

is now, but for this neglect; every new fact relating to the geographical distribution of well-known species is as important to science as the discovery of a new species. Could we only know the range of a single animal as accurately as Alphonse DeCandolle has lately determined that of many species of plants, we might begin a new era in Zoölogy. It is greatly to be regretted that in most works, containing the scientific results of explorations of distant countries, only new species are described, when the mere enumeration of those already known might have added invaluable information respecting their geographical distribution. The carelessness with which some naturalists distinguish species merely because they are found in distant regions, without even attempting to secure specimens for comparison, is a perpetual source of erroneous conclusions in the study of the geographical distribution of organized beings, not less detrimental to the progress of science than the readiness of others to consider as identical, animals and plants which may resemble each other closely, without paying the least regard to their distinct origin, and without even pointing out the differences they may perceive between specimens from different parts of the world. The perfect identity of animals and plants living in very remote parts of the globe has so often been ascertained, and it is also so well known how closely species may be allied and yet differ in all the essential relations which characterize species, that such loose investigations are no longer justifiable.

This close resemblance of animals and plants in distant parts of the world is the most interesting subject of investigation with reference to the question of the unity of origin of animals, and to that of the influence of physical agents upon organized beings in general. It appears to me that as the facts point now distinctly to an independent origin of individuals of the same species in remote regions, or of closely allied species representing one another in distant parts of the world, one of the strongest arguments in favor of the supposition that physical agents may have had a controlling influence in changing the character of the organic world, is gone for ever.

The narrowest limits within which certain Vertebrata may be circumscribed, is exemplified, among Mammalia, by some large and remarkable species: the Orang-Outangs upon the Sunda Islands, the Chimpanzee and the Gorilla along the western coast of Africa, several distinct species of Rhinoceros about the Cape of Good Hope, and in Java and Sumatra, the Pinchaque and the common Tapir in South America, and the eastern Tapir in Sumatra, the East Indian and the African Elephant, the Bactrian Camel and the Dromedary, the Llamas, and the different kinds of wild Bulls, wild Goats, and wild Sheep, etc.; among birds by the African Ostrich, the two American Rheas, the Casovary (*Dromicejus*) of New Holland, and the Emeu (*Casuarus galeatus*) of the Indian Archipelago, and still more by the different