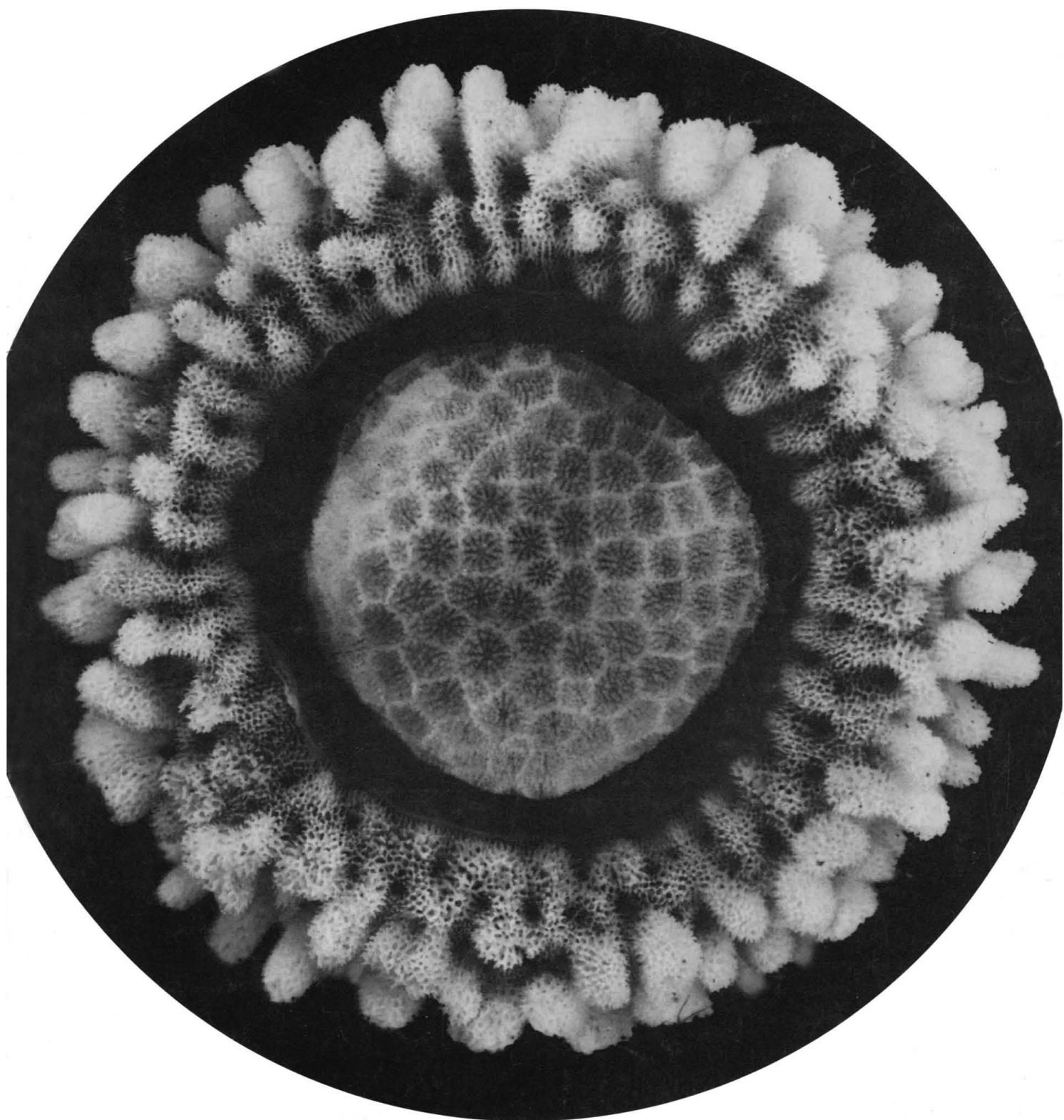


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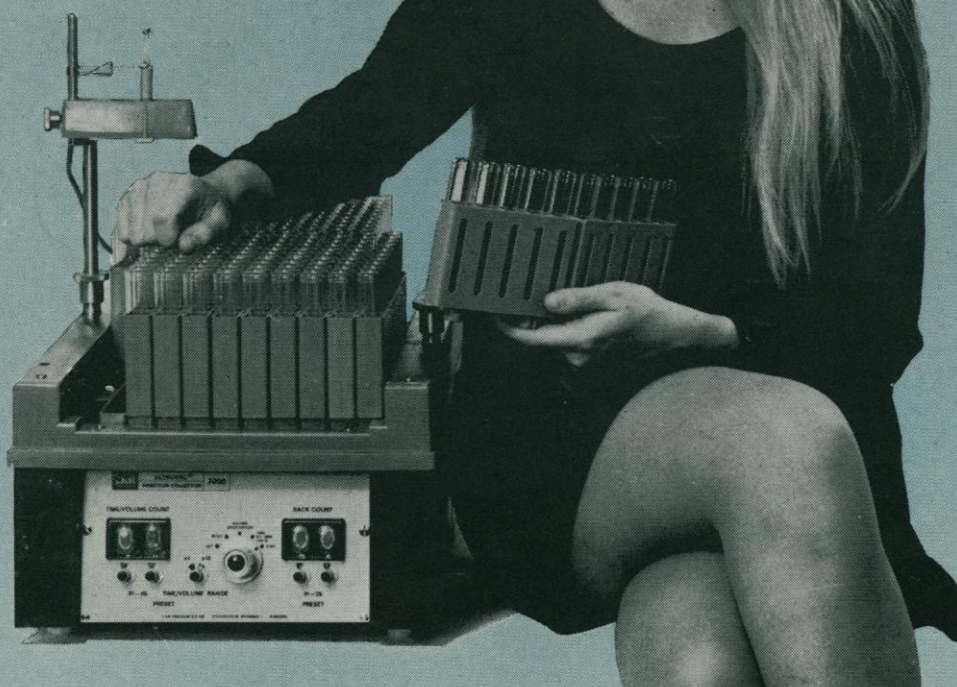
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End view of a finger of coral (*Porites compressa*) being overgrown by another coral (*Montipora verrucosa*). The more rapidly growing species (*Montipora*) is selectively eaten by the crown-of-thorns starfish (*Acanthaster planci*) and is a minor component of the coral cover where the starfish are aggregated. See page 1155. [Joseph M. Branham, University of Hawaii]

