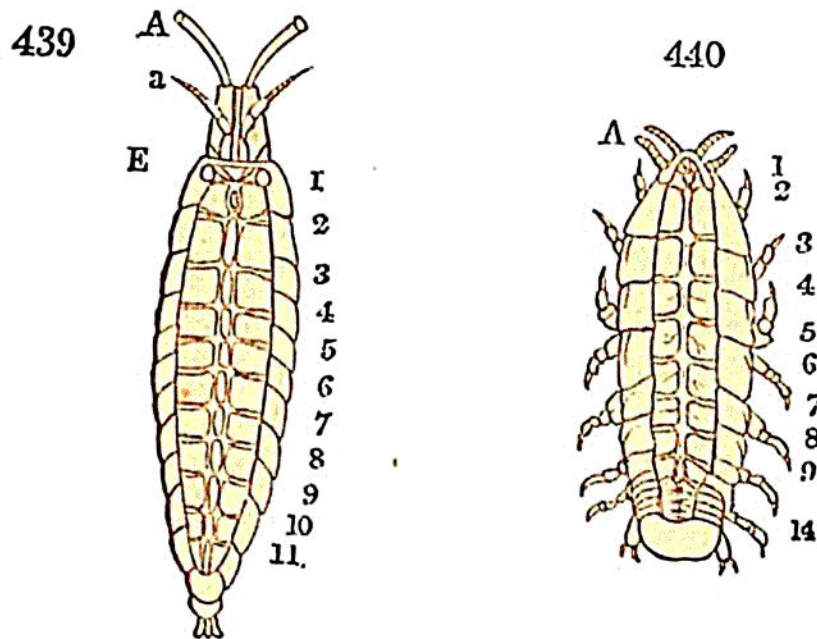


cords, which run in a longitudinal direction, are here perfectly distinct from one another, and even separated by a small interval: they present a series of ganglia, which are nearly of equal size, and equidistant from one another, one pair corresponding to each segment of the body,* and united by transverse threads; and other filaments, diverging laterally, proceed from each ganglion. During the progress of growth, the longitudinal cords approach somewhat nearer to each other, but still remain perfectly distinct. The first



pair of ganglia, or the *cephalic*, have been considered, though improperly, as the brain of the animal.

The next step in the gradation occurs in the *Phyllosoma* (Leach,) where the ganglia composing each pair in the abdomen and in the head, are united into single masses, while those in the thoracic region are still double. In the *Cymothoa*, (Fab.,) which belongs to the family of *Oniscus*, there is the appearance of a single chain of ganglia, those on the one side having coalesced with those on the other; each pair composing a single ganglion, situated in the middle line; while the longitudinal cords which connect them still re-

* These segments are numbered in this and the following figure in their proper order, beginning with that near the head. A is the external antenna; a, the internal antenna; and z the eye.