striated. In many of the zoœcia, at some distance from the growing edge, but in which the polypide is still quite vigorous, a narrow linear band may be seen on either side within the perigastric cavity, and anterior to the polypide. These bands are formed by a flexuose tube, cæcal at both ends, and having thick walls lined with an hexagonal epithelium. These organs may be probably either ovarian or testicular, but I have failed to perceive anything within them beyond the epithelium. Whatever their nature may really be, they are perhaps homologous with the peculiar horse-shoe-shaped organ in Carbasea moscleyi. They are certainly not parasitic vermicules, although, curiously enough, the latter do sometimes occur in the interior of a zoœcium in this species.

(7) Carbasea cribriformis, Busk (Pl. XXXIV. fig. 8).

Carbasea cribriformis, Bk., Brit. Mus. Cat., vol. i. p. 51, pl. lxviii. fig. 1; Haswell, Proc. Linn. Soc. N. S. Wales, p. 37.

Retepora cornea, Bk., Voy. of Rattles., vol. i. p. 380.

Character.—Zoarium composed of circular fenestrated fronds, superimposed one upon the other, and growing spirally from a common centre, one from the other. Zoœcia oval, open in front but with a narrow thickened band all round, within the border; behind they are convex, and faintly wrinkled or striated transversely with faint longitudinal cicatriciform marks extending the length of the zoœcium. Oœcia globose, completely immersed in the superjacent zoœcium. A wide, thin-walled, flexible, radical tube, springs from an aborted zoœcium at the lower angle of each fenestra.

Habitat.—Station 186, Cape York, 8 fathoms, coral mud. Station 188, lat. 9° 59′ S., long. 139° 42′ E., 28 fathoms, green mud. Station 190, lat. 8° 56′ S., long. 136° 5′ E., 45 fathoms, green mud.

[Off Cumberland Island, Voy. of Rattles.]

The peculiar fenestrate zoarium of this very curious form is at once sufficient for its distinction; the mere external aspect, except as regards the horny consistence, is exactly that of a Retepore. Whether it should be included among the Flustridæ or should not rather be regarded as a quasi-erect Membraniporidan is extremely doubtful. The zoæcia have a membraniporidan character. The way in which the superimposed fronds or lobes spring in a sort of spiral manner from the centre, sometimes to the number of six or more, is very remarkable; but besides this central or initial attachment, the fronds are also loosely interconnected by the wide radical tubes springing from the lower angle of each fenestra. A condition which is also more or less membraniporidan.

Mr. Haswell (loc. cit.) well describes the very peculiar mode of growth in this species.