

ZOOPHYTA BRITANNICA.

ORDER II.

Z. ASTEROIDA.

CHARACTER.

Polypes compound, the mouth encircled with 8 pectinate tentacula; stomach membranous with dependant vasculiform appendages; intestine 0; anus 0; reproductive gemmules produced interiorly.——Polype-mass variable in form, free or permanently attached, carnosæ, generally strengthened with a horny or calcareous axis enveloped with the gelatinous or creto-gelatinous crust in which the polype-cells are immersed, and which open on the surface in a starred fashion with 8 rays.

OBSERVATIONS.

On a cursory view the Polypidoms of the three families embraced in this order appear very dissimilar, and accordingly, by many recent authors, they have been scattered over the class, and placed widely asunder. The affinity between them, however, is generally acknowledged, and had been distinctly perceived by some of the earliest zoophytologists. Thus Bohadsch found so much in common between the typical Pennatulæ and a species of Alcyonium, that he has not hesitated to describe them as members of the same genus; and although the more systematic character of Pallas prevented him falling into this error,—if error it can indeed be called,—he did not the less recognize the relationship between the genera or families.* Pal-

* “ Pennatulæ Alcyoniis specierum gradatione ita propinquæ sunt et tamen simul structura, habitu, vitæque sensitivæ gradu discrepant, ut exemplum majoris simul affinitatis et discordantiæ inter duo genera in rerum natura vix dari existimem. Certo respectu Pennatulæ ad Alcyonia sunt, quod Hydræ ad Sertularias.” Elench. p. 362.—In' relation to this paragraph consult also p. 370, 343, 162, 191:—and Misc. Zool. p. 177.