

type." He likewise believed in specific centres of distribution. He held that all the individuals composing a species had descended from a single progenitor, or from two, according as the sexes might be united or distinct, and that consequently the idea of a species involved the idea of the relationship in all the individuals of common descent; and the converse, that there could by no possibility be community of descent except in living beings which possessed the same specific characters. He supposed that the original individual or pair was created at a particular spot where the conditions were suitable for its existence and propagation, and that the species extended and migrated from that spot on all sides over an area of greater or less extent, until it met with some natural barrier in the shape of unsuitable conditions. No specific form could have more than a single centre of distribution. If its area appeared to be broken up, a patch not in connection with the original centre of distribution occurring in some distant locality, it was accounted for by the formation, through some geological change after the first spread of the species, of a barrier which cut off a part of its area; or to some accidental transport to a place where the conditions were sufficiently similar to those of its natural original habitat to enable it to become naturalized. No species once exterminated was ever recreated, so that in those few cases in which we find a species abundant at one period over an area, absent over the same area for a time, and recurring at a later period, it must be accounted for by a change in the conditions of the area which forced the emigration of the species, and a subsequent further change which permitted its return.