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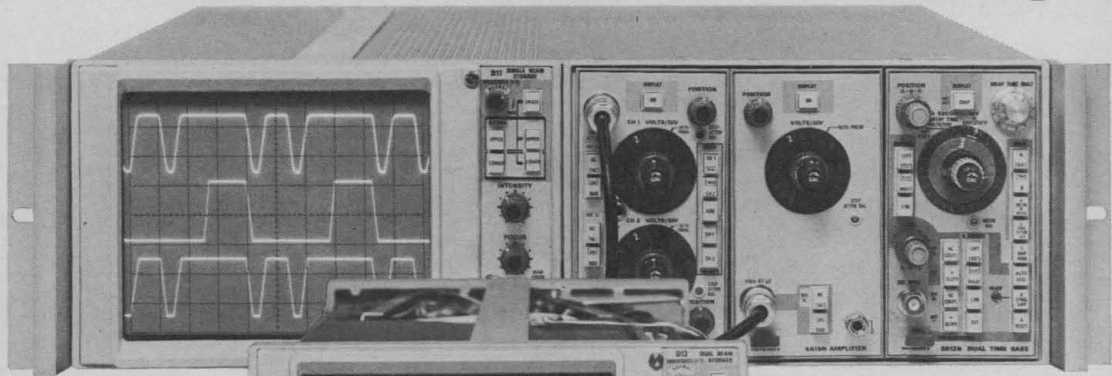
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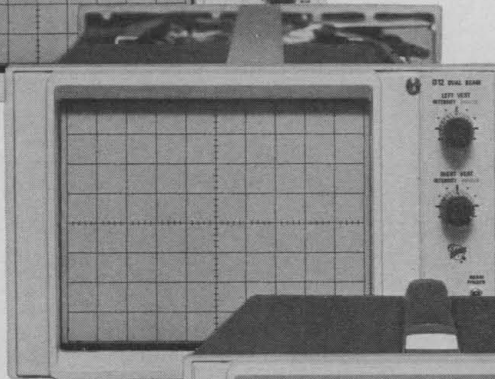
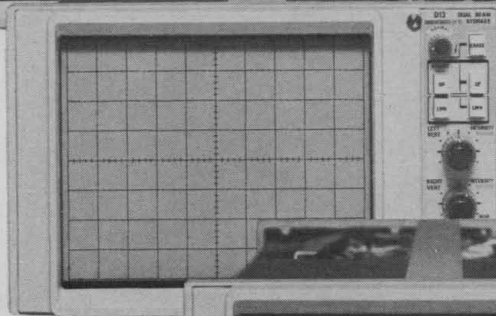
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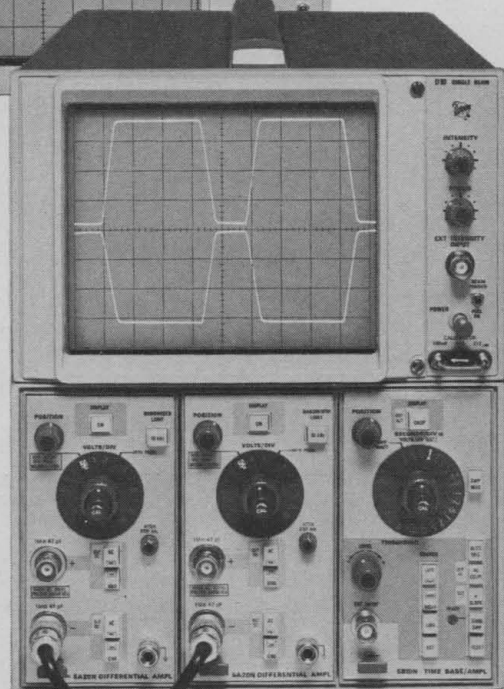


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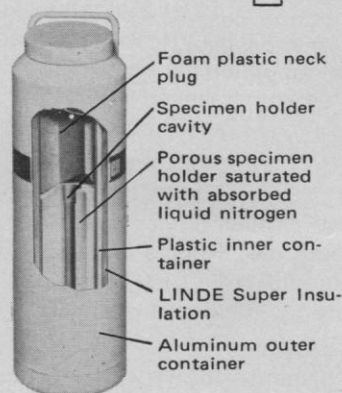


