appears to be adult, and though closely allied to the last species to be distinct from it specifically although it was obtained at the same time.

Diameter of the single specimen, 12 mm.

Station 120. Off Pernambuco, Brazil. 675 fathoms.

Stephanotrochus platypus, Moseley (Pl. III. figs. 4, 4*a*, 4*b*; 5, 5*a*).

Ceratotrochus platypus, Moseley, Proc. Roy. Soc., 1876, p. 554.

The only two specimens obtained are of a dull opaque white colour, and had evidently lain dead on the sea-bottom for a long time. The corallum is circular with a horizontal base, from which the low wall rises abruptly and almost vertically. In the larger of the two specimens there is no trace of a peduncle, but the remains of a spiral gasteropodous shell are to be seen embedded in the coral tissue. In the smaller specimen an indication of a peduncle is to be seen arising also from a spiral shell, which is in this instance not deeply embedded as in the other. In the larger specimen the base is almost flat, but somewhat irregular in surface; in the smaller it is hollowed out around the point of attachment; the costæ are simple slight rounded ridges continued from the centre of the base to the margin of the calicle, only the primary and secondary are well marked; there are no costal teeth or spines. There are six systems of septa and five cycles; the quinary septa are incomplete, and also many of the quaternary; no lateral fusion of septa occurs; the septa are all straight. The primary septa are continued to the very centre of the calicle and there meet in a point; the secondary are continued nearly as far, and there is no columella properly so called, merely a very small amount of hard tissue present, soldering the adjacent inner ends of the septa laterally. The primary and secondary septa are exsert to an extraordinary degree, rising far above the margin of the calicle, and terminating with nearly horizontal edges; the primary septa are considerably higher than the secondary. The tertiary and quaternary septa rise only just above the margin of the calicle, but the quinary septa next the primaries rise very high and are fused to them externally by continuations of the wall; the quinaries next the secondaries are also high and similarly fused to these latter but do not rise quite so high as those next the primaries. Curved rows of granules are present on the septal faces as in *Stephanotrochus diadema*, marking lines of growth. The free margins of the principal septa are much curved, in the smaller specimen bent nearly at a right angle. On these margins, in the case of some of the septa of the larger specimen, a slight indication of a paliform elevation is visible.

Extreme diameters of the calicles in the two specimens respectively, 46 mm. and 35 mm. Heights of the walls above the horizontal planes of the bases, 8 mm. and 6 mm. Height to the summits of the primary septa, 22 mm. and 19 mm.

Station 164. Off Sydney, New South Wales. 410 fathoms.