

shortly peduncled hydrothecæ. Hydrothecæ borne both by the perisiphonic stem and the monosiphonic ramuli, deep and narrow, with the axis slightly curved away from the supporting ramulus or stem; margin scarcely everted, peduncle formed of two short annular segments.

*Gonosome* not present.

*Locality*.—Off Somerset, Cape York, Torres Strait; depth, 8 to 12 fathoms.

The deep narrow hydrothecæ of the present species resemble in form those of a *Lafoëa*, from which, however, they differ in the presence of the limiting diaphragm or floor at the basal end. The ramuli which carry the hydrothecæ in two alternate series are here and there divided into internodes by transverse joints. These occur chiefly towards the distal extremity of the ramulus, where two hydrothecæ usually intervene between two joints. The ramuli are very regularly disposed, forming a series of equidistant alternate pinnæ on each side of the fascicled stem. Those of one side, however, are not placed exactly opposite to the middle points between the pinnæ of the opposite side.

I have little hesitation in regarding the present Hydroid, notwithstanding its more robust habit and somewhat more irregular ramification, as specifically identical with *Lafoëa hatecioides* of the "Porcupine" collection, a species which, in accordance with the limitation of *Lafoëa* here insisted on, must be removed from that genus and placed in the genus *Lictorella*, keeping in mind, however, that so long as the gonosome is unknown, no generic allocation can be regarded as otherwise than provisional. The removal from *Lafoëa* is justified by the fact of the hydrothecæ being provided with a definite floor instead of having their cavity, as in the true *Lafoëa*, directly continuous with that of the hydrothecæ.

The specific identification of the Challenger Hydroid with that of the "Porcupine" is not without significance, when we bear in mind the widely separated localities and very different conditions under which the two were found. The specimens brought home by the "Porcupine" were dredged from the cold area which lies between Shetland and the Færøe Islands, and from depths of 640 and 345 fathoms; while those of the Challenger were dredged off Cape York, Torres Strait, from a depth of about 8 fathoms.

*Lictorella cyathifera*, n. sp. (Pl. XI. figs. 3, 3a).

*Trophosome*.—Hydrocaulus pinnately branched; stem and principal branches perisiphonic, becoming monosiphonic towards their extremities, and sending off very regular, pinnately disposed, alternate monosiphonic ramuli, which are destitute of distinct joints, and carry the pinnately disposed alternate hydrothecæ. Hydrothecæ deeply cyathiform, with an entire and very slightly everted rim, and supported on a very short unjointed peduncle which springs from a short fixed process of the hydrocaulus.

*Gonosome* not known.