in the best tables that are calculated upon an approximation, the whole of the irregularities are explainable upon the hypothesis of planetary disturbance alone; and the system appears to have gone on just as if there had been no comets in it. That the comets are formed of matter of some sort or other we know, from the dense and opaque appearance of their nucleus, as well as from the action of the planets upon them; but, as their action upon the planets has not been great, or even almost perceptible, we are led to the conclusion that they are not bodies of the same density or magnitude as even the smallest and rarest of the planets. When a comet is viewed through a telescope of considerable power, there appears a dense nucleus in the centre of the luminous and apparently vaporous matter, of which the external parts are composed; and the opacity of this nucleus varies in different comets.

On its first appearance, and again when it recedes, the luminous part of the comet is faint, and does not extend far from the nucleuses; but, as it moves on towards the perihelion, the brightness increases, and the luminous matter lengthens into a train, which in some cases, has extended across a fourth of the entire circumference of the heavens.

ECLIPSES IN THE YEAR 1836.

There will be Four Eclipses this year—*Two* of the SUN, and *Two* of the MOON, in the following order:—

I. The *first* will be of the MOON, on *Sunday*, May 1st, in the morning, partial and visible.

	H.	M.	
First contact of the ☽ with ⊙'s penumbra,	1	38	Apparent time
Eclipse begins,	2	53	
Middle, or greatest obscurity,	3	55	
Eclipse ends,	4	58	
Last contact of the ☽ with ⊙'s penumbra,	6	12	

Quantity eclipsed, 4¼ digits on the Moon's south limb.

II. The *second* will be of the SUN, on Sunday, May 15th, visible.

	H.	M.	
Beginning of the Eclipse,	8	40	Apparent or solar time in the morning.
Greatest obscurity,	9	32	
Eclipse ends,	10	58	

Quantity eclipsed 8½ digits on the Sun's south limb.

The first contact of the Moon's penumbra, or imperfect