

plane of the large triangular area; the surface of the area is unknown, except a narrow reflected margin.

The dorsal valve is slightly elevated at the beak, more transverse than the ventral, and with a narrower area.

Surface similar to that described by Mr. Billings.

Unfortunately none of the specimens shows the two valves united and the areas of the valves are not preserved. From their non-preservation in this species and also in all the known species of the genus the presumption is that the greater portion of the area was open or else covered by a thin film of shell that is not preserved. There is considerable variation in the relative length and breadth of different shells and in the height of the ventral valve.

An examination of the type specimen of *Obolus Labradoricus*, in the collection of the Geological Survey of Canada, led to the identification of the Vermont specimens as the same species and the generic reference was changed to *Kutorgina*.

*Formation and localities.*—Middle Cambrian, Georgia Formation. In a lenticular mass of limestone intercalated in argillaceous shales carrying *Olenellus Thompsoni*, on the Bullard farm, about two miles east of Swanton; also, about two miles east of Highgate Springs, Franklin County, Vermont, and Mr. Billings describes it from limestone at L'Anse au Loup, Labrador.

#### KUTORGINA PANNULA White. (sp.)

Plate vii, figs. 3, 3a, pl. viii, figs. 2, 2a-c.

*Trematis? pannulus* White, 1874. Geog. and Geol. Expl. and Surv. West 100th Merid.; Prelim. Rep. Invert. Foss., p. 6. *Idem*, 1875. Same report, vol. iv, pt. 1, 36, pl. i, figs. 4a, b.

*Original description.*—"Associated with *Olenellus Gilberti* Meek, a single imperfect specimen of *Trematis* has been discovered, which, although consisting only of a single valve, possesses such characteristic surface-markings as to indicate its specific separation from all other known forms of the genus.

"The diameter of the specimen is about three millimeters; outline apparently subcircular or a little broader than long; apex moderately prominent and situated near the posterior margin. Surface marked by a very fine net-work of oblique raised lines, dividing it up into minute, four-sided, pore-like pits, which cause it to resemble, under the lens, the texture of finely-woven cloth.

"In the character of its surface-markings this species is nearly related to *T. punctata* Sowerby, sp., as figured by Davidson in his Monograph of British Fossil Brachiopoda, part vii, No. 1. That species, however, reaches a much larger size than our shell, and the small pits that similarly mark its surface are six-sided, instead of four-sided as in ours. The surface of *T. siluriana* Davidson, another allied species, has the pits arranged in radiating instead of oblique lines."