

acter of their representatives in other parts of the world; unless it could be shown that such agents have the power of discrimination, and may produce, under the same conditions, beings which agree and others which do not agree with those of different continents; not to speak again of the simultaneous occurrence in that same continent of other heterogeneous types of Mammalia, Bats and Rodents, which occur there as well as everywhere else in other continents. Nor is New Holland the only part of the world which nourishes animals highly diversified among themselves, and yet presenting common characters strikingly different from those of the other members of their type, circumscribed within definite geographical areas. Almost every part of the globe exhibits some such group either of animals or of plants, and every class of organized beings contains some native natural group, more or less extensive, more or less prominent, which is circumscribed within peculiar geographical limits. Among Mammalia we might quote further the *Quadrumana*, the representatives of which, though greatly diversified in the Old as well as in the New World, differ and agree respectively in many important points of their structure; also the *Edentata* of South America.

Among birds, the Humming Birds, which constitute a very natural, beautiful, and numerous family, all of which are nevertheless confined to America only, as the Pheasants are to the Old World.¹ Among Reptiles, the Crocodiles of the Old World compared to those of America. Among fishes, the family of Labyrinthici, which is confined to the Indian and Pacific Oceans, that of Goniodonts, which is limited to the fresh waters of South America, as that of Cestraciontes to the Pacific. The comparative anatomy of Insects is not sufficiently far advanced to furnish striking examples of this kind; among Insects, however, remarkable for their form, which are limited to particular regions, may be quoted the genus *Mormolyce* of Java, the *Pneumora* of the Cape of Good Hope, the *Belostoma* of North America, the *Fulgora* of China, etc. The geographical distribution of Crustacea has been treated in such a masterly manner by Dana, in his great work upon the Crustacea of the United States Exploring Expedition, Vol. XIII., p. 1451, that I can only refer to it for numerous examples of localized types of this class, and also as a model how to deal with such subjects. Among Worms, the *Peripates* of Guiana deserves to be mentioned. Among Cephalopods, the *Nautilus* in Amboyna. Among Gasteropods, the genus *Io* in the western waters of the United States. Among Acephala, the *Trigonia* in New Holland, certain *Naiades* in the United States, the *Aetheria* in the Nile. Among Echinoderms, the *Pentacrinus* in the West Indies, the *Culcita* in Zanzibar, the *Amblypneustes* in the Pacific, the *Tennopleurus* in the Indian Ocean, the *Dendraster* on the western coast

¹ What are called Pheasants in America do not even belong to the same family as the eastern Pheas-

ants. The American, so-called, Pheasants are genuine Grouses.