, hit upon the real scheme of nature." This was used as

This 32 ton giant was only the half of it!



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a full-page advertisement in *Science* (10 April 1959, p. 931) by the Rand Corporation, and it might well serve as a text for the theoretician in the computer lab.

WILLEM J. LUYTEN
University of Minnesota, Minneapolis 14

Luyten's contributions to our understanding of white dwarf stars are so basic to all work in the field that his comments deserve serious attention.

Luyten's inference that I am dissatisfied with the contributions of observational astronomy to our knowledge of the deaths of stars is a misunderstanding resulting from my poor choice of phraseology. In actuality, I find it inspiring that, despite the great technical difficulties involved, observers can discover as much as they have about the final stages of stellar evolution.

Of the four subtopics in "Gravitational collapse and the death of a star" —white dwarf stars, dynamics of supernovae, neutron stars, and collapse to zero volume—only white dwarfs are amenable to extensive observational study. Luyten wishes that I had devoted a larger portion of my article to observational results on white dwarfs. However, great progress has been made recently in our theoretical understanding of supernovae, of neutron stars, and of gravitational collapse, whereas by comparison white-dwarf observations and theory have changed little in the last 5 years. To do justice to exciting recent developments, it was necessary to be brief in describing the beautiful but well-known observational and theoretical results on white dwarfs.

Luyten fears that the present trend of science is to pursue mathematical computations in an experimental vacuum. On the contrary, it seems to me that recent developments furnish beautiful examples of the manner in which observation and theory are jointly, and inseparably, responsible for the progress of science. For example, the computations reviewed in my article provide a link between experimental nuclear physics and experimental elementary particle physics on the one hand, and observational astrophysics on the other: From experimental laboratory studies one obtains a fairly reliable understanding of the properties of matter at and below nuclear density ($\lesssim 10^{15}$g/cm^3). One then uses this laboratory-based knowledge, together with arbitrary assumptions about the equation of state of matter at supranuclear densities, and together with the theories of relativity and of hydrodynamics, to compute the properties of superdense stars, the dynamics of supernovae, and the dynamics of collapse to zero volume. Happily, one finds that, although the results of the computations are highly sensitive to the known properties of matter at subnuclear densities, they are insensitive to the unknown equation of state at supranuclear densities (*1*). From these experimentally based computations one concludes that supernovae, collapsing stars, and young superdense stars should all be copious sources of x-rays, of neutrinos, and of gravitational radiation. This conclusion provides an important impetus to the development of the very young, and as yet necessarily primitive, fields of neutrino astronomy and x-ray astronomy, and to the search for gravitational radiation.

The scope of observation, far from being decreased, is undergoing in the newer developments of astrophysics the greatest enlargment of this century. Everyone will agree with Luyten when he stresses that observation is the foundation of all knowledge; and everyone is excited by the new realms of observation which modern astrophysics is opening up.

KIP S. THORNE
Palmer Physical Laboratory, Princeton, University, Princeton, New Jersey

References

1. See, for example, C. W. Misner and H. S. Zapolsky, *Phys. Rev. Letters* **12**, 635 (1964); R. Penrose, *ibid.* **14**, 57 (1965); M. M. May and R. H. White, *Phys. Rev.* **141**, 1232 (1966); B. K. Harrison, K. S. Thorne, M. Wakano, J. A. Wheeler, *Gravitation Theory and Gravitational Collapse* (Univ. of Chicago Press, Chicago, 1965), chapters 5 and 11.

Quarks Defined

May I add a linguistic remark to Edwin M. McMillan's lecture on particle physics (27 May, p. 1210). McMillan states that Murray Gell-Mann suggested the name "quarks" for a possible set of particles, using a "made-up word originally used by James Joyce in an entirely different connection." In German the word quark is not a made-up word, but is the term for a somewhat gluey cottage cheese. Maybe the "hadrons" should be called quarks.

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Dextran-carboxyl-C-14	1.5uc/mg	280.00	150.00	30.00
Ethanolamine-1-C-14 HCl	14	375.00	195.00	40.00
D-Galactose-UL-C-14	60	1500.00	900.00	300.00
D-Glucose-2-C-14	21.1	790.00	400.00	88.00
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D-Glucose-UL-C-14	210	80.00	45.00	18.00
L-alpha-Glycerol-phosphate -UL-C-14	28	1495.00	895.00	295.00
Glycerol-UL-C-14	25	380.00	200.00	45.00
Guanidine-C-14 HCl	15	300.00	155.00	30.00
GDPG-(glucose-UL-C-14)	3.1	210/25uc	125/10uc	600.00
DL-Histidine-2-C-14	10	790.00	400.00	90.00
DL-Malic-3-C-14	15	800.00	425.00	95.00
DL-Methionine-methyl-C-14	4	270.00	140.00	30.00
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22 July 1966, Volume 153, Number 3734 **SCIENCE**

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Medical Ethics

The physician historically has occupied a unique position in society. This singularity is rapidly being destroyed by the public and by physicians. The loss is due chiefly to erosion of medical ethics. In my view medical ethics depends importantly on whether the starting point is religious, existentialist, or wholly materialist. Each leads to its own particular reasoning, and when the reasonings are mixed an almost insoluble confusion results. Ethics cannot be formulated or enforced by committees, panels, or chest beating; ultimately it is a matter of the head and heart. I shall give examples of the ethical problems medicine now faces; their solution will depend upon individual beliefs.

The sanctity of the human body has long been considered inviolate, as has the relationship between patient and physician. It is on just these questions that the problem of consent for operations, drug testing, organ transplantation, and experimentation has hit a snag. Despite millions of words, we are no closer to solving such problems than we were before the Kefauver investigation. Indeed, we have managed to hide our dilemma by the simple device of word coverage. The recent flurry of TV spectaculars concerned with surgical operations highlights the question; a man's innards and his sufferings are freely and intimately presented to the untutored public for their delectation in a kind of electronic Roman circus!

Privacy of both body and mind seems to be an aging idea that no longer deserves credence. Recently there have been repeated assaults upon this last remnant of man's dignity, especially when a celebrity or "public person" is concerned. The health of the President or of the Prime Minister is said to be of concern to everyone and therefore should be public knowledge. At the other extreme, sexual behavior is said to be a private affair, but recent literature shows how untrue this is. Sexual behavior is now depicted as a series of physiological responses made operational by biochemists and measurable by psychologists, perhaps for the benefit of sociologists.

Science has awakened a quiescent medical ethics with such headline stimulants as "chronic dialysis," "organ transplantation," and, most recently, "artificial hearts." Government spending is leading to active federal participation in the conduct of both medicine and research, and so in their ethics as well. Radio, television, and science-reporting have questioned the right to privacy and the inviolability of the doctor-patient relationship. Even the right to die with some degree of dignity is being reexamined. If there is such a thing as an expert in medical ethics, we need him badly, but I suspect he is nonexistent.

In the present circumstances all of us might well consult the ancient Hippocratic Oath. It reads in part as follows: "The regimen I adopt shall be for the benefit of my patients according to my ability and judgment, and not for their hurt or for any wrong. . . . Whatsoever house I enter, there will I go for the benefit of the sick, refraining from all wrongdoing or corruption. . . . Whatsoever things I see or hear concerning the life of men, in my attendance on the sick or even apart therefrom, which ought not to be noised abroad, I will keep silence thereon, counting such things to be as sacred secrets."

