

vertebrata; but which it is not necessary for our present purpose to describe.

Of the organs of vision some remains also occur in the mineral kingdom. The sclerotic coat, or capsule of the eye, being bony in fishes, is often preserved; and in several chalk specimens I have found it occupying the orbit.

In addition to those durable parts of fishes, already mentioned, as likely to be met with in a fossil state, the bones called *otolithes* (ear-stones) must be enumerated. These calcareous bodies are found in the membranous labyrinth of the organs of hearing; and although more or less developed in the ear-bulb of all animals, they are larger and of more definite forms in the higher osseous and cartilaginous fishes. The *otolithes* are supposed to assist in communicating more vivid impressions of sounds to the extremities of the auditory nerves; they are stony in most aquatic animals, and friable or pulverulent in those that live on land. Smooth, oblong *otolithes* are not uncommon in the Crag deposits of Norfolk and Suffolk.

TAILS OF FISHES.—The tail, as we have previously mentioned, is the chief instrument of progressive motion in these animals; it assumes two principal modifications. In the greater number of the existing species, the vertebral column terminates in a triangular plate of bone, to which the caudal fin is attached symmetrically; and its figure is either rounded, or divided into two equal lobes or branches; these tails are termed *homocercal*, i. e.