

of the copies of this plate which were sent to me I found the MS. name *Bathycrinus campbellianus* in Sir Wyville's handwriting. He had evidently therefore come to regard this individual as specifically distinct from those subsequently obtained in the Southern Ocean, to which he eventually limited the name *Bathycrinus aldrichianus*; and the disk of this individual (*Bathycrinus campbellianus*) corresponds in most respects with his description quoted above.

The whole of each interradial area is covered with closely set, calcareous plates, not scattered granules; but I cannot make out that they are more abundant in the immediate neighbourhood of the mouth than elsewhere. The covering plates of the ambulacra are smaller and less regular than in *Bathycrinus aldrichianus*, and their course can only be followed with difficulty. In the solitary young specimen of *Bathycrinus gracilis* (Pl. VIIIa. fig. 1) there are neither orals nor anambulacral plates, so that in these respects it resembles the southern *Bathycrinus aldrichianus* rather than the northern *Bathycrinus carpenteri*.

In order that I might be able to compare the anatomy of *Bathycrinus* with that of *Rhizocrinus*, two of the least perfect examples were cut into thin sections with a Leyser's microtome. Unfortunately, however, the circum-oral portions of the one used for the vertical sections were somewhat mutilated, and the remainder was found to be contracted, and, as it were, coagulated by the action of the spirit, so that not even its general anatomy could be made out, much less any histological detail. The arms, on the other hand, yielded more satisfactory results.

In correspondence with the different size of the basals, the chambered organ (Pl. VIIb. figs. 1, 2, *ch*) is more flattened than that of *Rhizocrinus*. It is continued below into the vascular axis of the stem, which is thrown into numerous folds as it passes through the closely packed discoidal joints at the top of the stem. As in *Rhizocrinus* there is only one central vessel (Pl. VIIa. fig. 2; Pl. VIIb. fig. 2—*v*), and not two or more as in some species of *Pentacrinus* and in the Comatulæ. The plexiform gland rising from the chambered organ expands considerably within the central funnel of the calyx (Pl. VIIb. figs. 1, 3–5, *x*), and soon becomes lobulate. It appears to be made up of numerous small cells, which can be traced downwards into the flattened epithelial lining of the vessels in its lower part, and in the chambers of the chambered organ. But it has nothing like the glandular appearance of the corresponding organ in *Antedon carinata*, the numerous lobules of which consist of distinct tubules lined by columnar cells, like those of the urinary tubules.

On its way up through the disk the plexiform gland becomes narrower again, probably on account of its giving off extensions which form the intervisceral vessels, as in other Crinoids. It is interradial in position, as usual, and may be followed at the sides of the fore-gut both in transverse and in longitudinal section (Pl. VIIb. figs. 6–8, *x*) to a little way below the peristome, where its further course cannot be traced. I have little doubt, however, that its connections are essentially the same as in other Crinoids. But owing to