

really belonged to *Conocrinus*. But as he did not place the latter type among the Apiocrinidæ together with *Bourgueticrinus* and *Eugenicrinus*, it would seem that he had either abandoned it altogether, or else entirely misunderstood its real character and affinities; and in the absence of figures or original specimens his account of it would be absolutely unintelligible.

*Rhizocrinus* was first described by Sars in 1864,<sup>1</sup> and more fully in 1868<sup>2</sup>; and though he was led to consider the anchylosed basals as a top stem-joint, this error was corrected by Pourtalès and myself before a fresh diagnosis of *Conocrinus* was given by de Loriol.<sup>3</sup> This indeed was only provisional, in default of better knowledge, and owing to Meneghini's failure to find the interbasal sutures in a section through the lower part of the calyx,<sup>4</sup> just as in a recent *Rhizocrinus* or *Bathycrinus* (Pl. VIIa. fig. 13), de Loriol was led to consider it probable that the basals "n'existent pas et sont intimement soudées, de manière à former comme une seule pièce centro-dorsale." He thus fell into exactly the same error as had been made by Sars and Ludwig respecting the recent *Rhizocrinus lofotensis*. Zittel,<sup>5</sup> however, who had satisfied himself regarding the presence of interbasal sutures in *Conocrinus pyriformis*, recognised the identity of this genus with *Rhizocrinus*, but did not adopt the latter name on the ground that "Nach den Regeln der Priorität gebührt dem Namen *Conocrinus*, d'Orb. die Priorität, wenn gleich die Gattungsdiagnose d'Orbigny's unvollständig und theilweise unrichtig ist."

It seems to me, however, that this is stretching the rules of priority to the widest possible limit, or even beyond it; and that definitions which are incorrect, meaningless, and altogether incomplete have no claim whatever to recognition. Lütken remarked in 1864 that the distinction of *Conocrinus* from *Bourgueticrinus* was still a matter of uncertainty; while d'Orbigny's own countrymen Hébert and Munier-Chalmas did not adopt his generic name for the new type which they described as *Bourgueticrinus suessi*; and although it was subsequently referred by de Loriol to *Conocrinus*, and carefully described, the genus *Rhizocrinus* had meanwhile become thoroughly well established and universally recognised by zoologists.

Both Sars and de Loriol were in error as to the composition of the calyx in this type; and a correct definition of *Conocrinus* was not given until the publication of Zittel's Palæontology in 1879; while even as early as 1868,<sup>6</sup> and subsequently more fully in 1874,<sup>7</sup> Pourtalès had correctly pointed out the characteristic features of Sars's genus *Rhizocrinus*, especially as regards the presence of basals, which had been supposed to be either absent altogether, or else modified into a kind of rosette. According to Sars<sup>8</sup> "Ce qui est remarquable et caractéristique pour la tige du *Rhizocrinus*, c'est son sommet

<sup>1</sup> *Forhandl. Vidensk. Selsk.*, p. 127.

<sup>2</sup> *Swiss Crinoids*, p. 191.

<sup>3</sup> *Palæontologie*, p. 392.

<sup>4</sup> *Ill. Cat. Mus. Comp. Zool.*, No. 8, pp. 27, 28.

<sup>5</sup> *Crinoïdes vivants*, pp. 38, 39.

<sup>6</sup> *Loc. cit.*, p. 50.

<sup>7</sup> *Bull. Mus. Comp. Zool.*, vol. i., No. 7, p. 120.

<sup>8</sup> *Crinoïdes vivants*, p. 4.