

period. They would render it less remarkable that no new species of animals seem to have been introduced since the glacial age, that many insular faunas belong to far earlier times, and that no changes even leading to the production of well-marked varieties have occurred in the post-glacial or modern age.

In conclusion, does all this array of fact and reasoning bring us any nearer to the comprehension of that "mystery of mysteries," the origin and succession of life? It certainly does not enable us to point to any species and to say precisely here, at this time and thus it originated. If we adopt the theory of evolution, the facts seem to restrict us to that form of it which admits paroxysmal or intermittent introduction of species, depending on the concurrence of conditions favorable to the action of the power, whatever it may be, which produces new organisms. Nor is there anything in the facts of distribution to invalidate the belief in creation according to definite laws, if that really differs in its nature from certain forms of the hypothesis of evolution. We have also learned that, time being given, animals and plants manifest wonderful powers of migration, that they can vary within considerable limits without ceasing to be practically the same species, and that under certain conditions they can endure far longer in some places than in others. We also see evidence that it is not on limited islands but on the continents that land animals and plants have originated, and that swarms of new and vigorous species have issued from the more northern regions in successive periods of favorable arctic climate. The last of these new swarms or "centres of creation," that with which man himself is more closely connected, belongs to the Palearctic region. We can scarcely be wrong in supposing that the six months' sunlight of arctic regions, along with abundant heat and moisture, were important factors in the creation of many new plants, or at least conditions of their production. In the case of new marine animals we have a double source in the equatorial and polar waters, and for the lower forms of life principally in the former. In every geological period, when the submerged continental plateaus were pervaded by the warm equatorial waters, multitudes of new species appear. In times when, on the contrary, the colder arctic currents poured over these submerged surfaces, carrying mud and stones,