The pinnule-bearing arm pieces are swollen or c'aviform at the joints, which are oblique so that the articular facet of the two arm pieces and the articular facet of the arm piece and pinnule are at right angles to one another.

The left posterior radial (or anal) piece carries the basal plate of a ventral tube of which but three pieces can be made out in the type specimen, owing to the folding of the arms over the upper portion.

Collected by the author at Division Street, Ottawa, in beds of the Trenton Formation.

CALCEOCRINUS RUGOSUS; n. sp.

This species has the same arrangement of the plates of cup and arms as *C. furcillatus*, excepting that the central arm of the anterior side of this species does not appear to be bifurcated; there being in the only specimen which I have examined five plates of the primary series but no axillary piece.

In the specimen described, the basals, radials and arms, are all in the same straight line, so that both sides of the basal plates can be observed. A piece of the column which was in the same line as the other portions was lost while cleaning the specimen.

The basals at the lowest point have a broad facet for the articulation of the column, and from thence a marginal lip is carried each edge of the posterior side, across which a ridge is carried, immediately opposite the vertical suture of the anterior side, to the middle of the line of articulation with the series above, thus dividing the posterior side of the basals into two concave surfaces. The posterior side of the basal series shows no sutures.

All the plates have punctate surfaces.

The primary radials have each a deep transverse furrow which with ridges at the sutures produce wrinkles. The arm-plates and pinnules are stouter than in C. furcillatus.

Collected by Mr. W. R. Smith at Belleville, Ont., in a stratum of the Trenton Formation, containing *Porocrinus Smithi*, *Pleurocystites* guamosus, Dendrocrinus Jewettii, &c.

DENDROCRINUS PROBOSCIDIATUS, BILLINGS, 1857.

The specimen figured was discovered last autumn, at Division street, this city, by Mr. Wm. H. Jenkins of Madoc, Ont., who kindly