Character.—Zoarium much and irregularly branched in various directions. Branches subcompressed, varying in breadth from 0"·15 to ·25. Zoœcia at the growing extremity ventricose and subtubular towards the orifice; in all other parts completely immersed, so that no outlines are discernible, the thickened annular orifices alone projecting from a level surface, which is closely and uniformly pitted. Orifice suborbicular, peristome very thick, annular, entire, and on it are placed from five to eight small circular avicularia on as many tubercular elevations. An elongate sublateral pore or fissure some distance below the orifice. Oœcia—?

Habitat.—Station 190, lat. 8° 56′ S., long. 136° 5′ E., 49 fathoms, green mud. Station 162, off East Moncœur Island, 38 fathoms, sand and shells.

[Bass Strait, Voy. of Rattles.; tertiary fossil, Reuss; Miocene? Tenison Woods.]

Although Dr. Reuss describes a central pore of large size, it is not represented in his figure of *Acropora coronata*. But there can, I think, be little doubt that the present species is identical with the tertiary form, as well as with that described by the Rev. Tenison Woods from the Mount Gambier deposits, under the name of *Eschara buskii*.

If the peculiar characters of this form be regarded as of generic value, which I think they might be, Reuss' appellation *Acropora* would be very appropriate.

§ β. Crustaceous, unilaminar.

2. Lepralia, Johnston.

Lepralia, Hincks, Smitt.
,, (pars), Brit. Mus. Cat., Auctt.
Eschara (pars), Auctt.
Hemeschara (pars), Busk, &c.

Character.—Zoarium unilaminar, erect or crustaceous, and loosely or wholly unattached; or adnate with the zoœcia, incomplete behind.

- (a) Unilaminar, erect or crustaceous, free or loosely attached (hemescharan).
- (1) Lepralia celleporoides, n. sp. (Pl. XVII. fig. 4).

Character.—Zoarium unattached, sometimes one layer overgrowing another. Zoœcia completely immersed, convex in front, separated by wide and deep sulci, at the bottom of which are large pores or cancelli. Zoœcia broadly oval, surface entire, finely granular, except a very large central subreniform or orbicular pore, which in the natural state is closed by a delicate membrane, and has a slightly raised border. Orifice coarctate, rostriform. In the older cells a tubercular elevation immediately below the mouth. An immersed avicularium is placed in the sulcus between each pair of cells, on a level with the orifice, with a duck-bill shaped mandible, directed usually vertically upwards, but occasionally in other directions.

Habitat.—Station 186, lat. 10° 30′ S., long. 142° 18′ E., 8 fathoms, coral mud.