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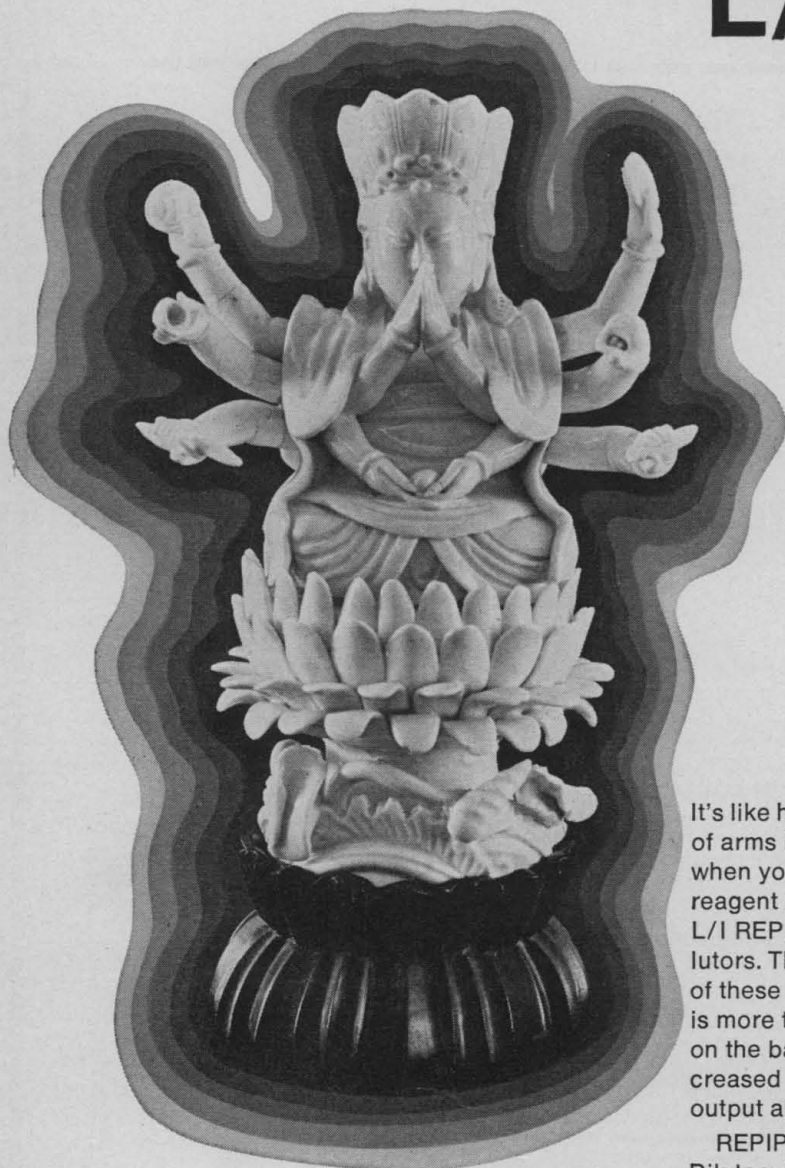
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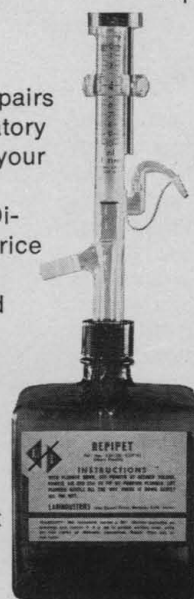
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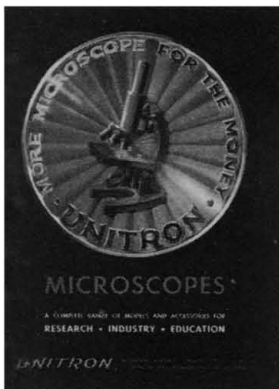
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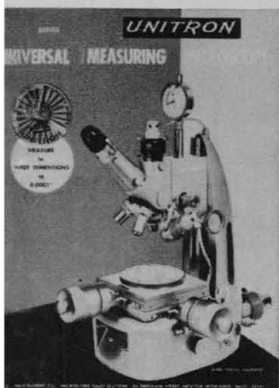
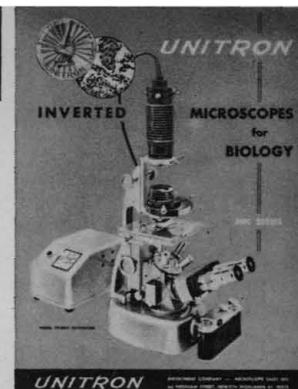
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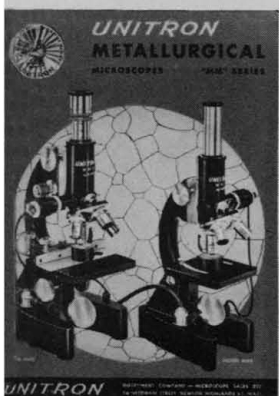
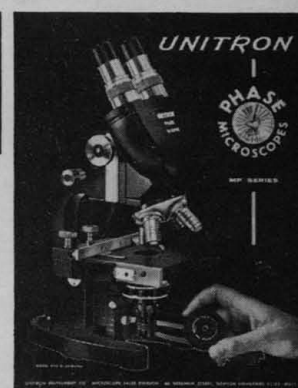
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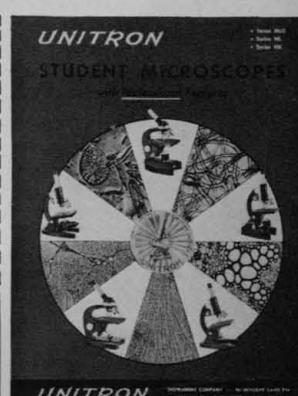
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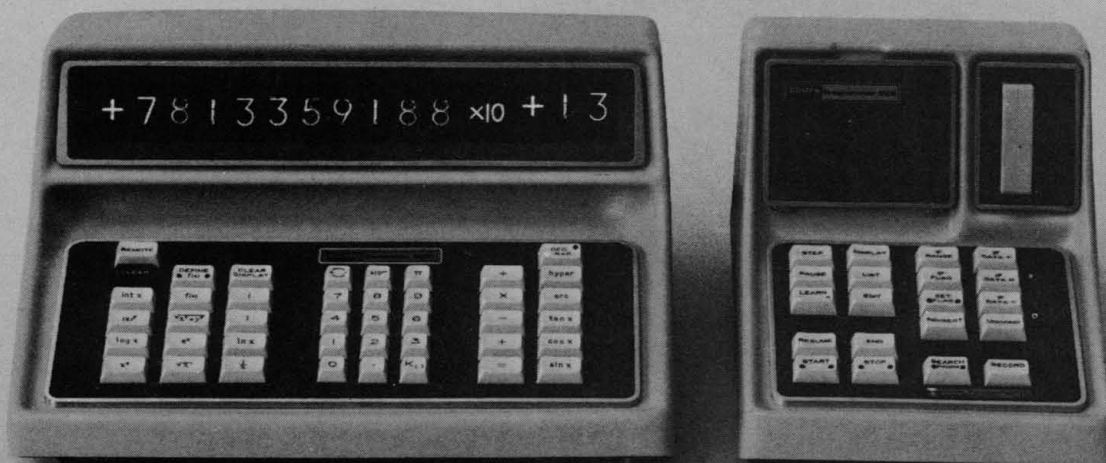
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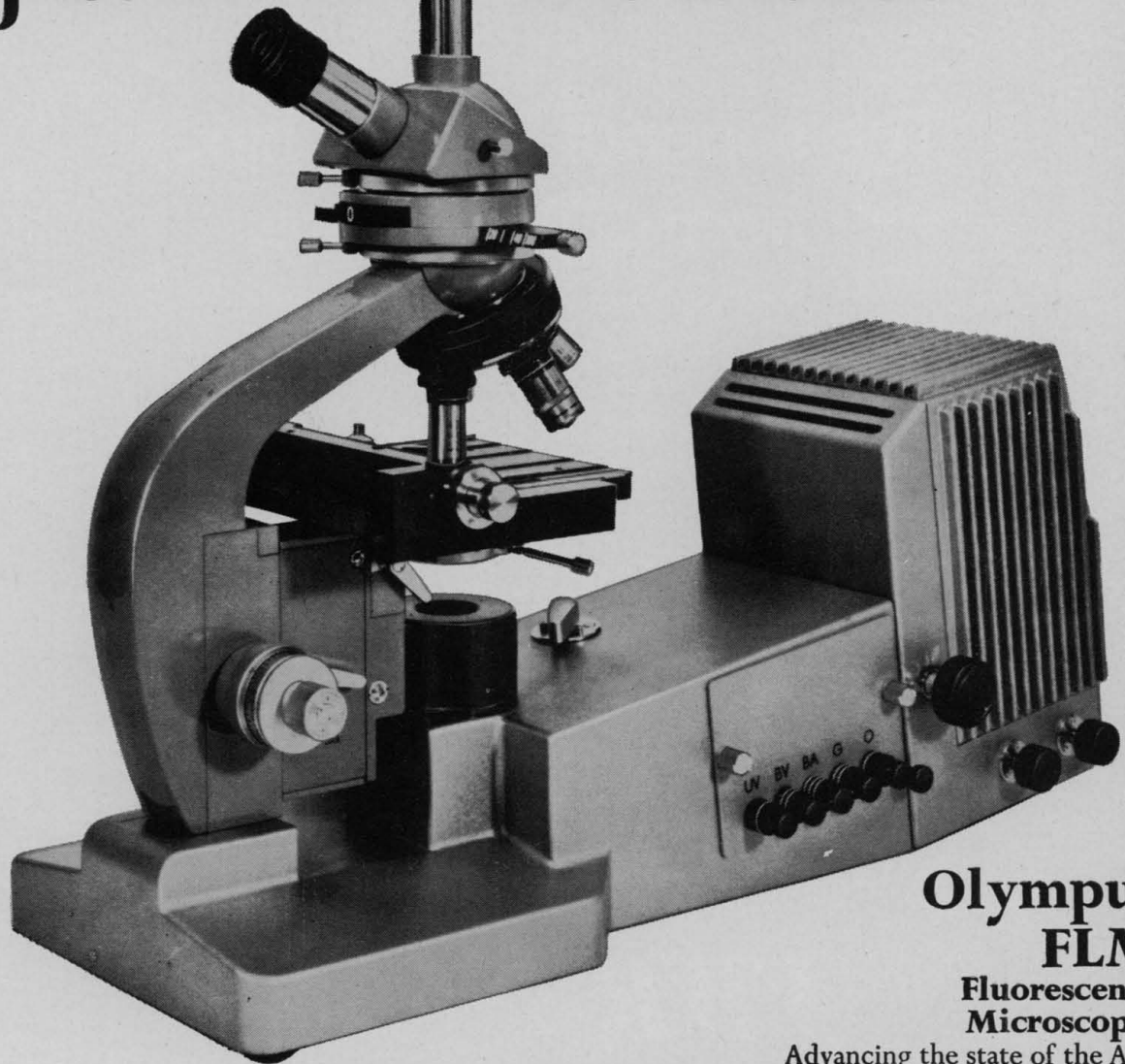
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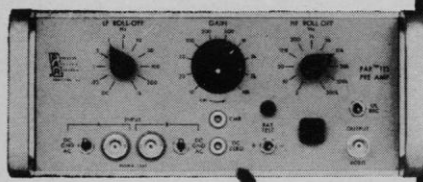


