

their houses most of our garden flowers, as roses, fuchsias, and geraniums, showing that it is merely warmth, and not light that is required to enable a subtropical flora to thrive in Greenland. Even in Canada, which has a flora richer in some respects than that of temperate Europe, growth is effectually arrested by cold for nearly six months, and though there is ample sunlight there is no vegetation. It is indeed not impossible that in the plans of the Creator the continuous summer sun of the Arctic regions may have been made the means for the introduction, or at least for the rapid growth and multiplication, of new and more varied types of plants. It is a matter of familiar observation in Canada that our hardy garden flowers attain to a greater luxuriance and intensity of colour in those more northern latitudes where they have the advantage of long and sunny summer days.

Much, of course, remains to be known of the history of the old floras whose fortunes I have endeavoured to sketch, and which seem to have been driven like shuttlecocks from north to south, and from south to north, especially on the American continent, whose meridional extension seems to have given a field specially suited for such operations.

This great stretch of the western continent from north to south is also connected with the interesting fact that, when new floras are entering from the Arctic regions, they appear earlier in America than in Europe; and that in times when the old floras are retreating from the south, old genera and species linger longer in America. Thus, in the Devonian and Cretaceous new forms of those periods appear in America long before they are recognised in Europe, and in the modern epoch forms that would be regarded in Europe as Miocene still exist. Much confusion in reasoning as to the geological ages of the fossil flora has arisen from want of attention to this circumstance.

What we have learned respecting this wonderful history has