was briefly described, and samples of 'artificial horse-hair,' made by treating ordinary cotton thread with the dissolved cotton-seed-cellulose, were also exhibited and the process of its fabrication briefly described.

C. Stuart Gager,
Secretary

IOWA ANTHROPOLOGICAL ASSOCIATION

The fourth yearly meeting of the Iowa Anthropological Association was held at the Davenport Academy of Sciences, Davenport, Iowa, on Friday and Saturday, May 17 and 18, the sessions being well attended. On Friday evening Professor Frederick Starr, of the University of Chicago, delivered an address on 'The Field of Folk-lore in Mexico,' illustrated with stereopticon views. On account of his numerous trips to Mexico and his intimate acquaintance with the people of that country, Professor Starr's address was of unusual interest.

On Saturday morning, after some introductory remarks by the president, Professor B. F. Shambaugh, of the University of Iowa, and the report of the secretary, J. H. Paarmann, curator of the Davenport Academy of Sciences, there were a number of papers by members of the Davenport Academy of Sciences dealing with different aspects of the explorations recently made near Albany, Whiteside County, Illinois. These were as follows:

Edward K. Putnam: 'Bibliography of the Albany Mounds.'

Professor Samuel Calvin, University of Iowa: 'The Geology of the Region in the Vicinity of Albany.'

W. H. Kimball: 'Report of the Survey of the Albany Mound District.'

J. H. Paarmann: 'Report of the Opening of Two Mounds Near Albany.'

Dr. A. W. Elmer: 'Iron found in the Albany Mounds.'

J. E. Calkins: 'Some Puzzles at Albany.'

After luncheon at the Davenport Commercial Club, various papers on current anthropological topics were presented as follows:

Richard Herrmann, Dubuque, Iowa: 'Mound Builders of the Mississippi Valley.'

Professor Bohumil Shimek, University of Iowa: "The Loess and the 'Nebraska Man.'"

Professor C. C. Nutting, University of Iowa: 'Urn Burial on the Island of Ometepe, Nicaragua.'

Rabbi W. H. Fineschriber, Davenport, Iowa: 'Some Facts of Jewish Anthropology.'

Professor Frederick Starr, University of Chicago: 'The Davenport Academy's Collection of Objects from the Upper Kasai, Congo Free State.'

The following officers were elected:

President—Edward K. Putnam.
Vice-President—Bohumil Shimek.
Secretary—J. H. Paarmann.
Treasurer—A. G. Smith.
Executive Committee—F. J. Becker, I. A. Loos, G. T. Flom, C. C. Nutting and A. W. Elmer.

On Saturday evening a meeting was held to organize an Iowa branch of the American Folk-lore Society, the program being as follows:

Edward K. Putnam, Davenport Academy of Sciences: 'Introductory Remarks on Folk-lore.'

Professor Charles Bundy Wilson, University of Iowa: 'German-American Folk-medicine.'

Professor G. T. Flom, University of Iowa: 'The Myths of Creation and Doom in Norse Mythology.'

Professor Jules Mauritzon, Augustana College, Rock Island, Ill.: 'Traces of Old North Heathenism in Swedish Christmas Customs of To-day.'

Professor Charles Bundy Wilson, of the University of Iowa, was elected president and Edward K. Putnam, of Davenport, secretary.

J. H. Paarmann,
Secretary

DISCUSSION AND CORRESPONDENCE

THE FIRST SPECIES RULE: AN OBJECTION

To the Editor of Science: The rules that have been drawn up by a committee of American zoologists, with a view of determining the genotype of every genus in a manner that can admit of no uncertainty, may perhaps not yet have been published, but, to judge from the manuscript copy which I have been permitted to see, they are admirably adapted to secure their object. The question remains whether the object is a good one; and it is the purpose of this letter to point out a set of cases in which the selection as genotype of the

first species mentioned would be likely to introduce confusion.

When genera are based on recent species it may be assumed that, as a rule, no one species is more obscure than another, so that, *ceteris paribus,* there is no objection to taking as genotype the first mentioned. Indeed the first mentioned is in most cases likely to be the best known, although every one is aware that it is not so in all cases. But when genera are based mainly or entirely on fossils there is a great difference between the values of the different species. The common-sense thing to do in such a case is to select the most completely preserved and best-known species as genotype.

If now one considers the general action of previous revisers in dealing with paleontological material, one notes a general tendency either to select as genotypes, or at all events to regard as representative, those species which are the least obscure. In other words, the historical development of the science has resulted in the common-sense method of interpreting genera by their best known species.

To leave the selection to an arbitrary rule that is as likely as not to fix on an obscure fragment would in itself be contrary to common sense; but the first species method now proposed not merely ignores these important factors of clearness and familiarity, but actually tends in the case of fossils towards the greatest obscurity. For this reason, many new species established by paleontologists have been introduced in monographs or papers dealing with series of fossils from various horizons; and it has generally been the custom of paleontologists, in discussing the species under review, to follow a stratigraphical order, beginning with the oldest rock. Consequently, when a paleontologist founds a new genus, the first species that he mentions is generally the oldest, and for this very reason it is generally also the most obscure. In many cases then the first species rule would lead to the inevitable selection of the most obscure species as the type of a genus. A rule of which this can be said may work with mathematical exactness and automatic precision, but its final result must be to introduce, or rather to force, into zoological nomenclature fresh elements of uncertainty and change.

F. A. BATHER

LONDON, S. W., ENGLAND,
April 29, 1907

THE GREAT INFERIOR TUSKED MASTODON OF THE LOUP FORK MIOCENE

IN 1882 I discovered a jaw of this mastodon on the Sappy, in Decatur County, while in the employ of the Museum of Comparative Zoology at Cambridge. A single jaw was present measuring four feet to the end of the tusk. Last year while on an expedition for the Royal Museum of Munich in the same beds on the Prairie Dog, I collected a very perfect set, without the tusks; length of the preserved jaws two and a half feet, height at condyles fourteen inches, height of grinding surface of the single last molar nine and a half inches. Last season my son was so fortunate as to discover in Scott County, near the Gove County line, a very complete and well-preserved set of lower jaws of a huge specimen so different in several respects from the other two mentioned, a separate form may be represented. The peculiarity lies in the low condyle that is only thirteen and a half inches high, and in the great depression of the rostrum, thirteen inches lower than the teeth at its distal end. The length of the jaws are four feet and one inch long. The distance between the condyle and distal end of rostrum or beak, four feet three and a half inches. But one well-preserved molar, the last, in each jaw their greatest height is ten inches; height of crown two and a half inches, length nine and a half inches, width three inches, distance between the molars four inches. This is the largest specimen in my experience ever taken from the Loup Fork Miocene beds of Kansas, and point to an animal of large proportions.

In this connection I would like to put on record the description of the largest tusk of *Elephas columbi,* or the great Columbian mammoth, of which such a fine example is now mounted in the American Museum, New York City. I discovered this tusk with a lot of teeth; several of them are now preserved in the State University Museum of Kansas and