known, and we cannot doubt that bodies attract each other in a direct ratio of their masses, and in an inverted ratio, at the squares of their distances: so likewise we cannot doubt, that the general action of any body is not composed of all the particular actions of its parts. Thus each part of matter mutually attracts in a direct ratio of its mass and an inverted ratio of its distance; and from all these attractions there results a sphere when there is no rotatory motion, and a spheroid when there is one. This spheroid is longer or shorter at the two extremities of the axis of rotation, in proportion to the velocity of its diurnal motion; and the earth has then, by virtue of its rotative velocity, and of the mutual attraction of all its parts, the figure of a spheroid, the two axes of which are as 229 to 230 to one another.

Thus, by its original constituent, or by its homogeneousness, and independent of every hypothesis from the direction of gravity, the earth has taken this figure of a spheroid at its formation, and agreeable to mechanical laws: its equatorial diameter was raised about $6\frac{1}{2}$ leagues higher than under the poles.

I shall