

At a recent meeting of the Wellington Philosophical Society, Mr. J. W. Fortescue spoke of the rapid increase of deer that have been acclimatized in the New Zealand mountains. Having had special facilities for observing these creatures, he proceeded to state some interesting facts as to their habits. At the close of his address Sir James Hector asked Mr. Fortescue, as an expert on the subject, whether the chief use of the antlers was not so much for fighting as for facilitating the progress of the stag through dense woods. He had considerable experience with the wapiti, in North America, and found that by throwing up the head, thereby placing the horns along the back, the animals were enabled to go forward with great rapidity and follow the hinds. He asked this, as it had been stated at a previous meeting of the Society that the antlers tended to entangle the deer. Mr. Fortescue said that Sir James Hector was quite correct in stating that the antlers assisted the stags in penetrating dense forests. Mr. Higginson also bore out this statement from his experience in India.

ON July 23, at 11.17 p.m., a brilliant meteor was seen in the province of Småland, in Sweden. At Nexjö it was seen due east, falling perpendicularly towards the horizon, when it suddenly burst.

DURING the month of June severe frosts occurred in the north of Finland, doing great damage to the crops.

NORWEGIAN hunters returning from the Arctic regions report much ice and severe storms.

ZOOLOGICAL GARDENS are being laid out in Christiania and Helsingfors.

THE additions to the Zoological Society's Gardens during the past week include a Feline Douroucouli (*Nyctipithecus vociferans*) from Savanilla, presented by Master Lester Ralph; a Crested Grebe (*Fodiceps cristatus*), British, presented by Mr. W. Nicholls; a Brazilian Cariama (*Cariama cristata*) from South-East Brazil, presented by Mr. Fredrick Rose, jun.; an Indian Kite (*Milvus govinda*) from India, presented by Mrs. Dean; a Green Turtle (*Chelone viridis*) from the West Indies, presented by Baron Henry de Worms; a Hawk's-billed Turtle (*Chelone imbricata*) from the Bahamas, presented by Mr. W. T. Manger; a Corn Snake (*Coluber guttatus*) from North America, presented by Mr. J. Garnett; a Common Viper (*Vipera berus*), British, presented by Mr. F. C. Smith; a Virginian Fox (*Canis virginianus* ♀) from North America, deposited; a Derbian Screamer (*Chauna derbiana*) from the Northern Coast of Columbia, a Prince Albert's Curassow (*Crax alberti* ♀) from Columbia, four Beautiful Grass-Finches (*Poëphila mirabilis*), four Gouldian Grass-Finches (*Poëphila gouldiæ*) from Australia, purchased; two Rose-coloured Pastors (*Pastor roseus*) from India, received in exchange; two Collared Fruit Bats (*Cynonycteris collaris*), two Mule Deer (*Cariacus macrotis* ♂ ♀), a Canadian Beaver (*Castor canadensis*), a Thar (*Capra jemlaica*), born in the Gardens; a Brazilian Cariama (*Cariama cristata*), bred in the Gardens.

OUR ASTRONOMICAL COLUMN.

VARIABLE STARS.—Mr. Sawyer gives, in Nos. 174 and 176 of *Gould's Astronomical Journal*, the results of his observations of variable stars in the year 1887. The following are the observations for the more regular variables:—

R Virginis	M	June 17	Mag. 7.1	Calculated	June 21
S Coronæ	M	Apr. 19	7.1		Apr. 6
R Lyræ	M	Sept. 9			Aug. 31
	M	Oct. 15			Oct. 16
	m	Nov. 10			Nov. 16
	M	Nov. 29			Dec. 1

The calculated dates are those which have been given in NATURE in the column headed "Astronomical Phenomena." U MONOCEROTIS was observed at maximum on Jan. 15, March 4, April 28;

and at minimum Feb. 18 and April 6; R Scuti was observed at maximum on Oct. 27, and at minimum on Sept. 14 and Nov. 23; W Cygni was at minimum, mag. 6.7, on July 23 and Dec. 8, and at maximum, mag. 6.1, on Sept. 13; Mira Ceti was at maximum, mag. 4.4, on 1886 December 30.

