

of tropical regions, the American group has not one in common with the African, nor either of these with the parrots of India.*

Another illustration is afforded by that minute and beautiful tribe, the humming-birds. The whole of them are, in the first place, peculiar to the new world; but some species are confined to Mexico, while others exist only in some of the West India Islands, and have not been found elsewhere in the western hemisphere. Yet there are species of this family which have a vast range, as the *Trochilus flammifrons* (or *Mellisuga Kingii*), which is found over a space of 2500 miles on the west coast of South America, from the hot dry country of Lima to the humid forests of Tierra del Fuego. Captain King, during his survey in the years 1826-30, found this bird at the Straits of Magellan, in the month of May—the depth of winter—sucking the flowers of a large species of fuchsia, then in bloom, in the midst of a shower of snow.

The ornithology of our own country affords one well known and striking exemplification of the law of a limited specific range; for the common grouse (*Tetrao scoticus*) occurs nowhere in the known world except in the British isles.

Some species of the vulture tribe are said to be cosmopolites; and the common wild goose (*Anas anser*, Linn.), if we may believe some ornithologists, is a general inhabitant of the globe, being met with from Lapland to the Cape of Good Hope, frequent in Arabia, Persia, China, and Japan, and in the American continent from Hudson's Bay to South Carolina.† An extraordinary range has also been attributed to the nightingale, which extends from western Europe to Persia, and still farther. In a work entitled *Specchio Comparativo*‡, by Charles Bonaparte, many species of birds are enumerated as common to Rome and Philadelphia: the greater part of these are migratory, but some of them, such as the long-eared owl (*Strix otus*), are permanent in both countries. The correspondence of the ornithological fauna of the eastern and western hemispheres increases considerably, as might have been anticipated, in high northern latitudes.§

Their facilities of diffusion.—In parallel zones of the northern and southern hemispheres, a great general correspondence of form is observable, both in the aquatic and terrestrial birds; but there is rarely any specific identity: and this phenomenon is truly remarkable, when we recollect the readiness with which some birds, not gifted with great powers of flight, shift their quarters to different regions, and the facility with which others, possessing great strength of wing, perform their aerial voyage. Some migrate periodically from high latitudes, to avoid the cold of winter, and the accompaniments of cold,—scarcity of insects and vegetable food; others, it is said, for some particular kinds of nutriment required for rearing their young: for this purpose, they often traverse the ocean for

* Prichard, vol. i. p. 47.

† Bewick's Birds, vol. ii. p. 294., who cites Latham.

‡ Pisa, 1827 (not sold).

§ Bachman, Silliman's Amer. Journ., No. 61. p. 92.