

the combined action of many different internal as well as external conditions, the nature of which can not in all cases be defined, the most striking varieties being found in those families which are capable of the greatest distribution over the surface of the earth. The different races of mankind are forms of one sole species, by the union of two of whose members descendants are propagated. They are not different species of a genus, since in that case their hybrid descendants would remain unfruitful. But whether the human races have descended from several primitive races of men, or from one alone, is a question that can not be determined from experience."*

Geographical investigations regarding the ancient *seat*, the so-called *cradle of the human race*, are not devoid of a myth-

discussion, and north, east, and west of it, were severer during the glacial epoch, when a great part of the space now occupied by the British isles was under water, than they are now or were before; but there is good reason to believe that, so far from those conditions having continued severe, or having gradually diminished in severity southward of Britain, the cold region of the glacial epoch came directly into contact with a region of more southern and thermal character than that in which the most southern beds of glacial drift are now to be met with. 6. This state of things did not materially differ from that now existing, under corresponding latitudes, in the North American, Atlantic, and Arctic seas, and on their bounding shores. 7. The Alpine floras of Europe and Asia, so far as they are identical with the flora of the Arctic and sub-Arctic zones of the Old World, are fragments of a flora which was diffused from the north, either by means of transport not now in action on the temperate coasts of Europe, or over continuous land which no longer exists. The deep sea fauna is in like manner a fragment of the general glacial fauna. 8. The floras of the islands of the Atlantic region, between the Gulf-weed Bank and the Old World, are fragments of the great Mediterranean flora, anciently diffused over a land constituted out of the upheaved and never again submerged bed of the (shallow) Miocene Sea. This great flora, in the epoch anterior to, and probably, in part, during the glacial period, had a greater extension northward than it now presents. 9. The termination of the glacial epoch in Europe was marked by a recession of an Arctic fauna and flora northward, and of a fauna and flora of the Mediterranean type southward; and in the interspace thus produced there appeared on land the Germanic fauna and flora, and in the sea that fauna termed Celtic. 10. The causes which thus preceded the appearance of a new assemblage of organized beings were the destruction of many species of animals, and probably also of plants, either forms of extremely local distribution, or such as were not capable of enduring many changes of conditions—species, in short, with very limited capacity for horizontal or vertical diffusion. 11. All the changes before, during, and after the glacial epoch appear to have been gradual, and not sudden, so that no marked line of demarkation can be drawn between the creatures inhabiting the same element and the same locality during two proximate periods."]—*Tr.*

* Joh. Müller, *Physiologie des Menschen*, bd. ii., s. 768.