

SECTION XI.

COMMUNITY OF STRUCTURE AMONG ANIMALS LIVING IN THE SAME REGIONS.

The most interesting result of the earliest investigations of the fauna of Australia was the discovery of a type of animals, the Marsupialia, prevailing upon this continental island, which are unknown in almost every other part of the world. Every student of Natural History knows now that there are no *Quadrumana* in New Holland, neither Monkeys, nor Makis: no *Insectivora*, neither Shrews, nor Moles, nor Hedgehogs; no true *Carnivora*,¹ neither Bears, nor Weasels, nor Foxes, nor Viverras, nor Hyenas, nor Wild Cats; no *Edentata*, neither Sloths, nor Tatous, nor Ant-eaters, nor Pangolins; no *Pachyderms*, neither Elephants, nor Hippopotamuses, nor Hogs, nor Rhinoceroses, nor Tapirs, nor Wild Horses; no *Ruminantia*, neither Camels, nor Llamas, nor Deers, nor Goats, nor Sheep, nor Bulls, etc., and yet the Mammalia of Australia are almost as diversified as those of any other continent. In the words of Waterhouse,² who has studied them with particular care, "the Marsupialia present a remarkable diversity of structure, containing herbivorous, carnivorous, and insectivorous species; indeed, we find amongst the marsupial animals analogous representations of most of the other orders of Mammalia. The *Quadrumana* are represented by the Phelangers, the *Carnivora* by the Dasyuri, the *Insectivora* by the small Phascogales, the *Ruminantia* by the Kangaroos, and the *Edentata* by the Monotremes. The Cheiroptera are not represented by any known marsupial animals, and the Rodents are represented by a single species only; the hiatus is filled up, however, in both cases, by placental species, for Bats and Rodents are tolerably numerous in Australia, and, if we except the Dog, which it is probable has been introduced by man, these are the only placental Mammalia found in that continent." Nevertheless, all these animals have in common some most striking anatomical characters, which distinguish them from all other Mammalia, and stamp them as one of the most natural groups of that class; their mode of reproduction, and the connection of the young with the mother, are different; so, also, is the structure of their brain, etc.³

Now, the suggestion that such peculiarities could be produced by physical agents is for ever set aside by the fact that neither the birds nor the reptiles, nor, indeed, any other animals of New Holland, depart in such a manner from the ordinary char-

¹ Doubts are entertained respecting the origin of the Dingo, the only beast of prey of New Holland.

² WATERHOUSE, (G. A.,) Natural History of the Mammalia, London, 1848, 2 vols. 8vo., vol. i., p. 4.

³ See OWEN, (R.,) Marsupialia in Todd's Cyclopaedia of Anat. and Physiol., London, 1841, 8vo., and several elaborate papers by himself and others, quoted there.