Mr. John Tebbutt reports (*Astr. Nachr.*, No. 2849) that η Argûs has undergone a notable increase of brilliancy of late, as he observed it as 7.0 mag. on May 19 of this year; whilst on April 23, 1887, it was only 7.5.

COMET 1888 a (SAWERTHAL).—The following ephemeris for Greenwich midnight for this object is from the *Dun Echt Circular*, No. 157:—

Aug. 3	R.A.			Decl.	Log Δ.	Log r.
	h.	m.	s.			
...	1	3	26	53 51.6 N.	0.3409	0.3881
5	1	2	5	54 5.5		
7	1	0	35	54 18.3	0.3424	0.3973
9	0	58	55	54 30.0		
11	0	57	5	54 40.5	0.3439	0.4062
13	0	55	5	54 49.8		
15	0	52	57	54 57.8	0.3455	0.4149
17	0	50	40	55 4.4		
19	0	48	15	55 9.7	0.3471	0.4234
21	0	45	42	55 13.6		
23	0	43	2	55 16.0 N.	0.3489	0.4316

ASTRONOMICAL PHENOMENA FOR THE WEEK 1888 AUGUST 5-11.

(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 August 5

Sun rises, 4h. 33m.; souths, 12h. 5m. 41.8s.; sets, 19h. 39m.; right asc. on meridian, 9h. 3.6m.; decl. 16° 48' N. Sidereal Time at Sunset, 16h. 38m.

Moon (New on August 7, 18h.) rises, 1h. 57m.; souths, 10h. 8m.; sets, 18h. 17m.; right asc. on meridian, 7h. 5.8m.; decl. 21° 12' N.

Planet.	Rises.		Souths.		Sets.		Right asc. and declination on meridian.	
	h.	m.	h.	m.	h.	m.	h.	m.
Mercury..	2	55	10	54	18	53	7	51.3
Venus.....	5	7	12	35	20	3	9	32.6
Mars.....	12	37	17	21	22	5	14	19.9
Jupiter...	14	16	18	40	23	4	15	38.6
Saturn....	4	13	11	55	19	37	8	52.7
Uranus...	10	16	15	54	21	32	12	52.7
Neptune..	23	17*	7	4	14	51	4	1.3

* Indicates that the rising is that of the preceding evening.

Aug.	h.	Phenomenon
6	9	Mercury in conjunction with and 0° 18' north of the Moon.
7	10	Saturn in conjunction with and 0° 16' south of the Moon.
7	—	Partial eclipse of Sun: visible as little more than a bare contact at Greenwich, beginning at 18h. 49m. and ending at 19h. 6m.
8	9	Venus in conjunction with and 0° 42' south of the Moon.
10	23	Mercury at least distance from the Sun.

Variable Stars.

Star.	R.A.		Decl.	h.	m
	h.	m.			
U Cephei	0	52.4	81 16 N.	Aug.	9, 19 49 m
Algol	3	0.9	40 31 N.	"	5, 20 2 m
U Hydræ	10	32.0	12 48 S.	"	11, M
δ Libræ	14	55.0	8 4 S.	"	9, 23 26 m
U Coronæ	15	13.6	32 3 N.	"	9, 1 42 m
U Ophiuchi	17	10.9	1 20 N.	"	9, 1 16 m
				"	9, 21 24 m
Z Sagittarii	18	14.8	18 55 S.	"	8, 0 0 m
β Lyræ	18	46.0	33 14 N.	"	9, 21 0 M
η Aquilæ	19	46.8	0 43 N.	"	6, 22 0 m
X Cygni	20	39.0	35 11 N.	"	8, 1 0 M
T Aquarii	20	44.0	5 34 S.	"	5, M
T Vulpeculæ	20	46.7	27 50 N.	"	10, 23 0 M
δ Cephei	22	25.0	57 51 N.	"	9, 20 0 M

M signifies maximum; m minimum.