

eight pinnules which contain the short fusiform genital glands show this feature most distinctly. Somewhat the same character presents itself in the enlarged lower portions of the long pinnules of *Hyocrinus*. But in this case the plate-like sides of the pinnule-joints diverge considerably, so that the median groove is widened instead of narrowed as in *Bathycrinus*. It is therefore partially roofed in by side plates (Pl. Vc. figs. 9, 10), of which there is no trace in *Bathycrinus*. But the plate-like sides of the joints bound a narrow ventral furrow, just as in the arms, and the covering plates rest directly upon their edges (Pl. VII. figs. 7, 8; Pl. VIII. figs. 3, 5), as is the case in *Rhizocrinus* and in the outer parts of the pinnules of *Hyocrinus* (Pl. Vc. fig. 9; Pl. IX. fig. 4; Pl. X. fig. 20). They are continued down the sides of the arm-grooves on to the disk, and in *Bathycrinus aldrichianus*, which has no orals, they stand up all round the edge of the peristome, as is represented, though badly, in Pl. VII. fig. 3. These covering plates are scarcely so substantial as the corresponding plates in *Hyocrinus*, and are also narrower, though nearly as long.

The two lower brachials and part of the third assist in the protection of the visceral mass, the upper surface of which is more or less strongly convex (Pl. VII. fig. 3). There is a very large, funnel-shaped peristomial opening, at the bottom of which is the mouth, and the anus is on a low papilla in one of the five interradial areas. In *Bathycrinus carpenteri* these are supported, according to Danielssen and Koren, by large retiform calcareous plates a little sunk in the perisome, which are obviously persistent orals, though they seem to be entirely absent in the three other species of the genus. In his preliminary description¹ of *Bathycrinus aldrichianus* Sir Wyville Thomson said "the disk is membranous, with scattered calcareous granules. The mouth is subcentral; there are no regular oral plates; but there seems to be a determination of calcareous matter to five interradial points round the mouth, where it forms little irregular calcareous bosses." This description was accompanied by a woodcut which was definitely stated to represent the *Bathycrinus* from Station 106 (in Mid-Atlantic), and not one of the numerous specimens obtained at Stations 146 and 147 in the Southern Ocean. The whole set were at first regarded by Sir Wyville Thomson as belonging to one and the same species, to which he gave the name *Bathycrinus aldrichianus*; but he subsequently limited this name to the individuals from the Southern Ocean. They are figured on Pl. VII., which was lettered and printed off before his death. The disk of one of them is shown on Pl. VII. fig. 3, and obviously bears neither scattered calcareous granules nor interradial bosses round the mouth. This individual has not come into my hands; but the disk of another which I have examined is perfectly naked, except for the covering-plates at the sides of the ambulacra, and the peristome is like that shown in fig. 3. The specimen which was obtained at Station 106, and had been already figured in the Journal of the Linnean Society as *Bathycrinus aldrichianus*, was drawn by Mr. Black for Pl. VIII.; but on one

¹ *Journ. Linn. Soc. Lond. (Zool.)*, 1876, vol. xiii. pp. 50, 51; also in *The Atlantic*, 1877, vol. ii. pp. 92-95, fig. 23.