Those words have been a guiding light for medicine for 2500 years. Does not their spirit provide a beacon reliable for both today and tomorrow?—IRVINE H. PAGE, *Director, Research Division, Cleveland Clinic, Cleveland, Ohio*

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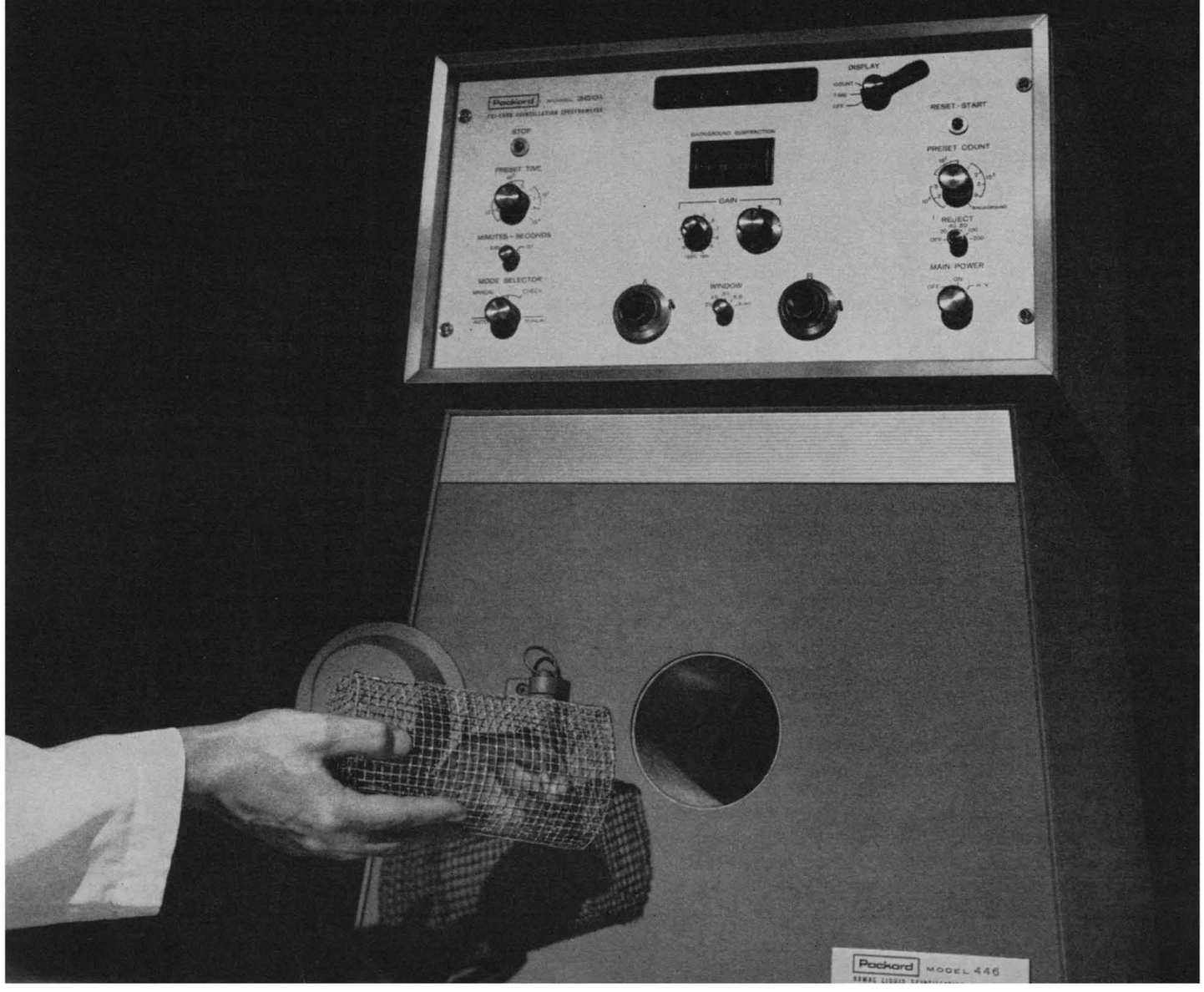

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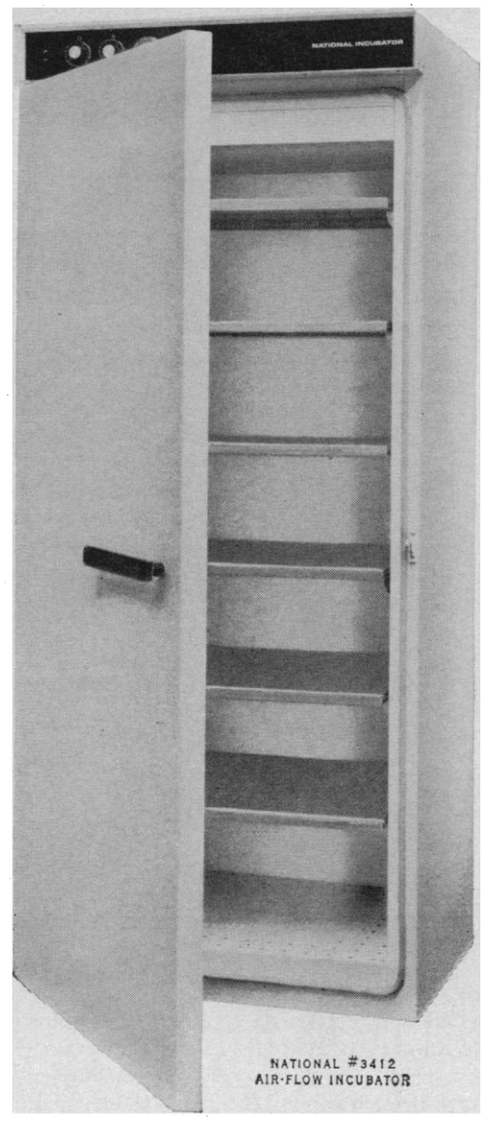

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to solve a given problem is more difficult. In observational research, if one line doesn't pan out, the researcher can shift to another question, or even to another field. But when you've got a problem to lick, the problem doesn't change—only your thinking about it must change."

"Observation—say, measuring how many times a bird in flight flaps its wings—is important in science, especially when it starts free-swinging thinking, but less interesting to me."

While Tishler is not unaware that observations of the flight of birds probably helped to get the first airplane off the ground, it is obvious that any thought he might give to a bird in flight would start with a wish to get a man up there.

Also responsible for the character of the Merck "group" are Karl Beyer and Lewis Sarett. Beyer, senior vice president for research at the West Point laboratories, led the development of the thiazide diuretics and is president of the Federation of American Societies for Experimental Biology. Sarett synthesized cortisone for Merck within 2 years after he took his Ph.D. at Princeton and has since risen to vice president for research at Rahway. All three men have an unaffected directness more often met on the campus than in the board room, and their cheerfully modest air does indeed suggest that it would not be too onerous to be part of the Merck group.

$85,000 NMR Spectrometer

For the June Ph.D., deciding where to place his career, the instruments available in a well-heeled industrial laboratory like that of Merck are an inducement that many academic laboratories still cannot match. Take, for example, the $85,000 nuclear magnetic resonance spectrometer that will be important in the new addition to Merck research announced at the laboratory dedication: a biophysics department headed by Nelson Trenner.

