With such a character of surface long continued, there would be no difficulty in admitting the gradual distribution over the British Isles of a large proportion of the terrestrial forms of Europe, quadrupeds, birds, reptiles, insects, land mollusca, and plants; the difficulty would be greater in regard to the denizens of rivers and lakes; and in fact there are some considerable local distinctions in respect of these, not only in contrasting Britain with the continent, but also in comparing one of our rivers with another.

One such migration must be supposed to have happened in the pre-glacial period: were all the animals and plants of this colony destroyed by the glacial ocean; and is it necessary to admit another migration after that ocean had been withdrawn? If the glacial ocean covered all our islands, the second migration must be admitted; but there is no proof that that ocean did cover all our mountains. On the contrary, there seems reason to limit its height, as a general rule, in the north of England and Wales, to something less than 1500 feet. This indeed would reduce everywhere to a series of islands what is now the land of Britain,—a condition under which some races of animals and plants must perish; yet the islands might preserve many species, which on the retirement of the sea would spread downward from the mountains as far as climatal conditions allowed, according to the notion long since put forth by Linnæus in his treatise 'De Telluris Orbis Incremento.' Some species, however, would remain confined to the mountains.

This is the fact in regard to some species of plants, which occur on the mountains of Scotland and Cumberland and the most elevated regions of Yorkshire, and which appear to be parts of a Scandinavian flora, communicated to Britain before the glacial period, and now preserved on certain elevated tracts which, during that period, stood above the water.

As examples of the plants here alluded to, we may quote from Baines's 'Flora of Yorkshire' the following well-known species:—