

ing the secreted fluid to a more distant point. These cells, or *follicles*, as they are termed, are generally employed for the mucous secretions, and are often scattered throughout the surfaces of membranes:* at other times the secreting cavities are collected in great numbers into groups; and they then frequently consist of a series of lengthened tubes, like *cæca*, examples of which we have already seen in the hepatic and salivary glands of insects.

A secretory organ, in its simplest form, consists of short, narrow and undivided tubes; we next find tubes which are elongated, tortuous or convoluted, occasionally presenting dilated portions, or even having altogether the appearance of a collection of pouches, or sacs; while, in others cases, they are branched, and extend into minute ramifications. Sometimes they are detached, or isolated; at other times they are collected into tufts, or variously grouped into masses, where still the separate tubes admit of being unravelled. The secreting filaments of insects float in the general cavity, containing the mass of nutrient fluid, and thence imbibe the materials they require for the performance of their functions. It is only when they receive a firm investment of cellular membrane, forming what is termed a *capsule*, and assuming the appearance of a compact body, that they properly constitute a *gland*; and this form of a secreting organ is met with only among the higher animals.†

Great variety is observable both in the form and structure of different glands, and in the mode in which their blood vessels are distributed. In animals which are furnished with an extensive circulation, the vessels supplying the glands with blood are distributed in various modes; and it is evident that each plan has been designedly selected with reference to the nature of the particular secretion to

* See p. 135 of this volume; and in particular Fig. 305. Sebaceous follicles are also noticed in Vol. i. p. 19.

† Dr. Kidd, however, describes bodies apparently of a glandular character, disposed in rows on the inner surface of the intestinal canal of the *Gryllotalpa*, or mole-cricket. Phil. Tran. for 1825, p. 227.