

downwards, between radiating brushes of spicules, into one large inhalent canal (*i.c.*), from which smaller canals or lacunæ originate. Here again we find an intimate connection between the arrangement of the pores and the nature of the dermal skeleton, for the entire surface of the sponge, except on the tops of the raised pore-areas, is covered with a dense, continuous armour of outwardly projecting discastra (Pl. LI. figs. 1, *d*; 1*b*, *d*), between which there is no room for the pores. We have already seen how a similar arrangement of the pores, consequent upon the denseness of the dermal skeleton (which is, however, very differently arranged in the two cases, as will be seen by comparison of Pl. XLVI. fig. 5, with Pl. LI. fig. 1*b*), in a totally different sponge, viz., *Halichondria latrunculioides*, has given rise to a similar external form.

We ought perhaps also to consider under this head one more case, viz., that of *Tentorium semisuberites*, in which there is, however, only a single, large pore-area. The arrangement of the dermal skeleton and ectosome in this sponge has been already referred to (p. xxxi), the columnar body (Pl. L. fig. 3) is encased in a quite impenetrable sheath of spicules, except at the top (Pl. L. fig. 3, *p.a*), where the dermal skeleton is differently (radiately) arranged. In the centre of the cushion-like top arises usually a single oscular tube (Pl. L. fig. 3, *o*), and all around this are numerous pores, seen best in longitudinal section (Pl. L. fig. 3*a*), leading into the elongated subdermal cavities between vertical brushes of spicules, much as in other Suberitidæ. There are no pores except on the summit of the sponge.

(2) *Pores localised in areas in accordance with the arrangement of the subdermal cavities; the dermal skeleton being either absent, or so feebly developed as not to interfere with their arrangement.*—This condition is found most frequently in non-corticate sponges, and here, as before, it is impossible to say exactly where the scattered condition ceases and localisation begins. We shall content ourselves with taking a few examples in which the localisation is more or less distinctly marked.

In the genus *Myxilla* it is exceedingly common to find the surface of the sponge marked out into more or less regular, oval or rounded pore-areas, marking the position of the underlying subdermal cavities, and this without any relation to the dermal skeleton, which is commonly very vaguely and poorly developed; as examples we may cite *Myxilla cribrigera*, nobis, *Myxilla mariana*, var. *massa*, nobis, *Myxilla nobilis*, nobis, and *Myxilla compressa*, nobis. Fig. 2*a* on Pl. XXX. shows this condition as seen in *Myxilla nobilis*. For further details the reader is referred to the descriptions of the several species mentioned.

We also find this condition occurring in the genus *Phakellia*, e.g., *Phakellia flabelata*, nobis, where the pores occur in small groups over the ends of narrow inhalent canals; and in *Phakellia ventilabrum*, var. *connexiva*, we have much the same thing (*vide* Pl. XLIX. fig. 3). In neither of these cases is the skeleton arranged so as in any way to determine the arrangement of the pores (*cf.* p. 171, and Pl. XLIX. fig. 3).