"Notes on Leptophrys,"[1] are of interest and should be made more available.

In this paper it is recorded that "some time after the animal has gorged itself with food, or formed a central, common vacuole of food, it withdraws its pseudopodia and enters into an encysted condition. Numerous cysts have been seen and studied. A single individual has been observed ingesting food and was followed through its complete encystment. From the time when the animal had quieted down and ceased to ingest food to when it left the cyst, a period of five hours had elapsed. The cyst varies in size and shape, depending upon the size of the animal and the amount and form of the food."

Again, in 1908,[2] it was recorded that when Vampyrella ingests food, "the protoplasm forms a rounded mass about which an encysting membrane is formed. The animal remains quiet while the food is being digested. As digestion proceeds, the plants taken in as food change from green to brownish red. The food decreases in size as its digested parts are absorbed from the food vacuole. The protoplasm becomes pigmented by the assimilated food, so that when the protoplasm breaks from the cyst as a free animal or animals, it is conspicuously colored brownish red."

These observations were made upon both isolated individuals, taken from a swamp in which they were scarce and from laboratory aquaria in which they were abundant. Fission of the individual did not always follow encystment. The process of encystment seemed rather to be a vegetative one to which propagation by fission was but incidental.

It is indicated, therefore, that this a-nucleated protozoon encysts in order to conserve its energy towards digesting and absorbing its food.

The writing of this note has been prompted by the fact that such thorough workers as Mast and Ibara had overlooked my observations and that for the good reason that they had been buried beneath a poor title.

WM. A. KEPNER

MILLER SCHOOL OF BIOLOGY,
UNIVERSITY OF VIRGINIA

UNIVERSITIES AND THE CIRCUS

WE have received the following communication purporting to come from the North American Circus Owners' League:

Editor of SCIENCE:

We are about to select one of the large eastern universities and to offer to it a substantial subsidy for providing instruction for future circus managers, artists and employees. We wish to ascertain unofficially, through your valued paper, if the rush of students to take these courses would not seriously interfere with the quieter and less practical courses now given, and thus possibly cause us some undesirable publicity.

Some universities are already training cooks, salesmen and plumbers, and are teaching the laying of eggs, horseshoeing, etc. A careful study of their present courses of instruction has led our educational committee to believe that most subjects of importance in our profession could be given by the existing departments, with a slight adaptation of problems and terminology.

Members of our committee have personally attended the so-called Spring-Day, Mud-Rush, and other similar performances at some universities, and also various impromptu rough-house affairs on the campuses and down-town. They have satisfied themselves that plentiful acceptable circus material exists among the student bodies of our typical universities and colleges.

In offering our endowment to a university, we shall make two conditions: (a) That the requirements for passing a course in our line shall be considerably above the present educational standards, and (b) that no excuses for absence shall be considered unless accompanied by at least three separate medical certificates, each signed by a doctor of a different medical school, and all specifying an ailment substantially in the same part of the body.

For the training of managers, the present courses in bookkeeping, poster design and boxing could be admirably adapted. For training arena artists some universities already have physical directors, athletic coaches, horses, bulls, etc., while for laboratory exercises the students themselves could in turn take the part of wild animals.

A department of domestic science could give excellent instruction in the preparation of pink lemonade, redhots and popcorn, while the departments of oratory and psychology could teach the proper way of calling attention to such delicacies. The departments of chemistry, anatomy and law could give training in the scientific preparation of freaks for the side shows.

An assistant professor of clownry, a three-legged calf and a steam piano would be the only additional equipment needed to start with.

We shall be glad to have your impartial opinion in regard to the above proposal.

Yours truly,

HAGEN RING BARNLING,
Executive Secretary

[The foregoing satire on some present-day tendencies in our university instruction was written by Professor Vladimir Karapetoff of Cornell University. —*Editor.*]

[1] *The American Naturalist*, Vol. 40, p. 337.

[2] "Principles of Animal Histology," Dahlgren and Kepner, p. 273.