

ment; and in the Pleistocene beds of the Clyde it is in the Icelandic, not the Scottish proportions, that we find it. The same remark applies to *Cardium Norwegica* and *Astarte compressa*, with not a few others; and still more strongly to another *Astarte*, not rare in the Pleistocene deposits of at least Banffshire and Caithness, but so exceedingly rare as Scottish in the present age of the world, that the late Professor Edward Forbes,—indefatigable dredger as he was,—had to borrow from a friend the Scottish specimen which he figures in his great work. But though of such unfrequent occurrence in the Scottish seas, it is common in those of Nova Zembla and within the Arctic circle; and it is in the proportions in which it is developed in the high latitudes that we now find it in the Pleistocene beds of Scotland.

But how interpret so curious a fact as the occurrence in this country of beds of shells (evidently occupying the place in which they had lived and died) whose proper climatal habitat is now some ten or fifteen degrees further to the north? There is nothing more fixed than the nature of species. Art, within certain limits, exerts an acclimatizing power: Alpine plants may be found, for instance, living, if not flourishing, within the Botanic Gardens of Edinburgh, elevated scarce a hundred feet above the level of the sea; but every scientific gardener knows how extremely difficult it is to keep these alive in the too genial temperature of a situation greatly lower than the one natural to them; and that while inter-tropical plants may be easily maintained in existence through the judicious application of artificial heat, the sub-arctic or Alpine plants are ever and anon dying out. And never do they so change their natures as *of themselves* to propagate their kind downwards from the hill-tops to the plains. They on no occasion violate the climatal conditions imposed upon them by nature. It is so also with the animal world, and especially with shells. There are shells