The spectrometer is one of the latest models, equipped with a computer for time-averaging, and has a highly stabilized and homogeneous magnetic field controlled by a feed-back element linked to a natural frequency of vibration of the water molecule. Trenner says he is perfectly satisfied with the stability achieved; in his view, this is the first NMR instrument that makes study of complex biological interactions really feasible at physiological concentrations.

A request for an electron-spin resonance instrument is contemplated, Trenner said, since this is now essential for studying the free radical intermediates by which most enzymes are thought to operate.

Trenner hopes soon to be set up for x-ray crystallographic methods that will show what happens when a crystalline solid is allowed to interact with a molecule in solution.

"Someday," Trenner said, "it might be possible to inject low molecular weight substrates into a living cell and monitor what happens by the changing spectroscopic pattern. We hope to use these structural studies to discover new biodynamic substances. But even if we don't succeed in that we should, at a minimum, be able to eliminate many substances that are not biologically active and relieve the animal people of drug assays that require much time and are subject to the uncertainties that follow from the well-known differences of drug reactions among the different species."

T. L. CAMPBELL

AAAS

References and Notes

1. C. Kidson and K. S. Kirby, *Nature* **203**, 599 (1964).
2. All photographs by Morris Warman except where otherwise credited.

Forthcoming Events

August

22–24. **Computer and Information Sciences,** symp., Columbus, Ohio. (J. T. Tou, Communication Science Research Center, Columbus Laboratories, Battelle Memorial Inst., 505 King Ave., Columbus, Ohio 43201)

22–24. **Physiology,** 12th Scandinavian congr., Turku, Finland. (K. Hartiala, Dept. of Physiology, Turku Univ., Turku)

22–26. Society of **Photo-Optical Instrumentation** Engineers, 11th annual technical symp., St. Louis, Mo. (R. T. Hedden, 16 Harneywold Dr., St. Louis 63136)

22–26. **Poultry Science** Assoc., Utah State Univ., Logan. (C. B. Ryan, Dept. of Poultry Science, Texas A&M Univ., College Station 77843)

22–27. **Food Science and Technology,** 2nd intern. congr., Warsaw, Poland. (A. Borys, Inst. Przemyslu Miesnego, Rakowiecka 36, Warsaw 12)

22–27. Pan American Federation of Associations of **Medical Schools,** 1st general assembly, Bogota, Colombia. (E. Braga, Caixa Postal 26-ZC-39, Rio de Janeiro, GB, Brazil)

22–10. **Science,** 11th Pacific congr., Tokyo, Japan. (Pacific Science Assoc., Bishop Museum, Honolulu, Hawaii 96819)

23–25. **Biological Photographic** Assoc.,

36th annual mtg., Lexington, Ky. (P. Brook, The Association, Cornell Univ. Medical College, 1300 York Ave., New York, N.Y.)

23–26. **Electronics**, western show and conv., Los Angeles, Calif. (S. Sensiper, WESCON, 3600 Wilshire Blvd., Suite 1920A, Los Angeles 99005)

23–30. **Luminescence**, intern. congr., Budapest, Hungary. (G. Szigeti, Research Inst. for Technical Physics, Hungarian Acad. of Sciences, P.O. Box Ujpest 1, No. 76, Budapest)

23–1. **Radio Astronomy** and the Galactic System, symp.. Noordwijk, Netherlands. (J. H. Oort, University Observatory, Leiden, Netherlands)

24–26. Principles of **Radiation Protection**, conf., Oak Ridge, Tenn. (Special Projects Office, Oak Ridge Associated Univs., P.O. Box 117, Oak Ridge, Tenn. 37830)

24–29. International Soc. of **Blood Transfusion**, 11th biennial congr., Sydney, Australia. (G. T. Archer, 1 York St., Sydney)

24–29. **Prehistoric and Protohistoric Sciences**, 7th intern. congr., Prague, Czechoslovakia. (S. J. De Laet, Seminaire d'Archéologie de l'Université, 2 Blandijnberg, Ghent, Belgium)

25. Scandinavian **Pharmacologists**, mtg., Turku, Finland. (K. Hartiala, Dept. of Physiology, Turku Univ., Turku)

25–27. Inter-Union Commission on **Solar and Terrestrial Relationships**, mtg., Belgrade, Yugoslavia. (C. W. Allen, Univ. of London Observatory, Mill Hill Park, London N.W.7, England)

26–29. **Low Temperature Calorimetry**, conf., Otaniemi, Finland. (O. V. Lounasmaa, Dept. of Technical Physics, Inst. of Technology, Otaniemi)

26–29. Rural **Sociological** Soc., annual mtg., Miami, Fla. (J. A. Beegle, Dept. of Sociology and Anthropology, Michigan State Univ., East Lansing)

26–2. **Biometeorology**, 4th intern. congr., Rutgers Univ., New Brunswick, N.J. (F. Sargent, II, 524 Burrill Hall, Univ. of Illinois, Urbana 61801)

27. American Assoc. of **Electromyography and Electrodiagnosis**, San Francisco, Calif. (M. K. Newman, 16861 Wyoming Ave., Detroit 21, Mich.)

27–28. Society for the Study of **Social Problems**, annual mtg., Miami Beach, Fla. (F. F. Lee, Dept. of Sociology and Anthropology, Northeastern Univ., Boston, Mass. 02115)

28–1. Association of American **Geographers**, Toronto, Ont., Canada. (J. K. Hart, 1146 16th St., NW, Washington, D.C. 20036)

28–2. **Hormones**, Laurentian conf., Mont Tremblant, P.Q., Canada. (J. Sanford, 222 Maple Ave., Shrewsbury, Mass. 01545)

28–4. **Electron Microscopy**, 6th intern. congr., Kyoto, Japan. (Chairman of the Organizing Committee, Inst. for Virus Research, Kyoto Univ., Kyoto)

29–1. **Technical Information Center Administration**, 3rd annual conf., Philadelphia, Pa. (M. Warrington, Graduate School of Library Science, Drexel Inst. of Technology, Philadelphia 19104)

29–31. Preparation and Properties of Electronic Materials for **Control of Ra-**

diative Processes, conf., Boston, Mass. (E. P. Warekois, MIT Lincoln Laboratory, Lexington, Mass. 02173)

29–31. **Electronic Materials**, conf., Boston, Mass. (American Inst. of Mining, Metallurgical and Petroleum Engineers, 345 E. 47 St., New York 10017)

29–31. **Instrumentation in Aerospace Simulation Facilities**, 2nd intern. congr., Stanford Univ., Stanford, Calif. (P. L. Clemens, VKF/AP, Arnold Air Force Base Station, Tenn.)

29–31. **Mathematical** Assoc. of America, Rutgers Univ., New Brunswick, N.J. (H. M. Gehman, State Univ. of New York at Buffalo, Buffalo 14214)

29–31. **Metallurgists**, 5th annual conf., Toronto, Ont., Canada. (Canadian Inst. of Mining and Metallurgy, 906 Drummond Bldg., 117 St. Catherine St., W., Montreal 2, P.Q.)

29–31. **Physical Chemistry of Solids**, symp., Univ. of Montreal, Montreal, P. Q., Canada. (W. C. Cooper, Noranda Research Centre, 240 Hymus Blvd., Pointe Claire, P.Q., Canada)

29–31. **Solvent Extraction Chemistry**, intern. conf., Göteborg, Sweden. (The Conference, Dept. of Chemistry, Gibraltargatan 5 H, Göteborg S)

29–31. **Textiles**, Canadian seminar, Queens Univ., Kingston, Ont. (Textile Technical Federation of Canada, 4795 St. Catherine St., W. Westmount, Montreal, P.Q.)

