tributed in its effects with an approach to uniformity over a wide extent of country, and was unaccompanied by those sharp flexings or the protrusions of abrupt granitic cores which are encountered in some portions of the Appalachians and other mountain regions. The individual masses and ranges in the Cumberland region are the work of erosion acting upon a broad platform, excavating wide valleys and narrow gorges, leaving the peaks and ridges as cameos and mere remnants of the general degradation of the entire region. Professor Powell exemplified the process by citing the Uinta Mountains as a broad platform similarly carved by an enormous erosion.

Mr. Lester F. Ward then read a communication entitled, "Field and Closet Notes on the Flora of the District of Columbia." Mr. Ward's paper was more comprehensive than its title indicated. He read extracts from a local monograph which he has been preparing on the Flora of the District of Columbia. The work has been done by Mr. Ward in his-usual energetic, thorough, and philosophical manner, and presents many points of interest. It will be published in full by the Society.

## THE ANTHROPOLOGICAL SOCIETY OF WASH-INGTON.

The Society met in the lecture room of the National Medical College on Tuesday evening, February I, Major J. W. Powell in the chair. By the provisions of the Constitution the retiring President is required to deliver his annual address at the meeting succeeding that held for the election of officers, and to review therein the work of the Society during the past year. As before mentioned, the reasons for the publication of elaborate proceedings, existing in the case of other societies, do not obtain here. The President, therefore, in connection with his address, had prepared a pamphlet of 100 pages, in which were embodied abstracts of every paper read during the two years of the Society's existence, together with a brief history of its formation, the two annual addresses, the constitution, and the list of officers and members. The whole constitutes a very important contribution to knowledge.

Major Powell thus presented a classification of the papers and discussed the several subjects treated in their order, namely: Archæology, ethnography, linguistics, biology, philosophy, technology, sociology, and mythology. As the address will appear in full as a part of the pamphlet, it is not necessary to present an abstract.

DETERMINATION OF GOLD AND SILVER IN ALLOYS, AFTER QUARTATION WITH CADMIUM.-Two portions of the alloy, each of 0.25 grms., are weighed off and placed with the cadmium in small porcelain vessels. A piece of potassium cyanide is melted in a porcelain capsule over the flame, and the metal thrown in. The melting together takes place readily, and is complete in a few minutes. By changing with two or three porcelain capsules, and having a vessel with warm water at hand, in which the melted portion is dissolved when sufficiently cool, twenty to thirty meltings can be executed in an hour. The two metallic granules are now thrown together into a small long-necked flask, in which is nitric acid of sp. gr. 1.30; a piece of wood charcoal is introduced to prevent bumping—which would rupture the globules—and heat is gently applied. The first solution lasts rather long, according to the proportion of gold; *e.g.*, an hour in case of fine gold. The solution is poured off, the boiling repeated with nitric acid of sp. gr. 1.3 for ten minutes, the liquid again poured off, the globules rinsed with hot water, boiled for five minutes with water, which is poured off, and the flask filled with water is inverted into a porous earthern crucible, dried, ignited strongly, proceed-ing as in cupellation. In most cases the globules can be weighed separately. Silver is determined in the solution of titration with ammonium sulphocyanide according to Volhard's method.-FR. KRAUS.

## A SKETCH OF THE GEOLOGY OF HUDSON COUNTY, N. J.\*

## BY ISRAEL C. RUSSELL.

An outline of the geology of Hudson County, N. J., is delineated in the accompanying generalized section.

FIG. 1-GENERALIZED SECTION OF THE ROCKS OF HUDSON COUNTY, N. J.



At the base of the series is crystalline gne'ss of Archæan age, which is exposed in a few reefs along the shore of the Hudson in Jersey City. These rocks are composed mainly of quartz, feldspar and mica, and form highly crystalline gneiss, mica schist, hornblende schist, etc., and are not to be distinguished from the rocks of

<sup>\*</sup> Taken from a paper published in the Annals of the N. J. Academy of Sciences, Vol. II., No. 2, pp. 27-80.