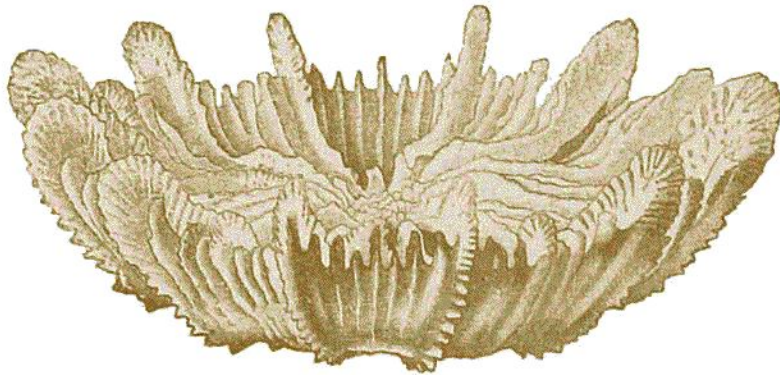


Stephanotrochus diadema, Moseley (Pl. III. fig. 1, *a-c*).

Ceratotrochus diadema, Moseley, Proc. Roy. Soc., 1876, p. 553.

The corallum is white and saucer-shaped. The central region of the base is flattened and nearly horizontal, the lateral portion of the wall rises with some abruptness from this horizontal region at an angle of about 55° with the vertical. A very short rudimentary pedicle is seen in the centre of the base and terminates in a small scar of adherence.



Stephanotrochus diadema. (Once and a half the natural size.)

From the base of the pedicle radiate out well-marked costal ridges corresponding to the primary and secondary septa. These ridges are sharp and serrate, the dentations being inclined towards the margin of the calix. The primary costa are more prominent than the secondary, and take origin nearer the peduncle. Tertiary costæ are present as only slightly elevated narrow untoothed ridges, most marked near the margin of the calyx; the quaternary costa are very faintly marked. There are six systems of septa and five cycles. The whole of the septa are exsert, the primary and secondary extremely so, projecting nearly a centimeter above the margin of the calicle; the quinary septa next to the primary and secondary are higher than the quaternary and equal in height to the tertiary, in some instances even higher than these latter; they are joined for nearly their entire height to the primary and secondary septa by prolongations of the wall. The quinary septa next to the tertiaries are lower than the quaternaries. The primary, secondary, and tertiary septa are remarkably stout and straight, and rise above the level of the remaining septa within the calicle. The septa are irregularly denticulate on their edges, and covered with granules arranged in curved lines of growth; the upper terminations of the exsert septa are rounded. The free borders of the primary, secondary, and tertiary septa in their curved sweep towards the columella each present a shallow notch, corresponding in position to the region where the somewhat abrupt change from horizontal to inclined contour in the base of the corallum occurs. Beyond this notch the border of each septum rises again slightly, an indistinct indication of a paliform lobe being thus formed; the primary septa are entirely free from adhesion with others, and are thereby conspicuous; the tertiary septa are fused to the secondary close to the columella; the quaternary unite with the tertiary