astronomy, which thus establishes, if not an original or subsequent state of universal fluidity in the earth, a succession of actions, at least, in which a certain portion of it has either been fluid at one period, or at successive periods, or has, in some other way, been so possessed of internal mobility as to have been capable of fulfilling the conditions of this problem.

Numerous experiments and observations, followed by the requisite calculations, and from different data, have been made, at different times, for the purpose of determining the exact figure of this spheroid ; and the subject has also recently been resumed with consider-able ardour and anxiety. It would here be to trans-gress the proper bounds of this sketch, to detail the whole of this subject, which is of considerable extent; nor need I even give the whole of what had been concluded as to it by different mathematicians, since the more recent calculations will be sufficient for the purpose here in view. Though it has resulted, how-ever, that the form of this ellipsoid is not that which, from abstract mathematical considerations, it had been conceived, we are scarcely yet entitled to suppose that even the most recent conclusions have truly solved this problem. But I shall merely tabulate these results without further commentary or explanation, as they would be unsuitable in this place. The ellip-ticities are given in parts of the equatorial axis, as usual, and require no other explanation.

1. Sir Isaac Newton - - - - - $\frac{1}{230}$

2. Playfair, from the Meridians of Peru, and between Dunkirk and Perpignan - $\frac{1}{300}$

3. Ditto, from the Meridian in Peru and that between Clifton and Dunnose - $\frac{1}{322,68}$

4. French report in the Système Métrique $\frac{1}{386}$