Salp *Thalia democratica-mucronata* have now for the most part broken up, and the detached sexual forms, each with a contained embryo, have been taken in considerable numbers. The floating fauna has also included Cirripede and Copepod Nauplii, Polychæte trochospheres and Molluscan veligers. Among Leptomedusæ *Clytia Johnstoni* and small *Obeliæ* have been abundant; and among Anthomedusæ *Sarsia eximia* has been observed, together with numbers of an apparently undescribed species of *Dysmorphosa*, resembling *Rathkea octopunctata* in its power of budding from the manubrium. The Mollusc *Galvina cingulata* and the Tunicate *Thalia democratica-mucronata* are now breeding.

THE additions to the Zoological Society's Gardens during the past week include an American Black Bear (*Ursus americanus*) from Canada, presented by Mr. Joseph Politzer; a Hawk's-billed Turtle (*Chelone imbricata*) from the West Indies, presented by Mr. C. Melhado; two Common Buzzards (*Buteo vulgaris*) European, deposited; two Australian Crows (*Corvus australis*) from Australia, purchased; a Thar (*Capra jemlaica*, ♀), a Triangular-spotted Pigeon (*Columba guinea*), a Cardinal Grosbeak (*Cardinalis virginianus*), two Hybrid Pied Wagtails (between *Motacilla lugubris*, ♂, and *M. melanope*, ♀) bred in the Gardens.

## OUR ASTRONOMICAL COLUMN.

A NEW COMET.—A telegram received from Prof. Krueger announces that a comet with a bright tail was discovered by M. Quenisset at M. Flammarion's observatory, Juvisy, on July 9, its approximate place being R.A. 7h. 50m., N. Decl. 48° 10′. The comet is therefore in the constellation Lynx.

In *Edinburgh Circular* No. 38, Mr. Heath says that a second telegram from the same source states that the comet was again seen on the 10th, at 12h. 59·3m. M.T. at Kiel, its place being then R.A. 8h. 29m. 45·7s., N. Decl. 46° 59′ 29″; daily motion, + 34m. 48s. and − 1° 24′.

COMET FINLAY (1886 VII.).—A continuation of M. Schulhof's ephemeris for the ensuing week is as follows:—

12*h. M.T. Paris.*

| 1893 | R.A. app. | Decl. app. |
|---|---|---|
| | h m s | ° ′ ″ |
| July 13 ... | 3 59 23·84 ... | +18 54 32·8 |
| 14 ... | 4 3 57·65 ... | 19 10 20·2 |
| 15 ... | 8 30·28 ... | 19 25 35·4 |
| 16 ... | 13 1·69 ... | 19 40 18·4 |
| 17 ... | 17 31·83 ... | 19 54 29·3 |
| 18 ... | 22 0·65 ... | 20 8 8·3 |
| 19 ... | 26 28·11 .. | 20 21 15·4 |
| 20 ... | 4 30 54·16 ... | 20 33 51·0 |

In the above ephemeris we have corrected the error made in the *Astronomische Nachrichten* (No. 3171), where the 16th is inadvertently printed 14th.

METEOR SHOWERS THIS MONTH.—In the list of the radiants of the principal meteor showers which Mr. Denning gives in the companion to the *Observatory* the following are visible this month, that occurring on the 28th being defined as "most brilliant":—

| Date. | Radiant. α | Radiant. δ | Meteors. |
|---|---|---|---|
| | ° | ° | |
| July 19 ... | 314 | +48 ... | Short, swift. |
| 20 ... | 269 | +49 ... | Swift. |
| 22 ... | 16 | +31 ... | Swift, streaks. |
| 25 ... | 48 | +43 ... | Swift, streaks. |
| 28 ... | **339** | **−12** ... | Slow, long. |
| 30 ... | 6 | +35 ... | Swift, streaks. |

L'ASTRONOMIE FOR JULY.—The current number of this journal commences with an article by M. Tisserand on the inauguration of the statue of Arago, which was referred to in these pages last week. M. Deslandres briefly refers to some of his results as shown by the photographs taken by him at the late total solar eclipse, to which are added the observations of several other observers, and several illustrations of the instruments employed. M. Denning contributes three drawings of comet Holmes (made on November 9, 16, and 19 last), showing its change of shape from the circular to the pear-shaped form. Other articles of interest refer to meteorological statistics, atmospheric phenomena, earth tremblings, &c. In the notes some recent measures are given of the diameter of Mars, and of the snow caps, the former made by M. W. W. Campbell at the Lick Observatory, and the latter by M. Asaph Hall at the Washington Observatory.

HIMMEL UND ERDE FOR JULY.—In this number Dr. W. Luzi concludes his interesting article on the diamond, having covered the ground between the first observations made at Florence in 1694, and M. Moissan's recent researches. Dr. Wilhelm Meyer continues his chapters on the physical condition of the planet Mars after the evidence of eminent observers, while Herr Gingel gives us his fourth chapter on the mechanics of the heavens, dealing with the new researches by G. H. Darwin on the influence of tides on the movements and form-proportions of the heavenly bodies, embracing particularly the earth-moon system. Among the notes that on variable stars calls for attention.

## MUSEUMS ASSOCIATION.[1]

II.

THESE are the principles of what may be called the New Museum idea as applied to national museums of natural history. It is a remarkable coincidence that since they were first enunciated, and during the time of their discussion, but before they had met with anything like universal acceptance, the four first nations of Europe almost simultaneously erected in their respective capitals—London, Paris, Vienna, and Berlin—entirely new buildings on a costly, even palatial scale, to receive the natural history collections, which in each case had quite outgrown their previous insufficient accommodation. In the construction of neither of these four edifices can the guardians of the public purse be accused of want of liberality. Each building is a monument in itself of the appreciation of the government of the country of the value and interest of the natural history sciences. So far this is most satisfactory. Now that each is more or less completed, at all events for the present, and its contents in a fair way towards a permanent arrangement, it may not be without interest on the present occasion to give some comparative account of their salient features, especially with a view to ascertain whether and to what extent their construction and arrangement have complied with the requirements of the modern idea of such institutions.

It may seem ungrateful to those who have so liberally responded to the urgent representations of men of science by providing the means of erecting these splendid buildings, to suggest that if they had all been delayed for a few years the result might have been more satisfactory. The effects of having been erected in what may be called a transitional period of museum ideas is more or less evident in all, and all show traces of compromise, or rather adaptation to new ideas of structures avowedly designed for old ones. In none, perhaps, is this more strikingly shown than in our own, built, unfortunately, before any of the others, and so without the advantages of the experience that might have been gained from their successes or their shortcomings. Though a building of acknowledged architectural beauty, and with some excellent features, it cannot be taken structurally as a model museum, when the test of adaptation to the purpose to which it is devoted is rigidly applied. But to speak of its defects is an ungracious and uncongenial task for me. If it were not taking me too far away from my present subject I would rather speak of the admirable manner in which the staff are endeavouring to carry out the new idea under somewhat disadvantageous circumstances.

The new zoological museum in the Jardin des Plantes at Paris is a glorification of the old idea pure and simple. It consists of one huge hall, with galleries and some annexes, in which every specimen is intended to be exhibited, more or less imperfectly, on alternate periods to students and to the general public. The building and cases are very handsome in style, and there are endless rows of specimens of all kinds neatly mounted in a uniform manner. There are no storerooms, no laboratories, no workrooms connected with the building. These are all in

[1] Continued from p. 236.