that additional student population should be met with a proportionate expansion in the number of teachers if the quality of the work and the standing of the university are not to suffer.

The committee recommends that in the allocation of the limited supply of scientists during the reconversion period the order of preference should be: (1) teaching and fundamental research; (2) civil science, both government and industrial; and (3) defense science.

Attention is called to the importance of maintaining an adequate nucleus of able scientists working on the problems of defense, but the committee feels that the most important immediate task is to reconstruct the central core of fundamental research and teaching. As one means of implementing the order of priority improvement of the attractions of an academic career is called for.

The report represents the deliberations of the committee since its appointment in December 1945. A copy may be secured from His Majesty's Stationery Office. A review of the article appeared in *Nature* for Saturday, 15 June.—*M. H. Trytten* (Director, Office of Scientific Personnel, National Research Council).

In the Laboratory

Agar Technique for Arresting Movement in Protozoa

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Of the several well-known methods of hindering the movements of active Mastigophora and Infusoria so that they can be examined easily through a high-power microscope, none appears to be entirely adequate, and a new technique based on the use of agar has been developed. The idea came from the papers of Whitaker and Berg (*2*), who used agar solutions when studying the development of Fucus eggs, and of Holtfreter (*1*), who adopted the same method when working on the growth of amphibian embryos.

The modification developed for the Protozoa is as follows: Place a *small* drop of the culture solution on a glass slide. Avoid including sand grains or other large pieces of detritus, as these will hold up the cover glass and prevent the use of high-power objectives. Place an equal-sized drop of a melted solution of agar on a cover glass (a 1-per cent aqueous solution kept liquid at about 40° C. in a water bath or oven), immediately invert the cover glass, center the drop of agar solution directly over the drop of culture solution and let the cover glass fall. As the two drops merge and the agar rapidly cools, the mixture becomes solid. The jelly formed in this way contains large numbers of tiny water spaces, most of which are smaller than the field of a high-power microscope, and in these the protozoans are confined. Large species are often held so tightly that they are unable to turn around, but smaller ones can swim about in small circles. If required, animals can be held more tightly by increasing the size of the agar drop relative to the drop of culture solution or by using a 1.5-per cent solution of agar.

The animals continue living in these conditions for at least half an hour and often for many hours (the actual time apparently depending both on size and on species). The cover glass is held sufficiently firmly for an oil-immersion objective to be used. However, care must be taken not to press upon or otherwise move the cover glass, since this will break the jelly reticulum and release the animals.

In the case of marine Protozoa, the agar solution must be made up in sea water, and in the case of parasitic Protozoa, such as those found in the rectum of the frog, it must be made up in normal saline.

References

1. Holtfreter, J. *Anat. Rec.*, 1945, **93**, 59.
2. Whitaker, D. M., and Berg, W. E. *Biol. Bull.*, 1944, **86**, 125.

A Simple and Accurate Soil Fumigant Injection Apparatus[1]

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The accurate application of liquid soil fumigants for experimental purposes is somewhat difficult when

[1] Published with the approval of the director as Miscellaneous Paper No. 42 of the Pineapple Research Institute, University of Hawaii.