

moves the members; the mind governs the outward frame; and, in the king of animals, an immortal spirit is enabled to seek and secure a higher destiny.

This change in the *structure* of animals was rendered necessary by an increase in their *bulk*, for though there are some of the invertebrated sub-kingdom, as the fixed Polypes and several of the Cephalopods, that are of as large dimensions, and a few of the vertebrated, as the humming birds,\* and the harvest mouse,† that are not so large as some insects; yet the generality of those distinguished by a vertebral column, form a striking contrast, as to magnitude, with those that are not. Besides this, as these animals, by the will of their Creator, were to be endowed as they ascended in the scale, with gradually increasing intellectual faculties, it was necessary that the principal seat of those faculties should be differently organized. A different organ of respiration, also, as well as of circulation, in the great body of vertebrates, required an internal cavity defended from the effects of pressure.

Having premised these general observations, we are next to consider what animals form the basis of the vertebrated sub-kingdom. Most modern zoologists appear to be of opinion that the *fishes*, occupy this position, and, taking all circumstances into consideration, this seems the station assigned to them by their Creator; still there are characters in some of the *Reptiles* that seem to connect them more immediately with the *Insects*. The metamorphoses, particularly of the Batrachian Order, are of this description; as is likewise the carapace, or shell of the Chelonians, of which the vertebral column and ribs form the basis. Those extraordinary animals, the hag,‡ and the lamprey,§ half worms and half fish, by means of the leech, evidently

\* Trochilus.

† Mus messorius.

‡ Gastrobranchus. (Myxine. L.)

§ Pteromyzon.