once of the fishes, most of which are probably capable of directly colonising our rivers and streams, and some of which (salmon, eel, sturgeon, lamprey) are still in the habit of migrating from salt water to fresh. Then there are certain Crustaceans which may very well have actively invaded fresh water. These are the crabs, prawns, and crayfishes, which by swimming or crawling would be capable of making headway against the current of a river.

An examination into detail shows us that these forms have acquired characteristics which have fitted them for colonising fresh water in the way suggested. Most fresh-water crabs, unlike their marine allies, which are liberated from the egg as free-swimming larvæ (Zoea), remain in the shelter of the female's abdomen until they have reached their adult form, while the young of the crayfish remain attached to the swimmerets of the female until able to lead an independent existence. In the case of fresh-water prawns, we appear to have merely an increase in the amount of food-yolk, which at least ensures that the larvæ are set free at a more advanced stage than the corresponding marine types. This is actually to be seen within the limits of a single species, in the case of the prawn *Palæmonætes vulgaris*, which is known to inhabit both the sea and fresh water. The eggs of the individuals living in the latter are larger, and hatch out at a later stage, than the eggs of marine specimens. All the modifications just pointed out have, of course, the one object—that of enabling the young to retain the hold upon fresh water which their parents have acquired, by the more or less complete suppression of a free-swimming larval form, which would be at the mercy of every current.

We may perhaps be justified in including the genera *Asellus* and *Gammarus* among the types which have actively migrated from the sea; in both cases the eggs are retained within the brood-pouch until the adult form is approximately reached. The leeches too we can consider as forms which may have actively colonised fresh water, for they are powerful swimmers, can attach themselves firmly to rocks or stones, and either deposit the eggs in a horny cocoon or carry them upon the ventral surface of the parent.

That a number of the Mollusca which we find in fresh water migrated directly from the ocean there can be little doubt. Both Lamellibranchs and Gasteropods could actively accomplish this, for, though slowly creeping forms, they would in time reach great distances from the mouth of a river or stream. Here again we have striking examples of how—to avoid the danger of being swept out to sea—the free-swimming larval forms characteristic of their marine relations have become suppressed. In the well-known genus *Bythinia*, for example, eggs well provided with food-yolk are attached to stones