

gristly expansion, in the form of a horn or a funnel, the object of which is to collect the waves of sound; for this reason, animals prick up their ears when they listen. The ear of man is remarkable for being nearly immovable. Therefore, persons, whose hearing is deficient, employ an artificial trumpet, by which the vibrations from a much more extended surface may be collected. The external ear is peculiar to mammals, and is wanting even in some aquatic species of these, such as the seals and the *Ornithorhyncus*.

95. The *middle ear* has received the name of the *tympanic cavity*, (*k.*) It is separated from the auditory passage by a membranous partition, the *tympanum* or drum, (*c*;) though it still communicates with the open air by means of a narrow canal, called the Eustachian tube, (*i.*) which opens at the back part of the mouth. In the interior of the chamber are four little bones, of singular forms, which anatomists have distinguished by the names of *malleus*, (Fig. 20, *c.*) *incus*, (*n.*) *stapes*, (*s.*) and *os orbiculare*, (*o.*;) which are articulated together, so as to form a continuous chain, as here represented, magnified.

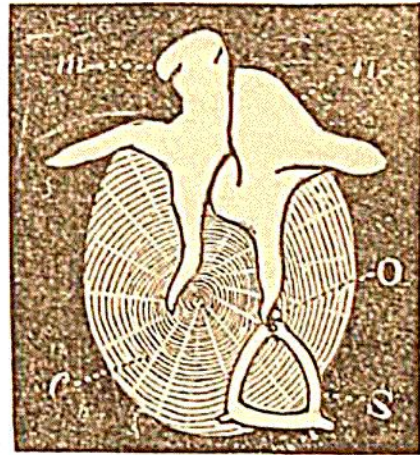


Fig. 20.

96. The *internal ear*, which is also denominated the *labyrinth*, is an irregular cavity formed in the most solid part of the temporal bone, beyond the chamber of the middle ear, from which it is separated by a bony partition, which is perforated by two small holes, called, from their form, the round and the oval apertures, the *foramen rotundum*, (Fig. 19, *g.*) and the *foramen ovale*, (*h.*) The first is closed by a membrane, similar to that of the tympanum, while the latter is closed by the *stapes*, one of the little bones in the chamber.