the wild ducks that frequent this brook through the summer season.

W. A. MURRILL,
Secretary pro tem.

THE club met at the American Museum of Natural History on November 10, 1908, and was called to order by Vice-president Burgess at 8:15 P.M. About 95 persons were present.

After the reading of the minutes of the meeting of October 29, Dr. N. L. Britton delivered the lecture of the evening on "Trees of the Vicinity of New York." The lecture was illustrated by lantern slides from the Van Brunt collection and was of a popular nature. The trees were taken up in a biological order, beginning with the gymnosperms, and the photographs exhibited illustrated both the general habit of the trees discussed and the details of their flowers and fruit.

MARSHALL A. HOWE,
Secretary pro tem.

SECTION OF GEOLOGY AND MINERALOGY OF THE NEW YORK ACADEMY OF SCIENCES

A REGULAR monthly meeting of the section was held October 5 in the academy rooms at the American Museum of Natural History. Four papers were presented, as follows:

Outline of the Geology of Long Island, N. Y.:
Professor W. O. CROSBY.

Professor Crosby is of the opinion that the Pleistocene history of Long Island is relatively simple, and the known facts are accounted for by a single ice-invasion. The recent reference of the underlying lignitic and pyritic Chesapeake (Miocene) clays and the Lafayette (Pliocene) yellow gravel to the Pleistocene glacial series is believed to be a mistake. From the early Pleistocene uplift dates the cuesta of Long Island, to which Long Island Sound holds the relation of an inner lowland. This lowland is still floored by Cretaceous clays and sands. The transverse valleys and deep bays of the north shore of Long Island are essentially preglacial, though greatly modified by glacial erosion and deposition.

The Production of Low-grade Copper Ore in the West: Professor JAMES F. KEMP.

The speaker presented a brief description of the recent development of the so-called "low-grade" copper mines in Bingham Cañon, Utah, and at Ely, Nev. By means of maps the geographical situation was made clear and the geological relations were outlined. The ores consist of bodies of silicified and brecciated porphyry, impregnated with chalcocite. They are mined by means of

steam shovels, in huge open cuts. They range in copper from less than two to two and a half per cent. The operation and processes of the mills and smelters were briefly outlined. The paper was based upon visits made the past summer.

Limestones Interbedded with the Fordham Gneiss in New York City: Dr. CHARLES P. BERKEY.

The discovery of beds of limestone at three points in such relation as to indicate interbedding with the banded gneisses was announced. This is an additional feature of similarity between the gneisses of the Highlands and the Fordham at its type locality. The largest bed is about 27 feet thick and is exposed in the east wall of the new Jerome Park Reservoir at 205th Street. In all cases these limestones are very impure and coarsely crystalline, carrying many unusual minerals arising chiefly from recrystallization. Chondrodite and actinolite are abundant. Sphalerite and galenite are also found.

Continental Formations of the North American Paleozoic: Professor A. W. GRABAU.

The change of opinion in regard to conditions under which many of the well-known sedimentary formations are originally deposited was outlined. A tabulated list of those formations of the Appalachian region whose characters seem to indicate continental origin was exhibited and the evidence was briefly discussed. This article is to be published in full in SCIENCE.

CHARLES P. BERKEY,
Secretary of Section

WASHINGTON SECTION OF THE AMERICAN CHEMICAL SOCIETY

THE 185th meeting was called to order by President Walker on Thursday evening, November 12. The attendance was 90, this large number being due to the fact that many visiting members of the A. O. A. C. were present. The following papers were read:

"Color of Lead Chromate," E. E. Free.

"Absorption of CO₂ by Moist Oxide," W. O. Robinson.

"Solubility of Gold in Salt Solutions," W. J. McCaughey.

"The Distribution of NaNO₃ in the United States," C. E. Munroe.

Three members of the society were elected as councilors to the American Chemical Society, viz., L. M. Tolman, E. T. Allen and E. M. Chace.

J. A. LECLERC,
Secretary