

No further definition of *Chladocrinus* was ever given by Prof. L. Agassiz; and it is not surprising therefore that the genus has never been accepted by naturalists. The remaining type which is supposed to be generically distinct from *Pentacrinus*, is the *Cainocrinus* of Forbes.¹ It has recently been revived by de Loriol;² but since it was based on a misconception, and its only distinctive character depends upon a feature which is very variable among the recent species, viz., the presence or absence of a closed ring of basals, I see no good in retaining it (see pp. 281–283). Practically, therefore, owing to the well marked characters of *Extracrinus* and our want of knowledge of *Balanocrinus*, a definition of *Pentacrinus* for the study of recent forms need only emphasise those points in which it differs from *Metacrinus*. I have, however, referred to one or two characters in which the genus differs from *Extracrinus*.

Genus *Pentacrinus*, Miller, 1821.³

1761. *Palmier marin*, Guettard, Mémoires de Mathématique et de Physique tirés des Registres de l'Académie Royale des Sciences, de l'année MDCCLV., Paris, 1761, p. 225.
1762. *Encrinus*, Ellis, Phil. Trans., vol. lii. pt. i. for the year 1761, London, 1762, p. 358.
1766. *Isis*, Linnæus, Systema Naturæ, ed. xii., Holmiæ, 1766, t. i. p. 1288.
1816. *Encrinus*, Lamarck, Histoire Naturelle des Animaux sans Vertébrés, t. ii., Paris, 1816, p. 432.
1820. *Pentacrinites*, von Schlotheim, Die Petrefactenkunde, Gotha, 1820, p. 327.
1821. *Pentacrinus*, Miller, A Natural History of the Crinoidea, Bristol, 1821, p. 45.
1832. *Pentacrinites*, Goldfuss, Petrefacta Germaniæ, Dusseldorf, 1832, t. i. p. 168.
1832. *Solanocrinites*, Goldfuss, *Ibid.*, p. 168.
1834. *Pentacrinus*, de Blainville, Manuel d'Actinologie, Paris, 1834, p. 257.
1834. *Encrinus*, de Blainville, *Ibid.*, p. 254.
1835. *Pentacrinus*, Agassiz, Mém. de la Soc. d. Sci. Nat. de Neuchatel, t. i. p. 194.
1835. *Chladocrinus*, Agassiz, *Ibid.*, p. 195.
1836. *Pentacrinus*, Buckland, Geology and Mineralogy, London, 1836, vol. i. p. 432.
1837. *Isocrinus*, von Meyer, Museum Senckenbergianum, Frankfurt, ii. p. 251.
1843. *Pentacrinus*, Müller, Abhandl. d. k. Akad. d. Wiss. Berlin, Jahrg. 1841, p. 177.
1845. *Pentacrinus*, Austin, A Monograph on Recent and Fossil Crinoidea, Bristol, 1843–45, p. 110.
1845. *Pentacrinus*, Desor, Bull. Soc. d. Sci. Nat. de Neuchatel, vol. i. pp. 213, 214.
1845. *Isocrinus*, Desor (*non* von Meyer), *Ibid.*, p. 213.
1845. *Balanocrinus*, Agassiz (*non* de Loriol), in Desor, *Ibid.*, p. 214.
1847. *Pentacrinus*, d'Orbigny, Cours élément. de Paléontol. et de Géol. stratigr., t. ii. Fasc. 1, Paris, 1852, p. 149.
1852. *Isocrinus*, d'Orbigny, *Ibid.*, p. 149.

¹ British Tertiary Echinoderms, p. 33.

² Swiss Crinoids, pp. 111, 112.

³ The above list contains, I believe, all the most important references to the recent *Pentacrinus* since the time of Guettard, together with notices of the chief palæontological works in which this type and its fossil representatives are mentioned. But it makes no pretence whatever of recording all the various names which have been bestowed at different times upon fragments of fossil Pentacrinidæ. A task of this kind is scarcely worth undertaking, as the result would be totally incommensurate with the labour involved.