A similar type of the pygidium is figured by Angelin (Pal. Scan., plaxxiii, fig. 11) and doubtfully referred to the genera Corynexochus. In Brögger's Die silirischen Etagen 2 und 3, pl. i, a number of pygidia with a spinose border of this type are referred to the genera Peltura.

Formation and locality.—Middle Cambrian. Parker's quarry, town of Georgia, Franklin County, Vermont; also, in the conglomerate limestones of Bic Harbor, on the St. Lawrence River, below Quebec, Canada.

## OLENOIDES LEVIS n. sp.

Plate xxv, figs. 3, 3a.

Of this species we have only the head within the facial sutures. The glabella is elongate, sides parallel, front broadly rounded, general surface moderately convex and marked by glabellar furrows. Occipital furrows well defined, occipital segment imperfectly preserved, but apparently narrow. Free cheeks broad; the rim of the large eye lobe is continued across the cheek to form the ocular ridge; frontal limb narrow concave and rising rapidly from the front of the glabella to the narrow frontal rim; laterally it merges in the broad, free cheeks; postero-lateral limbs broken away except the inner portion on the left side, which is narrow, as in O. typicalis. Although imbedded in limestone the surface is not well preserved; it was probably smooth or finely granulose.

In the form of the glabella and broad, fixed cheeks this species differs from other known species of the genus.

Bathyurellus abruptus Billings (Pal. Foss., vol. i, p. 263, fig. 247) is of this type of head, and is placed as the first species after the generic description, but it is evidently not regarded as the type of the genus Bathyurellus, as the generic description is taken from the species B. nitidus, described after B. abruptus.

This species occurs in a granular limestone with Olenellus Gilberti. At a higher horizon Olenoides spinosus is found in an arenaceous shale, and still higher in the section O. typicalis, in an argillaceous shale.

Formation and locality.-Middle Cambrian. Pioche, Nevada.

## OLENOIDES QUADRICEPS H. & W.

Plate xxix, figs. 1, 1a-c.

Dikellocephalus quadriceps Hall & Whitfield, 1877. Geol. Expl. Fortieth Par., vol. iv, p. 240, pl. i, figs. 37-40.

Dicellocephalus ? quadriceps Walcott, 1884. Monographs U. S. Geol. Survey, vol. viii, p. 45, pl. ix, fig. 24.

Original description.—"Glabella and fixed cheeks united, quadrangular in form, with a regularly and symmetrically arcuate front margin. Glabella elongate quadrangular, a little expanded and rounded in front, three-fourths as wide across the middle as the length above the occipital