

"It is possible I should call this species *Olenus* or *Parabolina Nevadaensis*; but its large size seems to be an objection to placing it in any section of either of these groups. In the possession of a node or spine on each of the thoracic segments, as well as in the direction of the posterior segments of the lateral lobes of the pygidium, it agrees with the type of *Parabolina*; but, unfortunately, the specimen is not in a condition to show whether or not these segments of the pygidium terminated in produced marginal spines, while the furrows of its pleuræ have not the obliquity of those seen in that type, but agree more nearly with those of some species of *Conocoryphe*. The comparatively large size of its pygidium, and the nodes, or spines, on its thoracic segments, as well as the nature of the furrows of the pleuræ, are rather against its reference to *Paradoxides*, and lead me to think that it may belong to an undescribed genus; if so, it might be called *Olenoides*."

*Formation and locality*.—Middle Cambrian. Bluish-gray calcareous shale, House Range, Antelope Spring, Western Utah.

OLENOIDES TYPICALIS n. sp.

Plate xxv, figs. 2, 2a.

Form ovate. Head large, semicircular in outline. Glabella elongate, not quite twice so long as wide; sides subparallel; front broadly rounded; general surface moderately convex and marked by four pairs of glabellar furrows that extend about one-third the distance across, the anterior being scarcely discernable in most specimens; occipital furrow well defined; occipital ring strong, not very convex, and with a rather strong central spine projecting backwards over the thorax.

Fixed cheeks broad inside the rim of the eye, contracted at the front of the eye and expanding to unite with the frontal limb, which is of medium width, concave, and bordered by a narrow, rim-like margin; postero-lateral limbs narrow, elongate, with a central longitudinal ridge and a rather long spine extending backward just within the extremity of the limb. Free cheeks large, bordered exteriorly by a rather thick rim that is produced into a strong genal spine. Eyes narrow, elongate, reaching from opposite the third pair of glabellar furrows back nearly to the posterior margin, conforming in direction to the eye of *Paradoxides rugulosus*.

Hypostoma elongate, strongly convex, broadest anteriorly, narrowing towards the front; a sulcus, that rises on the lateral margin, separates a narrow posterior lobe; two small lateral depressions, or muscular impressions, occur a little in advance of the sulcus; anterior wings small; frontal margin broadly rounded. The hypostoma is more like that of *Ptychoparia* than that of *Paradoxides*, *Olenellus*, or *Dicellosephalus*.

Thorax with nine segments; axial lobe convex, broad, and tapering very gradually towards the pygidium; a furrow crosses obliquely from each posterior side of the segment and almost unites before the base