

rocks of Russia. Mr. Grabau's studies confirm the position taken by Zittel and Rohon that these minute tooth-like fossils are the jaws of worms. He also discussed the relations of Styliolina, Cardiola and Clymenia, and the close parallelism between American and European Goniatites. Professor Hyatt took exception to Hinde's view, quoted by Mr. Grabau, as to the unity of the American and European forms; the late American faunas are residual; they do not originate types; the very ancient American faunas may be, however, originating faunas.

Dr. Jackson drew attention to the large numbers of associated fossils in very small space, and Mr. Grabau stated that Clark's investigations proved the identity of the American and European species.

SAMUEL HENSHAW,
Secretary.

THE TORREY BOTANICAL CLUB, NOVEMBER 9,
1897.

THE paper of the evening, by Mrs. E. G. Britton, a description of two new species of *Ophioglossum* will be printed in the *Bulletin*. The paper also discussed the affinities, range and type characters of our Eastern species of *Ophioglossum*, with keys and specific descriptions, and with exhibition of tracings and numerous mounted specimens.

Dr. Underwood sketched the characteristics of the four distinct types of *Ophioglossum* as: 1st, the section typified by *O. vulgatum* and discussed in the paper; 2d, that by *O. palmatum* of tropical America, which extends into Florida, there growing directly under the crown of the palmetto trees, nestled among the leaf-shrubs; 3d, that typified by *O. pendulum*, found in the Hawaiian Islands and Pacific regions, which is also pendulous from trees and produces a stipe attached almost to the middle of the leaf. In the 4th section, with growth not over one inch high, the sterile and fertile fronds are distinct to the rooting base.

Dr. Underwood further remarked the necessity of experience to discover forms of *Ophioglossum*, especially such as *O. crotalophoroides*, only one inch high, collected by him in Alabama.

Mr. Clute spoke of the great diversity in size displayed by *O. vulgatum* in a single locality.

Professor Burgess referred to the occasional occurrence of *O. vulgatum* with its own name-sake *Pogonia ophioglossoides*, and to other companion-plants with which he finds *Ophioglossum* associated in growth, as *Chiogenes* and especially the orchids *Microstylis ophioglossoides*, *Habenaria hyperborea* and *H. dilatata*.

Dr. Underwood then exhibited photographs of the Kew Gardens, with reminiscences of his visit of last summer. He spoke particularly of their formal decoration, dating back to royal use, and the photographs shown included one of 'Queen Mary's Elm,' planted by her about 1555, once 25 feet in girth, now represented chiefly by a series of shoots.

EDWARD S. BURGESS,
Secretary.

THE ACADEMY OF SCIENCE OF ST. LOUIS.

At the meeting of the Academy of Science of St. Louis on December 20, 1897, twenty-five persons present, Dr. R. J. Terry exhibited several specimens of human humerus, showing supracondylar process associated with high division of the brachial artery, which was contrasted with similar processes that have been observed in the anthropoid apes and the lower monkeys, and with a similarly situated foramen of the arm of the *Felidæ*. It was stated that while a slight roughness was observed, at the point indicated, in a majority of ninety-six specimens observed, the structure was fairly developed in four out of this number, in all cases on the left arm.

Professor F. E. Nipher presented a paper describing a long series of experiments made to determine the distribution of pressure over a pressure board, and summarizing the results reached.

WILLIAM TRELEASE,
Recording Secretary.

NEW BOOKS.

A Genealogy of Morals. FRIEDRICH NIETZSCHE. Translated by WILLIAM A. HAUSEMANN. New York and London, The Macmillan Company. 1897. Pp. xix+289. \$2.

The Social Mind and Education. GEORGE EDGAR VINCENT. New York and London, The Macmillan Company. 1897. Pp. 146. \$1.25.