

possessing several pairs of feelers like legs, of a thorax, to the three rings of which are attached three pairs of legs, and of a hinder, body, or abdomen, consisting of many distinct rings. In the articulation of their body, the Solifugæ are therefore in reality more closely related to flies than to other spiders. Out of the Devonian Primæval Spiders, which were nearly related to the Solifugæ of the present day, the Long Spiders, the Tailor Spiders, and the Round Spiders probably developed as three diverging branches.

The *Long Spiders* (Arthrogastres), in which the earlier articulation of body has been better preserved than in Round Spiders, appear to be the older and more original forms. The most important members of this sub-class are the scorpions, which are connected with the Solifugæ through the Tarantella (or Phrynidæ). The small book scorpions, which inhabit our libraries and herbariums, appear as a degenerate lateral branch from the true scorpions. Mid-way between the Scorpions and Round Spiders are the long-legged Tailor-spiders (Opiliones) which have possibly arisen out of a special branch of the Solifugæ. The Pycnogonida, or No-body Crabs, and the Arctisca, or Bear Worms—still generally included among Long Spiders—must be completely excluded from the class of Spiders; the former belong to the Crustacea, the latter to Ringed worms.

Fossil remains of Long Spiders are found in the Coal. The second sub-class of the Arachnida, the *Round Spiders* (Sphærogastres), first appear in the fossil state in the Jura, that is, at a very much later period. They have developed out of a branch of the Solifuga, by the rings of the body becoming more and more united with one another. In the true *Spinning Spiders* (Araneæ), which we admire on