of the *perihelion*, or place of the nearest distance of the earth to the sun, this nearest distance would fall in different ages at different parts of the year, the whole distribution of heat through the year would thus be gradually subverted. The summer and winter of the *tropical* year, as we have it now, being combined with the heat and cold of the *anomalistic* year, a period of different length, the difference of the two seasons might sometimes be neutralized altogether, and at other times exaggerated by the accumulation of the inequalities, so as to be intolerable.

The circular form of the orbit therefore, which, from its unique character, appears to be chosen with *some* design, from its effects on the seasons appears to be chosen with this design, so apparent in other parts of creation, of securing the welfare of organic life, by a steadfast and regular order of the solar influence upon the planet.

CHAPTER III.

The Stability of the Solar System.

THERE is a consequence resulting from the actual structure of the solar system, which has been brought to light by the investigations of mathematicians concerning the cause and laws of its motions, and which has an important bearing on our argument. It appears that the arrangement which at present obtains is precisely that which is necessary to secure the *stability* of the system. This point we must endeavour to explain.

If each planet were to revolve round the sun without being affected by the other planets, there would be a certain degree of regularity in its motion; and this regularity would continue for ever. But it appears, by the discovery of the law of uni-