

A new species of panther (*Felis irbis*), covered with long hair, has been discovered in Siberia, evidently inhabiting, like the tiger, a region north of the Celestial Mountains, which are in lat 42°.*

The two-horned African rhinoceros occurs without the tropics at the Cape of Good Hope, in lat. 34° 29' S., where it is accompanied by the elephant, hippopotamus, and hyæna. Here the migration of all these species towards the south is arrested by the ocean; but if the continent had been prolonged still farther, and the land had been of moderate elevation, it is very probable that they might have extended their range to a greater distance from the tropics.

Now, if the Indian tiger can range in our own times to the southern borders of Siberia, or skirt the snows of the Himalaya, and if the puma can reach the fifty-third degree of latitude in South America, we may easily understand how large species of the same *genera* may once have inhabited our temperate climates. The mammoth (*E. primigenius*), already alluded to, as occurring fossil in England, was decidedly different from the two existing species of elephants, one of which is limited to Asia, south of the 31° of N. lat., the other to Africa, where it extends, as before stated, as far south as the Cape of Good Hope. The bones of the great fossil species are very widely spread over Europe and North America; but are nowhere in such profusion as in Siberia, particularly near the shores of the Frozen Ocean. Are we, then, to conclude that this animal preferred a polar climate? If so, it may well be asked, by what food was it sustained, and why does it not still survive near the arctic circle?†

Pallas and other writers describe the bones of the mammoth as abounding throughout all the Lowland of Siberia, stretching in a direction west and east, from the borders of Europe to the extreme point nearest America, and south and north, from the base of the mountains of Central Asia to the shores of the arctic sea. (See map, Pl. 3.) Within this space, scarcely inferior in area to the whole of Europe, fossil ivory has been collected almost everywhere, on the banks of the Irtysh, Oby, Yenesei, Lena, and other rivers. The elephantine remains do not occur in the marshes and low plains, but where the banks of the rivers present lofty precipices of sand and clay, from which circumstance Pallas very justly inferred that, if sections could be obtained, similar bones might be found in all the elevated lands intervening between the great rivers. Strahlenberg, indeed, had

* Ehrenberg, *ibid.*

† The speculations which follow, on the ancient physical geography of Siberia, and its former fitness as a residence for the mammoth, were first given in their present form in my 4th edition, June, 1835. Recently Sir R. Murchison and his companions in their great work on the *Geology of Russia*, 1845 (vol. i. p. 497.), have, in citing this chapter, declared that their investigations have led them to similar conclusions. Professor Owen, in

his excellent *History of British Fossil Mammalia*, 1844, p. 261. *et seq.*, observes that the teeth of the mammoth differ from those of the living Asiatic or African elephant in having a larger proportion of dense enamel, which may have enabled it to subsist on the coarser ligneous tissues of trees and shrubs. In short, he is of opinion, that the structure of its teeth, as well as the nature of its epidermis and coverings, may have made it "a meet companion for the reindeer."