ing ribs, five or six in the width of two lines at the margin, crossed by fine concentric striæ, of which there are from seven to ten in one line.

"Width on hinge line from ten to fifteen lines; length about one-third less than the width. Height of central valve from two to three lines.

"Both valves show longitudinal undulations radiating from the beak to the margin.

"This species closely resembles some of the ordinary forms of the genus, but differs internally from any known to me in the Second Fauna in the absence of the dental plates, no traces of which can be perceived in the casts."

Specimens were collected from a limestone in the typical locality, but no casts of the interior were found. The radiating costæ are finer and more numerous than those on the cast figured by Mr. Billings, but in other characters they appear to belong to the same species. East of Highgate Springs the species is quite abundant in a hard, arenaceous, magnesian limestone, and shows the costæ to have been roughened by spinous projections and also by rather strong concentric lines of growth. These characteristics are also preserved in a cast from the argillaceous shale of Parker's quarry. Several illustrations are given of specimens from different localities.

Formation and localities.—Middle Cambrian, Georgia Formation. In limestone "lentile" about two miles east of Swanton; in silico-argillaceous shales, with *Olenellus Thompsoni*, Parker's quarry, town of Georgia; and in arenaceous magnesian limestone about two miles east of Highgate Springs, Franklin County, Vermont.

ORTHISINA? TRANSVERSA n. sp.

Plate vii, figs. 5, 5*a*.

Shell small, transversely subquadrangular in outline, front broadly rounded, angle formed by the union of the cardinal slopes of the ventral valve 155° to 165°, hinge line straight and as long as the width of the shell. Area of the ventral valve of moderate height, bent back from the hinge line, divided by a triangular foramen that is higher than wide and covered by a convex deltidium; the area of the dorsal valve is bent back at more than right angles to the hinge line; foramen higher than wide, covered by a deltidium.

Surface marked by numerous radiating, fine, even costæ, eight in a distance of 3^{mm}, on the frontal margin of the ventral valve; a few concentric lines of growth cross the radiating costæ, but not so as to give them a nodose character.

Interior characters unknown. The fine radiating striæ and transverse form distinguish this from other described species known to me.

Formation and locality.—Middle Cambrian, Georgia Formation. Silico-argillaceous shales of Parker's quarry, town of Georgia, Franklin County, Vermont.