

During totality one meteor from Andromeda was seen which passed right in front of the disc of the Moon to a very few degrees above the horizon. It was bright yellow followed by a quickly disappearing tint of bluish green colour.

BY NOGENDRA NATH DHAR.

1. *Place of observation*—Krishnagar City, District Nadia, Bengal.
2. Quite clear sky ; no cloud or mist.
3. *Instrument used*—A Newtonian Reflector with 4-inch mirror made by Messrs. S. K. Dhar & Brothers of Hughli, Bengal. Power used was about 60.
4. *Progress of Eclipse*—
Contact with penumbra not observed.
Contact with shadow—a little to the south of east point at about 4-20 a.m.
Beginning of totality—about 5-30 a.m.
5. *Notable features*—
 - (a) Observation continued till shadow progressed for about a third of the Moon's disc. No occultation of stars noticed.
 - (b) Nothing particular was noticed regarding the rays radiating from craters during the aforesaid period of observation.
 - (c) One faintly luminous spot was noticed in the eclipsed part of the Moon at the spot known as Aristarchus.
 - (d) The edge of the shadow appeared to travel regularly as far as I watched the passage of the shadow ; that is, till about a third of the Moon was eclipsed.

The Geminid Meteors.

BY THE DIRECTOR OF THE SECTION.

The next important meteoric shower is Geminids of 10th to 12th December. It is a rich annual shower of swift short meteors. As it is necessary for the persons observing it to make themselves acquainted with the constellation in which the radiant point is situated, a brief description of Gemini is now given. Many persons, I suppose, know the position of the bright fixed star Sirius in Canis Major called the

Dog-star. Indeed it is so very bright that even those who do not know it can find it without any trouble. It is the bright white star which is to be seen in the south-eastern sky at about 8 p.m., and it crosses the meridian of Calcutta a few minutes after 2 a.m., its zenith distance at that time being 39° towards south. At a short distance towards north and slightly towards east from this star will be found another very bright star, namely, Procyon (*i.e.*,) κ Canis Minoris, and north of Procyon will be found the two principal stars of the constellation Gemini, namely, Castor and Pollux (*i.e.*,) κ Geminorum and β Geminorum. Of these Pollux is brighter than Castor, their magnitudes being 1.2 and 2.0 respectively.

The R. A. and the declination of Castor are 7 hrs. 29 mts. and $32^\circ 5' N$. On the 10th of December it will rise at Calcutta at 6.56 p.m. and its amplitude will be $35^\circ 7'$ (*i.e.*,) this will be its angular distance from the east point towards north. It will cross the meridian at 13.58 astronomical time which corresponds to the common time 1.58 a.m. of the 11th, and it shall be then $9^\circ 32'$ from the zenith towards north. South-west of Castor and Pollux is the small star δ Geminorum; and then we come to three stars whose right ascensions are very nearly equal and therefore they are in a straight line running from north to south. Lastly, we come to the two small stars μ Geminorum and η Geminorum. The R. A. and the declination of the radiant point of the shower are 7.12 and $33^\circ N. - 0$. On the 10th of December it rises at Calcutta at 6.39 p.m. and its angular distance at that time from the east point shall be $36^\circ 8'$ towards north. It is very near Castor.

The November Meteors.

BY B. N. RAKSHIT.

13th November 1910.

On the morning at 2.10 a.m. standard time the following Andromed meteor was observed.

Magnitude—1.5

Duration—2 seconds.

Characteristics—Slow, trains.

Direction.—If we join Aldibaran (α Tauri) with Capella (α Aurigæ), we find three small stars nearly equi-distant from each other. The direction of the meteor appeared to pass immediately above the first star from Capella and to