

Mr. Marr, though in several matters of detail different results are reached. Other important papers complete what is a particularly interesting issue of the *Journal*.

THE additions to the Zoological Society's Gardens during the past week include two Maholi Galagos (*Galago maholi*), a Bosch Bok (*Tragelaphus sylvaticus*, ♂), two Cape Zorillas (*Ictonyx zorilla*), a Hoary Snake (*Pseudaspis cana*), two Rough-keeled Snakes (*Dasyptellus scabra*), twelve Crossed Snakes (*Psammodphis crucifer*), two Rufescent Snakes (*Leptodera hotambai*), two Smooth-bellied Snakes (*Homalosoma lutrix*), two Puff Adders (*Bitis arietans*) from Port Elizabeth, Cape Colony, presented by Mr. J. E. Matcham; a Fat-tailed Sheep (*Ovis aries*, ♂, var.) from Cape Colony, presented by the Hon. Sir James Sivewright, K.C.M.G.; an African Civet (*Viverra civetta*) from West Africa, presented by Lieut. Carroll and Major Arthur Festing; a — Gannet (*Sula*, sp. inc.), captured at sea, presented by Captain Ernest W. Burnett; two Alligators (*Alligator mississippiensis*) from North America, presented by Mr. O. Moser; a Common Viper (*Vipera berus*), two Common Snakes (*Tropidonotus natrix*), British, presented Mr. W. F. Blanford; twelve African Walking Fish (*Periophthalmus koelreuteri*) from West Africa, presented by Dr. H. O. Forbes; a Reticulated Python (*Python reticulatus*) from Malacca, two Indian Pythons (*Python molurus*) from India, deposited; an Indian Chevrotain (*Tragulus meminna*, ♂) from India, purchased; a Burrhel Wild Sheep (*Ovis burrhel*, ♀), born in the Gardens.

OUR ASTRONOMICAL COLUMN.

ASTRONOMICAL OCCURRENCES IN SEPTEMBER:—

- September 5. 16h. 44m. to 17h. 41m. Occultation of 66 Arietis (mag. 6.1) by the moon.
 8. 10h. 52m. to 11h. 42m. Occultation of DM + 24° 1033 (mag. 6) by the moon.
 9. 1h. 31m. to 2h. 19m. Occultation of Mars by the moon.
 10. 14h. 5m. to 14h. 30m. Occultation of 79 Geminorum (mag. 6.5) by the moon.
 12. 11h. 27m. Minimum of Algol (β Persei).
 15. Venus. Illuminated portion of disc 0.521. Diameter 23" 2.
 15. Mars. Illuminated portion of disc 0.880. Diameter 6" 8.
 15. 8h. 16m. Minimum of Algol (β Persei).
 17. Saturn. Outer minor axis of outer ring, 16" 43.
 21. 3h. Mercury at greatest western elongation (17° 51').
 21. 5h. Venus at greatest eastern elongation (46° 27').
 26. Vesta 20' S. of Saturn.
 28. 13h. 39m. to 14h. 44m. Occultation of 16 Piscium (mag. 5.6) by the moon.

The planet Mercury will be favourably presented as a morning star between about September 18 and 27. The time of his rising compared with that of the sun will be as under:—

Date.	Mercury rises.		Sun rises.		Interval.	
	h.	m.	h.	m.	h.	m.
September 18	...	4 3	...	5 40	...	1 37
19	...	4 3	...	5 42	...	1 39
20	...	4 2	...	5 43	...	1 41
21	...	4 3	...	5 45	...	1 42
22	...	4 4	...	5 46	...	1 42
23	...	4 6	...	5 48	...	1 42
24	...	4 9	...	5 49	...	1 40
25	...	4 13	...	5 51	...	1 38
26	...	4 16	...	5 53	...	1 37
27	...	4 20	...	5 55	...	1 35

THE GREAT TELESCOPE FOR THE PARIS EXHIBITION.—We gather from an article in *La Nature*, August 27, that M. Gautier, the well-known optician, is making good progress with the construction of the giant telescope intended for the

Great Exhibition at Paris in 1900. The aperture will be 1.25 metres (49.2 inches), and the focal length 60 metres (196 feet 10 inches), while the estimated cost is 1,400,000 francs. An equatorial mounting and dome for such a gigantic instrument may well be considered impracticable, and accordingly the telescope itself will be rigidly fixed in a horizontal position on supports of masonry, and will receive the light of the heavenly bodies after reflection from a movable plane mirror 2 metres in diameter. The plane mirror is 13 inches thick, and weighs 3600 kilogrammes; and it is curious that of twelve discs cast for the purpose, the first one turned out to be the best. This has been in process of grinding for seven months, and is not yet finished.

There will be two objectives, one photographic and one visual, which will be easily interchangeable at will. It is expected that a magnifying power of 6000 will be usefully employed, and that occasionally a power of 10,000 may be used. As the highest power available in the largest existing telescope does not exceed 4000, the new instrument, if it be the success that every one will wish, should have a wide field of usefulness.

A NEW VARIABLE STAR.—In *Ast. Nach.*, No. 3512, Prof. Ceraski, Director of the Moscow Observatory, announces the discovery, by Madame Ceraski, of a new variable star. The variability was detected by a comparison of photographs, and has been confirmed by visual observations. Its estimated position is in R.A. 21h. 6.9m., Decl. + 82° 28' (1855); that is, not far from 76 Draconis. The range of variation is not stated, but it is mentioned that on July 25 it was of the tenth magnitude.

MINOR METEORIC RADIANTS.—In view of the large amount of attention which will probably be directed to meteoric displays during the next few years, Mr. Denning summarises in *Ast. Nach.*, No. 3513, the positions of the radiant points of the minor showers visible during the principal meteoric epochs. The catalogue comprises fifty radiants observable at each of the six periods corresponding to the displays of Quadrantids, Lyrids, Perseids, Orionids, Leonids and Geminids. As the Andromedes fall near and between the Leonids and Geminids, a separate list is unnecessary for this epoch. It is seen from the table that some of the positions for radiants are almost the same at different epochs, and Mr. Denning again draws attention to his conclusion that "certain radiants are actively maintained (though possibly with varying or intermittent intensity) over considerable intervals of time, during which their positions are quite stationary among the stars." The list will be invaluable to those who take up observations of shooting-stars.

THE INTERNATIONAL CONGRESS OF ZOOLOGISTS.

THE fourth International Congress of Zoologists, under the patronage of H.R.H. the Prince of Wales and the presidency of the Right Hon. Sir John Lubbock, Bart., M.P., F.R.S., which met last week at Cambridge, may be chronicled as a success, as well from the social as the scientific point of view. The discussions were animated, the sectional papers of general interest, and the attendance was large and representative. The severity of the zoological discussions was relieved by frequent social festivities, of which the reception at the Guildhall by the Mayor of Cambridge on Monday, and the open air party at the Botanic Gardens on Thursday afternoon, were especially noteworthy.

The Congress is a triennial one, and has already been held at Paris, Moscow and Leyden. This is the first occasion that the Congress has met on English soil, and it is gratifying to find that more members were in attendance last week than were present at any of the three preceding Congresses. The programme for the week was drawn up in such a way that the topics of general interest were discussed in the mornings before the whole body of the members, while those of more limited interest were divided into four sections—(A) General Zoology, (B) Vertebrata, (C) Invertebrata, excepting Arthropoda, (D) Arthropoda, and were read in the afternoons.

Tuesday, August 23.—Sir John Lubbock, in opening the Congress, expressed his regret at the absence through continued ill-health of Sir William Flower, who, at the Leyden meeting in 1895 was made President-Elect for the present Congress.