29–1. American **Sociological** Assoc., Miami Beach, Fla. (E. H. Volkart, 1001 Connecticut Ave., NW, Washington, D.C.)

29–2. **Internal Medicine**, Czechoslovak congr., Prague, Czechoslovakia. (O. Riedl, 4th Medical Clinic, Faculty of General Medicine, Charles Univ., U Nemocnice 2n, Prague 2)

29–2. American **Mathematical** Soc., Rutgers Univ., New Brunswick, N.J. (G. L. Walker, The Society, P.O. Box 6248, Providence, R.I.)

29–2. **Neutron Monitoring** for Radiological Protection, symp., Vienna, Austria. (S. Somasundaram, Div. of Health, Safety, and Waste Disposal, Intern. Atomic Energy Agency, Vienna)

29–2. **Operations Research**, 4th intern. conf., MIT, Cambridge, Mass. (K. D. Tocher, United Steel Co., Cybor House, 1–5 Tapton Hall Rd., Sheffield, England)

29–2. American **Physiological** Soc., fall mtg., Baylor Univ., Houston, Tex. (The Society, 9650 Wisconsin Ave., Washington, D.C. 20014)

29–2. **Solar-Terrestrial Physics**, inter-Union symp., Belgrade, Yugoslavia. (E. Herbays, Intern. Scientific Radio Union, 7, pl. Emile Danco, Brussels 18, Belgium)

29–3. Problems of **Animal Nutrition and Feed Production**, symp., Brno, Czechoslovakia. (Vlad. Sevcik, Research Inst. for Animal Nutrition, Feed Science and Technology, Ministry of Agriculture, Pohorelice, Czechoslovakia)

29–3. **Palynology**, 2nd intern. conf., Utrecht, Netherlands. (F. P. Jonker, State Univ., Botanical Museum and Herbarium, Lange Niewatraat 106, Utrecht)

29–23. **Photogrammetry in the Measurement of the Earth's Surface**, symp., Prague, Czechoslovakia. (L. Skladal, Intern. Soc. for Photogrammetry, Hybernska 2, Prague 1)

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* Kaji, et al., Ann. of N.Y. Acad. Sci., **94**, 798, (1961).

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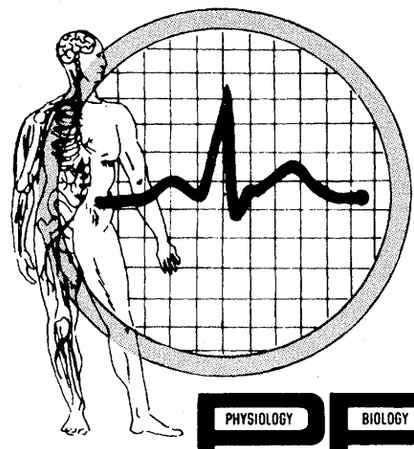

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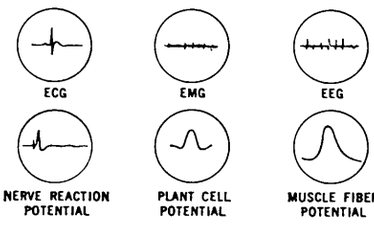

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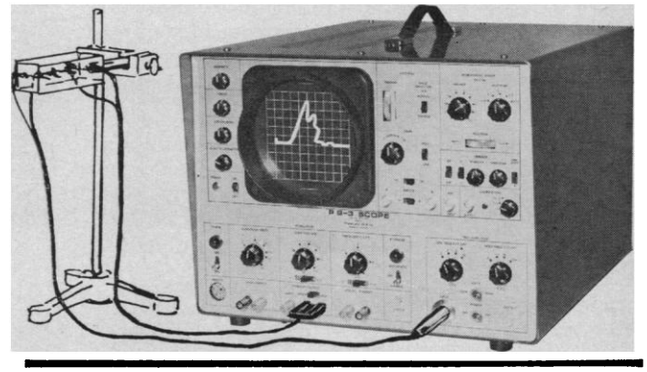

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30–1. Association for **Computing Machinery**, 21st natl. conf., Los Angeles, Calif. (B. R. Parker, P.O. Box 4233, Panorama City, Calif. 91412)

30–1. Society of **General Physiologists**, Marine Biological Laboratory, Woods Hole, Mass. (E. E. Clark, Box 43 Pupin, Columbia Univ., New York 10027)

30–2. **Collection and Processing of Field Data**, symp., Canberra, Australia. (E. F. Bradley, Div. of Plant Industry, P.O. Box 109, Canberra)

30–2. Institute of **Mathematical Statistics**, annual mtg., Rutgers Univ., New Brunswick, N.J. (J. R. Rosenblatt, A337 Admin., Gaithersburg, Natl. Bureau of Standards, Washington, D.C. 20234)

30–3. International **Mineralogical** Assoc., 5th general mtg., Cambridge, England. (C. E. Tilley, Dept. of Mineralogy and Petrology, Downing Pl., Cambridge)

31–2. **Synthesis**, symp., Chemical Inst. of Canada, organic div., Banff, Alta. (R. W. Bachelor, Dept. of Chemistry, Univ. of Alberta, Calgary)

31–3. German Soc. for the History of **Medicine, Physical Science, and Technology**, 49th annual mtg., Braunschweig, West Germany. (A. Hermann, The Society, Deutsches Museum, 8 Munich 26, West Germany)

31–3. Society of **General Physiologists**, annual mtg., Marine Biological Laboratory, Woods Hole, Mass. (Miss E. E. Clark, The Society, Marine Biological Lab., Woods Hole 02543)

31–6. **Low Temperature Physics**, 10th intern. conf., Moscow, U.S.S.R. (V. P. Peshkov, Inst. for Physical Problems, Acad. of Sciences of the U.S.S.R., Lenin Prospekt, Moscow)

31–7. **High Energy Physics**, 13th intern. conf., Univ. of California, Berkeley. (T. H. Chenoweth, Lawrence Radiation Laboratory, Univ. of California, Berkeley 94720)

September

1–3. **Genetics** Soc. of America, Chicago, Ill. (R. P. Wagner, Dept. of Zoology, Univ. of Texas, Austin)

1–5. International College of **Angiology**, 8th annual mtg., Madrid, Spain. (H. E. Shaftel, 50 Broadway, New York, N.Y. 10004)

2–4. **Czechoslovak Soc. of Arts and Sciences in America**, 3rd congr., New York, N.Y. (R. Sturm, Skidmore College, Saratoga Springs, N.Y. 12866)

2–6. American **Psychological** Assoc., 74th annual mtg., New York, N.Y. (A. H. Brayfield, 1200 17th St., NW, Washington, D.C. 20036)

2–6. **Psychometric** Soc., mtg., New York, N.Y. (W. G. Mollenkopf, Procter and Gamble Co., Box 599, Cincinnati, Ohio 45201)

3–5. International Soc. for the **History of Pharmacy**, 40th conf., Heidelberg, Germany. (W. Luckenbach, Friederich-Ebert-Anlage 23a, Postfach 1109, 69 Heidelberg 1 West Germany)

3–7. **Solid State Science**, intern. conf., American Univ., Cairo, Egypt. (A. Bishay, Dept. of Physical Sciences, American Univ. in Cairo, 113 Kasr El Aini St., Cairo, UAR)

