

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 floras has arisen from want of attention to this circumstance.

What we have learned respecting this wonderful history has served strangely to change some of our preconceived ideas. We must now be prepared to admit that an Eden can be planted even in Spitzbergen, that there are possibilities in this old earth of ours which its present condition does not reveal to us ; that the present state of the world is by no means the best possible in relation to climate and vegetation ; that there have been and might be again conditions which could convert the ice-clad arctic regions into blooming paradises, and which at the same time would moderate the fervent heat of the tropics. We are accustomed to say that nothing is impossible with God ; but how little have we known of the gigantic possibilities which lie hidden under some of the most common of his natural laws !

These facts have naturally been made the occasion of speculations as to the spontaneous development of plants by processes of varietal derivation. It would, from this point of view, be a nice question to calculate how many revolutions of climate would suffice to evolve the first land-plant ; what are the chances that such plant would be so dealt with by physical changes as to be preserved and nursed into a meagre flora like that of the Upper Silurian or the Jurassic ; how many transportations to Greenland would suffice to promote such meagre flora into the rich and abundant forests of the Upper Cretaceous, and to people the earth with the exuberant vegetation of the early Tertiary. Such problems we may never be able to solve. Probably they admit of no solution, unless we invoke the action of an Almighty mind, operating through long ages, and correlating with boundless power and wisdom all the energies inherent in inorganic and organic