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## LETTERS

### Academic Question

No doubt Hayes's report on the relation of research and teaching (16 Apr., p. 227) will earn him criticism from both skeptics and true-believers. His scales are crude, his student evaluation item not germane, and so forth. Actually, Hayes merits praise for his ingenuity in devising variables and for utilizing administrator ratings.

He might well, however, have introduced other related studies which are at least the equal of the two (Voeks's and Bresler's) he uses. For example, earlier Guthrie (1), also at the University of Washington and using the data bank that Voeks employed, correlated student evaluations of teaching effectiveness with the ratings given by a panel of seven faculty judges. Maslow and Zimmerman (2) at Brooklyn College intercorrelated faculty colleague ratings of teaching effectiveness and of creative effort with student evaluations. Isaacson *et al.* (3) identified factors by peer judgment of college teachers evaluated by students in psychology at the University of Michigan. Hammond *et al.* (4) reported on pilot investigations of the relation between research and teaching effectiveness at the University of Wisconsin and at Stanford. Stallings and Singhal (5) conducted an extensive analysis on a stratified sample of University of Illinois faculty on the relation of teaching effectiveness and a sophisticated scale for publication. And Hoyt (6) introduced and validated a new measure of teaching effectiveness (attainment of course objective), which he correlated with faculty productivity, promotion rate, and merit increases at Kansas State University. Had Hayes built on this research, his fine contribution would have been enriched.

Finally, for those intrigued with the problem Hayes investigated, two as yet unpublished studies will be of interest. One, by Trowbridge (7), relates faculty productivity as measured by Ph.D. production to research dollars and teaching effectiveness, in six liberal arts departments in a major large university. The other, carried out by Clark and Blackburn (8) in a small liberal arts college, introduced for the first time professorial self-rating of teaching effectiveness and overall contribution to the college, a measure demonstrated to be equivalent to research

productivity in a university setting. These self-ratings are correlated with student evaluations, judgments by colleagues, and administrator ratings. The finding of the very low correlation between the professor's judgment of his performance and how students and administrators rate him on teaching effectiveness is frightening. The academic man seems to be an extremely poor judge of how well he is doing. This may partly account for why he is as concerned as he is at promotion time.

ROBERT T. BLACKBURN

*Center for the Study of Higher  
Education, University of  
Michigan, Ann Arbor*

### References

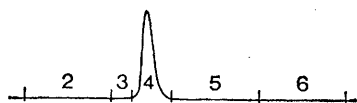
1. E. R. Guthrie, *Educ. Record* 30, 109 (1949).
2. A. H. Maslow and W. Zimmerman, *J. Educ. Psychol.* 47, 185 (1956).
3. R. L. Isaacson, W. J. McKeachie, J. Milholland, *ibid.* 54, 110 (1963).
4. P. E. Hammond, J. W. Meyer, D. Miller, *J. Higher Educ.* 40, 682 (1969).
5. W. M. Stallings and S. Singhal, *ERIC, ED 027 838* (1969) (available from ERIC Document Reproduction Service, P.O. Drawer 0, Bethesda, Md.).
6. D. P. Hoyt, "Instructional Effectiveness: III, Interrelationships with Publication Record and Monetary Reward" *Research Report 10* (Kansas State University, Manhattan, 1970).
7. K. Trowbridge, thesis, University of Michigan (1971).
8. M. J. Clark and R. T. Blackburn, "Assessment of Faculty Performance: (1) A Methodology and (2) Some Correlates between Self, Colleagues, Students, and Administrators," in preparation.

... Inasmuch as teaching and research are just two of the duties that a faculty member is called upon to perform, I see no justification in assuming that there exists either an inverse or a direct relation between the ability to do research and the gift of being a good teacher. The two factors could just as easily be totally independent of one another. In addition the correlations that Hayes and Bresler employ in their studies give one no information on causality.

A key point that seems to have been overlooked in these studies is a clarification of what constitutes good teaching. It would be a valuable contribution to determine what characteristics are embodied in the concept of good teaching by different individuals at various levels within the academic hierarchy. A graduate student and an undergraduate are likely to have somewhat different criteria of what constitutes good teaching. A researcher who stimulates students to do research in a one-to-one situation may be a poor lecturer within the confines of an undergraduate course; a showman often has a more stimulating influence at this level.

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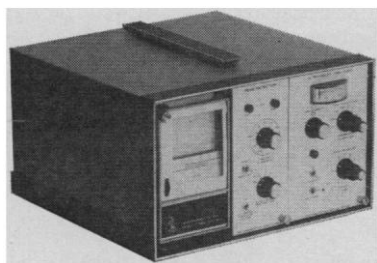


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One also has to weigh such factors as the course content, the level of scholarship demanded, the ability to counsel students, and the talent for turning students on. It would appear obvious that an undergraduate and a department chairman would weight these factors differently. It is my feeling that this difference in attitudes has a more profound influence on the academic conflict in question than does the teaching versus research controversy (which has assumed dimensions of jousting with windmills).

