

This little creature is clearly a hexapod and can best be referred to the Thysanura, as the three segments of the thorax are separate; there is a spring (elater) to the abdomen, and there are no traces of wings. It has not the compactness of body of the modern Springtail, but in its elongated form it approaches the species of *Lepisma* or Bristletails; however, these have more numerous segments to the abdomen than Podurites; and the strong stylet or spring of the latter is a distinguishing feature, that precludes us from placing it in *Lepisma*: the form and segmentation of the abdomen is thus intermediate between *Podura* and *Lepisma*, but sufficiently distinct from either to warrant the establishment of a new family for which I would suggest the name Poduritidæ.¹

ARACHNIDA.

According to Dr. S. H. Scudder (1881) two hundred and fifty species of Arachnids have been described from the Tertiary deposits. Of these one hundred and ninety are true spiders, while the remainder are Acarina (mites). Ophilionces (11 species), Chernitidæ (9 species). Of these insects nine-tenths (1886) have been preserved in amber, leaving only a quarter of a hundred species from other sources as representatives of this great division of the ancient insect world when Dr. Scudder commenced his studies on the insect fauna of Florissant. This fauna is contained in lacustrine clays, and the result of Dr. Scudder's study of the insect remains contained in it—if we omit from consideration the Arachnids of the European amber—more than doubled the number of Arachnids known as fossils up to that time.

While this was the relative number of the European and American Tertiary spiders up to this time, important additions were also being made to our knowledge of the Palæozoic Arachnids, for in the succeeding decade spider-like animals began to be found in the coal measures and among them several peculiar types, differing from any known in the later ages. Among these were the Anthracomarti of Karsch, differing widely from modern spiders, and established as a separate order by that author.

¹ Since the above paper was written another Thysanuran has been found, more remarkable than Podurites—that is, more difficult of comparison with any other modern form. While exhibiting the separate segments which are found in the thoraces of the Thysanurans, its head can only be compared with that of Scudder's genus *Planocephalus*, from the Oligocene beds of Florissant, or with certain suctorial Hemiptera. Perhaps it might be said that the existence of such a form as *Planocephalus*, best explains the peculiar structure of the new type, for it can be referred to the Thysanurans only on the same general considerations as have governed Dr. Scudder in so referring that genus.