4–9. American **Phytopathological** Soc.,

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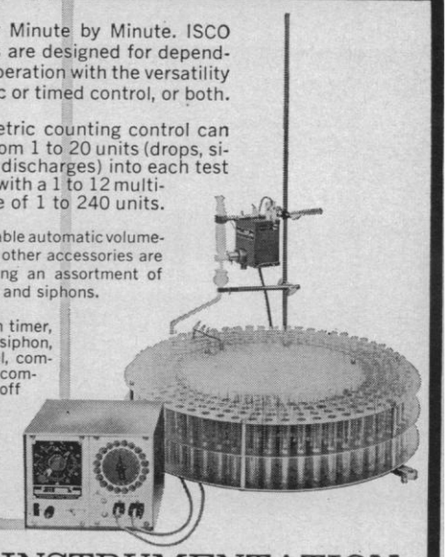

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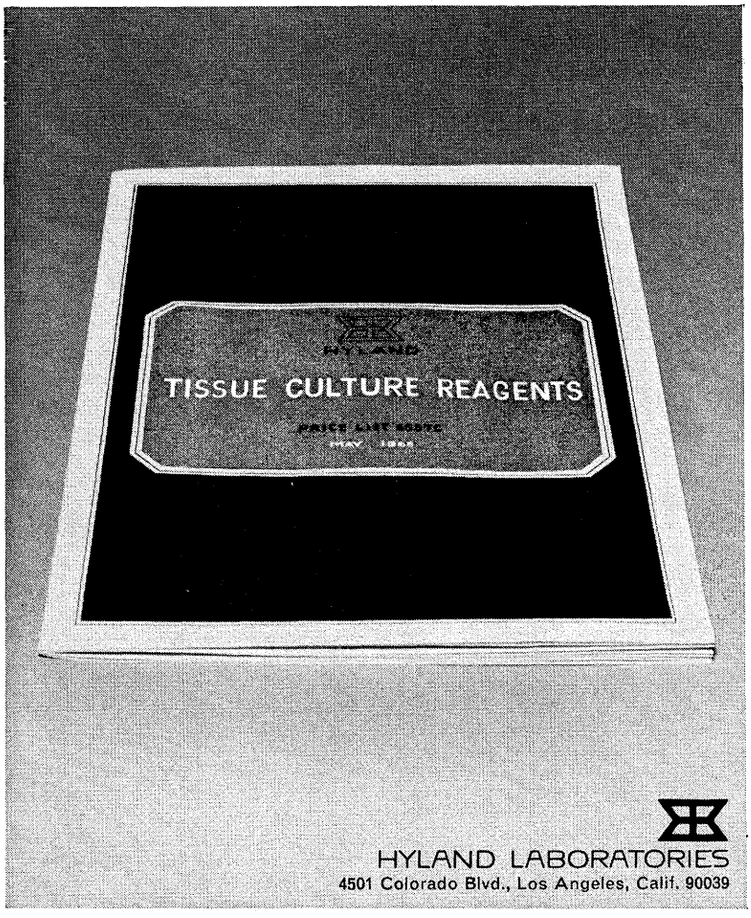

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Caribbean Div., 6th annual mtg., Maracay, Venezuela. (G. Malaguti, Centro de Investigaciones Agronomicas Apartado Postal 4690, Maracay)

4–11. **Sociology**, 6th world congr., Evian, France. (G. G. Reader, Dept. of Medicine, Cornell Univ. Medical College, 1300 York Ave., New York 10021)

5–7. **Rare Earths**, conf., Inst. of Physics and the Physical Soc., Univ. of Durham, Durham, England. (Meetings Officer, Inst. of Physics and the Physical Soc., 47 Belgrave Sq., London S.W.1)

5–8. American **Ornithologists'** Union, mtg., Univ. of Minnesota, Duluth. (L. R. Mewaldt, Dept. of Biological Sciences, San Jose College, San Jose, Calif. 95114)

5–9. **Biophysics**, 2nd intern. congr., Vienna, Austria. (A. K. Solomon, Biophysical Laboratory, Harvard Medical School, Boston, Mass. 02115)

5–9. **Coordination Chemistry**, intern. conf., St. Moritz, Switzerland. (G. Schwarzenbach, Eidg. Technical High School, Zurich)

5–9. Use of **Isotopes in Plant Nutrition and Physiology** Studies, symp., Vienna, Austria. (J. H. Kane, Conferences Branch, Div. of Technical Information, U.S. Atomic Energy Commission, Washington, D.C. 20545)

5–9. **Polar Meteorology**, symp., Geneva, Switzerland. (K. K. Langlo, World Meteorological Organization, 41 Ave. Giuseppe-Motta, 1200, Geneva)

5–9. **Water Pollution Research**, 3rd intern. conf., Munich, Germany. (B. B. Berger, Box 5557, Friendship Station, Washington, D.C. 20016)

5–10. **Human Genetics**. 3rd intern. congr., Univ. of Chicago, Chicago, Ill. (B. S. Strauss, Dept. of Microbiology, Univ. of Chicago, Chicago 60637)

5–10. **Insect Pathology**, intern. colloquium, Wageningen, Netherlands. (P. Grison, Laboratoire de Biocoenotique et de Lutte Biologique, La Minière par Versailles, Seine-et-Oise, France)

5–10. International **Radiation Protection** Assoc., first intern. congr., Rome, Italy. (C. Polvani, Casella Postale 2359, Rome)

5–11. **Psychiatry**, 4th world congr., Madrid, Spain. (Chair of Psychiatry, Faculty of Medicine, Univ. of San Carlos, Calle Atocha 106, Madrid)

5–11. **Vital Substances, Nutrition, and Civilization Diseases**, 12th intern. conv., Charleroi, Belgium. (H. A. Schweigart, Intern. Soc. for Research on Nutrition and Vital Substances, Bermeroder str., 61, Hannover, Kirochrode, West Germany)

5–13. International Committee of **Electrochemical Thermodynamics and Kinetics**, 17th mtg., Tokyo and Kyoto, Japan. (M. Fleischmann, Dept. of Physical Chemistry, Univ. of Newcastle upon Tyne, Newcastle upon Tyne 1, England)

15–17. **Rock Mechanics**, 8th symp., Minneapolis, Minn. (Symposium Committee, Univ. of Minnesota, Minneapolis 55414)

5–19. International **Scientific Radio Union**, 15th general assembly, Munich, Germany. (E. Herbays, 7, pl. Emile Danco, Brussels 18, Belgium)

6–8. **Selenium in Biomedicine**, intern. symp., Corvallis, Ore. (O. H. Muth, DVM Nutrition Research Inst., Oregon State Univ., Corvallis 97331)

6–9. **Bacterial Intestinal Infectious Dis-**

eases, intern. symp., Prague, Czechoslovakia. (M. Duniewicz, Czechoslovak Medical Soc. J. E. Purkyne Sokolska 31, Prague)

6–10. **Molecular Structure and Spectroscopy**, mtg., Ohio State Univ., Columbus. (R. N. Rao, Dept. of Physics, Ohio State Univ., Columbus 43210)

6–10. American **Political Science** Assoc., mtg., New York, N.Y. (E. M. Kirkpatrick, 1726 Massachusetts Ave., NW, Washington, D.C.)

