

a very long time, extending apparently through nearly the whole Cretaceous and Tertiary periods, the geographical conditions were such that the arctic climate was very much milder than at present. In testimony of this we have not only the temperate flora of Greenland and other northern lands in the Cretaceous and Tertiary, and the evidence that then Greenland was not a snow-clad table-land as at present, but the fact vouched for by Nordenskjöld that no boulders or ice-drifted materials are to be found in any of the arctic deposits older than the glacial age. We shall find that these facts throw much light on the distribution of those animals and plants which have come down to us from the preglacial times, as well as on that of more modern species.

Just as political geography sometimes presents boundaries not in accordance with the physical structure of countries, so the distribution of animals and plants shows many peculiar and unexpected features. Hence naturalists have divided the continents into what Sclater has called zoological regions, which are, so to speak, the great empires of animal life, divisible often by less prominent boundaries into provinces. In vegetable life similar boundaries may be drawn, more or less coincident with the zoological divisions. Zoologically, North America and Greenland may be regarded as one great region, the Nearctic, or new arctic, the prefix not indicating that the animals are newer than those of the old world, which is by no means the case. South America constitutes another region, the Neotropical. If now we turn to the greater Eurasian continent, with its two prolongations to the south in Africa and Australia, we shall find the whole northern portion, from the Atlantic to the Pacific, constituting one vast region of animal life, the Palearctic, which also includes Iceland and a strip across north Africa. Africa itself, with Madagascar, whose allegiance is, however, only partial, constitutes the Ethiopian region. India, Burmah, the south of China, and certain Asiatic islands form the Oriental region. Australia, New Guinea, and the Polynesian islands constitute the Australian region. All of these regions may in a geological point of view be considered as portions of old and permanent continental masses, which, tho with movements of elevation and depression, have continued to exist for vast periods. Some of