

however, is not an immovable syzygy, as in *Rhizocrinus*, but the same peculiar form of articulation as occurs between the second and third radials.

“The individual represented in fig. 120 was obtained in Mid Atlantic, just north of the equator (Station 106, 1850 fathoms). It was originally regarded by Sir Wyville Thomson as identical with a species which was dredged in considerable abundance in the Southern Sea (Stations 146, 147, 1375 and 1600 fathoms), and was named by him *Bathyrinus aldrichianus*; and the accompanying figure appeared under this name in ‘The Atlantic.’ Subsequently, however, Sir Wyville seems to have distinguished the two species, for the name *Bathyrinus campbellianus* occurs in his handwriting on the plate in which the individual from Station 106 is represented.

“A fourth species (*Bathyrinus carpenteri*) has since been dredged in the North Atlantic by the Norwegian North Atlantic Expedition. The genus ranges in depth from 1050 to 2435 fathoms, while *Rhizocrinus* has not been found deeper than 955 fathoms, and occurs at 80 fathoms in the Norwegian fjords. No fossil species of *Bathyrinus* are known.

“But for its resemblance to *Rhizocrinus*, it is probable that this genus would hardly be regarded as related to the Apiocrinidæ. The novel form (*Hyocrinus<sup>1</sup> bethellianus*) which was found associated with it at Station 147, is still more unlike the Pear-encrinite type, and though originally referred to it, is rather to be regarded as representing a new family altogether. The mode of attachment of the stem is unknown. Its component joints are short, cylindrical, and differently marked from those of *Bathyrinus*.

“The cup (fig. 122A, B) is composed of two alternating tiers of thin plates, the basals below and the radials above. The latter are broad and spade-shaped, with a slight blunt ridge running up the centre and ending in a narrow articulating surface for an almost cylindrical first brachial. The five undivided arms are composed of long cylindrical joints deeply grooved within, and intersected by syzygial junctions. The first three joints in each arm consist each of two parts separated by a syzygy; the third joint bears at its distal end an articulating facet, from which a pinnule springs. The fourth arm-joint is intersected by two syzygies, and thus consists of three parts, and so do all the succeeding joints; and each joint gives off a pinnule from its distal end, the pinnules arising from either side of the arm alternately. The proximal pinnules are very long, running on nearly to the end of the arm, and the succeeding pinnules are gradually shorter, all of them, however, running out nearly to the end of the arm, so that distally the ends of the five arms and the ends of all the pinnules meet nearly on a level.<sup>2</sup> This is an arrangement hitherto entirely unknown in recent Crinoids, and there is nothing exactly like it in any fossil species.

“The mouth is in the centre of the disk (fig. 122c) and protected by a pyramid of five

<sup>1</sup> Named after Hog Island, one of the Crozets near which it was found.

<sup>2</sup> The greater part of the preceding description is taken *verbatim* from the original account of *Hyocrinus* which was published by Sir Wyville Thomson. The Atlantic, vol. ii. p. 95, 1877.