the lamellæ are arched, entire, striated on the sides, whence the margin appears somewhat crenulate: they terminate about half across leaving a plain centre which is rough or tubercled. In one specimen before me the primary lamellæ are 14 in number; in another they are 20; but Dr Fleming gives about 40 as the number in his Zetland Height from two-tenths to half an inch; diameter threespecimen. tenths to one inch.

My friend Dr Coldstream has furnished me with the following account of the animal of this interesting zoophyte, which he watched for several successive weeks during his residence at Torquay. "When the soft parts," he writes, " are fully expanded, the appearance of the whole animal resembles very closely that of an Actinia. When shrunk they are almost entirely hid amongst the radiating plates. The specimens I have seen have varied in size from threetenths to one inch in diameter, and from two-tenths to half an inch in height. They are found pendant from large boulders of sandstone just at low water-mark; sometimes they are dredged from the middle of the bay. Their colour varies considerably; I have seen the soft parts white, yellowish, orange-brown, reddish, and of a fine apple green. The tentacula are usually paler. During expansion, the soft parts rise above the level of the calcareous disc to about twice its height. The tentacula are pushed forth very slowly, but sometimes are as long as the whole height of the body. They are terminated by a rounded head. \* The mouth has the appearance of an elongated slit in the centre of the disc: it is prominent, and the lips are marked with transverse striæ of a white colour. When a solid body is brought into contact gently with the tentacles they adhere pretty strongly to it, just as the Actiniæ do; but when they are rudely touched, they contract very quickly, and if the irritation

and may be distinguished into three different kinds. The first are the highest and the broadest at the margin, but as they descend into the disc they become narrower before they join the central plate. The second kind are narrower than the preceding at the margin, but towards the middle they suddenly enlarge and join the middle plate. The third kind are the smallest and terminate before reaching the middle plate. The space included between a pair of the first kind of plates, contains one of the second kind in the middle, with one of the third kind in each of the lateral spaces. Those on the sides are rough, with small scattered tubercles, and their margins are curled. This last circumstance occasions the roughness externally, where the longitudinal striæ are the remains of the gills. The plate which occupies the bottom of the cavity is smooth, variously twisted, and connected with the base of the lateral plates."

" "They are nearly transparent except at the termination, which is a little

ball, white and opake." De la Beche.