

plates. The anal opening is surrounded by a small pyramid of six triangular plates.

Just outside the tips of the rays there is a ring of large, thick plates ornamented with pits and rather large granules. There are two or three of these plates opposite each inter-radius except the posterior one, which has four. These plates are much thicker and less scale-like than is usual in this group of fossils, and such ornamentation of the plates is unique in the family.

Chapman says that his specimen was $\frac{1}{4}$ inch in diameter. Specimen 1413 is 12 mm. in diameter, while another, 1408E, is only 10 mm.

The plate structure as here described seems to be common to several species of *Agelacrinites* and *Cytaster*.

Horizon and locality: This species, as now restricted, is fairly common, but only at the type-locality. The original specimen was found at Peterboro, Ontario. At this city, specimens of *Agelacrinites* have been found in some numbers in an old quarry near the entrance to Jackson Park, and it is presumed that the original specimen came from that locality. If so, it was from the "Cystid" beds of the "Prasopora zone."

LEBETODISCUS YOUNGI SP. NOV.

(Plate 1, fig. 4).

This species is very like *L. billingsi*, having straight rays, the same supra-oral structure, and about the same size. It differs in lacking the thick, ornamented plates of the outer ring and the rays are broader. The inter-ambulacral areas are covered with large transversely elongated, scale-like, imbricating plates, about fifteen to each of the lateral and anterior areas, while in the posterior inter-radius the plates are somewhat smaller and more numerous. The anal opening is surrounded by two circles of small plates, five or six of which are in the inner circle. Outside the area to which the rays extend is a narrow margin of smaller imbricating plates.

The holotype (No. 3234, Vict. Mem. Mus.) is from lot 12, Con. I, Eldon, Ontario, where it was collected from strata belonging to the upper part of the "Prasopora zone" of the Trenton by Mr. W. A. Johnston. The name is in honor of Dr. G. A. Young, of the Geological Survey.

LEBETODISCUS CHAPMANI SP. NOV.

(Plate 1, fig. 3).

This species may be described briefly by saying that it differs from *L. youngi* in having longer and more slender rays, all of which show a slight curvature in the contra-solar direction,