

The semicircular scale-like ridges of the carapace are rather irregular in size, but the larger entirely covered by the smaller, otherwise resembling the fragment in Sir R. Murchison's *Sil. Syst.* from the Upper Ludlow, and named *Pterygotus problematicus* by Agassiz. The pincers are very remarkable; instead of being excessively thick and strong and armed on the inner edges with powerful teeth, as in the *Pterygotus Anglicus*, they are perfectly unarmed, and so long and slender as possibly to indicate a separate genus, which might be named *Leptocheles* (λεπτός, *tenuis*, and χηλή, *forceps*). It strikes me forcibly (judging from the figures) that the *Onchus Murchisoni* (Ag.), figured in the same work and from the same bed as the *P. problematicus*, is not an *Ichthyodorulite*, but the long fingers of the chelæ of this crustacean, the size, form, and sculpturing, agreeing very nearly. In the same bed as the long chelæ and fragments of carapace here described, were found one moveable finger, and one perfect claw with both fingers *in situ* of a much shorter form, the hand about three lines wide, the penultimate immoveable finger about one inch long and rapidly tapering from two and half lines wide at the base to the tip; it is longitudinally sulcated like the one above described: the last joint or moveable finger is very different, being perfectly flat, triangular, seven lines long, one and half lines wide at base, and tapering rapidly to a point, the inner edge being straight and simple, the outer edge slightly convex. The hands of both kinds of chelæ are similarly sculptured with fine sharp, short, irregular, longitudinal, curved plicæ. It seems probable therefore that more than one pair of feet were didactyle.

*Position and Locality.*—In the fine olive-schists, Leintwardine.

*Explanation of Figures.*—Pl. 1. E. fig. 7. The long penultimate or immoveable *Onchus*-like finger of one of the didactyle pincers, with a portion of the peculiarly sculptured crustaceous hand connected with its base, natural size; from Leintwardine.—Fig. 7 *a*. The terminal or moveable finger of probably the same pincer, seen from the opposite side, also shewing trace of the peculiar sculpturing of the hand near its expanded articular base; same locality.—Fig. 7 *b*. Portion of the sculpturing of the hand of fig. 7 magnified three diameters.—Fig. 7 *c*. A shorter didactyle claw, or pincer, with both fingers *in situ* belonging to a different pair from fig. 7, having a portion of the crustaceous hand and carpus attached, with traces of sculpturing resembling that of fig. 7 in character; same locality.—Fig. 7 *d*. A detached terminal joint (or the moveable finger) of a pincer identical with that of 7 *c*; same locality.