they are of an elongated conical form, and some of them are almost as long as the greatest breadth of the body. The body-wall passes imperceptibly into the processes, consequently it is rather difficult to state their exact size at the base. The processes are straight, brittle, and easily broken off, and appear to possess an extremely slight degree of flexibility. The tentacles (Pl. XLIII. fig. 3), the discoidal ends of which carry about eight minute retractile processes, are, as in *Deima validum*, small and capable of being withdrawn, thus rendering it impossible to discover any traces of them externally. The anterior circular aperture, which opens into the oral cavity in which the tentacles are enclosed, is surrounded in this species also by a circular disk encircled by a single crown of minute papillæ (Pl. XLIII. fig. 2). The integument, which is extremely brittle and hard, is supported by larger or smaller plates (Pl. XXXI. figs. 10, 11), which are crowded together and cover one another entirely or with their edges alone, so as to form a kind of external skeleton of remarkable firmness. Now and then some very large plates measuring up to 5 mm. are found, especially on the dorsal surface, round which are arranged some small plates, which mostly overlap the former ones. The inner surface of each plate is almost flat, while the outer is more or less convex and rises towards its middle into a large conical knob, which is most distinct and most prominent on the plates which belong to the back and to the processes. The inner surface of the plates is perforated by more regularly circular holes, and upon this inner surface, which doubtless is first formed, a very fine irregular network has arisen, thus giving the plates the form described. The tentacles contain only a small quantity of deposits (Pl. XXXI. fig. 13) in the shape of small oblong perforated spinose plates and spinose irregular spicula. The deposits of the dorsal processes resemble the plates in the integument, though they are smaller and of a more irregular form; I have not been able to distinguish any spicula, though they may possibly be present in the tops of the processes which, in consequence of their brittleness, have always been broken off. The plates on the pedicels seem to be destitute of the characteristic knob, or sometimes possess a slight one; transversely disposed spicula (Pl. XXXI. fig. 12) support the ends of the pedicels, which show no traces of a terminal plate.

The calcareous ring (Pl. XXXVII. fig. 3) resembles in structure that of *Oneirophanta;* five rather large radial pieces are distinguishable, each supplied with a furrow for the passage of the ambulacral nerves and canals. From want of materials I have not been able to make a more detailed examination concerning the number of the interradial pieces. The sutures are not visible between the different pieces, and the entire ring seems to form a continuous whole of an extremely spongy structure. The polian vesicle is short and widens behind. The water-vascular system seems to bear the most striking resemblance to that of *Deima validum* and *Oneirophanta*. The cloaca is insignificant. The reproductive organ (Pl. XLVI. fig. 8) consists of two fascicles, each composed of six or seven elongated cylindrical unbranched cæca. These cæca are very hard