

111. No special apparatus for smell has yet been found in Invertebrates. And yet there can be no doubt that insects, crabs, and some mollusks perceive odors, since they are attracted from a long distance by the odor of objects. Some of these animals may be deceived by odors similar to those of their prey; which clearly shows that they are led to it by this sense. The carrion fly will deposit its eggs on plants which have the smell of tainted flesh.

#### 4. *Of Taste.*

112. TASTE is the sense by which the flavor of bodies is perceived. That the flavor of a body may be perceived, it must come into immediate contact with the nerves of taste; these nerves are distributed at the entrance to the digestive tube, on the surface of the tongue and the palate. By this sense, animals are guided in the choice of their food, and warned to abstain from what is noxious. There is an intimate connection between the taste and the smell, so that both these senses are called into requisition in the selection of food.

113. The nerves of taste are not so strictly special as those of sight and hearing. They do not proceed from one single trunk, and, in the embryo, do not correspond to an isolated part of the brain. The tongue, in particular, receives nerves from several trunks; and taste is perfect in proportion as the nerves which go to the tongue are more minutely distributed. The extremities of the nerves generally terminate in little asperities of the surface, called *papillæ*. Sometimes these *papillæ* are very harsh, as in the cat and the ox; and again they are very delicate, as in the human tongue, in that of the dog, horse, &c.

114. Birds have the tongue cartilaginous, sometimes beset with little stiff points; sometimes fibrous or fringed at the edges. In the parrots, it is thick and fleshy;