

whole country is nearly entirely shrouded in glacier-ice, and is altogether uninhabitable by man, while in the northern hemisphere, in equivalent latitudes, there are no parts of North America and Europe totally uninhabited, and even the north of Norway in summer, when the sun does not set, is often inconveniently warm, and the traveller is troubled with clouds of mosquitoes.

The present winter of the southern hemisphere being when the earth is in aphelion, the result is this, that the winter of the Antipodes is seven or eight days longer than our own, for the further the earth is removed from the sun, the more slowly it moves in its orbit, and the nearer it is, it moves in proportion more rapidly, and this somewhat lengthened winter, coupled with the absence of heated water flowing south from equatorial regions, has enabled the snows to accumulate, and being but little affected even by the summer's sun, the country is continually buried in ice, while in Norway and on the shores of the Baltic, in equivalent latitudes, forests, grass, and crops abound. The winter of our northern hemisphere is of course seven or eight days shorter than that of the south, and the earth is at that season with us nearest to the sun, and our summer being a little longer though further from the sun, the effect of its heat corresponds to the difference, irrespective of the powerful effect of the heated water of the Gulf Stream.

If such marked results are produced with this comparatively small amount of eccentricity, it is reasonable to suppose that with the greatest possible eccentricity the effect must be much greater, and it has been calculated that when this by slow degrees takes place, the earth in aphelion is distant from the sun about $98\frac{1}{2}$ millions of miles, or nearly 7 millions of miles further