

(1) *Tubucellaria opuntioides*, Pallas (Pl. XXIV. fig. 7, and Pl. XXXVI. fig. 19, pars).*Cellularia opuntioides*, Pallas, Elench., p. 61, 1766.*Sertularia opuntioides*, Gmelin, 1789.*Cellaria cereoides* (pars), Lamx., Lamk.*Tubucellaria opuntioides* (pars), d'Orb.

*Character*.—Zoarium 1 to 2 inches high, forming tufted growths (*fruticuli inconditi*, Pallas); ramification irregular, sometimes ternate, rarely opposite; segments short or rather thick. Zoecia distinct, pyriform, tapering above gradually into the tubular peristome, which curves gently forwards, slightly dilated towards the circular orifice, and grooved longitudinally, each groove containing a series of angular punctures; the intervening ridges finely beaded. Surface (calcined) reticulato-scribulate, the bottom of the pits being formed by a delicate centrally perforated calcareous diaphragm; interstitial ridges finely beaded. Operculum (Pl. XXXVI. fig. 19) in the form of a rounded oblong dish-cover, with the convexity outwards and a thickened border or rim. The opening measuring from 0"·006 to ·008 × 0"·003 to ·004.

*Habitat*.—St. Paul's Rocks, North Atlantic; shallow water.

[John Adam's Bank, Voy. of H.M.S. "Herald."]

This well marked form agrees so perfectly with Pallas' admirably graphic description that I have no doubt of its being the species he intended, notwithstanding the difference of locality. Nor can there be any doubt of its distinction from the Mediterranean or may be also North Atlantic form described by Dr. Solander; nor again from a form which I have provisionally regarded as most probably that intended by d'Orbigny under the name "*fusiformis*," of which, if I am right, a fine specimen exists in the British Museum (No. 82, 2, 23, 410), from Thursday Island, Torres Strait, but of which I possess only one or two imperfect fragments from Australia or South Africa, but which suffice to show that the operculum is identical, or nearly so, with that of *Tubucellaria opuntioides*, from which facts we may consider the two to be closely related though differing widely in habit. The operculum also in *Tubucellaria cereoides*, it should be remarked, though of the same peculiar dish-cover-like conformation, is quite distinct.

(2) *Tubucellaria hirsuta*, Lamouroux (Pl. XXXVI. fig. 18).*Cellaria hirsuta*, Lamx., Hist. des Polyp., p. 126, pl. ii. fig. 4, 1816.*Cellaria barbata*, Lamk.*Cellaria* and *Tubucellaria barbata*, d'Orb.*Onchopora hirsuta*, Busk.*Tubucellaria hirsuta*, Macgillivray, Decade v. p. 52, pl. xlix. fig. 6.

*Character*.—Zoarium 2 to 3 inches high, composed of tolerably uniform, short, thickish internodes articulated dichotomously. Zoecia distinct, convex, slender, pyriform, much attenuated downwards, and above gradually tapering into the slender tubular