

vening ridges narrowed; this layer has a shining surface. Beneath this is a third layer on which the striae run in an opposite direction from those of the one above, the sculpturing, especially along the central part of the valve, consisting of striae radiating from the umbonal region to the front margin; these are crossed at intervals by undulations of growth concentric to the umbo; on the inside of this layer are impressed the surface markings of the interior of the valves.

Size.—Length, 5 to $5\frac{1}{2}$ mm.; breadth, 4 to 5 mm.; depth of each valve, about 1 mm. The ventral is about $\frac{1}{2}$ mm. longer than the dorsal. One dorsal has a length of 6 mm.

Horizon and locality.—In calcareous sandy layers with the Peltura fauna at McAdam shore, Escasonie, Cape Breton. This species was not found *in situ*, but in loose pieces of thin flag in the shingle of the shore where the trilobites occur; these pieces were very little worn, and therefore near or at the parent ledge. This species may be referred to the Peltura zone (3b).

This species is referred doubtfully to *Lingulella* as it has some characters of other genera. The weak cardinal development is like *Leptobolus*; as is the long lateral ridges and advanced ("j") laterals of dorsal valve. The spreading vascular trunks of the ventral valve are like *Leptobolus* and *Obolus*, as also the advanced "j" lateral. On the other hand the thick shell is quite unlike *Leptobolus*, but common in *Obolus* and *Lingulella*.

This pretty little species is easily recognized by its peculiar transverse sculpture. *Lingula teneola*, Hall, has a similar transverse ornamentation, but it is much larger, and flourished at a later period (Clinton group).†

Lingulella Ella, H. and W., has a somewhat similar sculpture, but is distinguished by its greater size, and the closer approximation of the vascular trunks of the ventral valve.

It is only in a few valves out of many that we find distinct muscle scars, enabling us to compare the species with others. Michwitz has determined that the exterior half of the great central muscle in the ventral valve of *Obolus* represents the "l" lateral of *Lingula*.* In this relation it is interesting to observe that the great muscle in *L. (?) Escasoni* also has a septum partly dividing it; but there is a separate scar, a small triangular one, at the anterior outer angle of

* Mem. Acad. Imp. des Sci. St. Petersburg. Series VIII. Tom. IV., No. 2, p. 79.

† N. York State Geologists' Report. Hall & Clarke, 1891, pl. i, fig. 8.