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Specimens of this species are rare and the best one known is that figured by Dr. (now Sir James) Grant in the OTTAWA FIELD NATURALIST. During my incumbency as Invertebrate Paleontologist to the Ceological Survey, this specimen was done ed. among other valuable fossils, to the Victoria Memorial Museum, and after comparing it with Billings' and Bather's figures, 1 am convinced that it is a real Agelacrimites dicksoni. Bather states that Lebetodiscus differs from Agelacrimites, first, in the absence of a differentiated marginal zone; this I believe is due to the imperfection of the specimen he studied; second, he regarded it as having a less flattened and less sessile habit; this also proceeds from the study of an incomplete specimen; third, "It seems clear that the side plates, here called flooring plates, are homologous with the flooring plates of Edrioaster. Whether those plates have homologues in the Agelacrinidae is a matter for debate; at any rate, no genus of that family has similar plates with intervening depressions so like pores." I may have misunderstood the figures and descriptions of both writers, but as I understand it, the "flooring plates" of Bather in Lebetodiscus are the same as the "outer covering plates" of Foerste, and Bather's specimen was not so preserved as to enable him to get at the real flooring plates, which in a Canadian specimen, are concave and single, not double. (Compare Dr. Bather's fig. 1, p. 545, with Dr. Foerste's figs. 1, pl. 1, fig. 4, pl. 2, and fig. 4, pl. 3, or, for the genus Thesherodiscus, fig. 8, pl. 1). The small . plates which Dr. Bather took for the real covering plates are the 'median or intercolated covering plates" of Foerste. I see no real difference between the structure of the subvective system of Lebetodiscus and such a typical (Ordovician) Agelacrimites as A. pileus, except in the large pores between the lateral covering plates. These may, however, be of such importance as to justify the restriction of Lebetodiscus to the species L. dicksoni and L. loriformis, and the creation of two new genera for the reception of the other species here described.

LEBETODISCUS DICKSONI BILLINGS.

Billings, Rept. Progress, Geol. Sur. Canada, 1857, p. 294; Can. Org. Rem., dec. 3, 1858, p. 84, pl. 8, figs. 3, 3a, 4, 4a; Chapman, Expos. Min. Geol. Canada, 1864, p. 110; Grant, Trans. Ottawa Field-Nat. Club, 1, No. 2, 1881, fig. 9; Jaekel, Stamm. Pelmat. 1899, p. 50, pl. 2, fig. 2; Clarke, Bull. N. Y. State Mus. 49, 1901, p. 191, fig. 3; fig'd without name by Sowerby, Zool. Journal, 1825, 2, p. 318, pl. 11, fig. 5.

Of this rare species, the Museum of the Geological Survey contains the type, another poor specimen collected by Billings (No. 1415), a specimen collected by Mr. Fitzpatrick at Peter-

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