6–10. **Radiochemistry**, 4th Czechoslovak conf., Bratislava, Czechoslovakia. (Nuclear Chemistry Section, Czechoslovak Chemical Soc., Hradčanské nám 12, Prague 1)

6–11. **Magnetic Resonance and Relaxation**, intern. conf., Ljubljana, Yugoslavia. (R. Blinc, Nuclear Inst. "J. Stefan", Ljubljana)

7–9. **Aerodynamic Deceleration Systems**, conf., Houston, Tex. (R. S. Ross, Goodyear Aerospace Corp., 1210 Masillon Rd., Akron, Ohio 44315)

7–9. Influence of **Synthetics and Pesticides on Food** Chemistry, symp., Aachen, Germany. (German Chemical Soc., Geschaftsstelle, 6 Frankfurt am Main, Postfach 9075, Germany)

7–10. National **Agricultural Chemicals** Assoc., 33rd annual mtg., White Sulphur Springs W. Va. (The Society, 1155 15th St. NW, Washington, D.C. 20005)

7–10. American **Geophysical** Union, 6th western natl. mtg., Los Angeles, Calif. (AGU, 1145 19th St. NW, Washington, D.C. 20036)

7–10. **Internal Medicine**, intern. conf., Amsterdam, Netherlands. (Secretariat, Holland Organizing Center, 16, Lange Voorhout, The Hague)

7–10. **Invertebrates and the Chemistry of Learning**, symp., Michigan State Univ., East Lansing. (W. C. Corning, Fordham Univ., Bronx, N.Y.)

7–10. **Space Simulation**, conf., Houston, Texas. (A. C. Bond, Code EA, NASA Manned Spacecraft Center, Houston 77058)

8–10. **Atherosclerosis and the Reticulo-Endothelial System**, intern. symp., Como, Italy. (R. Paoletti, Inst. of Pharmacology, Via Vanvitelli n. 32, Milan)

8–10. International Soc. of **Geographical Pathology**, 9th conf., Leiden, Netherlands. (Secretariat, Holland Organizing Centre, 16, Lange Voorhout, The Hague)

8–10. **Parapsychological** Assoc., 9th annual conv., New York, N.Y. (J. G. Pratt, Box 152, Univ. of Virginia Hospital, Charlottesville 22901)

8–13. **Semiconductor Physics**, intern. conf., Kyoto, Japan. (G. M. Hatoyama, Physical Soc. of Japan, Hongo P.O. Box 28, Tokyo)

9–10. **Instrumentation for High Energy Physics**, intern. conf., Stanford, Calif. (D. W. Dupen, Stanford Linear Accelerator Center, P.O. Box 4349, Stanford, Calif. 94305)

9–10. Scandinavian **Neurosurgical** Soc., 19th annual mtg., Gothenburg, Sweden. (G. Norlen, Sahlgrenska Sjukhus, Gothenburg)

10–21. **Industrial Chemistry**, 36th intern. congr., Brussels, Belgium. (A. Guilmot, 49, Sq. Marie-Louise, Brussels 4)

11–15. **Cell, Tissue, and Organ Culture**,

2nd conf., Tissue Culture Assoc., Bedford, Pa. (V. J. Evans, Natl. Cancer Inst., NIH, Bethesda, Md. 20014)

11–16. American **Chemical** Soc., 152nd natl. mtg., New York, N.Y. (The Society, 1155 16th St. NW, Washington, D.C.)

11–16. International Soc. of **Orthopedic Surgery and Traumatology**, 10th mtg., Paris, France. (P. Lance, 34 rue Montoyer, Brussels, Belgium)

11–17. International Soc. for **Rehabilitation** of the Disabled, 10th world congr., Wiesbaden, Germany. (S. G. Whittier, Natl. Soc. for Crippled Children and Adults, 2023 W. Ogden Ave., Chicago, Ill. 60612)

11–18. **Comparative Pathology**, intern. congr., Beirut, Lebanon. (J. K. Frenkel, Dept. of Pathology and Oncology, Univ. of Kansas Medical Center, Kansas City 66103)

12–13. **Chromatography and Electrophoresis**, 4th intern. symp., Brussels, Belgium. (Belgian Soc. of Pharmaceutical Sciences, 11, rue Archimède, Brussels 4)

12–14. American **Fisheries** Soc., Kansas City, Mo. (R. F. Hutton, The Society, 1404 New York Ave., Washington, D.C.)

12–14. Physics of **Free Atoms**, conf., Berkeley, Calif. (V. W. Cohen, Physics, Dept. Brookhaven Natl. Laboratory, Upton, N.Y. 11973)

12–14. Society for **Industrial and Applied Mathematics**, fall mtg., Stony Brook, N.Y. (A. H. Zemanian, Dept. of Applied Analysis, State Univ. of New York, Stony Brook 11790)

12–14. Production and Applications of **Intense Magnetic Fields**, intern. colloquium, Grenoble, France. (National Center of Scientific Research, 15, quai Anatole France, Paris 7)

12–15. **Sarcoidosis**, 4th intern. conf., Paris, France. (J. Chretien, Hospital Cochin, rue Faubourg St.-Jacques, Paris 14)

12–15. Society of American **Foresters**, 66th annual mtg., Seattle, Wash. (The Society, 1010 16th St. NW, Washington, D.C. 20036)

12–16. International Council of the **Aeronautical Sciences**, 5th congr. London, England. (American Inst. of Aeronautics and Astronautics, 1290 Sixth Ave., New York 10019)

12–16. **Ecological Archives** and Methods of Analysis, intern. conf., Evian, France. (Intern. Social Science Council, 6 rue Franklin, Paris 16, France)

12–16. **Nuclear Radiation and X-ray Chemistry**, symp., Jalich, Germany. (German Chemical Soc., Geschaftsstelle, 6 Frankfurt am Main 9, Postfach 9075, Germany)

12–16. **Radiation Measurements** in Nuclear Power, conf., Berkeley, England. (K. F. Orton, Berkeley Nuclear Laboratories, Berkeley)

12–16. **Vaccines Against Viral and Rickettsial Diseases of Man**, intern. conf., Washington, D.C. (Pan American Sanitary Bureau, 525 23rd St., NW, Washington, D.C. 20037)

12–17. **Angiology**, 8th Latin American congr., Caracas, Venezuela. (J. Morales Rocha, avda. Diego de Lazada 12, San Bernardino, Caracas)

12–17. **Insect Chemistry**, European conf., Milan, Italy. (Polytechnical Inst. of Milan, Piazza Leonardo da Vinci 32, Milan)

12–17. **Nuclear Physics**, intern. conf., Gatlinburg, Tenn. (A. Zucker, Oak Ridge Natl. Laboratory, P.O. Box X, Oak Ridge, Tenn. 37831)

13–16. **Antarctic Oceanography**, symp., Santiago, Chile. (H. Mosby, Geophysics Inst., Bergen, Norway)

14–16. **Deformation and Flow in High Polymer Systems**, conf., Loughborough, England. (R. E. Wetton, Dept. of Chemistry, Loughborough College of Technology, Loughborough, England)

14–18. International Federation of **Operational Research** Soc., 4th intern. conf., Cambridge, Mass. (P. M. Morse, Room 6-107, Massachusetts Inst. of Technology, Cambridge 02139)

14–21. **Neurobiology**, symp., Stockholm, Sweden. (UNESCO, Pl. de Fontenoy, Paris 7, France)

