

## CHAPTER XXXIX.

LAWS WHICH REGULATE THE GEOGRAPHICAL DISTRIBUTION OF SPECIES—*continued.*

Geographical distribution of animals — Buffon on specific distinctness of quadrupeds of Old and New World — Doctrine of “natural barriers” — Different regions of indigenous mammalia — Europe — Africa — India, and Indian Archipelago — Australia — North and South America — Quadrupeds in islands — Range of the Cetacea — Dispersion of quadrupeds — their powers of swimming — Migratory instincts — Drifting of animals on ice-floes — On floating islands of drift-timber — Migrations of Cetacea — Habitations of birds — Their migrations and facilities of diffusion — Distribution of reptiles, and their powers of dissemination.

*Geographical distribution of animals.*—ALTHOUGH in speculating on “philosophical possibilities,” said Buffon, “the same temperature might have been expected, all other circumstances being equal, to produce the same beings in different parts of the globe, both in the animal and vegetable kingdoms, yet it is an undoubted fact, that when America was discovered, its indigenous quadrupeds were all dissimilar to those previously known in the Old World. The elephant, the rhinoceros, the hippopotamus, the camelopard, the camel, the dromedary, the buffalo, the horse, the ass, the lion, the tiger, the apes, the baboons, and a number of other mammalia, were nowhere to be met with on the new continent; while in the old, the American species, of the same great class, were nowhere to be seen—the tapir, the lama, the pecari, the jaguar, the cougar, the agouti, the paca, the coati, and the sloth.”

These phenomena, although few in number relatively to the whole animate creation, were so striking and so positive in their nature, that the great French naturalist caught sight at once of a general law in the geographical distribution of organic beings, namely, the limitation of groups of distinct species to regions separated from the rest of the globe by certain natural barriers. It was, therefore, in a truly philosophical spirit that, relying on the clearness of the evidence obtained respecting the larger quadrupeds, he ventured to call in question the identifications announced by some contemporary naturalists of species of animals said to be common to the southern extremities of America and Africa.\*

The migration of quadrupeds from one part of the globe to another, observes Dr. Prichard, is prevented by uncongenial climates and the branches of the ocean which intersect continents. “Hence, by a reference to the geographical site of countries, we may divide the earth into a certain number of regions fitted to become the abodes of particular groups of animals, and we shall find, on inquiry, that each

\* Buffon, vol. v. — On the Virginian Opossum.