Many of the teaching-versus-research studies that have been done simply result in quantifying the obvious. One only has to look for an academic position to realize that one's apparent research potential as evidenced by publications is an important criterion in hiring. Thus it is not surprising that it is also an important factor in promotion. Studies of this sort might be more useful if they employed more realistic indices of research achievement, such as the number of times an author's paper is cited rather than how many papers he has produced.

DAVID DOW

*Department of Zoology,  
University of Georgia, Athens 30601*

Hayes's article provided some interesting bits of data heretofore unavailable. However, it is my opinion that his measures of "teaching ability" were entirely inadequate. He showed that his two measures—student evaluation of the teachers' performance and quality of teaching as judged by the department head—do not covary (his figure 2), then tried to relate these measures to other variables. Before any definitive answers can be made to the questions posed by this article, student performance must be made to play a central role in the evaluation of "teaching ability."

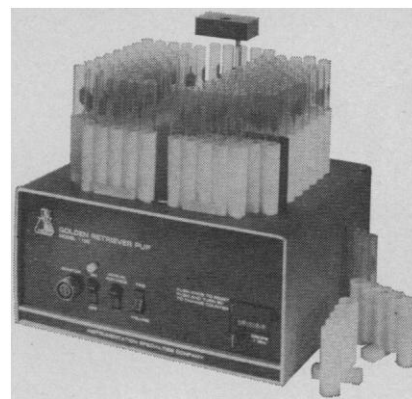
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### Transliterations' Pitfalls

The "barbarisms" of transliteration that Wartofsky points out in his review of an English translation of a Russian collection of essays on the logic of scientific knowledge (19 Feb., p. 662) results from the unfortunate translator's attempt to comply with the "International System for the

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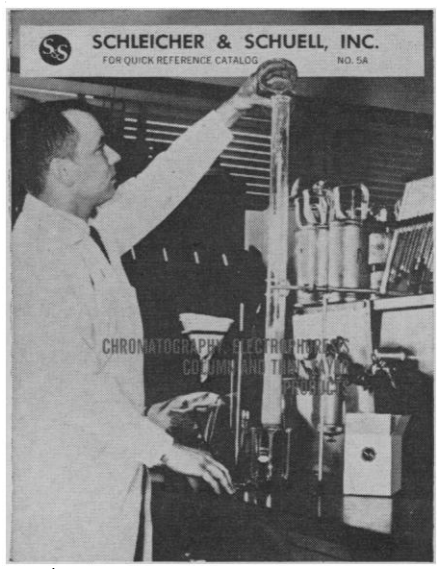


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Transliteration of Cyrillic Characters" as prescribed by the International Organization for Standardization. Granted that N'juton and Čerč for Newton and Church are abominations that should have been corrected by the editors or even the proofreaders of the volume in question, the fact remains that Russian scientific authors, when citing non-Russian literature, still seem (in general) to avoid the obvious palliative of giving both the original name and a Russian transliteration, at least in the bibliographies if not in the text. Surely this is a matter that the AAAS, *inter alia*, could take up with the competent authorities in the U.S.S.R.

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### Nobel Prizes

The recent death of fourfold Nobel-latent Herbert McLeane Evans suggests that it might be pertinent to raise a question regarding the value to our culture of the Nobel prizes. Quite obvious are apparent misjudgments both in omission and in commission. Yet, committees being human and ever operating on the compromise of the least common denominator of agreement, the record of over 70 years of awards is impressive in the effort to reward merit. Is the effort socially beneficial, or is it even necessary that merit receive reward beyond itself?

It may now be time, however, to propose that the Nobel prizes are outliving their social usefulness. Choices are ever more difficult. There are ever more worthy candidates. There seems to be a growing unpleasant competitiveness between rival scientific groups or between rival national literary cliques. In science, this engenders unseemly scrambles for priority. In general, this rivalry jeopardizes the ideals of scientific or literary endeavor. Political considerations may cloud choices.

In addition, while many awardees remain pleasant and cheerful, others tend to become arrogant, authoritative, and autocratic. There may be a built-in snobbishness in the whole Nobel prize business. My strictures apply to most other awards.

Perhaps I am quite wrong in my critique. If so, I welcome the opportunity to be set right. As of now, however, I think the Nobel and similar prize

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money would add more to our cultural progress by being given to promising scientists or writers, to help them in completing worthy works, than by being given to people for work, no matter how worthy, which is already finished.

