

Mr. Chapman presumably interpreted  $x$ , which he nowhere mentions, as a radial; but the present identification, when once made, is so obvious that only two facts need be adduced in its support. First, the heptagonal outline of the plate here called post. B. Second, the contrast between the conspicuous arm-facets on l. post. and l. ant. RR, and the absence of any such excavation on  $x$ . Above  $x$ , in the angle between it and the proximal IBr. of r. post. arm, are a few small plates (apparently not the ones alluded to and figured as tegminal plates by Mr. Chapman), and one of these seems to be folded at its edges as is so usual in the tube-plates of this genus. The arm-facet, neither mentioned nor very exactly drawn by Mr. Chapman, appears to have had straight, rather steeply sloping sides, ending in a deep axial canal, which has broken through to the front of the plate (compare the account of the ventral groove and axial canal in *B. crassus*). It is not easy to understand the true shape and proportions of the facet; but the narrowness of the primibrachs indicates that its width can scarcely have been half that of the radial.

#### AMERICAN SPECIES.

##### *Botryocrinus nucleus*.

- Dendrocrinus nucleus*, Hall, 1876, *Rep. N. Y. State Mus. Nat. Hist.* XXVIII, Documentary Edit., explan. pl. xv, ff. 7-9.  
*Cyathocrinus nucleus*, Hall, 1879, op. cit., Museum Edit., p. 136.  
*Homocrinus nucleus*, Wachsmuth & Springer, 1886, 'Revision of Palaeocrinoidea', III, p. 220, *Proc. Acad. Nat. Sci. Philadelphia*, 1886, p. 144.  
*Botryocrinus nucleus*, Bather, 1893, 'Crin. Gotland', *Svensk. Vet.-Akad. Handl.* XXV, No. 2, p. 104.

Dorsal cup with straight sides up to the RR, which project markedly towards the arm-facet. Slight trace of axial folding on BB. Height of cup (8-11.5 mm.), 100; width at base, 43; width at summit, 125-130. IBB low, much wider than high. BB wider than high. RR higher than wide. Arm-facet more than .66 of R.  $x$  supports 1 tube-plate. Proximal columnal circular, with tendency to quinquelobation.

Upper Wenlockian, Niagara shales of Waldron, Ind.

Holotype, American Museum of Natural History, No. 1898.

Piastotype in British Museum, No. E14075.