

Prof. Coakley, of the University of New York, writes as follows to the *Sun*:—At the time the moon rises on the 28th inst., the eclipse will have already begun, and will have progressed so far that about three-fifths of the moon's diameter on the lower side will be covered by the shadow of the earth.

The times of the several phases of the eclipse, expressed in eastern time, or that of meridian 75 degrees, are as follows:—

| | Eastern Time. |
|--|---------------|
| Eclipse begins, January 28, at..... | 4.31 p.m. |
| Moon rises (whole diameter), about.... | 5.10 p.m. |
| Total phase begins at..... | 5.31 p.m. |
| Middle of eclipse at..... | 6.20 p.m. |
| Total phase ends at..... | 7.09 p.m. |
| Eclipse ends at..... | 8.10 p.m. |

If the atmosphere is free from clouds, not only at New York, but for a considerable space around the circumference of the earth that bounds the disc embraced by the earth's shadow, then the atmosphere will act like a refracting lens to throw light upon the moon, even when she is totally immersed in the shadow. The moon will therefore, during her total immersion, reflect many of these rays of light to the earth, and she will present to us the appearance of a dull copper-coloured circular disc, like that of the full moon, but less brilliant. Many persons seeing this appearance of the moon during totality suppose that she is not then in eclipse, because they see her so plainly.

Her colored disc. — I set up the outside & showed it to the quite — totality was over & its lower in illuminated. I also showed, but as usual they were nearly so, especially at the latter, in see objects the size of a barn very stupid questions being asked not debate in astronomy & the heavens. — Through the

Heb's light from the earth the line of demarcation between the sun-illuminated part of the moon & the other was not well defined so that I did not attempt to note the time of immersion from the center's shadow — besides the temperature was below zero at the instrument. We had a pleasant evening & all seemed to have enjoyed themselves. They left at 11-30 PM.

Sunday, 29th weather was dawn, clear & I spent some cloudy time in the afternoon at Mrs. P's. In pleasant the evening games & music with our three fine boys was again our Sunday diversion. Last evening after tea & later than played together on the guitars, & then again on the pianos & I on the guitar, Mrs. Patterson said to me "I can make time pleasant for your boys," & related of a composition which her little boy had had lately written in "Home" — the poem & substance of which was — Home is a house, father & mother live in it and the children — father & mother are glad when the children are in bed, but on Christmas we have a jolly day — Mrs. P. said she felt the pain that this sentiment expressed. Mrs. I would pain

January
 to the core of my heart were I learn such from
 any of my children. — O, magic word — home.
 How much can be said of it, how much can be done
 for it, so that in time when memory recoils to it, it
 stands as one grand illumination surrounded by a
 resplendent halo — all betokening — the true —
 the beautiful and good.

Monday 30
 mild
 we little snow
 Busy computing.

Tuesday 31
 mild
 Busy computing.

Wednesday 1
 mild
 Made a survey for Geo. A. Case and one for Mich.
 Jaglowitz. — Evening busy writing, &c.

Thursday 2
 mild
 Busy at latitude computations.

Friday 3
 mild
 cloudy
 Busy at latitude computations. Dora came
 down & took Max, Julia & Oscar with her to
 Berlin for a visit, and will return with them on
 Sunday. — This made a very quiet supper for Marie
 & me.

Saturday 4
 mild, little
 snow, frost
 Busy computing. Inward evening Marie &
 I take an constitutional walk.

Sunday 5
 cloudy
 snowy
 Busy computing. In afternoon I spent some
 time at Father's. Our principal topic was 'Vola-
 pitik' — the universal language. Last night I carefully
 went through Speiser's translation of Schlieker's
 (the inventor of the language) work, and was struck with
 the extreme simplicity everywhere shown — in the words