

and also in having a wider border of small plates. The plate arrangement is the same as in *L. youngi*, but the lateral covering plates are not so narrowly pointed on their inner ends. No median covering plates have been seen.

The specimen selected as the holotype is 18 mm. in diameter.

This is one of the forms which have been identified usually as *A. billingsi*, but as it persistently differs from it, as well as from *L. youngi*, in the points mentioned, and through them is intermediate in characteristics between *L. billingsi* and *L. pileus* of the Upper Ordovician, it seems to be worthy of a specific name.

Ray I of this species is almost straight, the only curvature being just at the point where it joins the peristomal plates. At the outer end there is no curvature.

Ray IV is the most curved of any on the type, and all show the greatest curvature at about half way between center and margin.

Horizon and locality:—The holotype (No. 3235, Vict. Mem. Mus.) is from an abandoned quarry near the entrance to Jackson Park, Peterboro, Ontario, and was collected by Mr. W. A. Johnston. The horizon is the "Cystid beds" in the "Prasopora zone" of the Trenton. The same form has been found in the "Prasopora zone" at Fenelon Falls and Brechin, Ontario, and in the "Cystid beds" at Ottawa and Hull.

LEBETODISCUS PLATYS SP. NOV.

(Plate 1, fig. 5).

This species is based upon a single specimen which has long been in the Museum of the Geological Survey. It is imperfect, having been cut off by a joint along the anal side, thus losing the distal ends of rays I and V. The specimen is otherwise quite well preserved. The outline is rounded pentagonal and the rays are long, reaching nearly to the margin. The rays are nearly straight, though the anal rays probably curved toward each other somewhat, partially enclosing the anal structures. Such a curvature is suggested by such parts as remain. The anal structure is entirely missing, but it would appear to have been small and far from the mouth. The inter-radial spaces are covered with small, thin, imbricating plates, those near the margins being much larger and stronger than the others. The plates along the rays alternate in position, there being about twenty-four to twenty-six pairs. The inner ends are diagonally truncated and pointed, so that, where undisturbed, they fit together very closely. Where they have been displaced, as is the case with most of the arms, they are somewhat drawn apart, and thus leave alternating openings.

The plates above the mouth are like those in *L. billingsi*,