CHAUNCEY D. LEAKE

*Department of Pharmacology,  
University of California,  
San Francisco 94122*

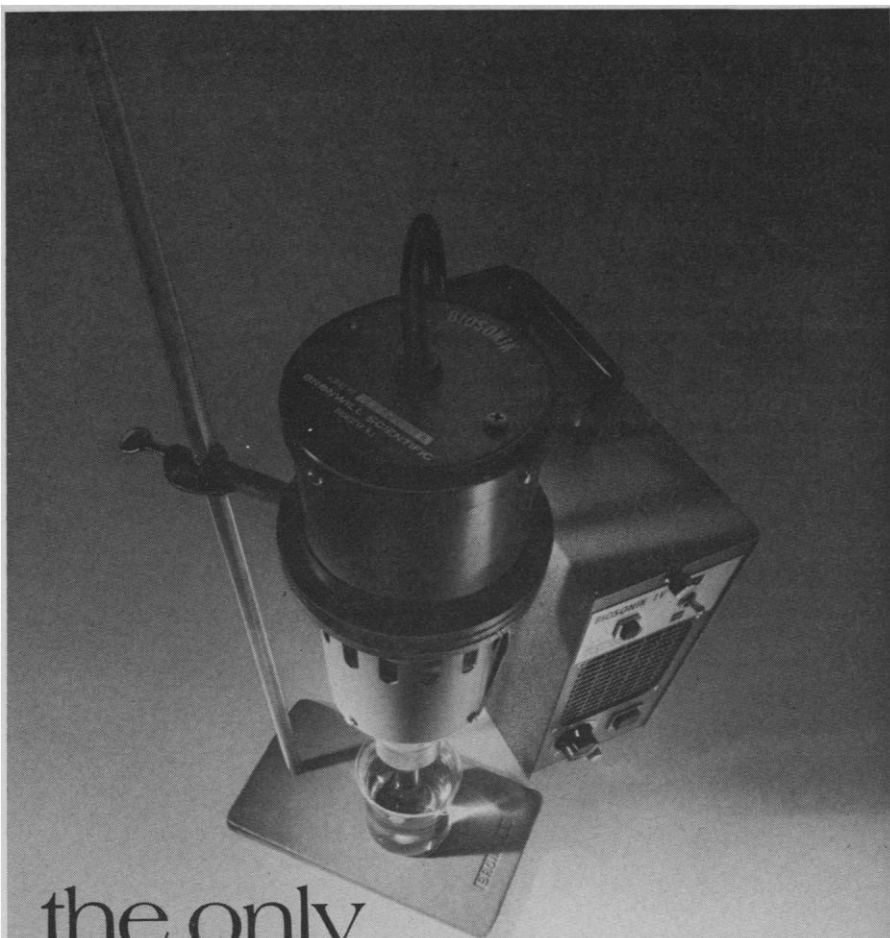
## Federal Land Releases

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An important mechanism for the control of federal programs by executive action can be recognized in the authority of the Property Review Board, established last year by executive order to make recommendations to the President regarding the use or disposal of federal property. The use of executive power to reduce the level of effort and to alter the priorities in federal programs is a subject of increasing concern. Immediate congressional investigations seem to be essential to reveal (i) policy and program changes that are entailed in these and other administrative decisions about changes in land use and (ii) the extent to which the provisions of section 102 of the National Environmental Policy Act of 1969 (Public Law 91-190) are being followed in these actions.

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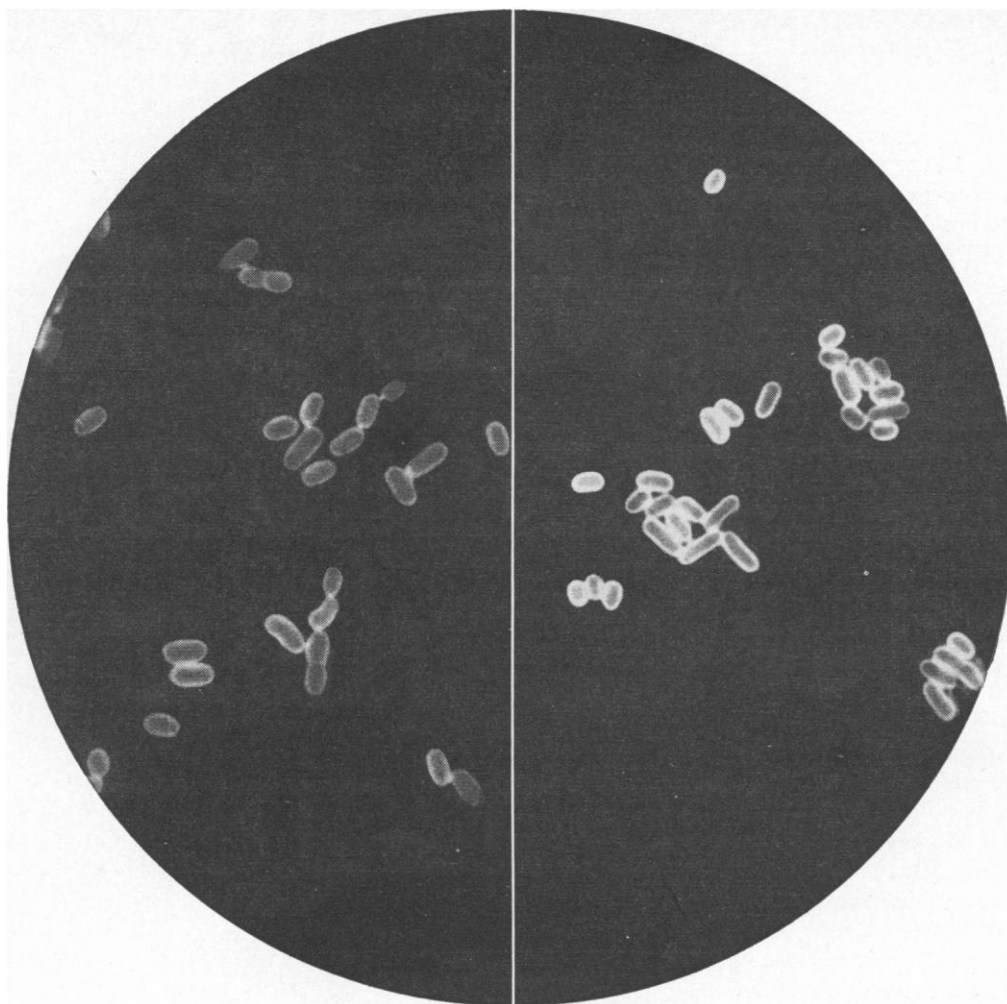
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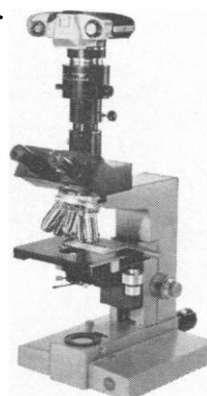
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## On Academic Blood Tests

One of my brightest students, who is completing his Ph.D., was chosen by the personnel committee of a major university to become an assistant professor in the university's sociology department. He was turned down, according to the chairman of the committee, because a large number of the faculty members preferred—a Chicano. (Blacks and women had been appointed in previous years.) My student, whom the faculty never saw, wrote to me:

... my great grandmother was a full blooded Minnesota Sioux Indian, and was the sister of Chief White Cloud who led the 1862 Sioux uprising against Fort Snelling in St. Paul. If only my great grandmother hadn't been so socially aware (she married a French trapper) and had stayed on the reservation where she belonged, I might be in better stead today!

I shared the information with my colleagues, but many of them gave a higher rating to a "100 percent Chicano" than to an unknown quantity of Indian blood.

My colleagues, it seems, must avoid being called racist, male chauvinist, or square, at all costs; can anyone build up his courage to the point where he can face such charges? And, if they are to retain a "balanced" faculty, how can they hire anyone who does not fit into a color chart, which tells them how many black, brown, red, yellow (and white) professors a distinguished university needs?

Don't they deserve our sympathy? As the case at hand illustrates, what are these poor souls to do when they must choose between members of different minorities, or—God forbid—between, say, an Oriental-Black and a Jewish-Chicano? Should not the first opening be reserved for a Gay, Gypsy Girl, under 30?

Tests of our genes will not do as a criterion of hiring, since most of our biological inheritance is not divided along racial lines. Blood tests are even less cooperative, since, embarrassingly, all of us have red blood. And, some of the most "backward" groups have the same blood type as the most "advanced" ones.

The social scientists in particular ought to be ashamed of themselves. Those treacherous creatures labored, for nearly two generations, to show that the concept of race is without scientific foundation. Many Negroes, they maintained, are not black; many Orientals are not yellow, and many Jews have no kinky hair. And—they argued quite convincingly—even if a person has one of the "racial" marks, he often has none of the others. They used to urge, in the forgotten days when liberal values ranked high on the campus, that we all think about members of minorities as people who differ in economic, social, and cultural background, not as people of different races. Now, the fashion is to see color even where there are obviously other factors at work.

