

bending in towards them for the purpose at points somewhat further outwards; the quinary unite with the quaternary at a point still further distant, a condition thus exists which is like that in *Deltocyathus* and some *Stephanophyllias*. The disposition of the septa is remarkably uniform in all the systems; the columella is composed of contorted finely fascicular matter, it is large and low, flat surfaced, and oval in superficial outline.

A mutilated specimen of what is apparently the young of the same species was obtained on another occasion with the soft parts attached. The disc at the margin of the calicle between the exsert septa was of a dark madder colour, and the same colour was extended on the membrane, stretching thence over the base to the region where the costal spines commence. Beyond this region the outer wall of the corallum was bare and not invested by living tissue. The remainder of the disc was of a pale bluish tint with a zone of intensely dark madder colour round the mouth. The young corallum is thinner in texture, and flatter, and with the septa little exsert.

Extreme diameters of the calicles 47.5 mm. and 30 mm. respectively. Extreme breadth between the exsert tips of the septa, 57.5 mm. and 36 mm. Vertical height of the larger specimen to the margin of the calicle, 47.5 mm.; to the summits of the highest septa, 21.5 mm.

One large perfect specimen dredged at Station 120, off Pernambuco, Brazil. 675 fathoms.

Mutilated young specimen. Station 78, off the Azores. 1009 fathoms.

*Stephanotrochus discoides*, Moseley (Pl. III., fig. 2, 2a, 2b, 2c).

*Ceratotrochus discoides*, Moseley, Proc. Roy. Soc., 1876, p. 554.

The corallam is white and is saucer-shaped, but much flatter than in *Stephanotrochus diadema*; there is a short pedicle and small scar of attachment. The primary and secondary costæ only are prominent, and bear each four or five short spines; the primary and secondary septa only are exsert, and these do not rise high above the margin of the calicle. There are six systems, and only four cycles. The septa of the fourth cycle being only partially developed in many of the systems, only two instead of four quaternaries being present in most of the systems, and these being those lying between the primary and tertiary septa. These quaternary septa are bent towards the tertiaries to fuse with them. The free borders of the septa are nearly straight, showing only an extremely slight indentation indicative of the paliform lobe seen in *Stephanotrochus diadema*. All the septa except the quaternaries run straight towards the centre of the calicle. Their inner ends are thickened and dilated, and, fusing together with the addition of some diffuse cementing calcareous matter, form a sort of columella, the surface of which is excavated in the very centre of the calicle by a well marked pit.

From the denseness of its calcareous tissue and its general appearance, this Coral