the anal pyramid is large and distinct. It is situated a little more than half way from the center to the margin, and is composed of a ring of seven or eight long triangular plates. In some specimens it is situated half way between rays I and V, while in others it is eccentric, and nearer V than I, as in the type.

The holotype is a large specimen, 15.5 mm. in diameter. Other specimens on the same slab with it (all figured) are 11.5, 10, and 9 mm. respectively.

This species differs from L. dicksoni in having shorter rays, one or two of which are solar, and in having much smaller interradial plates. It is most like L. platys, but has more numerous supra-oral plates. While small specimens of L. inconditus have straight, broad arms, they may readily be distinguished from L. billingsi or L. youngi by the more numerous supra-oral plates.

Horizon and locality:—This species is common in the "Cystid bed" in the "Prasopora zone" on both the Ottawa and Hull sides of the Ottawa River. It occurs at Peterboro also.

The holotype is No. 1409 in the Geological Survey Museum and was collected by Mr. T. C. Weston. It is undoubtedly from the "Cystid zone" at Queen's Wharf, Ottawa, Ont.

EXPLANATION OF PLATE.

- Lebetodiscus inconditus Raymond. Four specimens in natural position, resting on the sea bottom, showing that they were not attached to shells or other objects. With the decay of the animal the central portion sinks in, leaving an elevated ring of marginal plates. The largest specimen is the holotype. x 1.5.
- Lebetodiscus multibrachiatus Raymond. The holotype, showing the branching arms. The specimen does not lend itself readily to photography. x 3.8.
 - 3. Lebetodiscus chapmani Raymond. The holotype. x 3.
 - 4. Lebetodiscus youngi Raymond. The holotype. x 3.8.
 - Lebetodiscus platys Raymond. The holotype. x 1.5.
- Lebetodiscus lorijormis Raymond. The holotype, a large part of the surface of which is concealed by shale. x 2.8.

Figs. 1 and 5 were made at the Geological Survey photographic laboratories. Figs. 2, 3, 4, and 6 were made by Mr. Nelson at the Museum of Comparative Zoology, through the kindness of Director Samuel Henshaw.