

Springfield, Mass., High School. He urged the science teachers in secondary schools to interest themselves in this national organization, and extended an especial invitation to attend the anniversary meeting next August.

The closing session, Friday afternoon, began with three round tables. The representatives of union schools and academies were led by Principal Thomas B. Lovell, of the Niagara Falls High School, Normal School teachers by Professor Howard Lyon, of Oneonta, and College teachers by Professor B. G. Wilder.

Principal Frederick A. Vogt, of the Central High School in Buffalo, introduced the topic of 'Out-door Science Work in Secondary Schools.' He outlined a number of ways in which the 'laboratory method' may be most profitably employed in the open air, and he contended that many schools, especially in rural districts, are neglecting this most fruitful and convenient means of education and leaning too much on the traditional grind of the school book. The discussion showed that out-door study wherever it has grown to be a feature of science courses is becoming more systematic and rational than formerly. The demand for better work in this line is met by special courses in summer schools and by the preparation of leaflets and guides such as have been issued by the College of Agriculture of Cornell University and many similar institutions.

The following are the officers for 1898:

President, Charles W. Hargitt, Syracuse University.

Vice-President, John F. Woodhull, Teachers College, New York.

Secretary and Treasurer, Franklin W. Barrows, 45 Park Street, Buffalo, of Central High School.

Executive Council:

Professor William Hallock, Columbia University, New York.

Miss Mary E. Dann, Girls' High School, Brooklyn.

Professor D. L. Bardwell, State Normal School, Cortland.

Dr. Charles W. Dodge, University of Rochester.

Principal Thomas B. Lovell, High School, Niagara Falls.

Professor W. C. Peckham, Adelphi College, Brooklyn.

Professor J. McKeen Cattell, Columbia University, New York.

Professor Le Roy C. Cooley, Vassar College, Poughkeepsie.

Professor E. R. Whitney, High School, Binghamton.

Professor Irving P. Bishop, State Normal School, Buffalo.

Mr. Charles N. Cobb, Regents' Office, Albany.

Professor C. S. Prosser, Union University, Schenectady.

A more detailed report of the meeting is published in *The School Journal*, New York, for March 19th and 26th. Dr. Nichols' lecture and Principal Vogt's paper are published in later numbers of the same periodical.

FRANKLIN W. BARROWS,  
Secretary.

#### THE NATURAL HISTORY MUSEUM, LONDON.\*

THOSE who have visited the Natural History Museum recently and have marked the admirable manner in which the specimens are classified, labelled and arranged in the gallery of mammalia will readily appreciate how valuable an addition to the resources of the student the improvements in the mode of exhibition and the methods of mounting specimens now in progress in the other zoological galleries will afford when the work is complete. As regards the mammals the rearrangement is in a fairly finished state, though of course the process of elimi-

\* From the *London Times*.

nating badly-stuffed or worn-out specimens and replacing them as opportunities arise by the best examples of modern taxidermy is one which must ever continue if the Museum is to be maintained as an institution worthy of the nation. As an instance of the difference between the old style and the new, attention may be directed to the fine specimen of a wild lion, shot by Mr. S. L. Hinde, an officer in the service of the British East Africa Protectorate, near Machakos, on August 28, 1897, which is now splendidly set up in a prominent position among the carnivora, having lately taken the place of the old male menagerie specimen, grotesque-looking at the best, presented years ago to the Museum by the well-known showman Van Amburgh.

A feature of the extensive changes at present being made is the gradual disappearance of the polished sycamore stands which for very many years have been in use throughout the zoological department. The light color and reflecting surfaces of these stands not only obtrude themselves on the attention of the visitor, but they do not at all harmonize with the general tone of the specimens. The difficulty has been to find a good substitute. After many experiments of different colors and kinds of surface it has been finally resolved to adopt a suggestion made to Sir William Flower by the late Lord Leighton to use for the majority of the stands a dull surface of a good cigar-brown, produced by staining the wood.

