less than 8 or 10 inches would show them ; but though I have no doubt they are there, I do not mind saying that I have never seen them, not having made any great study of Mars.

A vote of thanks was duly returned to the President for his paper, and also a vote of thanks was accorded to Dr. Lowell.

The President next showed two other slides received from Dr. Lowell, the first being a photographic picture of Jupiter.

Mr. Holmes—The belts are clear ; what are they ?

The President—Yes, those are the equatorial bands. They are generally considered to be atmospheric pheno-mena on Jupiter.

The next picture shown was a very beautiful photograph of Saturn.

Mr. Ramaswami now read a note on a diagram which he had drawn, illustrating the Lunar eclipse which was to take place on the 12th May 1911. He explained that was only a penumbral eclipse, but made the diagram in the hope that some of the members would look out for it.

With a vote of thanks to Mr. Ramaswami, the proceed-ings came to a close, and the President then adjourned the Meeting to Tuesday, the 30th May 1911, at 5 p.m.

A Note on the Penumbral Eclipse of the Moon, 12th May 1911.

By C. Ramaswami.

The diagram opposite, drawn roughly to scale, represents graphically the penumbral eclipse of the moon in May.

A. R. B. D. is the Earth's shadow and K. M. N. the pen-umbra. The straight line LX represents the path traversed by the centre of the Moon, and the small circles X_1, X_2, etc., show the positions of the Moon at different times. As the circles representing the Moon do not intersect the circle A. R. B. D. but only the outer circle K. M. N. the eclipse is only penumbral. The beginning and end of the eclipse are easily determined from the diagram. The Moon travels in the direction LX and the eclipse will begin when the Moon touches the penumbra, or in our diagram at the point where the little circle representing the Moon touches the K. M. N. Drawing this circle the time can be easily read off from the line LX, which is about 15h.-50m ; or more accurately 15h.-46m. The end of the eclipse is similarly seen to be at 20h.-7m.

The time used throughout is Greenwich mean time, which can be converted into Calcutta Standard Time simply by the addition of 5½ hours.

GREENWICH MEAN TIME

FIRST CONTACT WITH } 15h 16'
      PENUMBRA

FINAL CONTACT   20h 7