

LEPIDITTA AURICULATA (Plate XV., figs. 3a and 3b).

Lepidittha auriculata, Trans. Roy. Soc. Can., vol. xi., pt. iv., p. 99, figs. 2 a and b.

Only a mould of the left valve is known. This is purse-shaped and has a short ear at each end of the hinge line. There is no marginal rim. Two grooves in the mould at the hinge line show that the hinge had two oblique plates towards the posterior end.

The surface of the mould is highest a short distance below the hinge, whence it descends gradually to the posterior margin, where the valve is nearly flat. This mould also shows faint, parallel ridges, concentric to what is supposed to be the anterior end. Faint lines mark off three quadrate spaces, near the hinge, parallel to the long plate, and corresponding in position to the upper seal-like marks of *L. sigillata* of the Protolenus Zone (Div. 1 b. 3).

Size.—Length, 4 mm.; width, $3\frac{1}{2}$ mm.; height of one valve, about $\frac{1}{4}$ mm.

Horizon and Locality.—In the fine olive gray shale of Div. 1 c at Hanford Brook, S. Martin's.

This species is something like that which Mr. C. D. Walcott refers to *Nothozoe Vermontiana*, but has a longer hinge line and is more triangular in form; it is also much flatter than that species. Its long hinge line and hinge plates show it to be of the genus *Lepidittha*.

OSTRACODA.

After the abundance of individuals and the variety of form in the Ostracoda of the Protolenus Fauna, the few found in the Paradoxides bed is somewhat of a surprise. Perhaps the Agnosti so common in the fine shales of bands c and d usurped the place of the Ostracoda.

PRIMITIA, Jones.

This genus is represented by more than one species in the rocks of the St. John group, and the author proposes to describe here a very tumid form, of which a few individuals have been found.

PRIMITIA ACADICA (Plate XV., figs. 5a-c).

Primitia Acadica, Trans. Roy. Soc. Can., vol. iii., pt. iv., p. pl. vi., figs. 22, 22 a and b.

Outline of the valves elliptical-oblong, with but very slight