Evidence of reform and reorganization is to be seen in the bird gallery, and here it may be noted that the formal turned perches on which the birds were mounted, and which necessitated a perfect uniformity of position, are being replaced by pieces of natural branches, allowing the taxidermist far greater freedom and variety in mounting the specimens. The new order or classification of the class *Aves* commences on the north side of the gallery, with the

struthious birds, or ostrich tribe, including the emus and cossowaries of Australia, the rheas of South America, and the living apteryx and, but recently extinct dinornis, or moa, of New Zealand, and then will proceed through the tinamous, game birds, pigeons, rails, plovers, gulls, petrels, and ducks to the large saloon at the western end of the gallery, where the pelicans and cormorants and some of the birds of prey will be exhibited. On the south side of the gallery will be arranged the remainder of the birds of prey, the owls, parrots, and other picarian birds as well as the perching birds, with which the arrangement will conclude on the left of the main entrance to the gallery. A student, therefore, wishing to examine the higher forms of bird life can, when the work is finished, begin on the left or south side of the room and pursue his studies in regular sequence until he arrives at the ostriches and other flightless birds, or he may commence with the latter and end with the highest forms of passeriformes or perching birds. So far the rearrangement has been completed to the game birds, and many splendid examples of pheasant, partridges and grouse are to be seen. An addition made within the last few days is the group of peafowl, perhaps the most striking and beautiful case in the gallery. It includes examples of the common peafowl, one of the males with the train expanded, a pair of the Burmese peafowl, a hybrid between these species bred in the zoological gardens, and an example of the black-shouldered peacock—a very handsome variety of the common species which has not been met with in a wild state. Among the pigeons which have just been provisionally placed in their case may be seen a fine pair of the now nearly extinct passenger pigeon (*Ectopistes migratorius*). These are remounted examples which have already done nearly fifty years' service, but look as fresh as if they had been shot yesterday.

In the gallery of reptilia an important and valuable acquisition has recently been made in the shape of an unusually large specimen and a skeleton of the Gangetic crocodile or gavial of the Ganges, measuring 16 feet in length. It is thought that no other skeleton of this species is to be seen in any museum or collection in Europe. This powerful and truly formidable looking animal feeds chiefly on fishes, for the capture of which its long and slender snout and sharp teeth are well adapted, but it occasionally devours human bodies.

One of the most beautiful sections of the Museum is the coral gallery, where many decided improvements are noticeable. Thus the sea-anemones in spirit, which do not look very much like sea-anemones in the sea, have had cleverly-executed water-color drawings of living specimens put beside them. The new whale room, for the exhibition of life-sized models and skeletons of whales on a scale never before approached, is making good progress under the director's constant supervision, and will probably be ready for the admission of the public early in the summer.

In the department of geology the recent accessions are many and varied. One which is of special importance and interest is the complete skeleton of *epyornis*, an extinct wingless bird as large as an ostrich, 5 feet 2 inches in height. The specimen has been reconstructed from the immense series of remains collected in the neighborhood of Sirabé by Dr. C. I. Forsyth Major during his recent expedition to Madagascar. Close to it has been placed for comparison a skeleton of the recent African ostrich.

An interesting specimen presented by Dr. John Murray, of the Challenger, has lately been added to the collection of rocks in the mineral gallery. It is a fragment of gneiss or rock dredged up by the Challenger from diatom ooze at a depth of 1,950 fathoms in the Antarctic Ocean, latitude 53° 55' S.,

longitude 108° 35' E., and is stated to be indicative of Continental land, it having been probably transported by the Antarctic icebergs from land situated towards the South Pole.

Recent additions to the botanical gallery include a table case illustrating parasitic flowering plants. The visitor will note not only the familiar mistletoe, but the more degenerate forms closely resembling fungi in their outward appearance. On the opposite side of the gallery a similar case is nearing completion in which the singular adaptations of flowers to fertilization are exhibited. The models of flowers by Miss Emmet are among the most successful this lady has ever made. The exhibition of British fungi is also now nearly complete and the arrival of a new pedestal case is all that is needed to set forth the continuation of Mr. Worthington Smith's beautiful series of drawings. Perhaps the addition which will be first noted by the visitor is the splendid cycad recently presented by Mr. Horace Munn, of Jamaica.

#### CURRENT NOTES ON ANTHROPOLOGY.

##### RECENT STUDIES IN MAYA HIEROGLYPHICS.

DR. FORSTEMANN has added another (the 7th) instalment to his series 'On the decipherment of the Maya Manuscripts.' It is devoted to the interpretation of the upper portions of pp. 53-58 and lower portions of pp. 51-58 of the Dresden Codex. They are shown to be occupied with an attempt to obtain a common measure for the apparent years of the planets and the periods of the sun, moon and *tonalamatl*.

The same writer has in *Globus* (Bd. LXXIII., 9 and 10) a very able analysis of the Mayan calendar with reference to the gods governing the days (Die Tagegötter der Mayas). Most of the identifications will be accepted by scholars, though some still remain unknown or dubious.

In the *American Anthropologist* for April