

plane surface on which the excurrent canals open; the openings of these canals for convenience are called oscules, but they are really homologous with the mouths of derivative excurrent canals.

The Oscules of Compound Sponges.—In compound sponges characterised by the presence of more than one evident oscule—and all simple sponges are liable to become compound—we may regard each oscule as indicating a separate system of canals and thus in a sense as a sign of individuality. The origin of additional individuals may be attributed to a process of budding or internal gemmation from some excurrent canal running near the surface of the sponge, close beneath the ectosome, and thus serving as a kind of internal stolon.

THE PORES.

These which are the immediate openings of the incurrent canals through the investing epithelium to the exterior are always very small, usually about 0·05 mm. in diameter, sometimes much less, 0·008 mm. in *Psammastra murrayi*, sometimes much more, 0·32 mm. in *Thenea wyvilli*. They are either uniformly dispersed over the poriferous surface or collected in sieve-like groups, or they form the single openings of chones. Sometimes they are more numerous over special areas, or indeed restricted to them.

Since they naturally can only occur over the subdermal cavities or intercortical canals of the sponge, one would not expect to find them generally distributed, yet this does occasionally happen when the cavities immediately beneath the skin are of great superficial extent, e.g., in *Caminus sphæroconia* (Pl. XXVII. fig. 2), but more usually even in such cases they are collected into sieves, of which numerous examples are described in the body of the Report (p. 143, Pl. XV. fig. 20; p. 232, Pl. XXII. fig. 14; Pl. XXX. fig. 3). In the Geodiidæ they commonly occur as sieves over the distal ends of the chones, the roofs of which may then be said to be *cribriporal* (Pl. XL. fig. 4); but in some of the more specialised genera—*Erylus* (Pl. XXVIII. fig. 17), *Isops*,—there is but a single pore to each chone; in this case the poral roof may be distinguished as *uniporal*. The restriction of the pores to special vestibules occurs in the Tetillid genus *Cinachyra* (p. 27, Pl. XXXIX. fig. 1); in the Stellettid *Disyringa* they are confined to an extension of the cortex, which forms a special incurrent tube (p. 163, Pl. XLI. fig. 3); in other sponges, such as the *Thenæ*, special poriferous recesses are present in addition to pores generally distributed.

LIPOGASTRISM AND LIPOSTOMY.

In many sponges the oscules are not distinguishable from the pores (lipostomy), and in some cases all traces of the paragastric cavity have also disappeared (lipogastry).