which, by the law of attraction, necessarily assumed a globular shape, and, by the laws of attraction and motion together, began a circular revolution in certain orbits. The laws by which these results are supposed to have been brought about appear very simple, for we see them operating in many familiar things on earth; but this apparent simplicity only serves the more expressively to show the greatness of that power which created both matter and its laws.

All objects connected with moving bodies possess a motion in common with these bodies. Thus, all things on the earth, including the atmosphere, have a motion in common with the earth; a person driving in a chaise has a motion in common with the chaise; a person in a moving vessel at sea has a motion in common with the vessel. In all cases, the motion which is given to any large body passes also into the smaller bodies about or connected with it. This participation of motion in all bodies moving in connected masses forms one of the most remarkable phenomena in nature. In consequence of it, all objects whatever keep their proper places in or about the large moving bodies with which they are in contact, and hence no confusion arises in the relative situation of objects on the earth from its motion.

For example, when we leap straight upwards from the ground, the earth does not slip away from below us; we fall on the spot whence we arose. Sitting in the cabin of a moving vessel, if we let a small object drop from our hand to the floor, it falls on a point in the floor immediately below; the floor does not leave it behind. The reason is, that the small objects possess an onward motion which is derived from the larger, and which is retained during their descent. This onward motion remains in the disengaged bodies till they meet some new impression of force—something to stop them. If we attempt to leap from a moving body, such as a coach or boat, we continue to possess the motion which we previously had until we reach the earth, when we receive a shock by the destruction of the motion we possessed. If the motion of the vehicle be very quick at the time, it is scarcely possible, in making such a leap, to avoid being pitched forward, by the upper part of our bodies retaining the motion which our feet lose on resting on the ground. The motion we possess in common with the earth, and the perfect smoothness of the earth's motion, render us incapable of feeling our own motion, or of seeing the earth move along with us. Also, in driving in a coach, and looking at the road-side, we feel as if it were not the coach which was running but the road, which seems to be moving past us.