specimens of a species from the Tonto formation of Arizona that appear to be identical with *Iphidea ornatella*, described by Dr. G. Linnarsson, from the Cambrian of Sweden.

Formation and localities.—Middle Cambrian. Besides the localities mentioned above, *Iphidea bella* occurs in the limestone of L'Anse au Loup, on the straits of Belle Isle, but its presence in Vermont, New York, or Nevada has not yet been recorded to my knowledge.

Genus KUTORGINA Billings.

Kutorgina Billings, 1861. Pamphlet; and Geology of Vermont, vol. ii, p. 948, foot-note. *Idem*, 1865. Pal. Foss., vol. i, p. 9.
Kutorgina Davidson, 1871. Mon. Brit. Foss. Brach., vol. iii, p. 342.

Mr. Billings proposed the genus Kutorgina in a foot-note accompanying the description of the type species *K. cingulata*. He says: "Since the above was written I have examined many casts of the interior of this species, and am inclined to the opinion that it is generically distinct from *Obolella chromatica*. From the very considerable elevation of the beak the dorsal valve must have an area and probably a foramen. In one specimen there are two large oval impressions faintly impressed, but still distinctly visible. There is no trace of the lateral scars; and the form, notwithstanding the characters of the surface, conveys the idea of an *Orthisina*. Should, upon further examination, my suspicions turn out to be well founded, I shall call the genus KUTORGINA, after the celebrated European naturalist, Kutorga."

The species now referred to the genus are:

Kutorgina sculptilis Meek, Whitfieldi Walcott,	Upper Cambrian.
cingulata Billings, Labradorica Billings, pannula White, Prospectensis Walcott,	Middle Cambrian.

From the character presented by these the following generic diagnosis is drawn:

Shell inequivalve, transverse, or elongated; hinge-line extended nearly to the width of the shell.

Larger or ventral valve convex, elevated at the beak, which is straight or incurved, with or without a mesial sinus; area narrow, or without a true area; when present it is divided by a wide, open fissure. Smaller or dorsal valve flat or slightly convex, beak marginal.

The areas of both the ventral and the dorsal valves of the species which we have showing them are very narrow and the fissure between them broad and relatively large. A number of thin longitudinal sections, cut so as to cross the beak and also out on the cardinal edges, fail to show any covering to the fissure, and the area appears to be little more than the reflexed shell, as the lines of growth of the valve extend over and upon it.