

cialize a process. It should come as no surprise then that many of these men become disillusioned and bored and decide to concentrate their efforts, not on research, but on the administration of research, especially when they discover the monetary rewards of a career devoted to keeping other Ph.D.'s happy at their non-research jobs.

The personnel departments know they do not have research jobs for all the Ph.D.'s they hire, but they also know that almost all the best B.S. students go on to graduate school. Thus, with company officials attaching so much importance to having a large number of Ph.D.'s on the staff it is now necessary to get Ph.D.'s for jobs once filled by outstanding B.S. graduates. Personnel policies of 20 years ago may have created this situation, but we cannot blame the personnel men of today who must staff their organization, get men wherever they can, and pay the going price.

These factors have already resulted in some B.S. students undertaking graduate studies even though they have neither outstanding ability nor a good undergraduate record and even though they have not developed a real interest in, or understanding for, research. Offering more financial support without some drastic changes in our school system will only dilute our graduate program with unqualified candidates. This will add to the faculties' problems and present examining committees with the thankless task of deciding whether they can refuse to grant a degree without achieving the reputation of being a "difficult" school and placing their graduate program in jeopardy.

J. R. MCKLVEEN

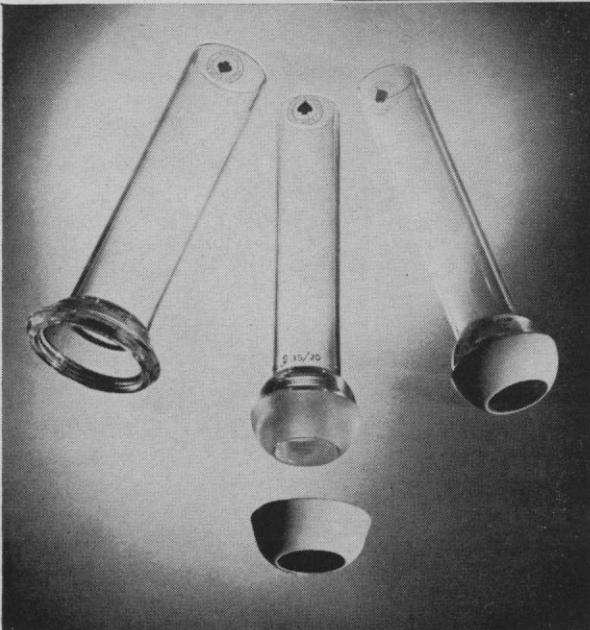
6018 Rio Vista Drive,
Corpus Christi, Texas

Fish Flour

It is very disturbing to me to read in a journal of such high standing as *Science* a news article [*Science* 139, 891 (8 March 1963)] advocating adulteration of our food supply and holding the Food and Drug Administration blameworthy for their very proper refusal to approve a food which frankly contains filth.

Let me make only this comment. Fresh horse feces commonly contain much undigested food material which, when strained out from a slurry of the feces with water and then sterilized

New
From Ace
Dual
Purpose
Tef-Sleeves



No
Grease!

No
Jamming!

Perfect
Fit!

Ace Teflon-Clad Joints

Provide the ultimate in no-freeze engagement

Here is something new: Ace Joints are now available with cementable Teflon sleeves. These sleeves are rugged. You can use them "loose" instead of grease for non-vacuum applications. A series of slightly undercut glass inner members is offered for perfect fit with sleeves. Outer members feature our exclusive polished surface which does not wear the Teflon, fits better, lasts longer. For full information on Ace Tef-Clad Joints, separate sleeves, epoxy, write Dept. S.

® Reg. T.M. DuPont

ACE GLASS

INCORPORATED

Louisville, Ky.,
Vineland N. J.
Springfield, Mass.

Circle No. 1155 on Readers' Service Card

In one-pan balances the name AINSWORTH is your guarantee

Complete control of quality

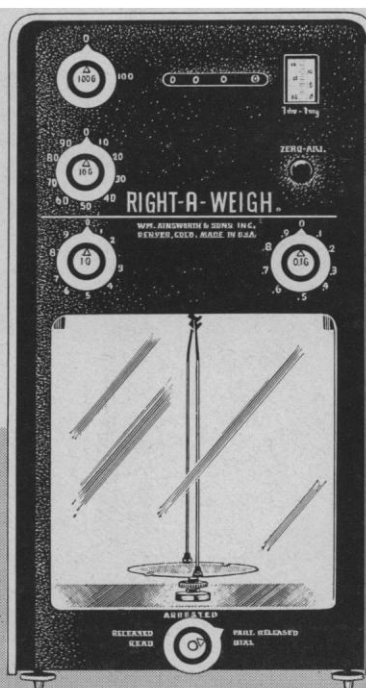
Ainsworth balances are completely fabricated in Denver by the Ainsworth company. Materials, design, production, assembly and testing are the result of Ainsworth's 83 years experience in making precision balances...your assurance of quality, accuracy, and long service.

DISTINCTIVE RIGHT-A-WEIGH TYPE SC FEATURES

Patented compensated beam...minimizes effects of changes in temperature, air density and humidity.

Eye-level readout...in-line, unobstructed readout.

Independent pan brake...stabilizes pan before beam is released.



"Add weight" and "remove weight" signals...automatically appear on screen for faster weighing.

Capacity 200 gr....sensitivity 0.1 mg....readability by estimation 0.05 mg....reproducibility ± 0.03 mg.

**For additional information, or demonstration,
send in this coupon.**

WM. AINSWORTH & SONS, INC.

Dept. S - 2151 Lawrence St., Denver 5, Colorado

Gentlemen: I would like to have

() a demonstration of your Type SC balance

() a copy of your bulletin on the Type SC balance

NAME.....

COMPANY.....

ADDRESS.....

.....

by heat, will provide wholesome and nourishing food. But I do not want any of that introduced into my food supply; neither does news writer Greenberg want it in his.

One could not permit the filth in whole fish flour without destroying all enforcement of laws against whatever filth any producer might incorporate in food if he sterilizes that filthy food.

LEO B. ROBERTS

Alabama Department of Agriculture
and Industries, Montgomery

Since there is no compelling reason for converting horse feces into human foodstuffs, I share Roberts' opposition to such a venture. But what does that have to do with fish flour? There is a compelling need for a cheap, non-perishable protein concentrate to improve the well-being of vast numbers of persons in this hungry world. Fish flour shows promise of filling this need, and it therefore deserves an appraisal unclouded by emotionally loaded words. Properly processed fish flour is wholesome and beneficial. The minimal amounts of undesirable materials that go into its manufacture are almost entirely removed in the production process. The National Academy of Sciences has concluded that the final product is biologically acceptable for human consumption. It might be pointed out that the U.S. government sets maximum tolerances for rat feces in wheat. It does not say there should be none; it says there should be no more than a certain amount. Perhaps Roberts and I can discuss this some day over sardine sandwiches, though, here again, we are dealing with the whole fish.

—D. S. GREENBERG

What Machines Cannot Do

Surely the answer to von Neumann —"If you will tell me precisely what it is that a machine cannot do, then I can always make a machine which will do just that" [*Science* 139, 216 (12 April 1963)]—is: to encapsulate umpteen hundred million years of evolution and reproduce it in nine months; also, to inherit and, after a few years education, draw upon umpteen hundred thousand years accumulation of material, culture, and knowledge.

HAROLD ORLANS

Brookings Institution,
1775 Massachusetts Avenue, NW,
Washington 6, D.C.