

jecture, with great probability, that the internal part of the earth is composed of a vitrified matter, the density of which is nearly the same as that of sand, and that consequently the terrestrial globe in general may be regarded as homogeneous.

Notwithstanding this, it may be urged, that although the globe was composed of concentrical strata of different densities, the diurnal motion might be equally certain, and the uniform inclination of the axis as constant and undisturbed as it could be, on the supposition of its being composed of homogeneous matter. I acknowledge it, but I ask at the same time, if there is any reason to believe that strata of different densities do exist? If these conclusions be not rather a desire to adjust the works of Nature to our own ideas? And whether in physics, we ought to admit suppositions which are not founded on observations or analogy?

It appears, therefore, that the earth, in consequence of the mutual attraction of its parts and its diurnal motion, assumed the figure of a spheroid, whose two axes differ a 230th part; that it necessarily took that form from being in a state of fluidity; that, agreeable to the laws
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