

dicular line, on that planet, if they were not repelled by some other power that obliges them to move in a straight line, and which impulsive force would compel them to fly off the tangents of their respective orbits, if the force of attraction ceased one moment. The force of impulsion was certainly communicated to the planets by the hand of the Almighty, when he gave motion to the universe ; but as we ought as much as possible to abstain in physics from having recourse to supernatural causes, it appears that a probable reason may be given for this impulsive force, perfectly accordant with the law of mechanics, and not by any means more astonishing than the changes and revolutions which may and must happen in the universe.

The vast extent of the solar system, or, what is the same, the sphere of the sun's attraction, does not confine itself to the orbs of the planets, but extends to a remote distance, always decreasing in the same ratio as the square of the distance increases ; it is demonstrated that the comets which are lost to our sight, in the regions of the sky, obey this power, and by it their motions, like that of the planets, are regulated. All these stars, whose tracts are so different,