Thus we face, in effect, two choices. We could launch a crash program to produce biological and social tests to secure racial identifications and provide each campus with a color master plan, asking future applicants to send in an authenticated family tree (snapshots are unreliable)—or, we could stop checking people's genes, genitalia, and gender as we retain scholars and educators.

Of course, social justice must be advanced, but it will not be served long by applying *ad absurdum* racism in reverse. What we need are more, broader, and stronger programs to help the less prepared to meet the same academic criteria now applied to those who had a more fortunate background.—AMITAI ETZIONI, *Chairman, Department of Sociology, Columbia University, and Director, Center for Policy Research*

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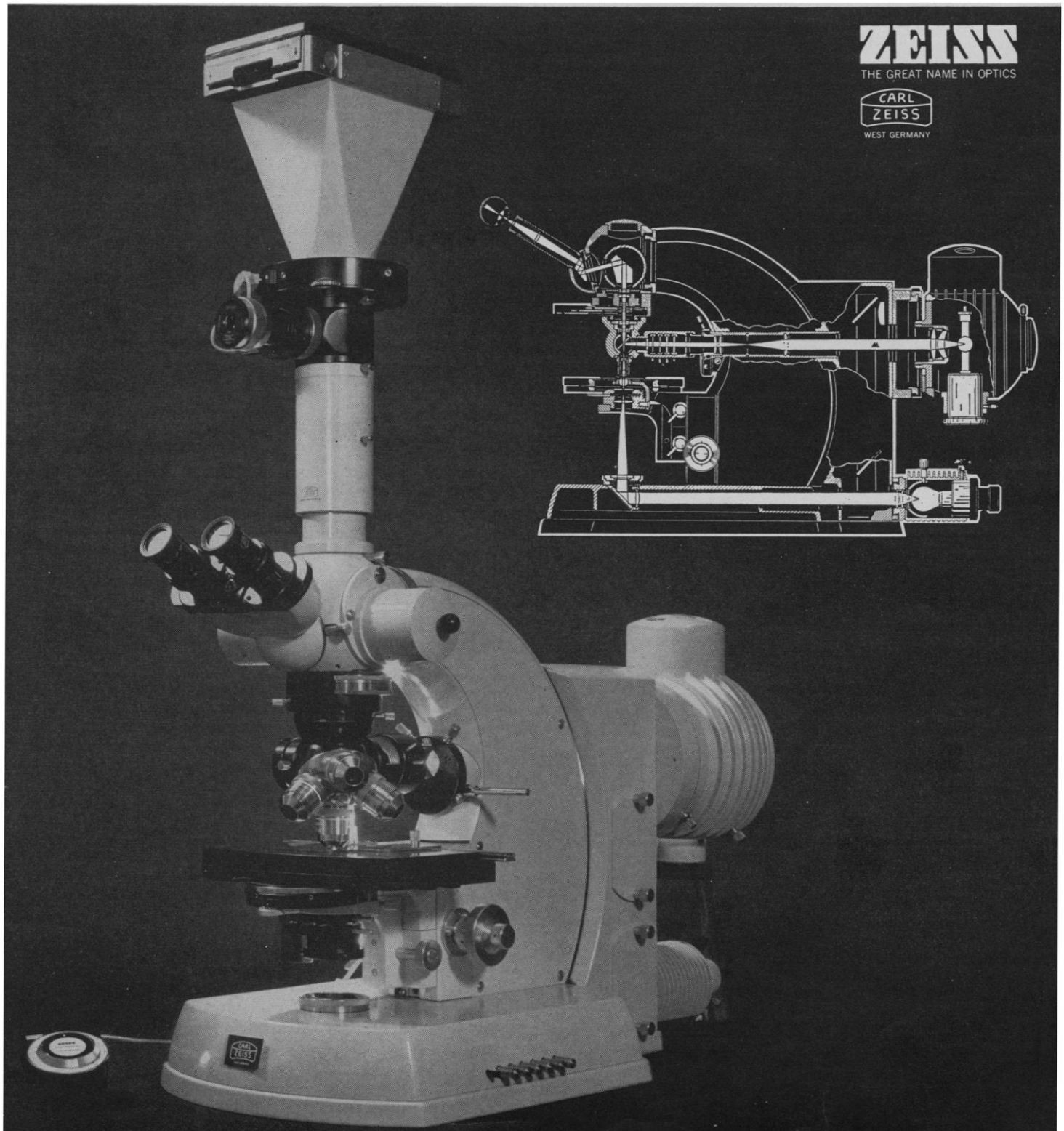
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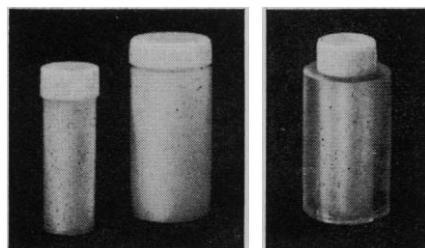
\*Dr. Walter McCrone is President of McCrone Research Institute, Chicago.

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**BOOKS RECEIVED**

(Continued from page 1125)

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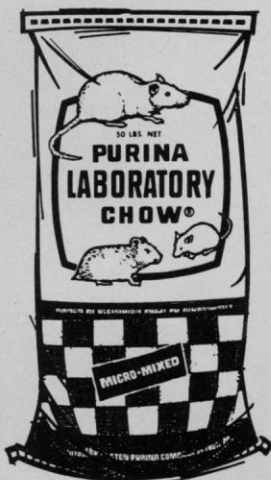
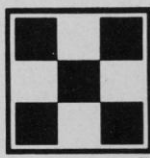


