tubes and fibres in this case differ from those of the deep water *Bicellariæ* and other abyssal forms, in the circumstance that they have a tendency to coalesce and form flattened bands as above stated, in something the same way as in *Kinetoskias*. And it should also be remarked that in the present case the ultimate fibrils are not individually affixed to separate particles, but rather by their interlacement form a soft spongy or felted mass, the interstices of which are filled and, as it were, weighted by the foreign substances contained in the meshes, or even, as sometimes may be seen, received into actual pouches formed by the flattened membranous bands.

The case affords a striking instance of the active organizing force inherent in the apparently amorphous chitinous substance of the radical tubes, which must be supposed, even down to the finest, to be lined by an active living tissue of some kind,—each segment in fact of every fibre being an actively living zooid as truly as are the zoœcia themselves.

§ 2. *compressæ*.

2. *Melicerita*, Milne-Edwards.

Melicerita, Milne-Edw., Ann. d. Sci. Nat., vol. vi. p. 26;
d'Orb. Reuss, Stoliczka, Busk, &c.
Melicertina, Ehrenb.
Ulidium, Searles Wood.
(?) *Latereschara*, d'Orb.
Cellaria (sp.); Waters.

Character.—Zoarium compressed, bilaminar, rigid, lobate, ligulate, or foliaceous; articulated or continuous. Zoœcia usually disposed in transverse rows.[1] Surface areolated. Area rhomboid or hexagonal. Orifice subcentral, semicircular, or oblong; border entire, with two articular teeth below and sometimes also above. Operculum corresponding in form to the orifice, supported by a chitinous ring, incomplete above.

In the conformation of the zoœcia and general structure of the zoarium there is no essential difference between *Melicerita* and *Salicornaria*, the two, as I have remarked in the "Crag Polyzoa" (p. 70), very closely corresponding. The main distinction between the two forms consists solely, as it would seem, in the compressed habit of the one and the cylindrical form of the other. The transverse arrangement of the cells and the absence of segmentation, if this be real, are perhaps characters insufficient of themselves to entitle *Melicerita* to the place of a distinct genus in the Family Salicornariadæ.[2]

[1] The disposition of the cells in transverse series is the main character upon which the genus was founded by M. Milne-Edwards, but it is not one that can be regarded as of primary importance, since the same disposition occasionally obtains in several species of *Salicornaria*, and notably in *Salicornaria malvinensis*, in some part or other of the zoarium.

[2] In a valuable paper on the Fossil Chilostomatous Bryozoa from South-West Victoria, Australia, published in the *Quarterly Journal of the Geological Society*, vol. xxxviii. p. 322, 1881, Mr. A. W. Waters observed that *Melicerita angustiloba*,