in Vermont; *Arenaria Grönlandica*, on the White Mountains, the Catskills, Shawangunk Mountain, and, in the form of *A. glabra* Michx., on the Alleghanies of Carolina; *Scirpus cæspitosus* in North Carolina, a patch remaining on Roan Mountain, and *Nephroma arcticum*, and other northern Lichens, with *Lycopodium selago* on the highest Alleghanies.

Even freshwater shells of the Unio family were among the immigrants, as C. T. Stimson has found by a study of fossil shells from near Toronto. Scudder has shown that in North America the fossil Coleopterous Insects of deposits laid down in the Glacial period are very nearly all of extinct species, while those from peat beds of later origin are, with a rare exception, existing species.

The bones of the Reindeer have occasionally been found in the valley drift. Two bones, referred by Marsh to the Arctic Reindeer, *Rangifer tarandus*, were found in the lower clay-beds of the Quinnipiac River, three miles north of New Haven, and others have been reported from near Vincentown, N.J. Other remains, but possibly of the *R. caribou*, have been found near Sing Sing, N.Y., in Kentucky at Big-bone Lick, and on Racket River in northern New York.

The region farther south abounded, no doubt, in the beasts, birds, and other species of a temperate climate. With so long a glacial front in latitudes of 40° to 35°, at the time of greatest extension, the extreme cold would have swept at times over the south, and have probably excluded from the region north of Florida tropical and subtropical species, excepting migrating kinds.

Elevation of the Continent.

The evidence that the continent, especially over its northern portions and along the mountain borders, continued its rise above the sea level after the Tertiary period is based largely on the facts relating to river channels, fiords, and Arctic migrations between Europe or Asia and America.

Evidence from river channels and fiords. — Near and beneath the southern margin of the ice, over the interior of the continent, many river channels, as proved by borings, have a depth of 100 to 400 feet below their present bed. These deep gorges are filled with drift, thus making it certain that the excavation was completed in the Glacial period. Newberry states that all the river valleys of Ohio are examples. The Cuyahoga, which is one of them, has, where it enters Lake Erie, its bottom 200 feet below the present bed, and this continues for 20 miles up the stream. The valleys of northern Pennsylvania are other examples, and according to Carll and White the depth of the drift-filling is, in some cases, 300 to 400 feet. At the west end of Lake Ontario, the Dundas gorge has been proved by borings to descend 227 feet below the sea level, or nearly half as far as the deepest part of Lake Ontario, the material penetrated by the boring being drift (J. W. Spencer). It is inferred that the lake was above the sea level in the period, and that a river flowed along its bottom, either eastward or westward,