

qui forme un grand évasement obconique ou caliciforme, ce qui donne à notre Crinoïde de la ressemblance avec le genres fossiles *Apiocrinus* et *Bourgueticrinus*. Cette extrémité n'est donc pas autre chose que le sommet de la tige qui s'élargit successivement." Sars considered the summit therefore as an enlarged uppermost stem-joint analogous to the centro-dorsal of the Comatulæ. He was unable to resolve it into any component parts by treating it with alkalies; and it is consequently not surprising that he was led to regard the whole subradial portion of the calyx as composed of but one single piece. In fact he was never able to separate this piece from the radials or the radials from one another, the existence of these plates being only indicated on the outside of the calyx by very faint sutural lines, occasionally rendered more distinct by slight furrows.

It never seems to have struck him, however, that there might be basal plates below the radials which were similarly, but more closely anchylosed; and he was led to consider the basals as fused, like those of Comatulæ, into a kind of rosette. This circular plate (Pl. VIIIa. figs. 6, 7; Pl. X. figs. 1, 4—*br*) "est située à l'intérieur dans l'espace central laissé en dedans de l'anneau formé par l'adhésion des premiers radiales;"<sup>1</sup> but Sars was unable to isolate it, owing to its very close adherence to the first radials.

It has been pointed out that *Rhizocrinus* was dredged by Pourtalès in 1868 before he had heard of its discovery by Sars; and the condition of his specimens was fortunately such that he was able to describe the calyx as "composed of a cycle of elongated basal (pelvic) pieces, followed by the much shorter first radials (costals) alternating with them. These pieces are all so intimately connected with each other that the sutures are seen with difficulty."<sup>2</sup> This account seems to have escaped the notice of Sir Wyville Thomson; for in his description of the "Porcupine" Crinoids<sup>3</sup> he stated that "in *Rhizocrinus* the basal series of plates of the cup are not distinguishable. They are masked in a closed ring at the top of the stem." He did not, however, entirely accept Sars's view of the composition of the calyx; for he went on to say that "whether the ring be composed of the fused basals alone, or of an upper stem-joint with the basals within it forming a rosette as in the calyx of *Antedon*, is a question which can only be solved by a careful tracing of successive stages of development." The relatively large specimens which were dredged by the "Porcupine" in 862 fathoms off Cape Clear, show the interbasal sutures very clearly; and though they were referred at the time to *Rhizocrinus lofotensis*, they really belong to the Caribbean species *Rhizocrinus rawsoni*, larger specimens of which were obtained by the "Hassler" off Barbados in 1871, and described by Pourtalès in 1874. These, like the "Porcupine" specimens and the Gulf Stream variety of *Rhizocrinus lofotensis*, also showed distinct interbasal sutures. Pourtalès was therefore led to dissent from Sars's description of the calyx in this genus, and to repeat more emphatically his own previous statements concerning the existence of long but closely united basals.<sup>4</sup>

<sup>1</sup> Crinoïdes vivants, p. 12.

<sup>3</sup> Proc. Roy. Soc. Edin., vol. vii., 1872, p. 770.

<sup>2</sup> Bull. Mus. Comp. Zoöl., vol. i. p. 129.

<sup>4</sup> Mem. Mus. Comp. Zoöl., No. 8, pp. 28, 29.