

anguinus) from the Caves of Adelsburg, presented respectively by Prof. W. H. Corfield, F.Z.S. and Dr. E. Rickards; a Spotted Salamander (Salamandra maculosa), European, presented by Mr. Alban Doran; a Gorilla (Anthropopithecus gorilla ♂), three Pluto Monkeys (Cercopithecus pluto), an Erxleben's Monkey (Cercopithecus erxlebeni ♀) from West Africa, deposited; two Coypus (Myopotamus coypus), born in the Gardens.

OUR ASTRONOMICAL COLUMN.

NEW MINOR PLANET.—A new minor planet, No. 270, was discovered by Dr. Peters on October 13.

OLBERS'S COMET.—The following corrected elements and ephemeris for this object are by Herr O. Tetens (Astr. Nachr. No. 2806):—

T = 1887 October 8.4938 Berlin M. T.

π = 149 48 7 } Mean Eq. 1887.0
δ = 84 27 40
i = 44 32 53
φ = 68 35 36
log q = 0.078899

x = [9.854835] r sin (v + 237 35 31)
y = [9.972351] r sin (v + 168 39 22)
z = [9.891623] r sin (v + 95 54 3)

Ephemeris for Berlin Midnight.

Table with columns: 1887, R.A. (h. m. s.), Decl., log r., log Δ. Rows for Oct. 22-30 and Nov. 1-11.

The brightness on October 26 will be 1.48, and on November 11, 1.20; that on August 27 being taken as unity.

SOUTHERN DOUBLE STARS.—A welcome addition to the still somewhat scanty supply of observations of southern double stars is contained in the Monthly Notices for June 1887, which furnishes a series of measures of stars in relative motion recently made at the Sydney Observatory, special attention having been paid to the binaries α Centauri and γ Coronæ Australis.

Downing-Elkin orbit-angle = 202.6, distance = 15.11.
Powell orbit-angle = 201.8, distance = 15.26.

These orbits give for the periodic time of α Centauri the values 76 years and 87 years respectively; it appears, however, that several more years' observation will be necessary to decide which of these is the more accurate.

Table with columns: Epoch, Observed angle, Error, Observed distance, Error. Rows for 1881.72, 1883.62, 1886.615.

The first two of these observations were made at Cincinnati, and published in the Observatory, vol. ix. p. 234, the last at

Sydney. Mr. Gore's orbit gives 1886.53 as the time of periastron passage; it is very desirable, therefore, that this pair should be repeatedly measured during the next few years in order that the small corrections to the elements which appear to be required may be accurately determined.

ASTRONOMICAL PHENOMENA FOR THE WEEK 1887 OCTOBER 23-29.

(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 October 23

Sun rises, 6h. 39m.; souths, 11h. 44m. 26.2s.; sets, 16h. 50m.; decl. on meridian, 11° 24' S.; Sidereal Time at Sunset, 18h. 57m.

Moon (at First Quarter October 23, 18h.) rises, 13h. 37m.; souths, 18h. 1m.; sets, 22h. 28m.; decl. on meridian, 18° 47' S.

Table with columns: Planet, Rises (h. m.), Souths (h. m.), Sets (h. m.), Decl. on meridian. Rows for Mercury, Venus, Mars, Jupiter, Saturn.

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

Occultations of Stars by the Moon (visible at Greenwich).

Table with columns: Oct., Star, Mag., Disap., Reap., Corresponding angles from vertex to right for inverted image. Includes rows for σ Capricorni, θ Capricorni, 70 Aquarii, B.A.C. 81, 26 Ceti, 29 Ceti.

Oct. 27 ... 3 ... Mercury at greatest elongation from the Sun, 24° east.
Oct. 28 ... — ... Venus at period of greatest morning brilliancy.

Variable Stars.

Table with columns: Star, R.A. (h. m.), Decl., h. m. Rows for U Cephei, Algol, ζ Geminorum, S Cancri, S Ursæ Majoris, U Coronæ, T Ophiuchi, U. Ophiuchi, η Aquilæ, S Aquilæ, δ Cephei.

M signifies maximum; m minimum.

Meteor-Showers.

Table with columns: Name, R.A., Decl., Name. Rows for Near β Tauri, From Canis Minor, ,, Cancer.

GEOGRAPHICAL NOTES.

MM. BONVALOT, CAPUS, AND PEPIN, who have just returned to France from an extensive journey in Central Asia, are credited with having been the first to cross the Pamir. They may certainly have been the first to take the particular north to south route traversed by them, but the Pamir has been crossed