

AMERICAN MUSEUM OF NATURAL HISTORY,
NEW YORK.

The customary autumn reception at the American Museum of Natural History, Seventy-seventh street, near Central Park, took place on the 27th instant, from two to five o'clock in the afternoon. The attendance was not so large as upon former occasions. Among the trustees present were noted Mr. Robert L. Stuart, President; Messrs. Robert Colgate, Benjamin H. Field, Adrian Iselin, Morris K. Jesup, James M. Constable, Joseph W. Drexel, Frederic W. Stevens, Hugh Auchincloss, Oliver Harriman, ex-Governor E. D. Morgan, John H. Sherwood, R. H. Keene, Professor Eggleston, Rev. Dr. Trimble, Arkansas; Professor Daniel S. Martin, Rutgers College, with many others.

The additions and improvements since the last reception, in May of the present year, may be briefly summarized as follows: In the lower hall the Binney and Bland collection of land and fresh water shells formed a new feature. It contained the typical specimens that are to be met with in the works of those authors, and was presented by twelve members. The whole was enclosed in a desk case, placed between cases R and K. Besides this the skeletons of three Australians were there to challenge the attention of scientists. These interesting specimens were the gift of Mr. Morris K. Jesup, and may be inspected in case A. In the main hall, the Maximilian collection of birds, attracted the attention of visitors; they have been re-mounted on the new stands described in an article in "SCIENCE," October 7 last, under the title of "Bird Furniture, by Dr. Holder, the Assistant Superintendent. We direct the attention of those making collections of Natural History specimens, to these stands; they are inexpensive, and possess many advantages. The North American collection was increased by six hundred specimens.

The gallery stairway showed a detailed ethnological map of Africa, drawn on a large scale by Professor Bickmore. The additions to the Ethnological Collection from the South Seas consist of a war canoe (case No. 1), New Zealand weapons and carvings (case No. 3) and stone axes from New Guinea (case No. 4). The set of ornaments and carvings from British Columbia, presented by Mr. H. R. Bishop (case M), proved to be interesting, as many items were included which appeared unfamiliar to most people present. The Geological Hall received seven geological maps of Eastern North America, some Encrinites and other fossils from various formations. Cases A, B, C, D and E were re-arranged and labelled. In the desk cases specimens were placed which served to illustrate Dana's "Manual of Geology." The rearrangement and labelling of the portions alluded to are a considerable improvement.

Altogether the several collections and their belongings presented the appearance of being well kept and arranged according to the best scientific principles. The trustees say that the elevated railroad has brought a greatly increased number of visitors to the Museum, and they hope to make it still more attractive as a place of instructive amusement. It has been suggested that such advanced classes of the higher schools and colleges are making a regular study of natural history could find in this collection an excellent opportunity for advancing themselves in their chosen branch of education. If professors or teachers would accompany their pupils periodically through the Museum, giving progressive lectures on the different subjects presented for consideration, it is believed that the results would, under all aspects, be most beneficial.

ASTRONOMICAL NOTES.

Dr. W. L. Elkin has made a re-discussion of the various series of observations of α Centauri for the determination of the value of its parallax. These include the observations of Henderson, Maclear, Moesta and E. J. Stone. Besides a recomputation of the absolute parallax, Dr. Elkin has selected the observations which were made on nights when both α and β Centauri were observed, and from these determined their relative parallax. The discussion includes a new determination of the orbit of α considered as a double star, as well as a discussion of the relative proper motions of α and β . From a careful examination of each series he concludes that Maclear's is the only one worthy of confidence. He finds that, although the probable error of

Moesta's series is small, the annual variation may be accounted for as the effect of changes in temperature. Maclear's observations give for the relative parallax of α and β : $0''.50 + 0''.08$.

Dr. Henry Draper has succeeded in photographing the bright part of the nebula in Orion in the vicinity of the trapezium. The photographs show the mottled appearance of this region distinctly. They were taken by the aid of a triple objective of eleven inches aperture made by Alvan Clark and Sons, and corrected especially for the photographic rays. The exposure was for fifty minutes. A detailed description of the negatives has not yet been published, but will be soon. O. S.

SWIFTS' COMET.

BY ED. E. BARNARD.

The large comet discovered by Prof. Lewis Swift on the night of October 10th in R. A. 21 h. 30 m. north declination $17^{\circ} 30'$, is now in excellent position for observation. On October 21st it followed the fourth magnitude—star κ Pegasi by somewhat less than 1° . At 8 h. Washington m. t., I determined its position by the aid of a ring micrometer, R. A. 21 h. 42 $\frac{1}{4}$ m. Dec. $+ 25^{\circ} 1'$. The following night, October 22d, its position was at 10 h. 20 m. R. A. 21 h. 44 m. 3 sec. Dec. $+ 26^{\circ} 2'$. It is moving moderately fast in a north-easterly direction. It was observed again on the nights of October 23d and 24th. The comet is perfectly transparent. At each observation it passed over a number of small stars, 8 or 9 mag., these were seen through its very centre; they were slightly dimmed by the material of the comet.

It appears large and diffused with a slight condensation at the middle or the preceding side, with probably faint evidences of a diffused tail.

It can be seen with a very small telescope, being plainly visible on the 24th in my $1\frac{1}{8}$ in. finder.

NASHVILLE, TENN., October 25.

BOTANY.

The first annual Report upon Useful and Noxious Plants, presented by Professor T. J. Burrill to the Illinois State Board of Agriculture, contains a paper suggesting the more general cultivation of the Catalpas (*Catalpa bignonioides*.) Professor Burrill states: "I write 'these trees' advisedly, believing that the two kinds now known as the common and the hardy, or the eastern or southern and the western, are really different species. The wonder is that botanists had not long ago detected this difference and that in our manuals of botany the two had not been given under specific names.

At Urbana, Ill., in 1880, the one came into flower the first week in June; the other was nearly three weeks later, being in full flower about June 24th. They differ in other respects quite as much as well recognized species of oak, ash and cotton-wood; much more than described species of willow. But *Catalpa bignonioides*, Walt., is the only name to be found in the ordinary books, devoted to the flora, in whole or part, of North America. In 1853 Dr. Warder, of Ohio, noticing the showy flowers of some trees at Dayton, Ohio, and supposing these to be a variety of the well known species with this peculiarity, named the variety *speciosa*. It now appears that this large flowered kind is the common indigenous form found in the States of Indiana, Illinois, Kentucky, Tennessee, Wisconsin, Arkansas, etc., and botanists will doubtless henceforth write *Catalpa speciosa*, Warder, as a distinct species. Contrasted with *Catalpa bignonioides* the flowers are earlier and larger; the seed pods are larger; the bark is darker, and does not scale off, giving quite a different aspect to the trunk of a mature specimen; the growth is more erect, causing a better bole and finer head, and the tree is not so liable to be killed by the severities of winter. Added to all this the trees are so characteristically different that anyone can readily distinguish them. In *C. bignonioides* they are narrow and the fringe of the wing is close and pointed; in *C. speciosa* the larger seed has a wider wing, terminated at each end with a broad fringe of softer hairs. Unfortunately most of the cultivated Catalpa trees in Illinois have been of the tender species, and, although the wonderful durability