

Formation, associated with *Hybocrinus conicus*, *Heterocrinus canadiensis*, *Pleurocystites elegans*, *Streptelasma corniculum*, &c.

GENUS CALCEOCRINUS, HALL.

As there appears to be only conjecture for the assertion that the plates upon which this genus was proposed are congeneric with the species afterwards assigned to it by Meek and others* the following new species may have to be assigned either to *Chirocrinus*, Salter, or *Euchirocrinus*, Meek.

Wachsmuth and Springer represent the genus as having three arms. I am satisfied, however, that there are four.

There is no previous record of a specimen having the column basals and radials in the same straight line as is found in *C. rugosus*, described below.

CALCEOCRINUS FURCILLATUS, n. sp.

Only one side—the anterior—of the basal series observed; the posterior resting against the posterior radials as is usual in the greater number of the specimens of this genus. The basal series is semilunar, the chord being under the three radials of the anterior side. The basal portion, as seen on the anterior side, is divided into four pieces: first, by a vertical suture into halves, which are again divided by a line sub-parallel with the curved margin making two outer plates which, together, are rudely crescentic, and two subtrigonal inner plates.

Between the basal and the radial plates, on the anterior side of an exceptionally perfect specimen of his species *C. punctatus*, Prof. Ulrich "found a large number of small and irregularly distributed plates." These minute plates are absent in my specimen; but there exists a vacant space in which such an assemblage could easily find place.

There are five series of radials, aggregating—so far as known—eight pieces, of which three series with four plates are on the anterior side and two series with four plates are on the posterior. On the anterior side there are three alternating with the basals; the middle radial being composed of a tetragonal piece, $2\frac{1}{2}$ times as high as wide,

*See revision of the palæocrinoidae, by Charles Wachsmuth and Frank Springer, part 3, page 273; and also remark on the names Calceocrinus and Cheirocrinus, by Prof. Ulrich, in Report of Geological Survey, of Minnesota, 1886, page 104; both of which should be read by all interested in this genus.