

marine. On the other hand, the small but interesting group of lung-fishes (Dipnoi) is wholly fluviatile, while many Teleostean fishes are common inhabitants of our rivers and lakes.

Descending in the scale, we find both the Tunicates and *Amphioxus* unknown save in the sea.

Among the Arthropoda we find examples of both typical fresh-water and typical marine forms. The insects, myriapods and arachnids, are mainly terrestrial animals, but nevertheless a number of adult insects, and a still larger number of insect larvæ, are inhabitants of ponds and streams, while the family of the Hydrachnidæ is almost entirely confined to fresh water. The Crustacea, being principally aquatic, afford examples of both groups. Of the lower forms, the Cirripedia are entirely marine; the Copepoda and Ostracoda are abundant both in the sea and in fresh water, though present in greater variety in the sea; and the Branchiopoda are most common in fresh water. The great majority of the higher Crustacea are marine, the Cumacea and Stomatopoda exclusively so, and the other groups to a very large extent. The Isopoda, however, together with a number of terrestrial forms, includes the characteristic fresh-water genus *Asellus*; in like manner the genus *Gammarus*, species of which are common in fresh water, occurs amongst the Amphipoda. The Decapoda too, in addition to a great many marine types, contains the crayfishes, *Astacus* and its allies, certain prawns (*Palæmon*, *Caridina*, etc.) and crabs (principally Potamonidæ), which are characteristic of fresh water.

All the Brachiopoda are marine, and so are most of the Polyzoa, although the sub-group of the Phylactolæmata is confined to fresh water. Turning to the Mollusca, we find a number of types belonging both to the Gasteropoda and to the Lamellibranchiata which are well known in, and characteristic of, various fresh waters, though these divisions have a much larger number of species in the sea. Amongst others, we may indicate *Planorbis*, *Limnæa*, *Paludina*, and *Unio* from fresh water, and *Buccinum*, *Trochus*, *Patella*, and *Cardium* from the ocean, as being typical genera belonging to the two groups. The Cephalopoda are found only in the ocean.

A considerable number of what we may popularly call "worms" are internal parasites, and so fall outside the scope of our inquiry. Of more highly organised forms, the Polychæta are all but entirely marine, while the Oligochæta, with a few marine and many terrestrial types, yet includes a number (such as *Nais* and *Tubifex*) which are characteristic of fresh water. The leeches are for the most part terrestrial and fresh-water, though some forms inhabit the sea; and the Nemertinea, on the other hand, are principally marine forms, although a few are known from fresh water. Amongst the flat-worms