

— the sun representing heaven, the moon the Christian, and the earth the central point of all influences which act on man this side eternity.

And here I ought, probably, to apologize for an innovation which I shall venture to make upon the usual mode of sermonizing, by the introduction of a few sensible illustrations, or diagrams, to make my meaning intelligible and impressive. My reasons for this course are the following: First, I do not suppose I could otherwise make my meaning clear even to a highly intelligent audience; secondly, the only object of the diagrams is to make scientific truths understood and remembered, not to indulge in curious scientific speculations; thirdly, I conceive that the religious applications of science are its most important use; and I know not how such a use can be made of science, if we may not employ enough of sensible illustrations to make its truths clearly understood. However, if the novel course which I adopt seem objectionable to any after I shall have finished, let it be condemned. But when I recollect how often science has been used in opposition to religion, I do not anticipate condemnation in this attempt to make it auxiliary to the sacred cause of holiness, although the object of my illustrations is not to prove any point, but merely to elucidate and impress religious truth.

In the first place, in order to cause any body to revolve around a larger one in a circular orbit, so as to be always equidistant from it, it is necessary that a certain amount of force be imparted to the revolving body, and in a certain direction. In the case of the planets, the two forces are so balanced as to produce a nearly circular motion; but in the case of the comets, they are so unequal, — the impulsive or tangential force so predominates over the attractive, — that they move in elliptical orbits. Now, let us imagine the earth