seen, is far more than can be considered in any way probable,) he would require seventy millions of years to lose one-thousandth of the velocity; and a period seven hundred times as long to reduce the velocity to one-half. These are periods of time which quite overwhelm the imagination; and it is not pretended that the calculations are made with any pretensions to accuracy. But at the same time it is beyond doubt that though the intervals of time thus assigned to these changes are highly vague and uncertain, the changes themselves must, sooner or later, take place, in consequence of the existence of the resisting medium. Since there is such a retarding force perpetually acting, however slight it be, it must in the end destroy all the celestial motions. It may be millions of millions of years before the earth's retardation may perceptibly affect the apparent motion of the sun; but still the day will come (if the same Providence which formed the system, should permit it to continue so long) when this cause will entirely change the length of our year and the course of our seasons, and finally stop the earth's motion round the sun altogether. The smallness of the resistance, however small we choose to suppose it, does not allow us to escape this certainty. There is a resisting medium; and, therefore, the movements of the solar system cannot go on for ever. The moment such a fluid is ascertained to exist, the eternity of the movements of the planets becomes as impossible as a perpetual motion on the earth.

3. The vast periods which are brought under our consideration in tracing the effects of the resisting medium, harmonize with all that we learn of the constitution of the universe from other sources. Millions, and millions of millions of years are expressions that at first sight appear fitted only to overwhelm and confound all our powers of thought; and such numbers are no doubt beyond the limits of any thing which we distinctly conceive. But our powers of conception are suited rather to the wants and