

specific identity under such conditions is altogether inconceivable.

We have not been able to present any *direct* proof that *L. litorea* did not exist in Nova Scotia before the present century. The testimony of the numerous lists (by independent observers, who could not have overlooked the shell had it been present) of shells on the coast of New England and New Brunswick in none of which occurs any mention of *L. litorea*, the testimony of its absence from the Post-pliocene deposits of other parts of Canada where *L. palliata* (along with which it always exists) has been found, the testimony of the Indian shell-heaps, into which it would certainly have been carried by the same means or for the same purpose as was *L. palliata*, all of these combined afford almost absolute proof that the shell did not exist on the Atlantic coast of America outside of Nova Scotia. If these same tests could be applied directly to Nova Scotia the question would be settled as to whether it occurred there. An early list of the shells of that Province, or careful investigations into its Post-pliocene deposits and Indian shell-heaps, would practically remove all doubt one way or the other. But the former does not exist and the latter has not been made.

It must have existed in Nova Scotia, if at all. But at the same time its absence from Greenland and Labrador, where, in accordance with what we know of the geographical distribution of animals, it ought to occur along with *L. palliata* if it is indigenous; the extreme improbability of its remaining in such a small area without spreading, with causes in existence tending to carry it from a less favorable to a more favorable habitat; and the impossibility of the species remaining isolated from the parent stock in England for an indefinitely long time, and yet in spite of quite a differently conditioned habitat remaining specifically identical with it, all of these facts tend to show that it did not exist even in Nova Scotia. Is not the conclusion warranted then, that *Littorina litorea* is not indigenous to America, but has been recently and artificially introduced from Europe?