

themselves, however, have in some cases disappeared, and in others become transformed into the *wings* of the Flies. They have disappeared entirely in the classes of Spiders and Centipedes, and these groups must accordingly be conceived of as degenerated or peculiarly developed lateral branches of the Fly class, which at an early period branched off from the common primary form of Flies; Spiders probably did so at an earlier period than Centipedes. Whether that common primary form of all Tracheata, which in my General Morphology I have named Protracheata, did develop directly out of genuine Ringed worms, or at first out of Crustacea of the Zoëa form (Zoëpoda, p. 177) will probably be settled at some future time by a more accurate knowledge and comparison of the ontogeny of the Tracheata, Crustacea, and Annelida. However, the root of the Tracheata, as well as that of the Crustacea, must in any case be looked for in the group of Ringed worms.

The genuine Spiders (Arachnida) are distinguished from Flies by the absence of wings, and by four pairs of legs; but, as is distinctly seen in the Scorpion-spiders and Tarantulæ, they, like Flies, possess in reality only three pairs of genuine legs. The apparent "fourth pair of legs" in spiders (the foremost) are in reality a pair of feelers. Among the still existing Spiders, there is a small group which is probably very closely allied to the common primary form of the whole class; this is the order of Scorpion-spiders, or Solifugæ, (Solpuga, Galeodes), of which several large species live in Africa and Asia, and are dreaded on account of their poisonous bite. Their body consists—as we suppose to have been the case in the common ancestor of the Tracheata—of a head