

are very conspicuous and prominent, those of the third cycle being as usual the largest and projecting to a height of 4 mm. above the level of the summit of the columella, whilst those of the primary cycle are not elevated more than 1.5 mm. above that point. The tertiary pali are broad, the secondary and primary much narrower. The superior margins of all the pali are rounded. In some specimens all the pali are slightly indented on their inner edges. The pali of the secondary septa are placed at a slightly further distance outwards from the centre of the columella than those of the primary. The pali thus form three rings or crowns. Wherever a pair of septa of the partial fifth cycle are developed, the quaternary septa intervening between them are greatly enlarged, and occasionally fused with the adjoining tertiary septa. They are also provided with pali somewhat smaller than those of the tertiary cycle, and placed at a slightly further distance from the axis of the coral. The whole of the septa and pali are formed of thin but strong laminæ slightly thickened at the line of origin from the calicle, and terminating superiorly in sharp knife-edged margins. The surfaces of the septa and pali are covered with very small granular projections, which on the primary and secondary septa are seen to be arranged with considerable regularity in rows, radiating from a point a little inferior to the point of junction of the septa with the margin of the calicle towards the margin of the septa, and marking out also a series of successive lines which follow the course of the margins of the septa, and are the lines of growth of the septa. Similar lines of growth are to be observed on the pali. The columella is about 4 mm. in breadth, and is composed of a number of contorted papillæ covered with a fine granulation, and more or less fused into a single tubercular mass in old specimens.

Diameter of calicle of smallest specimen 15 mm. Height, exclusive of conical tubercle on base, 8 mm. Diameter of calicle in largest specimen 27 mm. Extreme diameter of the same measured from the outer edges of the summits of the exsert septa 32 mm. Height of calicle 16 mm.; measured to the top of the septa 20 mm. Diameter of base of calicle 21 mm., of circlet of basal spines 28 mm.

*Stephanotrochus*, n. gen.

Corallum dense and compact in substance, cup-shaped or saucer-shaped, with trace of early attachment, usually with well developed costæ bearing a succession of small spines, with widely open capacious fossa. Septa usually extremely exsert, the exsert quaternaries, or quaternaries where these are not present, lying next to the primaries, higher than the tertiaries, or equal to them. Columella absent or little prominent.

I have formed this genus to contain four species of corals dredged by the Challenger which are evidently very closely allied, but for which it is nevertheless somewhat difficult to find generic characteristics in the terms of the ordinary designation of genera. I placed the four species provisionally in my Report on Corals in the genus *Ceratotrochus*.