

SOCIETIES AND ACADEMIES.

BOSTON SOCIETY OF NATURAL HISTORY.

A GENERAL meeting was held November 2d, thirty-seven persons present. Professor Alpheus Hyatt exhibited the lower jaw of a whale, *Mesoplodon* sp., that came ashore on the beach inside the harbor of Annisquam, Mass., in August, 1898. The specimen was a young female; after the removal of the blubber, the length, measured along the side of the body, from the re-entrant angle of the tail-fin to the end of the lower jaw, was twelve feet, two inches. The lower jaw projected slightly beyond the upper jaw. A narrow crease was observed on the under side of the throat along the median line. The shape of the body was more or less laterally compressed oval. A single crescentic blow-hole was situated in a depression on the top of the head. The greatest diameter of the nasal pouch was about four inches.

According to True there are but two records of *Mesoplodon* from the north Atlantic coast. The first of these refers to a specimen from Nantucket, and is noticed by Professor Louis Agassiz in the 'Proceedings' of this Society, 1868, Vol. 11., p. 318. This specimen was sixteen feet long, and the skull and other bones, preserved in the collection of the Museum of Comparative Zoology, indicate a female somewhat older than the Annisquam specimen. The skeleton of the second specimen, taken at Atlantic City, N. J., in 1889, is in the United States National Museum. The skeleton of the Annisquam specimen will be preserved in the Museum of the Society.

Dr. R. T. Jackson spoke on localized stages in development in plants and animals. This paper will be printed as No. 4, Vol. 5, of the Memoirs of the Society.

SAMUEL HENSHAW,
Secretary.

BIOLOGICAL SOCIETY OF WASHINGTON—297TH MEETING, NOVEMBER 19.

DR. F. W. TRUE exhibited a copy of an entomological journal published in Japan, explaining that it was the first journal of its kind to appear in that country.

Mr. E. L. Morris narrated an extraordinary feat of climbing in the case of a small green snake, whereby the animal ascended a vertical polished nickel pipe for some distance above the tank in which it was confined.

Dr. L. O. Howard displayed three entomological posters issued in handsome form by foreign governments. Two, devoted to the Colorado potato beetle and the San José scale, were produced by the German authorities, and one, illustrating a destructive grain beetle, by the Russian.

Dr. Cleveland Abbe presented a paper entitled 'Climate and the Corn Crop,' illustrated by numerous charts and statistical tables. He discussed the various factors affecting the crop production in different portions of the country, with special reference to climatology.

Mr. Herbert J. Webber, in the course of 'A Comparison of the Types of Fecundation of Flowering Plants,' pointed out that zoidiagamous fertilization, by means of motile spermatozoids was, so far as known, confined to the Cycadales and the Ginkgoales among the Gymnospermæ. He described briefly the two forms of the process, porogamy and chalazogamy, found among the higher flowering plants, illustrating his remarks by numerous drawings of special cases.

F. A. LUCAS,
Secretary.

HARVARD UNIVERSITY : STUDENTS' GEOLOGICAL CLUB, NOVEMBER 8, 1898.

MR. W. E. HOBBS described some Cambrian fossils which he collected as East Braintree, Mass., from an outcrop that Professor Crosby places stratigraphically above the quarry outcrop. They include young individuals of *Paradoxides harlani*, shields of *Agraulus quadrangularis*, *Ptychoparia rogersi*, *Hyolithes haywardensis* (Grabau, not yet published), and an indistinct *Obolella*. Under the title of 'A new Species of Cystid,' Mr. L. LaForge discussed some specimens from the middle Chemung, at Alfred, N. Y. All the specimens, about one hundred in number, have been collected from boulders within an area of two or three square miles. The perfect specimens show the characteristics of *Agelacrinus*, but differ chiefly from the known species in the ambulacra.

Geological Conference, November 15, 1898. MR. J. E. WOODMAN presented brief notes on two local features, 'Fifty Years' Change in Lynn Beach,' and 'A Section through the Newtonville Esker.' Thirty years ago, according to the statement of a stage driver of that time, the road across Lynn Beach, from Lynn to Nahant, was passable for the stage only at low tide. The constructive action, which has resulted in the present, broad, high beach, takes place chiefly during winter storms and on the east side. Attention was directed to some significant bedding recently exposed in a section through the Newtonville esker. The subglacial stream cut the ice on the outside of its curve, just as meandering streams cut their banks to-day, for the east of the old channel shows higher beds unconformably overlapping lower ones on the outside of a bend.

Mr. A. W. Grabau spoke on the 'Siluro-Devonian Contact in Western New York.' In the region considered, the Onondaga limestone, at the base of the Devonian, has generally been held to rest unconformably upon the Water-lime, at the top of the Silurian. Five sections exposed in the Buffalo cement quarry, near Buffalo, N. Y., tend to show that these beds are not only unconformable, but also that they are separated, locally, by a thin layer of conglomerate. The so-called 'bull-head' limestone, which forms the upper seven feet of the Water-lime, contains few fossils except near the top, where the following have been found: exterior molds of a new coral; two species of Leperditia, and five species of brachiopods. All the species show Lower Helderberg affinities. The evidence afforded by fossils and by stratigraphic position indicates that this bed is the western extension of the Lower Helderberg, and that the overlying limestone conglomerate, with quartz sand in the cement, is the equivalent of the Oriskany. Mr. Grabau proposes to call this important capping member of the Silurian the Greenfield limestone. The name is taken from the town in Ohio near which this bed both attains strong development and afforded the first fossils described from it.

One portion of the contact discussed exhibits an irregular, ancient fissure about ten feet deep and up to two feet in width. This fissure

penetrates the entire stratum of the Greenfield limestone and a portion of the Water-lime, and is filled with compact, quartz sandstone, containing angular fragments of the limestone.

J. M. BOUTWELL,
Recording Secretary.

NEW BOOKS.

A Treatise on Universal Algebra with Applications. ALFRED NORTH WHITEHEAD. Cambridge, University Press; New York, The Macmillan Company. Volume I. Pp. xxvi + 586. \$7.50.

Foot Notes to Evolution. DAVID STARR JORDAN. New York, D. Appleton & Co. 1898. Pp. xviii + 392. \$1.50.

Text-Book of Physiology. Edited by E. A. SCHÄFER. Edinburgh and London, Young J. Pentland; New York, The Macmillan Co. 1898. Pp. xviii + 1036. \$8.00.

Anatomy and Histology of the Mouth and Teeth. I. NORMAN BROOMELL. Philadelphia, P. Blakiston's Sons & Co. 1898. Pp. viii + 428. \$4.50.

Text-Book of Histology. PHILIPP STÖHR. Second American Edition translated from Seventh German Edition by DR. EMMA BILLSTEIN. Philadelphia, P. Blakiston's Sons & Co. 1898. Pp. xviii + 424. \$3.00.

Human Anatomy. HENRY MORRIS. Philadelphia, P. Blakiston's Sons & Co. 1898. Pp. xxix + 1274. \$6.00.

Annual Report of the Board of Regents of the Smithsonian Institution. 1896. Washington, Government Printing Office. 1898. Pp. xliii + 727.

Outlines of Industrial Chemistry. FRANK HALL THORP. New York and London, The Macmillan Company. 1898. Pp. xvii + 541. \$3.50.

Fertilizers. EDWARD B. VORHEES. New York and London, The Macmillan Company. 1898. Pp. xiv + 335. \$1.00.

Instinct and Reason. HENRY RUTGERS MARSHALL. 1898. Pp. xii + 574. \$3.50.

Erratum: On page 675 above first column, line 33, for *Wabash* Creek read *Walnut* Creek.