

THE *Journal of the American Mathematical Society* states that Professor Joseph Allen, of the College of the City of New York, and Professor W. H. Metzler, of the University of Syracuse, have gone to France on army educational work. Captain P. L. Thorne, assistant professor of mathematics at New York University, has recently returned to his university work. He served at the front in France with the Sixtieth Heavy Artillery regiment. Captain A. L. Underhill, of the University of Minnesota, has been appointed Commandant at the University of Grenoble in France, where several hundred American soldiers are taking courses while awaiting their opportunity to return home.

PROFESSOR MIYAJIMA, of Tokyo, has arrived in Brazil where he is to do pathological research work at the Butantan Institute.

MESSRS. HOYT S. GALE and J. B. UMPLEBY, of the U. S. Geological Survey, have gone to France to investigate certain questions of mineral resources, particularly potash salts, involved in the peace negotiations.

UNIVERSITY AND EDUCATIONAL NEWS

THE New Haven Section of the American Chemical Society will give a scholarship in chemistry in the Yale Graduate School for the year 1919-20, with the understanding that the scholarship be given to "a graduate student who is a candidate for a higher degree in the department of chemistry. The recipient must be a resident of the territory covered by the New Haven Section, and be selected by a committee composed of the president and councillor of the section and the chairman of the department of chemistry of Yale University."

THE Iowa state legislature has appropriated \$175,000 for the establishment of a psychopathic hospital at the state university. This hospital will be open to both public and private patients suffering from mental disorders. The same legislature also extended the so-called Perkins law to include adults. By the Perkins law an orthopedic hospital is

maintained at the university for the free treatment of the crippled children in the state.

ASSISTANT PROFESSOR LEO F. RETTGER has been promoted to a professorship of bacteriology at Yale University. Dr. Rettger received his B.A. and M.A. at the University of Indiana, and his Ph.D. from Yale in 1902. After studying abroad he was for five years research scholar and fellow at the Rockefeller Institute for Medical Research.

IN the department of chemistry of the Massachusetts Institute of Technology the following appointments have been made: William H. McAdams, to be assistant professor of chemical engineering; Dr. Charles S. Venable and Dr. William G. Horsch, to be research associates in applied chemistry, and Thomas M. Knowland, to be research assistant in the same department.

AT the University of Strasbourg, professor René M. Fréchet, of the university of Poitiers, has been appointed professor of mathematics, and Pierre Weiss, professor at the Polytechnikum, Zurich, professor of general physics.

PROFESSOR E. WIECHERT, of Göttingen, has been appointed professor of geodesy and geophysics at the University of Berlin.

THE Cavendish professorship of experimental physics, at the University of Cambridge, recently vacated by Sir J. J. Thomson, has been filled by the appointment of Sir Ernest Rutherford, of the University of Manchester. Sir J. J. Thomson retains an honorary professorship.

DISCUSSION AND CORRESPONDENCE ERRONEOUS GENERIC DETERMINATIONS OF BEES

IN SCIENCE, 49: 71, Professor Stevens makes some statements regarding a paper with the above title in SCIENCE, 48: 368. He thinks many important factors influencing generic limitations were overlooked. For example, he points out that the average varies in proportion to the size of the region. In comparing the New Jersey with the local list I thought that fact was obvious. It was intended to discuss neither various factors nor

particular cases, but only to mention an impersonal criterion for showing that the generic determinations of bees in the lists cited were erroneous.

At first he takes the second of my alternatives and holds that the bees differ from all of the other groups of insects, and even among plants are only comparable with the Poales. Then he changes about, makes the erroneous assumption that the bees and Lower Aculeata were more completely represented in the local list, and arrives at the mistaken conclusion that such a condition would explain the discrepancy between the averages of these insects and the others.

Stevens compares *Andrena* with *Carex*. The so-called genus *Andrena* reminds one of the time when all of the owls were referred to *Strix*. It would not seem so large if the sexes were not described as distinct species. In a recent paper only 4.6 per cent. of the so-called species were described from both sexes. If one is so careless of his entomology and diction as to say species when he means sex, what is to keep him from saying subgenus or quidnunc-group instead of genus? One who ignores the fact that bees have two sexes is not competent to distinguish any genera except those based on characters common to both sexes. If you should disregard the secondary sexual characters and the habits of the females, how well could you understand the classification of the Hymenoptera in general.

Small divides *Carex* into two subgenera and 34 what-d'ye-call-'ems—named groups with subfamily, family, ordinal and other endings. One might like to know what categories the organisms form, not how they are to be forced to fit preconceived categories. The genus seems to be regarded with superstitious reverence when it contains 34 groups of the second order. Even the analogy of the Poales is against the bees. In the Fargo flora the Poales stand 2.3 against a general average of 1.8, while in the Carlinville list the bees stand 6.5 against an average of 1.7.

Compared with the general average the bees and Lower Aculeata show a great discrepancy

in both lists without regard to their percentages in the composition of them. The Coleoptera, respectively 33.7 and 10.6 per cent., approach the average in each list. In the local list the Coleoptera are quite fragmentary compared with the Diptera, but the average is about the same. The list of Rhopalocera, which is as complete as that of the bees, shows an average of 1.4 to the bees 6.5, while the Heterocera, which are quite fragmentary, average 1.2. The Bombyliidae, Conopidae, Syrphidae, Tachinidae and Muscidae, in which the local list is quite complete, show 1.7 while the other Diptera average 1.6. The 437 local entomophilous flowers on which insect visitors were taken average 1.6 while the 520 plants of the Fargo flora average 1.8.

Although Stevens argues against small groups he says that he believes in the recognition of them, but he doubts the necessity of forcing them upon every one. The statement that neglected groups will be subdivided about like those which have been more thoroughly studied hardly involves an attempt to force small groups upon any one. You may say that a river runs south without trying to force the water on those who live down stream.

CHARLES ROBERTSON

CARLINVILLE, ILLINOIS

GEOMORPHOLOGY

TO THE EDITOR OF SCIENCE: The letter from Professor John L. Rich in your issue of January 11, 1918, escaped my notice at the time and my attention was not drawn to it until very recently. Hence this belated reply.

I agree thoroughly with Professor Rich that geomorphology has an interpretative geological value, and I admit that, for the sake of economy of space, it may be necessary sometimes to compress the geographical aspect of a geomorphological description and its geological interpretation into a single paper from which the geographer and the geologist will each attempt to pick out the points that interest him. The introduction of certain geological dates into a paper with such a double purpose is excusable, but it is the thin end of a wedge which may lead to much obscurity.

The artifice of placing geological names in