PRELIMINARY steps have been taken by the War Department toward the formation of a Reserve Corps of Engineers for the army, as provided by the National Defense Act of June 3 last. By direction of the chief of engineers letters were sent to-day by Lieutenant Colonel E. Eveleth Winslow, of the Army Engineer Corps, to all the district engineer officers of the army throughout the country, paving the way for the creation of these new reserve corps, which will be composed of officers to be commissioned from among the engineers of the country and of an enlisted reserve corps of engineers. The plan for the formation of the new Reserve Corps is set forth in Lieutenant Colonel Winslow's letter as follows: "The importance of engineers in time of war is now universally recognized, and during the past few months steps have been taken to arouse the interest of the engineering profession in the national defense. Congress has now provided a means by which the civil engineers can more fully prepare themselves for that highest duty of citizens-the defense of our country. An engineer section of officers and enlisted reserve corps has been authorized, and in the opinion of the chief of engineers there is for the officers of the Corps of Engineers no more important duty than their active assistance in making a success of the new corps. All the engineers in the country should be informed of the existence of this new corps and those possessing the necessary qualifications should be enrolled as its members. A close cooperation between our engineer officers and the civilian engineers is therefore necessary, and fortunately the first steps in such cooperation have been already taken by the action of some of the most important of the engineering societies in indorsing the campaign for preparedness and in urging upon Congress the passage of the Officers' Reserve Corps law.

THE Senate Committee on Public Health and National Quarantine has reported favorably the bill to promote the efficiency of the United States Public Health Service. The bill has already passed the House of Representatives. The bill limits, according to the *Journal* of the American Medical Association, the appointment of the surgeon-general of the Public Health Service to commissioned officers in the service, not lower in grade than surgeon, and require that the surgeon-general at the expiration of his four-year term of office be carried as an extra number in the grade of assistant surgeon-general, unless he be reappointed. As an inducement to physicians to enter the service, the bill provides for the promotion of assistant surgeons to the next higher grade after three years' service, instead of after four years as at present. The chiefs of the bureaus of zoology, pharmacology and chemistry in the hygienic laboratory, are to be commissioned by the president, by and with the advice and consent of the Senate, as professors of zoology, pharmacology and chemistry, respectively, and are to be entitled to leaves of absence as now provided by law for commissioned medical officers. Provision is made for the appointment of five additional professors, qualified for special work in sanitary engineering, epidemiology, pathology, anatomy, bacteriology, housing, or other matters that relate to the propagation and spread of disease. Men of this class, the committee's report says, often do not have medical degrees, and under the present system of commissioned service only doctors of medicine are provided for; and the bill will remove this defect and make places for men who are specially trained in these highly technical fields, but who are not graduates in medicine.

## UNIVERSITY AND EDUCATIONAL NEWS

LAFAYETTE COLLEGE is the residuary legatee of Albert N. Seip, of Washington, D. C., a member of the class of 1862. It is said that the college will ultimately receive not less than \$250,000.

DR. ROBERT BENNETT BEAN, now professor of gross anatomy at Tulane University, has been appointed professor of anatomy at the University of Virginia, to take charge of the courses in gross anatomy and neurology formerly given by the late Dr. Richard H. Whitehead. 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,"<sup>1</sup> 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

<sup>1</sup> SCIENCE, November 19, 1915, p. 727.

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

## SEVERE RESTRICTIONS TO NORMAL GEO-GRAPHIC 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-