

'Mathematics and Biology' was of especial interest at this time on account of its bearing upon the principle of variation and mutation.

The recently adopted rule of not allowing papers to go on the program unless an abstract had been handed in by the author was adhered to by the program committee. This committee was enlarged for the coming year so as to have five members, one for zoology, one for botany, one for geology and physiography, one for archeology, anthropology and ethnology, and one for mathematics, chemistry and physics.

The next annual meeting will be held at the University of Cincinnati during the Thanksgiving recess, 1905. The following officers were elected:

President—Herbert Osborn, Columbus.

First Vice-President—C. W. Dabney, Cincinnati.

Second Vice-President—F. M. Comstock, Cleveland.

Secretary—L. B. Walton, Gambier.

Treasurer—J. S. Hine, Columbus.

Member Board of Trustees—C. J. Herrick, Granville.

Elective Members Executive Committee—S. H. Williams, Oxford, and F. C. Waite, Cleveland.

The annual contribution of \$250 to the research fund of the society was again furnished by Emerson McMillin. The following papers were read:

E. L. MOSELEY, Sandusky High School: President's address, 'The Formation of Sandusky Bay and Cedar Point.'

PROFESSOR GEORGE B. HALSTED, Kenyon College: 'Mathematics and Biology.'

PROFESSOR D. C. MILLER, Case School of Applied Science: 'Radium' (illustrated).

PROFESSOR FRANCIS H. HERRICK, Western Reserve University: 'The Building Habits and Home Life of Birds' (illustrated from original photographs).

A. A. WRIGHT, Oberlin College: 'Episodes in the Development of Rocky River.'

JAMES S. HINE, Ohio State University: 'Some Ohio Mammals.'

A. A. WRIGHT: 'Our Smallest Carnivore (*Putorius Allegheniensis*),' with exhibition of specimen.

JOSUA LINDAHL, Cincinnati: 'A List of Isopoda from Ohio.'

HERBERT OSBORN, Ohio State University: 'Report of Progress in the Study of the Hemiptera of the State.'

L. B. WALTON, Kenyon College: 'A Land Planarian in Ohio.'

MISS LUMINA C. RIDDLE: 'The Protozoa of Brush Lake.'

L. B. WALTON: '*Actinolphus minutus*, a New Heliozoan, with a Review of the Species Enumerated in the Genus.'

F. L. LANDACRE, Ohio State University: 'Report of Progress on the Survey of the Protozoa of Sandusky Bay and Vicinity.'

F. L. LANDACRE: 'Note on the Rate of Growth in Stalked Infusoria.'

F. L. LANDACRE,
Retiring Secretary.

THE SCIENCE CLUB OF NORTHWESTERN UNIVERSITY.

The Science Club of Northwestern University held its regular monthly meeting December 2.

Professor A. V. E. Young, of the department of chemistry, gave a paper on 'Mendeleef's Conception of the Ether.' Mr. J. N. Pearce, of the same department, discussed 'Colloidal Metal Solutions.' Both papers were followed by a general discussion. FLOYD FIELD,
Secretary.

DISCUSSION AND CORRESPONDENCE.

CONVOCATION WEEK.

In the earlier years of the American Association it had at least four important functions: (1) It gave opportunity for expert scientific discussion. (2) It fostered the scientific spirit and developed scientific interest in the people of the land (*a*) by admitting non-expert as well as expert membership, thus giving an opportunity for non-expert discussion, (*b*) by assembling popular or semi-scientific audiences, (*c*) by a peripatetic system of meetings in which few places were visited more than once. (3) It promoted the solidarity of the scientific body by affording opportunity for personal acquaintance and intercourse (*a*) of students of the same subject, (*b*) of students of different subjects. (4) It undertook the

discussion of general subjects affecting the welfare and interests of the scientific body.

With the growth of the scientific body the experts eventually found their discussions hampered by various conditions growing out of non-expert membership, and special societies were organized. These societies have to a great extent assumed the first of the functions enumerated above, but they ignore the second. Their tendency is toward solidarity of special groups of scientists (3a) but against solidarity of the general body (3b). They can not perform the fourth function without federation. In the reorganization now in progress the association is becoming the means of federation, the integrating factor; and this relation may be called its fifth function.

The special societies have found, and in the main may be expected to find, the winter more convenient than the summer for their principal meetings. They tend to monopolize convocation week, and by holding the attention of the body of experts interfere, at that time, with the success of the sectional sessions of the association. In view of these and other considerations, it seems to me desirable that the association hold two annual meetings. At a winter meeting, held in conjunction with the affiliated societies, it should function chiefly as the bond of union and the conservator of common interests; its proceedings should include general business, a presidential address and a popular lecture, a few selected papers, or a prearranged discussion on a topic of general interest; and there should be no division into sections. A summer meeting, having for a leading purpose the diffusion of scientific interest, should include the work of sections, popular lectures and excursions.

Under such an arrangement it is not to be supposed that the attendance at the two meetings would be constituted in the same way. The differentiation of work, being an adjustment to the diversity of tastes and needs in the membership, would naturally result in a partial differentiation of personnel. Such a separation is not on all accounts desirable, but it seems to me better than the relinquishment of either of those important functions

of the association for which the encroaching special societies fail to make provision.

G. K. GILBERT.

WASHINGTON, D. C.,
December 7, 1904.

THE TERM 'GEOLOGY.'

TO THE EDITOR OF SCIENCE: May I trespass once more upon your valuable space to reply to Dr. C. R. Eastman's note in your last number (SCIENCE, No. 517), in which he claims to have finally proved me inaccurate in giving credit to De Saussure as the first geologist who used the term 'geology' in the modern acceptance of the word.

While Dr. Eastman and I are quite agreed as to the importance of more care among scientific writers in the citation of ancient authorities, there seems to be this essential difference in our methods. That he is a strict constructionist and clings to the very letter of the law, while I consider it more important to get at the true spirit of the citations, thinking thus to trace more correctly the progress of human thought—a difference which the present case seems to me to well illustrate.

It will be noted that I said De Saussure *appears* to have been the first to use the term geology in writing on his science.

In his 'Lettres Physiques et Morales sur les Montagnes,' published in 1778-9, De Luc, to whom Von Zittel gives priority over De Saussure, uses the term cosmology for the science that treats of the knowledge of the earth, although he says in his preface (page viii) that the proper word would have been geology, but that he 'could not venture to adopt it because it was not a word in use.' De Saussure, on the other hand, writing on the Alps in 1779, employs the term geology without any explanation or apology and alludes to the geologist as if he were a very well-known species of natural philosopher.

In the extremely condensed form in which I was obliged to treat my subject to bring it within the limits of a presidential address, it seemed inadvisable to introduce such explanations as this, hence my use of the word *appears*, implying the possibility of another construction of the statement.