

THE additions to the Zoological Society's Gardens during the past week include a Malayan Bear (*Ursus malayanus*) from Malacca, presented by Mrs. Bingham; a Common Squirrel (*Sciurus vulgaris*), British, presented by Mr. H. B. Meadows; two Tree Pipits (*Anthus arboreus*), British, presented by Mr. W. B. Tegetmeier; two Dwarf Chameleons (*Chamaleon pumilus*), two Robben Island Snakes (*Coronella phocarum*), a Toad (*Bufo augusticeps*) from South Africa, presented by the Rev. G. H. R. Fisk; two Pondicherry Vultures (*Vultur calvus*) from India, two Ocellated Sand Skinks (*Seps ocellatus*), South European, purchased; two Black Lemurs (*Lemur macao*), a White-fronted Lemur (*Lemur albifrons*), born in the Gardens.

ASTRONOMICAL PHENOMENA FOR THE WEEK 1887 APRIL 3-9

(FOR the reckoning of time the civil day, commencing at Greenwich mean midnight, counting the hours on to 24, is here employed.)

At Greenwich on April 3

Sun rises, 5h. 33m.; souths, 12h. 3m. 22'6s.; sets, 18h. 34m.; decl. on meridian, 5° 18' N.: Sidereal Time at Sunset, 7h. 21m.

Moon (Full on April 8) rises, 12h. 29m.; souths, 20h. 12m.; sets, 3h. 44m.*; decl. on meridian, 15° 47' N.

Planet	Rises h. m.	Souths h. m.	Sets h. m.	Decl. on meridian
Mercury	4 57	10 50	16 43	2 13 S.
Venus	6 26	13 53	21 20	15 46 N.
Mars	5 44	12 22	19 0	6 44 N.
Jupiter	20 16*	1 22	6 28	11 12 N.
Saturn	10 13	18 22	2 31*	22 29 N.

* Indicates that the rising is that of the preceding evening and the setting that of the following morning.

Occultations of Stars by the Moon (visible at Greenwich)

April	Star	Mag.	Disap.	Reap.	Corresponding angles from vertex to right for inverted image
			h. m.	h. m.	
7	46 Virginis	6	21 23	22 6	351 275
7	48 Virginis	6	22 59	0 27	28 271
8	B.A.C. 4647	6	19 57	near approach	302 —
9	94 Virginis	6	1 12	2 22	59 273

† Occurs on the following morning.

April	h.	Star	Mag.	Disap.	Reap.
3	13	Mercury	stationary.		
9	3	Jupiter	in conjunction with and 3° 20' south of the Moon.		

Saturn, April 3.—Outer major axis of outer ring = 41"·9; outer minor axis of outer ring = 17"·5; southern surface visible.

Variable Stars

Star	R.A. h. m.	Decl.	h. m.
S Persei	2 14·8	58 4 N.	Apr. 9, M
ζ Geminorum	6 57·4	20 44 N.	" 4, 22 0 M
S Cancri	8 37·5	19 26 N.	" 9, 21 57 m
V Boötis	14 25·2	39 23 N.	" 9, m
δ Libræ	14 54·9	8 4 S.	" 6, 21 55 m
U Coronæ	15 13·6	32 4 N.	" 6, 20 26 m
S Coronæ	15 16·8	31 47 N.	" 6, M
S Scorpii	16 10·9	22 37 S.	" 4, M
R Ursæ Minoris	16 31·5	72 30 N.	" 5, M
U Ophiuchi	17 10·8	1 20 N.	" 3, 1 52 m
		and at intervals of 20 8	
U Sagittarii	18 25·2	19 12 S.	Apr. 5, 3 0 m
			" 8, 2 0 M
R Scuti	18 41·5	5 50 S.	" 8, m
β Lyræ	18 45·9	33 14 N.	" 3, 21 0 m
			" 7, 2 0 M
η Aquilæ	19 46·7	0 43 N.	" 6, 22 0 m
R Sagittæ	20 8·9	16 23 N.	" 8, M
δ Cephei	22 25·0	57 50 N.	" 4, 2 0 m
			" 7, 20 0 M

M signifies maximum; m minimum.

