

arrangement of the plates is not clearly shown, but apparently a fourth pair of interbrachial plates continue the interray to the margin of the cup.

The characteristic features of the species lie more particularly in the ornamentation of the cup plates. From the centre of each radial a strongly marked carina runs up the ray to the middle of the second costal, where it bifurcates and continues over the distichals to the point of origin of the arms. A strong ridge-like carina with sharp, square shoulders connects the centres of the radials, and forms a very characteristic, sharply defined band passing around the cup in this zone. Downwards from the centre of the radial, the carina is broken into two halves, each of which passes to the contiguous basal. No other stellate ornamentation appears on any of the plates, except a faint radial striation on the first interbrachial. All the plates, however, are marked with a distinct granulation which is more pronounced on some plates than on others.

*The stem.*—The stem is composed of thin discs which are alternately large and small. Near the cup, the larger joints are about two mm. in diameter and occur to the number of three in the space of one mm. Distally, the stem tapers rapidly and the joints become more elongated. Externally the stem-joints are round in section: the shape of the internal passage was not observed.

*The arms.*—The arms are ten in number: they appear to become free and to be provided with pinnules beyond the second distichal. The joints are distinctly uniserial in arrangement and occur to the number of three in the distance of one mm. in the lower portions of the arms. Bifurcation of the arms was observed in one instance only: the division in this case occurs above the sixtieth joint. The present species is distinguished, more particularly, by the strong carina passing around the cups in the radial zone. The lack of stellate ornamentation on the interbrachial plates distinguishes it from *G. decadactylus* and *G. dyeri*, which are, moreover, Cincinnati forms.

The species of *Glyptocrinus* hitherto described from the Trenton of Ontario are *G. ramulosus*, *G. ornatus* and *G. marginatus*: none of these shows a prominent carina encircling the cup. The small basal plates and slender branching arms of *G. ramulosus* sufficiently differentiate that species. The striking ornamentation of *G. ornatus*, which consists of five or six conspicuous, finely striated ridges radiating from the centres of the plates, serves to distinguish it from the present species. The margined plates of *G. marginatus* and the different arrange-