teeth takes place during the life of the fish, and we often find in fossil specimens, a series of successional teeth, beneath the row in use; as in the fragment of a jaw of *Lepidotus*, from Tilgate Forest, *Lign.* 133.

SKELETONS OF FISHES .- The skeletons of the animals of this class, differ so remarkably in their relative degree of firmness and elasticity, in consequence of peculiar modifications of their constituent substance, as to form two grand divisions; one of which is termed the osseous, the other the cartilaginous. The essential difference in the skeletons of these two groups, consists in the presence or absence of earthy matter (phosphate of lime) in the materials of which they are constructed. In the cartilaginous fishes, the skeleton is homogeneous and transparent; but in some species, the skin has dense calcareous particles or plates on the skin, as in the Rays; and in others, the head and body are protected by osseous scutcheons, as in the Sturgeon. There is also an intermediate group of fishes, termed the fibro-cartilaginous, in which the skeleton contains phosphate of lime, but in a much less proportion than in the true In some genera, certain portions of osseous fishes. the skeleton, as the bodies of the vertebræ, are cartilaginous, while the spinous processes, ribs, &c. are osseous; these characters are of considerable importance in the investigation of the fossil remains of fishes, as we shall hereafter have occasion to demonstrate.

The skeleton consists of the *cranium* or skull, which is composed of numerous bones; the jaws, and