Dr. R. M. Strong has resigned the chair of anatomy at the University of Mississippi to accept the position of associate professor of anatomy in the medical school of Vanderbilt University, Nashville, Tenn.

The following appointments to the faculty of the University and Bellevue Hospital Medical College have been announced: Dr. William C. Lusk, professor of surgery; Dr. Joseph B. Bissell, Dr. Thomas A. Smith, and Dr. Arthur M. Wright, clinical professors of surgery; Dr. W. Howard Barber, chief of clinic, department of surgery; Dr. George Francis Cahill, instructor in surgery; Dr. Theodore J. Abbott, clinical professor of medicine; Dr. Benjamin M. Levine, clinical professor of cancer research; Dr. Charles Krumwiede, Jr., assistant professor of bacteriology and hygiene; Miss Mary Smeeton, instructor in bacteriology.

Promotions in the philosophical and engineering faculties of the Johns Hopkins University has been made as follows: Knight Dunlap, professor of experimental psychology; Joseph C. W. Frazer, professor of analytical chemistry; E. Emmet Reid, professor of organic chemistry; Grandville R. Jones, associate professor of civil engineering; Paul B. Davis, associate in chemistry; William B. Kouwenhoven, associate in electrical engineering.

## DISCUSSION AND CORRESPONDENCE

### CULTURE MEDIA FOR PARAMECIA AND EUGLENA

A communication to this journal by J. B. Parker, entitled "A Method of Maintaining a Supply of Protozoa for Laboratory Use,"[1] brought to my mind a culture medium which I used at the University of Chicago for a few years and found thoroughly reliable. The method was given to me by one of my assistants at the time, Mr. John G. Sinclair, who according to my recollection had obtained it from Dr. A. W. Peters, of the University of Illinois.

Enough wheat to make about one half gram per liter of the culture solution is boiled in a small quantity of water for a few minutes. (The original method as given to me called for cracked wheat, but I obtained good results with whole wheat.) The boiled wheat is then placed in tap water in the ratio indicated above, and the solution is inoculated either from some culture of paramecia already on hand or with pond water. In most cases, I used water taken from the immediate vicinity of submerged pond vegetation. It was my custom to use large battery jars for the culture media, which were placed with glass covers on a table in the room where the paramecia were to be used. In the course of a week or so, depending upon the room temperature, I was always able to obtain an abundance of large paramecia.

A method for *Euglena* was also given to me, but I never used it, having no occasion to need this protozoan. I presume the method is equally good. One half gram of rice per liter of culture solution is washed thoroughly and drained. The washed rice is then boiled for about five minutes and put into tap water. After inoculation, the solution is placed where it may obtain direct sunlight.

The directions also state that it is advisable to add about one fourth gram of boiled grain (rice or wheat according to the culture) per liter of the medium, every three weeks and also just before use by a class begins. Furthermore, it is desirable to stir the solution every few days for an oxygen supply.

R. M. Strong

[1] Science, November 19, 1915, p. 727.

### SEVERE RESTRICTIONS TO NORMAL GEOGRAPHIC CYCLE

The formulation of the conception that there is a distinct cycle of corrasive development through which all land-forms must pass is now generally recognized to be one of the first half-dozen brilliant achievements in geologic science of the century just closed. Like many broad generalizations, this one is, upon critical submission to quantitative measurement, found to be too sweeping in its character. Close inspection soon discovers that there are grave complications in the normal scheme. Already the latter has to be especially adapted to fit, on the one hand, condi-