been announced from Block Island. The paper was discussed by Professors Lloyd and Martin.

The second paper of the evening was by the Secretary, entitled 'Scientific Geography in Education.' The speaker brought out the point that geography work may be classified into three divisions—that for the common schools, the secondary schools and the universities—and outlined briefly a few suggestions as to how the subject-matter might be treated scientifically in each of the groups, and the dependence of each group upon the others. He paid particular attention to the difficulties of securing scientific work in geography in the grade schools, and to the fact that the present work is extremely unsatisfactory in most of our schools, probably because of the lack of inspiration, owing to the neglect of the subject hitherto in universities of the country. The paper was illustrated by a series of cheap and easily procurable maps that may be used for scientific geography work in either of the groups mentioned.

The meeting then closed with a few remarks by the Chairman in reference to the famous classic entitled 'Lithographiæ Wircenburgensis ducentis lapidum figuratorum, a potiori insectiformium prodigiosis imaginibus exornatæ, specimen primum,' written by Dr. Beringer and published in Würzburg in 1726. Professor Kemp summarized the work of the author in attempting to explain a great collection of pseudo-fossils from a theological standpoint, the fossils having previously been made by some practical jokers and buried in the rocks for the author to find.

RICHARD E. Dodge, Secretary.

## SUB-SECTION OF ANTHROPOLOGY AND PSYCHOLOGY.

At the regular meeting of the New York Academy of Sciences at 64 Madison Avenue, Monday evening, January 24th, fourteen new names were proposed for membership. This is evidence of the increased interest being awakened in the Academy by the active efforts of President Stevenson. The hope was expressed that the number of members might soon be raised to five hundred.

The principle paper of the evening was presented by Mr. E. L. Thorndike, of Columbia University. He gave an account of a long series of interesting experiments on comparative psychology. These experiments were made upon cats, chickens, dogs, monkeys and other animals and were supplemented by the experience of professional animal trainers.

Cats were placed in boxes with doors so arranged that they could be opened from the inside in various ways, in one set of experiments by pressing a latch, in another by pulling a cord, by pulling a hook attached to a cord, or by turning a button. Again the arrangement was more complicated and two or three separate movements had to be combined in order to release the door and let the animal out to reach the fish placed outside the cage. Curves were given showing the rate at which the kittens learned the various tricks, the time taken to get out becoming gradually shorter.

The trick was always learned by accident; one lucky hit would prepare the way for another. There was no trace of rational inference. Seeing another animal do the trick a hundred times was no help. Nor was it possible to teach the trick by taking the kitten's paw and putting it on the latch and so opening the door, no matter how often it was repeated.

A habit once formed artificially will overpower natural instincts. A chicken that had been compelled to jump from a box to the floor in a roundabout way by a cardboard placed in its way felt unable to jump down to its food directly when the card was taken away.

The second paper was presented by Mr. H. I. Smith, of the Museum of Natural History. He gave an account of the archæological work which he did in British Columbia during the summer. He was the third member of the Jesup expedition, with Dr. Boas and Dr. Farrand. The work of the expedition has already been described in Science.

Dr. Livingston Farrand, of Columbia University, presented a brief report of the meeting of the American Psychological Association held at Cornell during the holidays.

Charles B. Bliss,
Secretary.