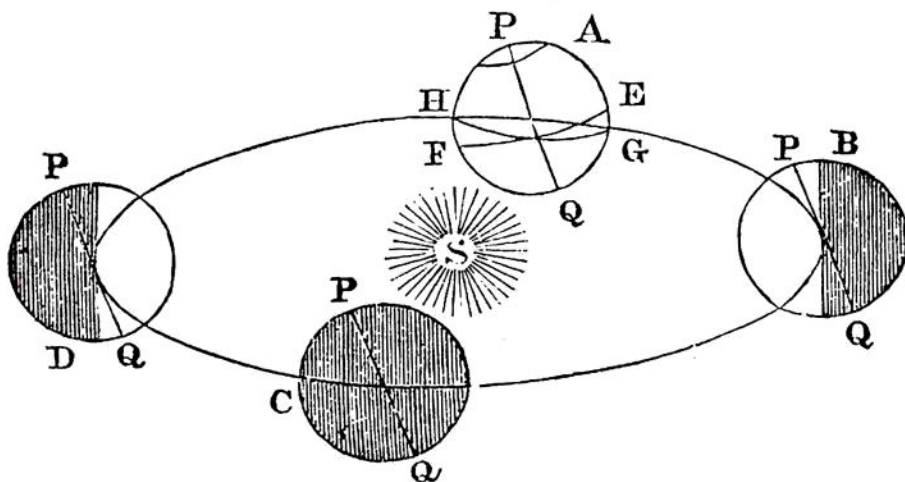


There are three subjects which demand attention in this part of our work ;—the seasons, climate, and the variations to which the superficial temperature has been subject

THE SEASONS.

There is no part of the earth's surface on which the temperature is precisely the same at all periods of the year ; there are everywhere recurring variations called seasons. To understand the origin of the seasons, it must be remembered, that the earth performs a revolution round the sun, and the period which is occupied in fulfilling that revolution is called a year. During this period, a place on the surface of the earth is exposed to an exceedingly variable temperature, which causes the four distinct seasons ; spring, summer, autumn, and winter. In performing this annual revolution, the axis of the earth preserves the same direction as though it had no orbital motion, and is carried round always presenting the poles to the same points of the celestial sphere. In attempting to explain the origin of the seasons, we shall speak of the orbit of the earth as though it were circular ; for although it is really elliptical, its form has little to do with the production of the effects to which we refer.

Let S represent the sun, and A B C D four several positions of the earth in her orbit. A may be considered the vernal equinox, or the position of the earth on the 21st of March ; B the summer solstice, or its position on the 21st of June ; C the autumnal equinox, or its situation on the



21st of September ; D the winter solstice, or its position on the 21st of December. P Q represents the direction of the