

Enrolment in a Middle Ordovician agnostoid trilobite

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Study of silicified material of *Trinodus elspethi*, from the Edinburg Formation, Virginia, USA, shows there is no gliding of distal parts of segments but an articulating furrow and opposing flange with prongs, acting as apodemes for muscle attachment, allowed cephalon and thorax to move as a single unit. Articulation between thorax and pygidium was more rigid with prongs from the thorax articulating in sockets on the pygidium. Support is given to the view that agnostoids lived partially enrolled with cephalon and pygidium gaping. They are unique in lacking an articulating half-ring between cephalon and thorax and the hinge joint is modified medially to provide an opening for what is interpreted as an exhalatory organ through which water passed during feeding and swimming. Peculiarities of the thorax are connected with the presence of only two thoracic segments articulating as a unit with distal tips directed anteriorly rather than posteriorly. Otherwise articulating half rings are present in the rest of the thorax and pygidium and lack of articulating facets is not unique. It is concluded that agnostoids can be shown to be trilobites.

Key words: Trilobita, Agnostida, life habit, preservation, Edinburg Formation, Ordovician, Virginia.

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