result of two forces; the one may be considered as an impulse from right to left, or from left to right, and the other as an attraction from above downwards, or beneath upwards, to a common centre. The direction of these two forces, and their quantities, is so nicely combined and proportioned, that they produce an almost uniform motion in an ellipse, very ncar to a circle. Like the other planets the carth is opaque; it throws out a shadow; it receives and reflects the light of the sun, round which it revolves in a space of time proportioned to its relative distance and density. It also turns round its own axis once in twenty-four hours, and its axis is inclined $66 \frac{1}{4}$ degrees on the plane of the orbit of its revolution, Its figure is spheroidical, the two axes of which differ about 175th part from each other, and the smallest axisis that round which the revolution is made.

These are the principal phenomena of the carth, the result of discoveries made by means of geometry, astronomy, and navigation. We shall not here enter into the detail of the proofs and observations by which those facts have been ascertained, but only make a few remarks to clear up what is still doubtful, and at the same time, give our ideas respecting the forma-

