

Valves obliquely semi-elliptical, about one-third longer than wide; hinge line straight, umbo less than one-third from the front of the valve. Tumid part of the valve occupying about one-third of its length and about one-half of its width; valve flattened toward the anterior and posterior ends. A faint narrow rim is traceable around the outer edge of the valves.

The cast of the right valve has a triangular umbonal prominence, about one-third from the front; the prominence is limited in front by a sharp and deep furrow, placed at right angles to the hinge line, and extending thence toward the base of the valve; the umbonal elevation is somewhat hollow in the middle, where it bears a sharp, narrow ridge, which is directed toward the posterior margin, at an angle of  $50^\circ$  from the hinge line; a faint furrow connects this ridge with the point of the umbo.

The outer surface of the valves of this species is marked by numerous concentric striæ, and by two faint radiating furrows, extending on each side of the tumid part of the valve to the basal margin.

The sharp median ridge and connected furrow, seen in the cast of the right valve of this species, are similar to those on the dorsal valves of some Brachiopods, but the position of the umbo separates it from that class of molluscs.

Length, 1 mm. Width,  $\frac{2}{3}$  mm.

Horizon and Locality. In the fine, gray shales of Div. 1. c, at Hanford Brook, St. Martin's. Infrequent.

LEPIDITTA CURTA (Plate XV., fig. 2).

*Lepiditta curta*, Trans. Roy. Soc. Can., Vol. III., pt. iv., p. 61, pl. vi., fig. 17.

Obliquely semi-elliptical and about two-sevenths longer than wide; hinge line nearly straight; umbo depressed, less than one quarter from the front of the valve. Valves flattened toward the base and posterior end, the anterior margin has a flattened, depressed rim; and the front of the rim in the two valves was apparently connected by a triangular piece not bounded by distinct sutures.

The interior of shell has roughened zones or undulations concentric to the umbo.

This organism is not unlike the crustaceans of the genus *Estheria*, but its resemblance to the preceding species, in form and hinge characters, indicates a generic relation.

Length,  $1\frac{1}{2}$  mm. Width,  $1\frac{1}{4}$  mm.

Horizon and Locality. In the fine dark shales of Div. 1.d<sup>1</sup>, at Porter's Brook, St. Martin's. Rare.