

by Mr J. E. Gray,\* that they are fixed in their first stage of existence, but become detached by age. Dr Fleming, to his description of the species, adds, "From its shape, it appears probable, that it grows with its base fixed in the sandy bottom of the sea, as Pallas formerly conjectured."

### 18. CARYOPHYLLIA, † Lamarck.

CHARACTER. *Animal like the Actinia : Polypidom permanently fixed, simple, cylindrical or conoid, striated externally in a longitudinal direction, the top hollowed into a lamellated stellular cup.*

1. C. SMITHII, *polypidom cylindrical ; lamellæ entire, arched, faintly crenate, from 3 to 5 smaller ones between the larger ; centre tubercular.* Rev. Dr Fleming.

VIGNETTE, No. 30, page 206.

*Caryophyllia cyathus*, Fleming in Wern. Mem. ii. 249 ; and in Edin. New Phil. Journ. viii. 70. *Broderip* in Ibid. viii. 312. *Flem. Brit. Anim.* 508.

—C. Smithii, Stokes and Broderip in Zool. Journ. iii. 486, pl. 13, fig. 1-6. and in Bull. des Sc. Nat. xvii. 157. *Buckland*, Bridgew. Treat. ii. 90, pl. 54 fig. 9-11. *Harvey* in Proc. Zool. Soc. 1834, part ii. 28 : and in Mag. Nat. Hist. New Series, i. 474, fig. 55.

*Hab.* "From deep water off Foulah, in Zetland," Fleming. Southern coast of Devonshire, *Thomas Smith, Esq.* Cornwall, *Mr Couth.*

The Polypidom is firmly attached to the rock so as apparently to make a part of it : it is cylindrical, whitish stained with brown, striated or finely grooved on the exterior, internally cupped and lamellar. The lamellæ are of three kinds, a larger and more prominent, between every pair of which there are generally three, but sometimes five lesser ones, of which the central one differs from the others in being divided into two portions, the innermost half projecting beyond the others towards the centre and forming an inner series. ‡ All

\* Syn. of Brit. Museum, p. 70. See also in relation to this point Mr Stutchbury's observations on the growth of young Corals of the genus *Fungia*, in Lin. Trans. xvi. p. 493.

† From *καρυον*, a nut, and *φυλλον*, a leaf.—The name has been so generally received that it might be difficult to substitute another for the genus, and yet it is very objectionable. There is a *Caryophyllæus* among the intestinal worms ; and the *Caryophylleæ* are familiar to all botanists.—The following generic character of *Caryophyllia* is given by Mr Stokes : "Polyparium simplex, basi affixum. Corona laminis duplici serie dispositis, exterioribus majoribus, regulariter inæqualibus, maximis inter seriei internæ laminas interpositis. Discus lamellis erectis, prominulis foliatis."

‡ Dr Fleming describes the plates thus : "The lamellæ are disposed in fours,