

of certain tribes of plants and animals in arctic, and of other tribes in tropical regions.

In Australia, New Zealand, and many other parts of the southern hemisphere, where the indigenous land quadrupeds are comparatively few, and of small dimensions, the reptiles do not predominate in number or size. The deposits formed at the mouth of an Australian river, within the tropics, might contain the bones of only a few small marsupial animals, which, like those of Stonesfield, might hereafter be discovered with difficulty by geologists; but there would, at the same time, be no megalosauri and other fossil remains, showing that large saurians were plentiful on the land and in the waters at a time when mammalia were scarce. This example, therefore, would afford an imperfect parallel to the state of the animal kingdom, supposed to have prevailed during the secondary periods, when a high temperature pervaded European latitudes.

It may nevertheless be advantageous to point to some existing anomalies in the geographical development of distinct classes of vertebrata which may be comparable to former conditions of the animal creation brought to light by geology. Thus in the arctic regions, at present, reptiles are small, and sometimes wholly wanting, where birds, large land quadrupeds, and cetacea abound. We meet with bears, wolves, foxes, musk oxen, and deer, walrusses, seals, whales, and narwals, in regions of ice and snow, where the smallest snakes, efts, and frogs are rarely if ever seen.

A still more anomalous state of things presents itself in the southern hemisphere. Even in the temperate zone, between the latitudes 52° and 56° S., as for example, in Tierra del Fuego, as well as in the woody region immediately north of the Straits of Magellan, and in the Falkland Islands, no reptiles of any kind are met with, not even a snake, lizard, or frog; but in these same countries we find the guanaco (a kind of llama), a deer, the puma, a large species of fox, many small rodentia, besides the seal and otter, together with the porpoise, whale, and other cetacea.

On what grand laws in the animal physiology these remarkable phenomena depend, cannot in the present state of science, be conjectured; nor could we predict whether any opposite condition of the atmosphere, in respect to heat, moisture, and other circumstances, would bring about a state of animal life which might be called the converse of that above described, namely, a state in which reptiles of every size and order might abound, and mammalia disappear.

The nearest approximation to such a fauna is found in the Galapagos Archipelago. These islands, situated under the equator, and nearly 600 miles west of the coast of Peru, have been called "the land of reptiles," so great is the number of snakes, large tortoises, and lizards, which they support. Among the lizards, the first living species proper to the ocean has been discovered. Yet although some of these islands are from 3000 to 4000 feet high, and one of them 75 miles long, they contain, with the exception of one small mouse, no indigenous mammifer. Even here, however, it is true