15–16. **Pyrolysis-Gas Chromatography**, symp., Paris, France. (G. Guichon, Ecole Polytechnique, 17 rue Descartes, Paris 53)

17–24. **Pharmaceutical Sciences**, 26th intern. congr., Madrid, Spain. (J. H. M. Winters, Alexanderstraat 111, The Hague, Netherlands)

18–21. American Inst. of **Chemical Engineers**, 58th natl. mtg., Atlantic City, N.J. (Asst. Secretary, 345 E. 47 St., New York 10017)

18–24. International Soc. of **Gastroenterology**, 5th world congr., Tokyo, Japan. (Secretary General, School of Medicine, Jikei Univ., Atago-cho, Shiba, Minato-Ku, Tokyo)

18–24. **Veterinary Medicine and Zootechnic**, 5th Pan American congr., Caracas, Venezuela. (P.O. Box 5212, Chacao, Caracas)

19–21. **Instrumental Optics** and Optical Design, conf., Chelsea College of Science and Technology, Chelsea, England. (Meetings Officer, Inst. of Physics and the Physical Soc., 47 Belgrave Sq., London, S.W.1, England)

19–22. **Cybernetic Medicine**, 4th intern. congr., Nice, France. (Dr. Cossa, 29 boul. Victor-Hugo, Nice)

19–22. Applications of **Electronic Engineering to Oceanography**, conf., Southampton, England. (Inst. of Electronic and Radio Engineers, 8-9 Bedford Sq., London, W.C.1, England)

19–22. **Neurobiologists**, 4th intern. mtg., Stockholm, Sweden. (Secretary General, Nobel Inst. for Neurophysiology, Karolinska Inst., Stockholm 60)

19–23. American Soc. of **Oral Surgeons**, mtg., Chicago, Ill. (E. Larson, 211 E. Chicago Ave., Chicago)

19–24. **Boundary Layers and Turbulence**, symp., Kyoto, Japan. (I. Tani, Inst. of Space and Aeronautical Science, Univ. of Tokyo)

19–24. International Federation for **Documentation**, 32nd conf., The Hague, Netherlands. (Organizing Secretary, 7 Hofweg, The Hague)

20–22. **Tube Techniques**, 8th conf., Inst. of Electrical and Electronics Engineers, electron devices group, New York, N.Y. (R. J. Bondley, General Electric Co., Schenectady, N.Y.)

20–23. **Comminution**, 2nd symp., European Federation of Chemical Engineering, Amsterdam, Netherlands. (Congress Bureau, 3 Sint Agnietenstraat, Amsterdam)

20–23. **Gas Chromatography** and Associated Techniques, intern. symp., Rome,

Italy. (A. B. Littlewood, School of Chemistry, The University, Newcastle on Tyne 1, England)

20–23. **Immunity, Cancer, and Chemotherapy**, intern. symp., Buffalo, N.Y. (E. Mihich, Roswell Park Memorial Inst., Buffalo 14203)

21–22. Significance of **Water Composition**, natl. symp., American Soc. for Testing and Materials, Philadelphia, Pa. (The Society, 1916 Race St., Philadelphia)

21–23. **Aerodynamic Testing**, conf., Los Angeles, Calif. (R. E. Covey, Jet Propulsion Laboratory, 4800 Oak Ridge Dr., Pasadena, Calif. 91103)

21–23. International Assoc. of **Geochemistry and Cosmochemistry**/Intern. Union of **Geological Sciences**, mtg., Paris, France. (UNESCO, Pl. de Fontenoy, Paris 7)

21–23. **Molecular Motion** in Solids, Liquids, and Gases by Magnetic Resonance, mtg., Canterbury, England. (E. F. W. Seymour, British Radio Spectroscopy Group, School of Physics, Univ. of Warwick, Coventry, England)

21–23. **Nuclear and Particle Physics**, conf., Univ. of Glasgow, Glasgow, Scotland. (Meetings Officer, Inst. of Physics and the Physical Soc., 47 Belgrave Sq., London S.W.1, England)

21–23. **Origin and Abundance-Distribution of the Elements**, symp., UNESCO headquarters, Paris, France. (W. D. Page, Div. of Earth Sciences, Natl. Acad. of Sciences, 2101 Constitution Ave., Washington, D.C. 20418)

21–23. **Origin and Distribution of the Elements**, symp., Paris, France. (E. Ingerson, Dept. of Geology, Univ. of Texas, Austin 78712)

21–23. **Supermolecular Structure in Fibers**, 25th conf., Fiber Society, Boston, Mass. (L. Rebenfeld, Textile Research Inst., P.O. Box 625, Princeton, N.J.)

21–24. New Methods of **Stellar Dynamics**, colloquium, Besançon, France. (Assistant Secretary, Intern. Astronomical Union, Observatory of Nice, Le Mont-Gros, Nice, France)

21–29. International **Atomic Energy** Agency, 10th general conf., Vienna, Austria. (IAEA, Kärntnerring 11, Vienna 1)

22–24. American College of **Cardiology**, regional mtg. Univ. of Florida, Gainesville. (M. W. Wheat, Jr., Div. of Postgraduate Education, Univ. of Florida College of Medicine, Gainesville 32601)

22–24. **Muscle Circulation**, symp., Smolenice, Czechoslovakia. (O. Hudlická, Inst. of Physiology, Czechoslovak Acad. of Sciences, Budějovická 1083, Prague 4)

23–1. American Soc. of **Clinical Pathologists**, Chicago, Ill. (Secretary, 445 North Lake Shore Dr., Chicago 11, Ill.)

24–26. **Phage Genetics and Physiology**, mtg., Naples, Italy. (Organizing Committee, Intern. Laboratory of Genetics and Biophysics, Naples)

25–28. **Gastrointestinal Radiation Injury**, symp., Richland, Wash. (M. F. Sullivan, Biology Dept., Battelle-Northwest, P.O. Box 999, Richland 99352)

25–29. **Water Pollution Control** Federation, 39th mtg., Kansas City, Mo. (R. E. Fuhrman, 4435 Wisconsin Ave., NW, Washington, D.C. 20016)

25–30. **Nephrology**, 3rd intern. congr., Washington, D.C. (Secretariat, 9650 Wisconsin Ave., Washington, D.C. 20014)

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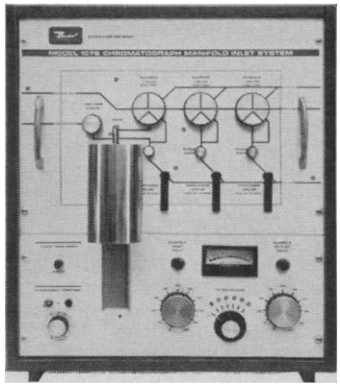

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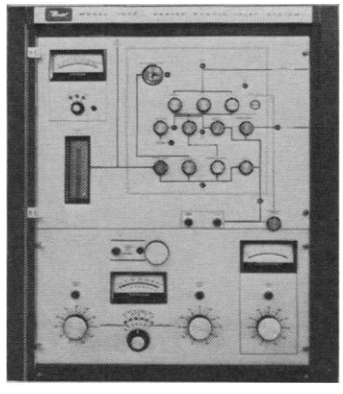

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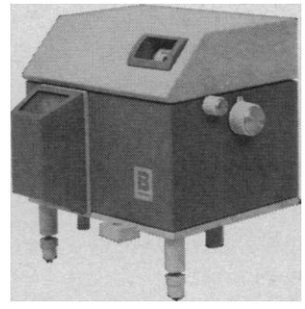

