interradial area is wider than the other four "with a conspicuous row of decidedly larger and more prominent pieces along the median part." Billings[1] gave a good figure of this in *Reteocrinus stellaris*, and spoke of it as follows:—"If this series of joints constitute a true arm there must be six arms in this species." Miller, who has examined the original specimen of *Reteocrinus stellaris*, describes it thus—"Azygous interradial area covered by a large number of plates, probably one hundred or more, very unequal in size, the middle row being decidedly larger and more prominent than the others, so as to form a ridge up the middle. The plates in this row, however, do not rapidly diminish in size and fade out in their distinctive character before reaching the top of the vault; on the contrary, they are longer than the primary radials, four of them reach nearly as high as the secondary radials, and while the specimen is not preserved above this, enough is disclosed to the palæontologist to show that this series continued up the face of a proboscis that extended, may be as far, or farther, than the arms and the pinnules."

In default, however, of further evidence I prefer to believe that the middle row of plates in the anal area of *Reteocrinus stellaris* was of the same nature as, though perhaps on a larger scale than, that of *Reteocrinus nealli*, which Miller describes as follows:—"Azygous interradial area covered by fifty or sixty plates, very unequal in size, the middle row being decidedly larger and more prominent than the others, so as to form a ridge up the middle, while the other smaller and less prominent ones are crowded in, irregularly, on each side. The plates in this middle row, however, have no uniformity in size or shape; the first one is large and elongated, the fourth is small and subquadrate; and the row has become almost obsolete at the sixth plate, where all are nearly of the same size and scarcely distinguishable from the minute pieces which cover the flattened vault, and with which they unite." The figures of this type in the Palæontology of Ohio (vol. i. pl. ii. figs. 3*b*, 3*c*) illustrate this description admirably, the original specimens having doubtless been seen by Miller; while the figure of *Reteocrinus subglobosus* on the same plate (fig. 2*c*) shows the incorporation into the body of a pinnule borne by one of the secondary radials. This pinnule is closely surrounded by the minute interradial plates, but may be distinguished from them at its origin just as the anal appendage is. This condition is still better shown in *Reteocrinus richardsoni*, Wetherby, which has two "fixed pinnules" in the anal interradius, one on either side of the median appendage. All three are "soldered" together by the minute irregular plates which pass insensibly upwards into those of the so-called "vault;" and the ordinary pinnules on the lower parts of the arms after the last axillary are united in just the same way.[2] This condition recurs constantly in the Liassic *Extracrinus* and in the recent

[1] Decades of the Geological Survey of Canada, vol. iv. p. 64, pl. ix. fig. 4*a*.

[2] Descriptions of New Crinoids from the Cincinnati Group of the Lower Silurian and the Subcarboniferous of Kentucky, *Journ. Cinc. Soc. Nat. Hist.*, vol. ii. pl. xvi. figs. 1, 1*a*.