# HANDLE Hazardous Materials Safely!

- **TOXIC CHEMICALS**
- **RADIOACTIVE MATERIALS**
- **■** LIVE VIRUSES, BACTERIA
- CONTAMINANTS
- **MIRACLE METALS**

Virtually any dangerous substance can be handled safely in one of the wide variety of special enclosures manufactured by S. Blickman, Inc. These include dry boxes, biological safety cabinets, controlled - atmosphere boxes, fume hoods and many other types. Two are illustrated here.



See us at the Health Physics Show, Statler-Hilton Hotel, New York, N.Y., June 11-13 exceed the financial participation of the federal government.

The usual objections to federal aid on the grounds of control of state and local schools, religion, and private organizations cannot apply here. The proposed federal aid would be directed to individuals for providing a staff of qualified science teachers to serve the children in *all* the nation's schools.

It is not too late to start improving teachers of science, math, English and other subjects by improving their educational proficiency and economic status. To attract the best young minds into the teaching profession and to meet the challenge of new and better programs of instruction for American schools, we must get down to counting time, money, and people.

OTIS W. ALLEN Leflore County Schools, Greenwood, Mississippi

#### Manpower or Mindpower

Among the letters elicited by the editorial, "Manpower or Mind Power" (11 January 1963), were two expressing opposing viewpoints that seemed to represent the opinions of graduate students and graduate faculty respectively [*Science* 139, 798 (1 March 1963)]. I would like to present impressions gained from association with recruitment activities in an industrial research laboratory.

Today's knowledgeable undergraduate knows that a graduate degree does not confer scientific prowess or creativity. He also knows that the Ph.D. is a prestige symbol, and he can estimate almost to the dollar his potential earnings both with and without this degree.

While graduate school administrators and professors respect the acquisition of research philosophy, techniques, and personal development as well as textbook knowledge, few students share this respect. They know that the top students get the top jobs, but with demand exceeding supply, almost every Ph.D. is assured of several job offers at salaries only slightly lower than those offered to the top men.

It is a paradox that while industry would like to hire more Ph.D.'s, it does not have enough research posts requiring their special training to utilize all the degree men it does hire. Therefore we see Ph.D.'s working as highly skilled laboratory technicians, doing routine analyses, or helping to commerin this neat package...



## a complete dc laboratory

The Keithley 610A Electrometer has 64 dc ranges . . . all you need to investigate in-circuit measurements with no loading, semi-conductor parameters, capacitor characteristics, photo-electric devices, piezo-electrics, properties of insulators and outputs of ion chambers. The 610A is line-operated and comes in bench or rack models. Brief specifications:

- 9 voltage ranges from 0.01 to 100 volts fs with 2% accuracy on all ranges
   input impedance selectable in decade steps from 1 ohm to 10<sup>14</sup> ohms
- steps from 1 ohm to 10<sup>14</sup> ohms
  28 current ranges from 3 amperes to 10<sup>-13</sup> ampere fs
- 27 resistance ranges from 10 to 10<sup>14</sup> ohms fs with provision for guarding
- constant current source from 1 milliampere to 10-12 ampere in decade steps
- gains to 1000 as a preamplifier, dc to 500 cps bandwidth, 10 volt and 1 milliampere outputs
- price \$565

#### Other ELECTROMETERS

Model 620,	31 ranges, batoperated,	\$280
Model 621,	37 ranges, line-operated,	\$390
Model 600A,	54 ranges, batoperated,	\$395
Model 603,	50 kc bandwidth amplifier,	\$750

Send for latest catalog



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.

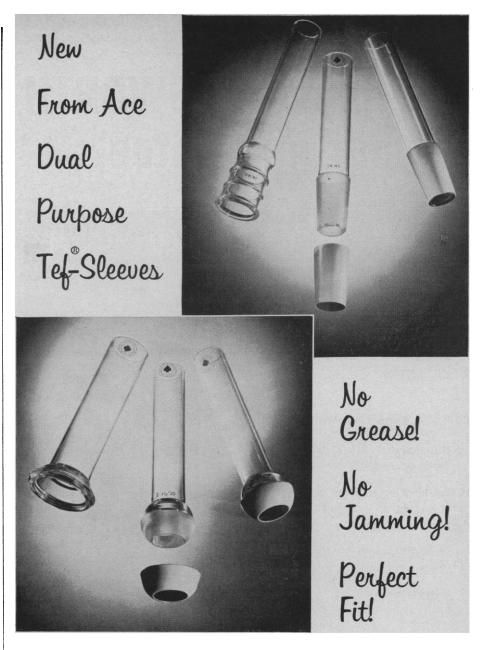
These factors have already resulted in some B.S. students undertaking graduate studies even though they have neither outstanding ability nor a good undergraduate record and even though they have not developed a real interest in, or understanding for, research. Offering more financial support without 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



### 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

