of action, *myoneures*. The latter term may perhaps be improved. Further subdivisions could readily be made when found necessary.

Prof. Edw. L. Greene read a paper on some fundamentals of nomenclature.

F. A. LUCAS, *Recording Secretary*.

NEW YORK ACADEMY OF SCIENCES, NOVEMBER 18, 1895.

THE Academy met with Vice-President Stevenson in the chair. The Section of Geology and Mineralogy immediately organized.

The first paper was read by Prof. J. J. Stevenson: 'Geological Notes on the Indian Territory.'

During a visit to Indian Territory in 1895 some observations were made which may aid in bringing together the results obtained in Arkansas and Indian Territory by Messrs. Winslow, Hill, Chance and Griswold, and which suggest relationships between the Carboniferous of Arkansas, Indian Territory and Texas.

The grouping of the coal measures presented by Mr. Winslow for Arkansas answers almost equally well for the eastern part of Indian Territory, as appears from Dr. Chance's sections, though some of the sub-divisions are wanting in the Territory and the bottom of the section is not reached, there being, yet lower, a very important limestone in the Choctaw nation. The workable coal beds of the territory are in the lower portion of the section,—the Booneville stage of Arkansas, at least 2,000 ft. lower than the Spadra semi-anthracites. At present they appear to be available only within the Choctaw nation, along the Choctaw and the Missouri, Kansas & Texas railways. The limestone, of undetermined thickness, belongs to the coal measures as is shown by the fossils. An asphaltic limestone occurs near Dougherty in the Chickasaw nation, apparently not far from the same horizon. Its fossils show it to belong to the Bend stage of Texas.

The Ouachita mountain system of Arkansas and eastern Indian Territory appears to be independent of the Tishomingo and Arbuckle mountain system, which is in the Chickasaw nation and apparently older than the other. The structure of the Ouachita system is beautifully simple and thoroughly Appalachian,

while that of the Chickasaw system is exceedingly complex. The curving trend shown by the Ouachita is so characteristic that one may venture to suggest that in Arkansas it may prove continuous with folds extending into Missouri. Its southern continuation appears to be buried under the Cretaceous overlap of Texas, which, as described by Prof. Hill, completely masks the older structure.

The paper will appear in full in the transactions of even date.

The second paper of the evening was read by Prof. J. F. Kemp: 'Zinc and Lead Mines in Southwestern Virginia.'

The paper was based on a visit of the speaker to the mines the past summer. He first showed their geographical distribution and the general geology of the country. By means of lantern views from photographs taken on the spot, the excessive sub-aerial decay of the blende-bearing limestones was made clear, and the occurrence of the zinc in the mineral calamine as crusts upon the undecomposed limestone and beneath the overlying mantle of clay. It was stated that the chemical reactions which had led to the formation of the ore must have taken place at the ordinary temperatures, and must have been produced by common agents, such as carbonated atmospheric waters, sulphuric acid and sulphate of zinc, produced by the decay of the blende, and silicic acid from the silica in the original limestone. The speaker did not attempt to elucidate the matter further, but cited it as an interesting subject for experiment and investigation.

J. F. KEMP,

Recording Secretary.

AMERICAN CHEMICAL SOCIETY, MEETING OF NOVEMBER 8, 1895.

THE regular meeting was held in the hall of the Mott Memorial Library at 64 Madison avenue, Prof. P. T. Austen in the chair.

The minutes of the previous meeting were read and approved.

The Secretary reported that the letter authorized to be prepared in regard to the death of Louis Pasteur had been received from the Committee and duly forwarded to the French Chemical Society.

Prof. W. P. Mason's paper on 'The Chemical