

nellus from *Paradoxides*. It was an error, as the finding of *Olenellus* beneath *Paradoxides* abundantly proves.

The discovery of more perfect specimens of *O. asaphoides* shows that that which I had identified as the facial suture is a raised line in the cast of the interior of the shell that fills a depressed line occupying the position of the suture. I have since found this raised line in many specimens, but in none is there a true suture cutting through the shell, as in *Paradoxides* and most other genera of trilobites.

Subgenus *Mesonacis* WALCOTT.

See Bull. U. S. Geol. Survey, No. 30, 1886, p. 158.

With the discovery of entire specimens of *Olenellus asaphoides*, *O. kjerulfi*, *O. mickwitzia*, and *O. bröggeri*, it appears that *Mesonacis vermontana* is to be grouped with them, and all referred to *Mesonacis* as a subgenus, on account of the peculiar pygidium of *Olenellus thompsoni*, the type of the genus, as compared with that of *O. (Mesonacis) vermontana*, the type of the subgenus *O. (M.) vermontana*.

*Olenellus (Mesonacis) asaphoides* EMMONS (sp.).

See Bull. U. S. Geol. Survey, No. 30, 1886, p. 168.

The discovery of entire specimens of this species shows that it has eighteen segments in the thorax, and a small, transverse pygidium, of the *Paradoxides* type. On each of the five, short posterior segments of the thorax there is a long, slender spine that projects back over the pygidium. The entire specimens were found at the original locality of the species, near the old Reynolds Inn building, one mile west of North Greenwich, Washington County, New York.

Nat. Mus. Cat. Invt. Foss., No. 18350.

*Olenellus (M.) bröggeri* WALCOTT.

*Olenellus bröggeri* WALCOTT, 1888. Name proposed on exhibition of specimens at the International Geological Congress, London. Name used in "Nature," vol. 38, p. 551, 1888.

General form ovate, the length and breadth nearly as 3 to 2 in comparing the length of the entire body with the width of the head. Head broad, semicircular in outline and moderately convex when preserved in the limestone, but very much compressed in the shales. Margin rather broad, but varying in width one-half in different individuals; it is slightly rounded and separated from the frontal limb and cheeks by a shallow groove and narrow, low ridge; posteriorly it terminates in a comparatively short, strong spine. The posterior margin of the head, between the glabella and postero-lateral spine, is broken just within the latter by a deep notch and a short spine that corresponds to the "interocular" spine (Ford) of *Olenellus asaphoides* and the spine at the pleural angles of the posterior margin of the head of *O. kjerulfi*; a low ridge extends from back of the eye, next to the glabella, out to the