what are called *second causes*, that is, causes operating under his own appointment and direction. The design of this paper is to explain briefly, as far as can be done in popular language, and without having recourse to mathematical diagrams and astronomical phraseology, how it is that the changes in question are effected. An enlightened knowledge of the way in which they take place is necessary to make us honourably different from those of our race who through many a year have witnessed their due coming round, and partaken of their good results, but understand little or nothing of the divine machinery, so to speak, which gives rise to them—perhaps never trouble themselves with a thought, or with reading a word upon the subject. But the more that we really know, so far as our knowledge can legitimately extend, concerning His doings in nature, the more rational and firm will be our belief, founded on abounding evidences of wise arrangement and procedure, that "He is," and that he is "*wonderful in counsel, and excellent in* working."

The second causes by which God produces the changes of season with such constant precision, are the rays of the sun, that wonderful orb which diffuses light and heat;—and two movements of the earth, one round the sun annually, in a position admirably adapted for answering the purposes intended, and another upon its own axis every day, or twenty-four hours. The sun is a luminous globe of huge size, a million times larger than our own earth. And it is a fixed centre, at any rate so far as it relates to the magnificent system of bodies more immediately connected with it, round which the earth, as a planet, along with others, revolves with the nicest exactness, always acted upon by that Omnipotent Power which first gave it existence, and propelled it in its course. This revolution is effected by a force which was first clearly ascertained by that prince of philosophers, Sir Isaac Newton, to prevail throughout the whole of material nature, by which a larger mass *attracts* a smaller one within its influence, causing the latter to *gravitate* or bend towards the former; at the same time, another different and antagonist force, called the *centrifugal* force, prevents the earth from being actually drawn into the sun, and steadily keeps it at a proper distance. The path in which the earth goes yearly around the sun *is not circular*, but *elliptic*, or *oval*; and it is according to the relative bearing of the sun upon the earth, at the various stages of its journey, that the seasons are occasioned, and follow each other. Now, the earth does not move round the sun, standing perpendicular, or straight up and down, from the level of its path. Were it so, by far the largest share of light and heat from the sun would constantly be enjoyed by the central parts of the earth; for these would ever be in the most direct line to the sun; while the parts towards the polar extremities,