

we meet with a concha, or external ear, distinctly marked; and the utility of this part, in catching and collecting the sonorous undulations of the air, may be inferred from the circumstance, that a large and very moveable concha is generally attended with great acuteness of hearing. This is more particularly the case with feeble and timid quadrupeds, as the hare and rabbit, which are ever on the watch to catch the most distant sounds of danger, and whose ears are turned backwards, or in the direction of their pursuers; while, on the contrary, the ears of predaceous animals are directed forwards, that is, towards the objects of their pursuit. This difference in direction is not confined to the external ear, but is observable also in the bony passage leading to the tympanum.

The Cetacea, being strictly inhabitants of the water, have no external ear; and the passage leading to the tympanum is a narrow and winding tube, formed of cartilage instead of bone, and having a very small external aperture. In the Dolphin tribe the orifice will barely admit the entrance of a pin; it is also exceedingly small in the *Dugong*; these structures being evidently intended for preventing the entrance of any quantity of water.* It is apparently with the same design that in the *Scal* the passage makes a circular turn; and that, in the *Ornithorhyncus paradoxus*, it winds round the temporal bone, and has its external orifice at a great distance from the vestibule. The internal parts of the organ of hearing in the Whale, and other cetacea, are enclosed in a bone of extraordinary hardness, which, instead of forming a continuous portion of the skull, is connected to it only by ligaments, and suspended in a kind of osseous cavity, formed by the adjacent bones. The cochlea is less developed than in quadrupeds, for it only takes one turn and a half, instead of two and a half. The existence of the se-

* It is probable that in these animals the principal channel by which sounds reach the internal organs is the Eustachian tube.