

The shell is singularly unlike that of any other known living echinoderm. It is about two inches in length, almost cylindrical, ending posteriorly in a blunt rostrum, and the anterior extremity is truncated. The surface of the shell is covered with short spatulate spines, and near the anterior end there is a kind of fringe of long thin cylindrical spines, especially congregated on the upper surface. The mouth is at the bottom of a deep anterior and inferior groove, and the excretory opening is at the bottom of a pit on the dorsal surface, above the terminal rostrum. The arrangement of the ambulacra is most peculiar. The four ovarial openings and the madreporic tubercle are on the dorsal surface, just above the truncated anterior end at the base of which the mouth lies, and the three ambulacral vessels of the 'trivium' take a short course from the oral vascular ring, one along the centre of the anterior face, and the other two round its edges to meet in a ring surrounding the ovarial openings. The two vessels of the 'bivium' have a very singular course. They run back into the great posterior prolongation of the shell, on the sides of which they form long loops, sending conical water-feet through single pores in long double lines of somewhat irregularly-formed ambulacral plates, which finally converge in a point a considerable distance behind the point of convergence of the three ambulacra of the bivium. Between these two points of convergence, which are both on the middle line of the back, several plates are intercalated. We have thus the three anterior ambulacra ending in their ocular plates, meeting at one point, where there are likewise four genital plates, and the madreporic