GEOGRAPHICAL NOTES

THE new number of the *Mittheilungen* of the Vienna Geographical Society contains several letters written by Dr. O. Lenz during his journey from Kasonge, on the Upper Congo, and the Shiré River, to the south of Lake Nyassa (June to December 1886). These letters are, to a large extent, occupied with details of the troubles which Dr. Lenz had with his men. Kasonge is a most unhealthy town. Bohndorf, Lenz's companion, was struck down with fever, and had to be carried most of the way, while small-pox broke out among his men, seriously hampering the proper work of the Expedition. Lenz left Kasonge on June 30, and reached the Island of Kavala, off the west shore of Lake Tanganyika, the head-quarters of Capt. Hore, on August 7. On the route he passed many villages recently built by Zanzibaris, the native population having retired into the forests and mountains. The region is mainly an open table-land, sometimes of a beautiful park-like aspect, and with the river-valleys thickly wooded. As Tanganyika was approached, the plateau rose to a height of 3000 to 4000 feet, with mountains rising from its surface to an equal height. The chief rock was granite, with crystalline slates, and wooded spurs. After staying a few days with Mr. Hore, Dr. Lenz crossed to Ujiji, which he reached on August 15. Here he found himself compelled to give up his proposed journey to Emin Pasha, and in a large boat he and his men sailed down the lake to the south shore, which he reached on September 27. Mr. Hore informed him that the Lukuga River now flows with a strong current out of Lake Tanganyika to the Lualaba. Mr. Hore, who has known the lake for ten years, assured Dr. Lenz that during that time its level has fallen 15 feet, and as the latter sailed down the lake he saw clearly enough the marks of the old shore-lines. With difficulty Dr. Lenz obtained assistance on the inhospitable south shore to continue his journey onwards to Lake Nyassa. This route has been traversed several times, and Dr. Lenz does not in these letters add much to our knowledge. It is a plateau with mountains rising from it to a considerable height, and to the south-west of Lake Tanganyika he came upon the sources of the Chambeze, which, flowing into Lake Bangweolo, may be said to form the remotest sources of the Congo. On October 17 he reached Nkonde, on Lake Nyassa, a station of the African Lakes Company, and thence made his way down the lake and on to the River Shiré, whence his last letter is dated, in December 1886.

IN the same number will be found the conclusion of Herr Glaser's paper on his journeys in South Arabia, in which he gives some important information on the various classes of the population. He speaks in the worst possible terms of the climate of the region: highland and lowland are equally bad, and deadly for Europeans.

THE leading paper in the last number of the *Verhandlungen* of the Berlin Geographical Society is Dr. Wolf's account of his important exploring work on the Sankuru, the great southern tributary of the Congo. This he navigated upwards from the Kasai, exploring its three great sources, the Lomomi, the Lusambo, and the Lubi. It is on the whole a magnificent water-way, its banks in many parts thickly wooded and densely populated. He gives much information concerning the two leading peoples here, the Bakutu and the Baluba, both of them evidently intruders on the Batua, the pygmy people referred to in our last number, the former coming from the north-west and the latter from the south-east. Herr Stäudinger adds considerably to our knowledge of the Niger region in his narrative of his journey from Loko, on the Binué, to the kingdoms of Saria, Kano, Sanfara, Sokoto, and Gando.

HERR FERDINAND SEELAND contributed to a recent meeting of the Austro-German Alpine Club some useful data on the rate of movement of the Pasterz Glacier. On October 3 last he found the glacier entirely free from snow, and he was lucky enough to find six pegs which he inserted in 1882 near the Hofmann Hut straight across the glacier to the base of the Glockner, and also two stones which he laid down in 1884. In the four years 1882-86 the first peg had moved downwards 121·5 m. (i.e. at the rate of 3·5 mm. per hour), the second 162 m. (4·6 mm.), the third 175·5 m. (5 mm.), the fourth 192·3 m. (5·5 mm.), the fifth 201·5 m. (5·8 mm.), and the sixth 198·6 m. (5·7 mm.). Of the stones, in the two years one had moved 104·2 m. (5·9 mm.), the other 100·7 m. (5·8 mm.). According to these results (in the direction from the north edge of the glacier towards the centre), the mean rate of