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26–27. **Engineering Management**, 14th annual joint conf. (JEMC), Washington, D.C. (H. M. Sarasohn, IBM Corp., Armonk, N.Y. 10504)

26–27. Prospects for **Simulation and Simulators of Dynamic Systems**, symp., Baltimore, Md. (S. Burik, MS 452A, Westinghouse Electric Corp., P.O. Box 746, Baltimore 21203)

26–28. **Colloid Stability** in Aqueous and Nonaqueous Media, mtg., Faraday Soc., Univ. of Nottingham, Nottingham, England. (The Society, 6 Gray's Inn Sq., London W.C.1, England)

26–28. **Nonconventional Energy Conversion Applications**, first conf., Los Angeles, Calif. (R. E. Henderson, Research Manager, Applied Sciences, Allison Div., General Motors Corp., Indianapolis, Ind. 46202)

26–28. **Organic Geochemistry**, 3rd intern. mtg., Imperial College of Science and Technology, London, England. (G. D. Hobson, Geology Dept. Imperial College of Science and Technology, London S.W.7)

26–28. **Point Defects in Non-Metallic Solids**, mtg., British Ceramic Soc., Falmer, England. (J. P. Roberts, Houldsworth School of Applied Science, Univ. of Leeds, Leeds 2, England)

26–30. **Animal Care Panel**, 17th annual mtg., Chicago, Ill. (J. J. Garvey, 4 E. Clinton St., Joliet, Ill. 60434)

26–30. **Health Physics**, 2nd autumn symp., Pecs, Hungary. (Eötvös Lorańd Fizikai Társulat, Szbadság ter 17, Budapest 5)

26–3. **Bionic Models of the Animal Sonar System**, symp., Frascati, Italy. (R. G. Busnel Laboratory of Acoustical Physiology, Domaine de Vilvert, Jouy-en-Josas, Seine-et-Oise France)

27–29. **Analytical Chemistry in Nuclear Technology**, conf., Gatlinburg, Tenn. (L. J. Brady, Oak Ridge Natl. Laboratory, P.O. Box X, Oak Ridge, Tenn. 37830)

27–29. Society for **General Microbiology**, mtg., Bristol, England. (Soc. for Visiting Scientists, 19 Albemarle St., London W.1, England)

27–29. **Vestibular and Kinaesthetic Mechanisms**, symp., London, England. (Ciba Foundation, 41 Portland Pl., London W.1)

28–30. **Energy Beams**, conf., Univ. of York, York, England. (Meetings Officer, Inst. of Physics and the Physical Soc., 47 Belgrave Sq., London S.W.1)

28–30. **Marine Geodesy**, Present and Future, intern. symp., Columbus, Ohio. (A. G. Mourad, Columbus Laboratories, Battelle Memorial Inst., 505 King Ave., Columbus 43201)

28–4. **Macromolecular Chemistry**, intern. symp., Tokyo and Kyoto, Japan. (Organizing Committee, C.P.O. Box 1966, Tokyo)

29–1. Association of **Clinical Pathologists**, autumn mtg., London, England. (Dr. Sandler, Queen Charlotte's Maternity Hospital, 339-351 Goldhawk Rd., London W.6)

29–2. American **Medical Writers'** Assoc., mtg., New York, N.Y. (J. E. Bryan, 2000 P St., NW, Washington, D.C. 20036)

30–1. **Medical Library** Assoc., southern regional group mtg., Winston-Salem, N.C. (The Association, 919 N. Michigan Ave., Chicago, Ill.)

NEW BOOKS

(Continued from page 406)

stitute of Human Relations and the Tavistock Clinic and deals with brief separations of children from their parents.

Central Places in Southern Germany. Walter Christaller. Translated from the German edition by Carlisle W. Baskin. Prentice-Hall, Englewood Cliffs, N.J., 1966. 240 pp. Illus. $9.95.

Le conditionnement operant. Une introduction et un guide à la recherche de laboratoire. Marc Richelle. Delachaux and Niestlé, Neuchâtel, Switzerland, 1966. 221 pp. Illus. Paper. Actualités Pédagogiques et Psychologiques.

Daydreaming: An Introduction to the Experimental Study of Inner Experience. Jerome L. Singer. Random House, New York, 1966. 256 pp. Paper, $2.25. Studies in Psychology Series.

The Economics of Delinquency. Belton M. Fleisher. Quadrangle Books, Chicago, 1966. 127 pp. Illus. $4.50.

Education for Positive Mental Health. James A. Davis. Aldine, Chicago, 1965. 206 pp. Illus. $6.95. National Opinion Research Center Monographs in Social Research Series.

Honour and Shame: The Values of the Mediterranean Society. J. G. Peristiany, Ed. Univ. of Chicago Press, Chicago, 1966. 266 pp. Illus. $5. Nature of Human Society Series. Six papers: "Honour and social status" by Julian Pitt-Rivers; "Honour and shame: A historical account of several conflicts" by Julio Caro Baroja; "Honour and the devil" by J. K. Campbell; "Honour and shame in a Cypriot highland village" by J. G. Peristiany; "The sentiment of honour in Kabyle society" by Pierre Bourdieu; and "Honour and shame among the Bedouins of Egypt" by Ahmed Abou-Zeid.

Input-Output Economics. Wassily Leontief. Oxford Univ. Press, New York, 1966. 269 pp. Illus. $8.50.

Intelligence and Affectivity in Early Childhood. An experimental study of Jean Piaget's object concept and object relations. Therésè Gouin Décarie. Translated by Elisabeth Pasztor Brandt and Lewis Wolfgang Brandt. International Universities Press, New York, 1966. 246 pp. Illus. $5.

The Intelligence of Democracy: Decision Making Through Adjustment. Charles E. Lindblom. Free Press, New York, 1965. 360 pp. $7.50.

Modernization and the Structure of Societies: A Setting for International Affairs. vols. 1 and 2. Marion J. Levy, Jr. Princeton Univ. Press, Princeton, N.J., 1966. vol. 1, 394 pp.; vol. 2, 492 pp. Illus. $22.50 set.

New Horizons in Psychology. Brian M. Foss, Ed. Penguin Books, Baltimore, 1966. 447 pp. Illus. Paper, $1.65. Twenty-one papers on the following topics: Perception, Thinking, and Communication (8 papers); Origins of Behaviour (3 papers); Physiological and Psychological States (3 papers); Learning and Training (4 papers); and Personality and Social Psychology (3 papers).

Operant Behavior: Areas of Research and Application. Werner K. Honig, Ed.

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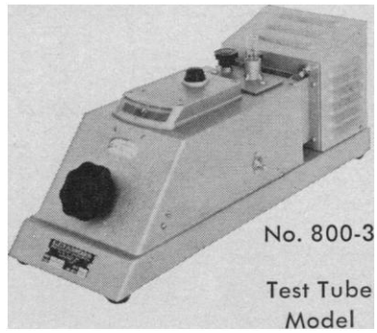

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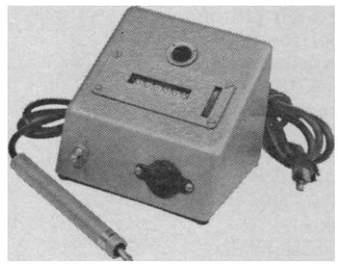

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