

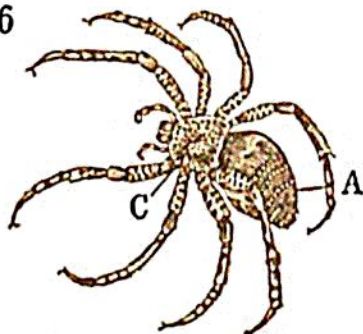
cavities of the body, and especially the alimentary canal, correspond in external form, as well as in many circumstances of internal conformation, to the Annelida. They compose an order denominated the *Entozoa*.

§ 3. *Arachnida*.

IN passing from the Annelida to the *Arachnida*, an order which comprehends all the species of spiders, together with animals allied to them in conformation, we find that a considerable advance has been made in the progress of development. The frame-work of the body is more consolidated, and the instruments provided for progressive motion are shaped into longer and more perfect levers, are united by a more refined system of articulation, and are moved by more distinct and more powerful muscles; so that the body is elevated from the ground, and enjoys a greater range of action, and a wider sphere of perception.

The rings, which always compose the frame-work of the Annelida, are here consolidated so as to form two principal divisions of the body; the one in front, which is termed the *Cephalo-thorax*, contains the organs of sensation, and of mastication, and also the principal reservoir of circulating fluids; the other, which is behind, and contains the organs of digestion, is termed the *abdomen*. In the spider (Fig. 136, where

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o is the cephalo-thorax, and A the abdomen) these two portions of the body are separated by a deep groove, which leaves only a slender pedicle, or tube of communication between them.

There are usually in the male four pairs of legs, constantly articulated with the cephalo-thorax; but the female is furnished with an additional pair to enable her to carry her eggs. For the purpose of obtaining an extensive base of support, the feet of the spider are spread out in diverging rays, so as to include a very wide circle. They are divided into several joints, those next to the body being termed