Confined range of others.—Mr. Lowe, in a memoir published in the Cambridge Transactions in 1834, enumerates seventy-one species of land Mollusca, collected by him in the islands of Madeira and Porto Santo, sixty of which belonged to the genus Helix alone, including as sub-genera Bulimus and Achatina, and excluding Vitrina and Clausilia;—forty-four of these are new. It is remarkable, that very few of the above-mentioned species are common to the neighbouring archipelago of the Canaries; but it is a still more striking fact, that, of the sixty species of the three genera above mentioned, thirty-one are natives of Porto Santo; whereas, in Madeira, which contains ten times the superficies, were found but twenty-nine. Of these only four were common to the two islands, which are separated by a distance of only twelve leagues; and two even of these four (namely, *Helix rhodostoma* and *H. ventrosa*) are species of general diffusion, common to Madeira, the Canaries, and the south of Europe.*

The confined range of these mollusks may easily be explained, if we admit that species have only one birth-place; and the only problem to be solved would relate to the exceptions—to account for the dissemination of some species throughout several islands, and the European continent. May not the eggs, when washed into the sea by the undermining of cliffs, or blown by a storm from the land, float uninjured to a distant shore?

Their mode of diffusion.—Notwithstanding the proverbially slow motion of snails and mollusks in general, and although many aquatic species adhere constantly to the same rock for their whole lives, they are by no means destitute of provision for disseminating themselves rapidly over a wide area. "Some Mollusca," says Mr. E. Forbes, "migrate in their larva state, for all of them undergo a metamorphosis either in the egg or out of the egg. The Gasteropoda commence life under the form of a small spiral shell, and an animal furnished with ciliated wings, or lobes, like a pteropod, by means of which it can swim freely, and in this form can migrate with ease through the sea." When reflecting on those tribes of the Invertebrata, which, like insects, undergo a series of transformations, we are accustomed to associate in our minds the idea of the greatest locomotive powers with the most mature and perfect state of each species; but it has been recently shown by Mr. Forbes that many Testacea, the scalop (*Pecten*) among others, possess when young, or in the larva state, the means of swimming from one distant region to another, which are denied them when they have attained their full development.†

Some species of shell-bearing Mollusca lay their eggs in a sponge-like nidus, wherein the young remain enveloped for a time after their birth; and this buoyant substance floats far and wide as readily as sea-weed. The young of other viviparous tribes are often borne along, entangled in sea-weed. Sometimes they are so light, that, like grains of sand, they can be easily moved by currents. Balani and Serpulæ are sometimes found adhering to floating cocoa-nuts, and

* Camb. Phil. Trans., vol. iv. 1831. † Edinb. New Phil. Journ., April, 1844.