

distribution of organisms, and that it must have entirely changed it. While the cold slowly advanced from the poles towards the equator, and covered land and sea with a connected sheet of ice, it must of course have driven the whole living world before it. Animals and plants had to migrate if they wished to escape being frozen. But as at that time the temperate and tropical zones were probably no less densely peopled with animals and plants than at present, there must have arisen a fearful struggle for life between the latter and the intruders coming from the poles. During this struggle, which certainly lasted many thousands of years, many species must have perished and many become modified and been transformed into new species. The hitherto existing tracts of distribution of species must have become completely changed, and the struggle have been continued, nay, indeed, must have broken out anew and been carried on in new forms, when the ice period had reached and gone beyond its furthest point, and when in the post-glacial period the temperature again increased, and organisms began to migrate back again towards the poles.

In any case this great change of climate, whether a greater or less importance be ascribed to it, is one of those occurrences in the history of the earth which have most powerfully influenced the distribution of organic forms. But more especially one important and difficult chorological circumstance is explained by it in the simplest manner, namely, the specific agreement of many of our Alpine inhabitants with some of those living in polar regions. There are a great number of remarkable animal and vegetable forms which are common to these two far distant parts of the earth, and which are found nowhere in the wide plains