

Suberite which we have described under the name *Cliona dissimilis* (p. 227; Pl. XXV. fig. 5, &c.). Here the sponge has bored its way into a flattened coral which it completely surrounds; hence it has itself acquired a flattened, lamellar form, and we find the pores collected in areas (woodcut, Fig. XI., *pa*), on one side of the sponge and the oscula (woodcut, Fig. XI., *o*) on the other.

There is no other known example, so far as we are aware, of a lamellar Suberitid sponge, and even the species in question is lamellar only because it has bored into a lamellar coral, and yet the pores and oscula are arranged just as they would be in a free living, frondose sponge such as *Phakellia*. There must be some strong reason why, as soon as a sponge, for any cause, acquires a lamellar form, the oscula become confined to one surface and the pores to the other, and to account for the occurrence of this condition in genera so widely separated as *Gellius*, *Myxilla*, *Phakellia* and *Cliona*. What this reason may be we cannot at present say.

(2) The Subdermal Cavities.

The subdermal cavities are the spaces into which the pores directly lead, and from which the inhalent canals proper take their origin. They might be regarded merely as the proximal portions of the inhalent canals, but inasmuch as they are sometimes very distinctly marked off from the remainder of the inhalent canal system, both by position and structure, it is convenient to treat of them separately and to retain for them a special name. Although the term *subdermal* is hardly a suitable one to apply to these structures in corticate sponges, as we shall see better later on, yet it is advisable to have the same term for the same structures in the two groups Halichondrina and Clavulina, and as the term subdermal cavity is already in use we shall retain it in preference to inventing a new one.

In the Halichondrina the subdermal cavities are usually expanded *horizontally* and more or less lacunar in form, being roofed in only by the thin, pore-bearing dermal membrane, and many pores usually lead into one and the same subdermal cavity. The extent to which they are developed varies much in different sponges, attaining its maximum in the genus *Ciocalypta* amongst the Axinellidæ. Here, it will be remembered, the thin dermal membrane is supported at some distance from the choanosome on slender pillars of spiculo-fibre, and the numerous pores lead into one large, continuous subdermal space, interrupted only by these supporting pillars.¹ In certain other Axinellidæ, *e.g.*, *Phakellia*, the subdermal cavities are also largely, but not nearly so largely developed, but this not does appear to be a constant family character.

In most of the Halichondrina, however, the subdermal cavities are rather vague and ill-defined, and distinguishable from the remainder of the lacunar canal system more by their position than by any peculiarities in structure; they show no great regularity either

¹ Bowerbank gives a good figure of this arrangement in Mon. Brit. Spong., vol. i., pl. xxx. fig. 360.