ing out the general improvement in the treatment of underground water problems which has taken place in the last few years, but calling attention to certain western folios in which the water problems, although of paramount importance, had not been treated, and emphasizing the need of more extended discussions. Mr. Richardson enumerated the more important problems which the investigations should cover, laying stress upon the need of accurate data relating to flow, head and quality of waters in addition to information as to their geologic occurrence. Mr. Fuller discussed the relative economy and thoroughness of the hydrologic studies as conducted by geologists or geohydrologists, advocating the employment of the former if they could give the necessary time. Mr. Newell spoke on the desirability of having the hydrologic work of geologists referred to the division of hydrology for approval in the same way that the geology of hydrologists is referred to the geologic branch.

M. L. Fuller,
Secretary.

BOSTON SOCIETY OF NATURAL HISTORY.

At the annual meeting of the society, May 2, 1906, the following officers were elected:

President—Charles Sedgwick Minot.

Vice-presidents—Charles P. Bowditch, Henry W. Haynes, Edward L. Mark.

Secretary—Glover M. Allen.

Treasurer—Edward T. Bouvé.

Councilors for three years—Charles F. Batchelder, Hubert L. Clark, William M. Davis, W. L. W. Field, N. T. Kidder, William L. Underwood, Arthur W. Weysse, Miss Mary A. Willcox.

The curator, Mr. Charles W. Johnson, in his annual report, called attention to the interest and activity shown in building up the New England collection which is henceforth to be the chief display of the museum. Two large exhibition cases have been installed during the past year and a pair of moose from Maine have been secured for one of these, while the deer and caribou are to be displayed in the other. A list of desiderata of New England birds and mammals has been printed with a view to aiding the society's efforts in making its collection of these groups as nearly complete as possible. A number of additional New England birds has been secured through the gift of Mr. Augustus Hemenway. The collection of New England invertebrates has also been largely augmented during the year, particularly through the efforts of the entomologists of the society. The Emily L. Morton collection of Microlepidoptera, containing 195 species and 755 specimens, largely from the vicinity of Newbury, N. Y., has also been received through Mr. H. H. Newcomb.

Two Walker prizes were awarded in the annual competition for the best memoirs presented on subjects previously announced. The first prize of $100 was awarded to Professor Amadeus W. Grabau, of Columbia University, for his essay on 'The Interpretation of Stratigraphic Series by the Principles of Sedimentary Overlap.' The second prize of $50 was awarded to Professor Douglas W. Johnson, of the Massachusetts Institute of Technology, for his essay on 'Drainage Modifications in the Tallulah District. A Study in River Capture.'

The subjects announced for the Walker Prize competition, 1907, are:

1. The structure and affinities of some fossil plant or group of fossil plants.

2. The development of the gametophytes in any little-known representative of the Coniferales.

3. The anatomy and development of some order or group of the angiosperms.

4. The functions and habits of animals in their relations to environment and to each other.

5. The habits and structure of any species of the Myriapoda.

6. A contribution to a knowledge of the rate of speed at which birds travel.

The paper of the evening was by Mr. George Carroll Curtis on 'Geographic Modeling from the Naturalist's Standpoint.'

Glover M. Allen,
Secretary.

DISCUSSION AND CORRESPONDENCE.

A FEW NOTES ON 'INDIAN MOUNDS' IN TEXAS.

Noting an article written by Mr. P. J. Farnsworth, 'On the Origin of the Small

Mounds of the Lower Mississippi Valley and Texas,' in SCIENCE, Vol. XXIII., pp. 583–4, leads me to say a few words on the subject. Mr. Farnsworth cites Mr. A. C. Veatch's article published in this paper, Vol. XXIII., p. 35, and goes on to state that the numerous mounds existing through the region above mentioned were formed by the upturning of trees. I will not question his authority in making the assertion, not having ever lived in the localities he cites; all I wish to give are a few facts concerning the 'Indian mounds' which I have met with in Kendall Co., Texas.

Within a radius of five miles of my old home there, I know of four mounds. They are all of the same shape—elliptical, and measure from twenty to forty feet long by ten to twenty wide by two to three high. They are about twice as long as they are wide, and level on top. Two of them are located on high, hilly ground, and the other two in valleys. They form no group, but are scattered widely over the country. They are made largely of stones about the size of a man's fist, which appear to have been in contact once with fire, and from the small percentage of earth they contain compared with the surrounding ground, they give one an impression that they were formed by the piling up of these rocks. Arrow-heads are common around them, for which the people in the locality attribute their existence to the Indians, and hold that they were used as places of sacrifices, or torture, or cremation.

I will refrain from expressing any opinion as to their probable origin, leaving that to wiser heads than mine, for only the interest I take in the subject induces me to contribute the above.

IRVING H. WENTWORTH.
MATEHUALA, S. L. P., MEXICO.

MEGASPORE OR MACROSPORE.

IT is often asked why some botanists use the term megaspore while others call the same object a macrospore. Since those who say macrospore are likely to say macrosporocarp, macrosporophyll, etc., instead of megasporocarp, etc., it is worth while to call attention to the comparative merits of *mega* and *macro*. *Mega,* from the Greek μέγας, means big, great, large; it is equivalent to the Latin *magnus* and is the opposite of *micro*. *Macro,* from the Greek μακρός, means long; it is *not* the opposite of *micro,* as was doubtless imagined by those who first used the term, macrospore, but is the opposite of βραχός, meaning short. No one would designate the larger spores of heterosporous plants as *long spores.* Why then should any one say the same thing in Greek? The misconception of the meaning of *macro*—a misconception which could never occur to a student of Greek—has become so established that we even have a genus, *Macrozamia.* The taxonomist doubtless thought he was constructing a word which should mean *large Zamia,* but the word means *long Zamia,* while the plant itself is of the short tuberous type. I should not suggest a change to *Megazamia,* although much more radical changes in generic names are made with far less provocation. Botanists dropped the term, *rhizocarp,* because it implied that the sporocarps were borne upon roots, an entirely inaccurate implication. The term, *macro,* except where it refers to length, is just as inaccurate. Let us say megaspore, megasporophyll, megasporocarp, megaphyllous, and, in short use *mega* wherever the idea is that of great size rather than great length.

CHARLES J. CHAMBERLAIN.

SPECIAL ARTICLES.

DINOSAURIAN GASTROLITHS.

THE occurrence of worn and polished quartz pebbles in such close association with plesiosaur skeletons of the Kansas chalk as to suggest that in life these reptiles were pebble swallowers was first noted by Professor Mudge and later by Williston.[1] More recently these observations of Mudge and Williston have been confirmed in the most conclusive manner by Mr. Barnum Brown,[2] who found siliceous pebbles almost invariably accompanying the plesiosaur skeletons, which

[1] Field Columbian Museum Publication (Chicago), No. 73, p. 75.

[2] SCIENCE, N. S., Vol. XIX., No. 501, pp. 184, 185, August 5, 1904.