the rays filled with a colourless transparent matter, which seems to harden into horn. The grey matter swells in the centre, where the rays meet, and rises perpendicularly upwards surrounded by the transparent horny matter, so as to form the trunk of the future zoophyte. The rays first formed are obviously the fleshy central substance of the roots, and the portion of that substance which grows perpendicularly upwards, forms the fleshy central part of the stem. As early as I could observe the stem, it was open at the top; and, when it bifurcated to form two branches, both were open at their extremities, but the fleshy central matter had nowhere developed itself as yet into the form of a polypus. Polypi, therefore, are not the first formed parts of this zoophyte, but are organs which appear long after the formation of the root and stem, as the leaves and flowers of a plant." *Professor Grant*.

2. P. CRISTATA, shoots simple, plumous, the pinnæ alternate; cells in a close row, cup-shaped with a toothed margin and a short lateral spine; vesicles gibbous, girt with crested ribs. Ellis.

PLATE XIX. Fig. 1-3, and PLATE XX. Fig. 1.

The Podded Coralline, Ellis, Corall. 13, no. 12, pl. 7. fig. b. B.—Sertularia pluma, Lin. Syst. 1309. Pall. Elench. 149. Ellis and Soland. Zooph. 43. Berk. Syn. i. 217. Turt. Gmel. iv. 679. Turt. Brit. Faun. 214. Stew. Elem. ii. 443. Bosc, Vers, iii. 111, pl. 29, fig. 1, pessima. Lister in Phil. Trans. an. 1834, 369, pl. 8, fig. 2.—Aglaophenia pluma, Lamour. Cor. Flex. 170. Corall. 75.—Plumularia cristata, Lam. Anim. s. vert. ii. 125. 2de edit. ii. 161. Stark, Elem. ii. 440. Templeton in Mag. Nat. Hist. ix. 467. Risso, L'Europ. mérid. v. 313.—Pl. pluma, Flem. Brit. Anim. 546.—La Plumulaire plume, Blainv. Actinol. 477.—Sertolaria pluma, Cavol. Pol. mar. 210, tav. 8, fig. 5—7.

Hab. On Fuci, particularly Fucus siliquosus, and sometimes "on muscles and other shells." Common on the southern coasts of England. Picked up on the shore at Stevenston, Ayrshire, Rev. D. Landsborough. On the coast of Ireland near Dublin, Ellis. On the shore of Belfast Lough, &c. Mr Templeton.

Attached to sea-weeds by a flexuous horny anastomosing tubular fibre, which throws up, at intervals, plumous shoots from one to one and a half inch high: these are very elegant and erect when in the sea, but when dry become curved in a falcate manner with all their pinules, which are also frequently laid to one side. "Siccatione surculi sursum seu contrario modo quam fuerant, recurvantur, pinnulæque curvatæ ad invicem accedunt." Pallas. The polypidom is of a honey-yellow colour with a dark brown rachis, which is smooth, and divided by numerous oblique septa or joints, there being one be-