

The median pore, of small size, is circular and papilliform, and surmounted by a chitinous ring as in *Tubucellaria*.

On a transverse section, or rather fracture, of one of the branches the cavities of four zoecia are exposed, varying of course in size according to the point at which the zoecium has been broken across. As well as can be seen in such a rude mode of preparation, each zoecial cavity appears to be divided into an anterior or superficial and a posterior or deeper chamber by a very delicate membranous septum. It would further seem that the posterior and somewhat larger of these chambers is the habitation of the polypide, and that into which the mouth opens, whilst the median pore appears to communicate with the anterior chamber through a very narrow passage. At any rate the dried remains of the polypide, with its vagino-parietal muscles, may be indistinctly discerned in the former; and in the latter, a brownish mass of uncertain nature.

On the dorsal aspect the surface is marked with the same delicate vibices as in front. Close behind the tubular portion of the lateral zoecia is a large circular opening with a tumid border, and in one or two instances appearing to present a crescentic valvular fold, which may probably represent a modified avicularium; but this is very uncertain.

Towards the lower end of the zoarium, on the dorsal aspect, radical tubes may be seen, entering the backs of the zoecia at uncertain points (fig. 2*b*). Though a very aberrant form, I do not see where this curious production can be more properly placed than near *Tubucellaria*, with which it appears to have closer affinities than with any other genus. The name is intended to indicate this connection.

Family XVI. ONCHOPORIDÆ.

Character.—Zoarium flexible, continuous, branched or lobate, ligulate or foliaceous, then unilaminar; zoecia urceolate, ventricose. Orifice semicircular, with a straight entire lower lip. On the front, close below the orifice, a lunate fringed pore, and on each side an oblong or circular, perforated disc, with a raised border.

The above characters appear to me to be sufficient to separate the few species included in this small group from the numerous other forms possessing a very similar lunate pore, even when combined with a similarly shaped orifice, as in the genus *Microporella*. But considering, as Mr. Hincks truly remarks, that we do not know the physiological import of the lunate pore, and that the form of the mouth is common to a vast number of species, I am not at present inclined to agree with him in regarding these two characters, even in combination, as alone sufficient to justify the association of such otherwise very dissimilar forms as *Onchopora sinclairii* and *Onchoporella (Carbasea) bombycina*, Busk, &c., with the lepralian *Microporellidæ*.

The resemblance, however, between the zoecial characters in *Onchopora bombycina*