

Pygidium marked by transverse furrows on the axis, and the lateral segments are directed backwards.

The genus is referred to the family Paradoxidæ. It is a type unlike Paradoxides, Olenellus, or Dicellosephalus, and yet includes in its thoracic segments features common to the two former genera and, in the eyes and facial sutures back of the eyes, characters found in Dicellosephalus.

The stratigraphic position of the species referred to it, *O. Nevadensis*, *O. typicalis*, *O. spinosus*, and *O. flagricaudus*, is between the Middle Cambrian (Olenellus) horizon and Upper Cambrian (Dicellosephalus) horizon.

The type specimen of *O. Nevadensis* preserves the occipital segment of the head, the eight thoracic segments, and about two-thirds of the pygidium. The second species is known by its entire form and is referred to the genus from having a similar type of thoracic segment and a pygidium, so far as is now known, of the same type. I had described and proposed a generic name for *O. typicalis*, but, on discovering that Mr. Meek had proposed the name Olenoides for a species that, so far as known, could be generically associated with *O. typicalis*, I adopted the name, being placed in the dilemma of having a species with a generic name proposed "in case *it might* be found to be a distinct generic type," to which to refer the species, or of giving a new generic name that, on finding more perfect material of *Paradoxides? Nevadensis*, might prove to be congeneric with the latter. To avoid introducing a new name that might become a synonym, all the species originally arranged with the species *O. typicalis* are now placed with it under the genus Olenoides.

OLENOIDES NEVADENSIS Meek.

Plate xxv, fig. 7.

Paradoxides? Nevadensis Meek, 1870. Proc. Acad. Nat. Sci. Philad., vol. xxii, p. 62.
Idem, 1877. Geol. Expl. Fortieth Par., vol. iv, p. 23, pl. i, fig. 5.

The original description appeared in 1870 and was reprinted in 1877, the only change being in the proposal of the generic name Olenoides in event of the species proving to belong to an undescribed genus. The later description is as follows: "Of the thorax, eight of the posterior segments are preserved. These show the axial lobe to be much depressed, and about as wide as the lateral ones, exclusive of the free recurved points of the pleuræ. The segments of the axial lobe are defined by a broad, rounded furrow, or depression, across the anterior side of each, and have much the general appearance of those of some species of *Paradoxides*, being a little thickened, squarely truncated, and slightly curved forward at the ends. But they differ in showing distinct remains of a mesial spine, or tubercle, on each, and in having an obscure, oblique furrow, or depression, on each side, passing outward and backward