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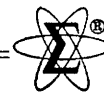
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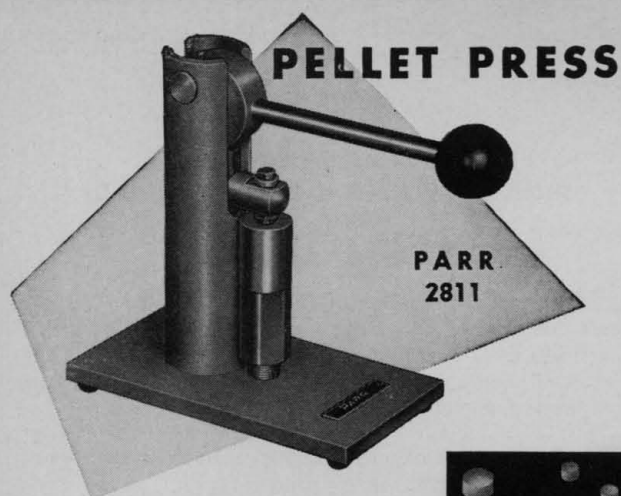
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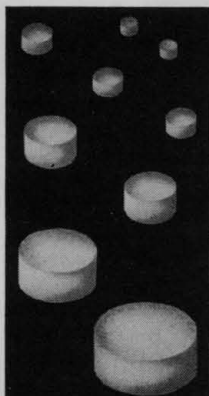
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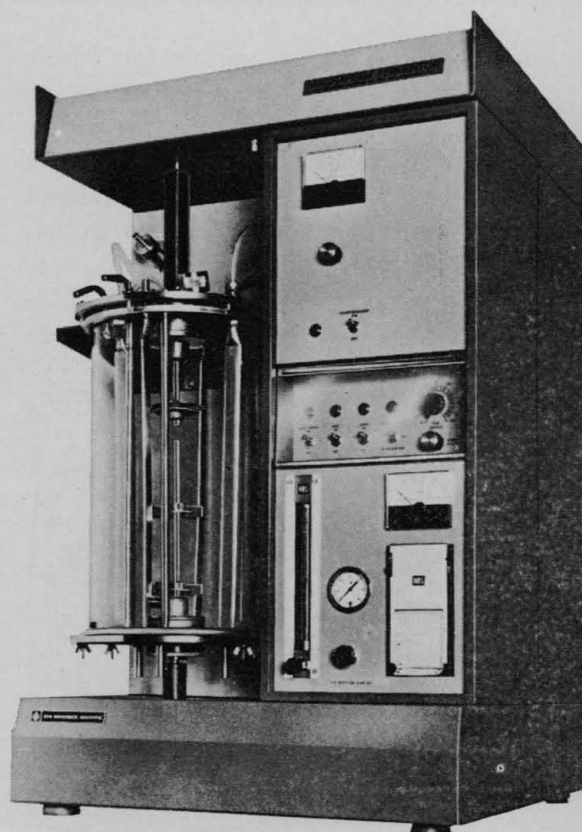
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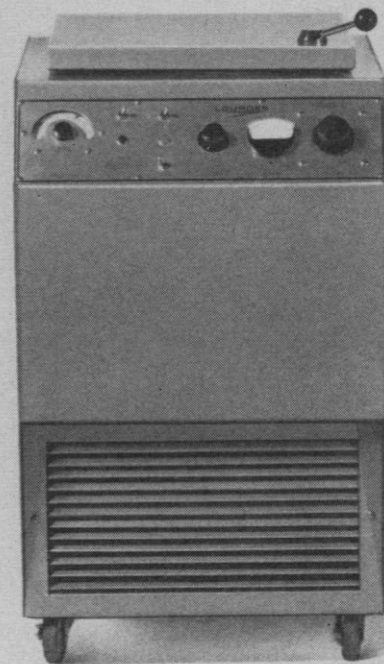
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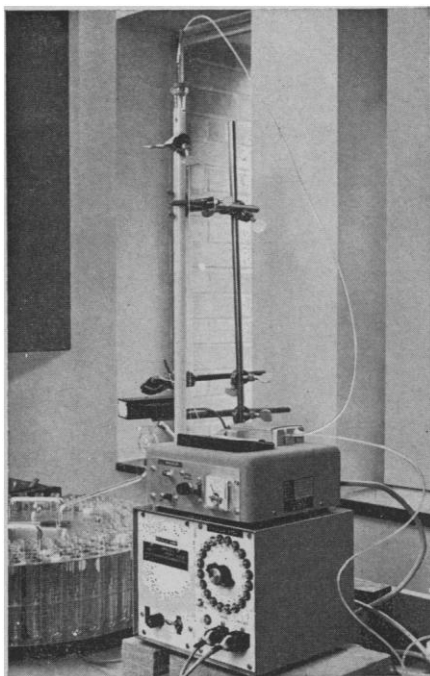
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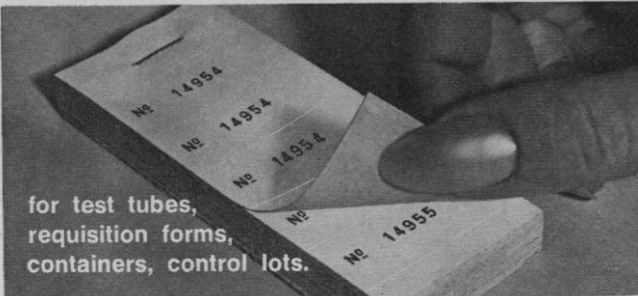


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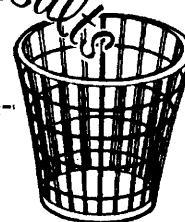
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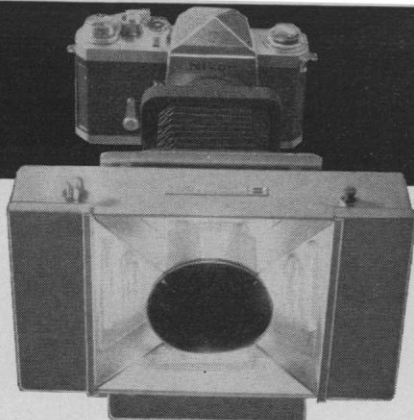
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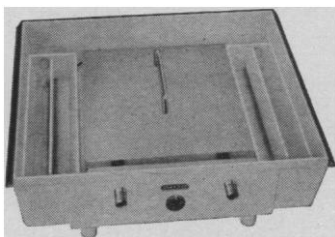


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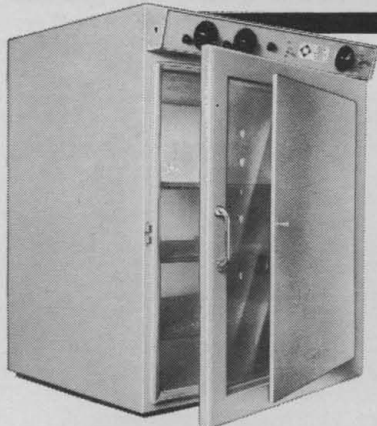
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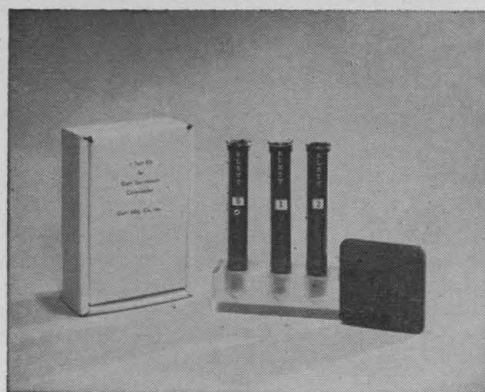
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