Turritigera stellata, n. sp. (Pl. XXIV. fig. 1).

Character.—Zoarium composed of four or five short furcate branches, springing from a common peduncular centre, and forming a stelliform growth. A few scattered anterior avicularia (with a duck-bill shaped mandible pointing downwards). Dorsal surface finely rugose, studded with numerous minute papilliform eminences, supporting small avicularia.

Habitat.—Station 320, lat. 37° 17′ S., long. 53° 52′ W., 600 fathoms, green sand. Station 142, lat. 35° 4′ S., long. 18° 37′ E., 150 fathoms, green sand.

This very remarkable form appears to be more nearly allied to *Retepora* than to any other generic group, but the very curious conformation of the oral portion and aperture, and its other peculiarities, seem to justify its being considered as generically distinct.

The inflated, ventricose, or flask-shaped zocecia, rise into a long and usually free tubular process, around whose opening spring several cylindrical columnar processes (fig. 1b), each supporting on its summit a small avicularium. But besides the columnar processes, there is always a larger one on the posterior side; of a conical form, and having its avicularium below the summit. The number of these avicularian processes increases with the age of the zocecium. The first to make its appearance is the hinder conical one, then appears one on each side of a cylindrical form, then a third or fourth in front. The armature of the peristome, therefore, and especially the posterior conical process, is very similar to that of many Cellepores; and in the same connection it may be remarked that here and there may be noticed an adventitious zocecium of smaller size, but otherwise of the same conformation as the others springing from the front of one of the older zocecia.

Although, generally speaking, the zoarium shows the oral orifices only on one face, occasionally an opening may be seen on the dorsal aspect. In one instance of this kind the elongated stem of a young Comatula, or Crinoid of some kind, may be seen issuing from the orifice (fig. 1d).

Family XVIII. CRIBRILINIDÆ, Hincks.

Cribrilinidæ, Hincks, Brit. Mar., Polyz., vol. i. p. 182. Escharidæ (pars), Johnst., &c. Membraniporidæ (pars), Busk. Eschariporidæ (pars), Smitt. Escharellidæ, &c., d'Orb.

Character.—Zoarium crustaceous, or adnate (lepralian), or erect and unilaminar (hemescharan). Zoœcia, front with transverse or radiating fissures or rows of punctures without fissures. Mouth simple, suborbicular, sometimes mucronate or semicircular; with or without a median suboral pore.