

bones of the tongue ; the osseous frame-work of the organs of respiration, consisting of the bones, rays, and arches that support the gills, and the *opercula*, or covers which close over the branchial apertures ; and of the vertebral column, formed of numerous dorsal and caudal vertebræ, with the ribs, and other appendages ; there are no proper cervical vertebræ, or spinal bones of the neck.

The branchial arches are in general four, or five, on each side, and are attached above to the cranium, and below to a chain of small bones, by which they are connected with the *os hyoides*, or bone of the tongue. The opercular bones that compose the cover or lid of the opening of the gills, consist of three pieces on each side, and are distinguished by the names, *opercular*, *pre-opercular*, and *sub-opercular*, according to the situations which they respectively occupy.

The *vertebræ* are double hollow cones, not unlike an hour-glass in form ; the interval between two of these bones is filled up, in the living state, by a gelatinous fluid. Along the upper part of each vertebra, there is an annular cavity, which in the united vertebral column forms a canal for the spinal marrow ; the posterior dorsal and caudal vertebræ have also a channel below, for the passage of the large blood-vessels.

There are likewise bones analogous to some of those which enter into the composition of the extremities, chest or thorax, and pelvis, of the higher