

263. In the higher animals, where separate organs for special purposes are multiplied, numerous sacs and tubes are assembled into compact masses, called *glands*. Some of these are of large size, such as the salivary glands, the kidneys, and the liver. In these, clusters of sacs open into a common canal, and this canal unites with similar ones forming larger trunks, such as we find in the salivary glands, (Fig. 93,) and finally they all discharge by a single duct.

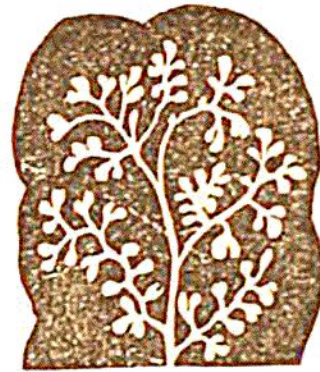


Fig. 93.

264. By the organs of secretion, two somewhat different purposes are effected, namely, fluids of a peculiar character are selected from the blood, for important uses, such as the saliva, tears, milk, &c., some of which differ but little in their composition from that of the blood itself, and might be retained in the blood with impunity; or, the fluids selected are such as are positively injurious, and cannot remain in the blood without soon destroying life. These latter are usually termed **EXCRETIONS**.

265. As the weight of the body, except during its period of active growth, remains nearly uniform, it follows that it must daily lose as much as it receives; in other words, the excretions must equal in amount the food and drink taken, with the exception of the small proportion discharged by the alimentary canal. Some of the most important of these outlets will be now indicated.

266. We have already seen (37) that all animal tissues admit of being traversed by liquids and gases. This mutual transmission of fluids from one side of a membrane to the other is termed *endosmosis* and *exosmosis*, or imbibition and transudation, and is a mechanical, rather than a vital, phenomenon, inasmuch as it takes place in dead as well as in