The roots are matted together with numerous entangled fibres. Stalks 6 inches in height or more, the largest as thick as a crow-quill, yellowish-brown, straight or slightly curved, swollen at intervals on the back, and simple or once divided: they are each of them composed of a number of tubes bound together, as is easily seen on a transverse section, and the oblong dorsal knobs seem to be produced by a less close adhesion of the tubes at these places, " marking probably the stages of growth." The branches or pinnæ spring from both sides beginning about the middle of the stalk, the lower part being naked, but they incline so much one way as to appear unilateral. The wide cylindrical cells are divided from each other by a joint, and are seated in the axil of a curved spinous process which projects far enough to form a short tooth at the under side of the aperture. When dry the stalk is twisted and more distinctly perceived to be composed of a bundle of tubes, and consequently furrowed. In each of the furrows there is a row of small holes with a raised brim as if punctures had been made by an instrument pushed from within. The holes are close-set, and regular in their size, form, and in the distances between them.

8. P. FRUTESCENS, stem branched, the branches pinnate; pinnæ alternate, bifid; cells infundibuliform, leaning, rather distant, the mouth plain. Ellis.

PLATE XX. Fig. 2, 3.

Sertularia Gorgonia, Pall. Elench. 158.—S. frutescens, Ellis and Soland. Zooph. 55. pl. 6, fig. a, A. and pl. 9. fig 1, 2, encrusted with a Gorgonia. Turt. Gmel. iv. 680. Turt. Brit. Faun. 214. Stew. Elem. ii. 445. Bosc, Vers, iii. 113. Hogg's Stock. 33.—Aglaophenia frutescens, Lamour. Cor. Flex. 173. Corall. 76.—Plumularia frutescens, Flem. Brit. Anim. 547. Lam. Anim. s. Vert. 2de edit. ii. 166.—La P. frutescente, Blainv. Actinolog. 477.

Hab. Found at Scarborough in Yorkshire, Ellis,—whence I have specimens from Mr Bean, who states that it inhabits deep water, where it grows attached to stones and shells by a fibrous base, and is very rare. Hartlepool, Durham, J. Hogg, Esq.

Polypidom between four and five inches in height, firm and woody, black or dusky-brown, varnished, irregularly branched. Stem and branches tapered, composed of many parallel twisted capillary tubes, the branches erecto-patent, spreading laterally, pinnate; pinnæ rather close, alternate, two or three from each space between the joints, and each divided into two branches. Cells rather distant, adnate, cylindrical widening outwards, smooth, with an entire slightly everted margin: there is a small cell in the axils of the pinnæ, and a den-