

## Oldest mickwitziid brachiopod from the Terreneuvian of southern France

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*Acta Palaeontologica Polonica* 60 (3), 2015: 755-768 doi:<http://dx.doi.org/10.4202/app.00021.2013>

*Kerberellus marcouensis* Devaere, Holmer, and Clausen gen. et sp. nov., originally described as *Dictyonina?* sp., from the Terreneuvian of northern Montagne Noire (France) is reinterpreted as the oldest relative to or member of mickwitziid-like stem-group brachiopods. Were extracted 170 partial to complete phosphatic internal moulds of two types of adult and one type of juvenile disarticulated valves, rarely externally coated with phosphates, from the calcareous *Heraultia* Member of the Marcou Formation. They correspond to microbially infested, ventribiconvex, inequivalved, bivalved shells. The ventral interarea is bisected by a triangular sinus. The shell, most probably dominantly organic in origin, is orthogonally pierced throughout its entire thickness by radially-aligned, smooth-walled, cylindrical to hourglass shaped canals except for the sub-apical planar field (interarea). The through-going canals of *K. marcouensis* are compared with brachiopods endopunctae and with canals of mickwitziid brachiopods. The absence of striations on *K. marcouensis* canal walls, typical of mickwitziids, implies that (i) the tubes could have been depleted of setae or; (ii) traces of the microvilli were not preserved on the tube wall (taphonomic bias) or, (iii) the tubes could have been associated with an outer epithelial follicle.

**Key words:** Brachiopoda, Mickwitziidae, shell canals, Cambrian, Terreneuvian, West Gondwana, France.

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