

terraces look very much like old beach lines, but as they have not been cut into I cannot say for certain.

A reference to the Ordnance Map, No. 82, south-west, will explain the relative position of the localities above referred to.

I am, yours truly,

J. M. MELLO.

ST. THOMAS'S PARSONAGE, BRAMPTON, CHESTERFIELD,  
July 22nd, 1867.

#### DR. T. STERRY HUNT'S THEORY OF THE EARTH.

*To the Editor of the GEOLOGICAL MAGAZINE.*

SIR,—I have read with considerable interest the very ingenious theory of the "Chemistry of the Primeval Earth," by Dr. Hunt, which is contained in your issue for August, and beg your permission very briefly to ask the Doctor how his theory is compatible with the following facts respecting the mean densities of the sun and larger planets, or whether the theory of their extensive hollowness does not more satisfactorily account for their low mean densities than does that of the sun, the earth, and, by inference, all the planets increasing in density to their centres.

The following are approximately the mean densities of the sun and the larger planets:—

Sun... ..	1.42	Uranus ... ..	1.0
Jupiter ... ..	1.37	Neptune... ..	0.5
Saturn ... ..	0.5		

and those of the smaller planets are—

Mercury... ..	6.6	Earth ... ..	5.5
Venus ... ..	5.6	Mars ... ..	5.6

The densities of the asteroids are unknown, but should they be ascertained, I venture to predict that they will probably be found of higher mean density than are any of the planets just enumerated. All the large planets have very low mean densities; all the smaller planets have high and nearly uniform mean densities.

How are these facts to be accounted for on Dr. Hunt's theory of condensation and increase of density to the centres?

I am, yours obediently,

NEWCASTLE-ON-TYNE,  
August 6th, 1867.

T. P. BARKAS.

#### ON THE SEQUENCE OF THE DRIFTS IN THE EASTERN COUNTIES.

*To the Editor of the GEOLOGICAL MAGAZINE.*

DEAR SIR,—With reference to Mr. Wood's suggestion, that I should give complete sections from his "upper drift" to the beds exposed on the coast, I wish to say that I have not materials by me to work out the details he asks for, and it appears to me that the point at issue would not be explained by exact particulars of surface contour, and the position of the crags in relation to the overlying drifts. There is no difference of opinion as to this, and all are agreed that the gravels underlying the Boulder-clay of High Suffolk correspond in height with much of the gravel superimposed on the