

Formation and localities.—Middle Cambrian. In the limestone with *Olenellus Gilberti*, *Olenoides levis*, &c., at Pioche, and also on the west side of the Highland Range, 11 miles north of Bennet's Springs, and at the south end of the Timpahute Range, Groome District, Nevada.

Genus ORTHISINA D'Orbigny.

Orthisina D'Orbigny, 1849. See Brit. Foss. Brach., vol. i, Genl. Introduction, p. 104.

ORTHISINA ORIENTALIS Whitfield.

Plate vii, fig. 6.

Orthisina Orientalis Whitfield, 1884. Bull. Amer. Mus. Nat. Hist., vol. i, p. 144, pl. xiv, fig. 6.

Original description.—"Shell quadrangular in outline, somewhat higher than wide, with vertical and sub-parallel lateral margins, and broadly rounded base. Cardinal line rapidly sloping from the apex to the extremities, which are slightly rounded. Hinge line straight, as long as the greatest width of the shell. Cardinal area broad and high, divided in the middle by a triangular foramen, which is about as high as wide. Surface of the ventral valve moderately convex, marked by very fine radiating striae and also by several concentric lines of growth. Filling of the rostral cavity and foramen large and prominent. Specimen, a cast in shale, of the ventral valve only."

The specimen described above is flattened in the shale and also apparently compressed laterally. Uncompressed specimens referred to this species, from intercalated limestone beds ("lentile") in the shales east of Swanton, show it to have been moderately convex, and also specifically distinct from *O. Pepina* of the Potsdam group in Wisconsin and in Texas.

Formation and localities.—Middle Cambrian, Georgia Formation. Silico-argillaceous shales; Parker's quarry, town of Georgia, and in a gray limestone "lentile" two miles east of Swanton, Vermont, at about the same relative geologic horizon.

ORTHISINA FESTINATA Billings.

Plate vii, figs. 7, 7a, b.

Orthisina festinata Billings, 1861. Pamphlet; Geology of Vermont, vol. ii, p. 949, figs. 350-352. *Idem*, 1863. Geol. Canada, p. 284, figs. 289a-c. *Idem*, 1865. Pal. Foss., vol. i, p. 10, fig. 11.

Original description.—"Subquadrate or semi-oval, hinge line equal to the greatest width of the shell. Ventral valve subpyramidal, beak elevated, surface with a straight or slightly convex slope in all directions to the margin, area triangular, a little inclined backwards, foramen about as wide as high, closed by a convex deltidium which is perforated at the beak. Dorsal valve nearly flat. Surface with angular bifurcat-