

back were tufts of minute spines, so that it looked much like some caterpillars.

7. **Arachnids.** — Among Arachnids, there were Spiders (Fig. 1095) as well as Scorpions (Fig. 1094).

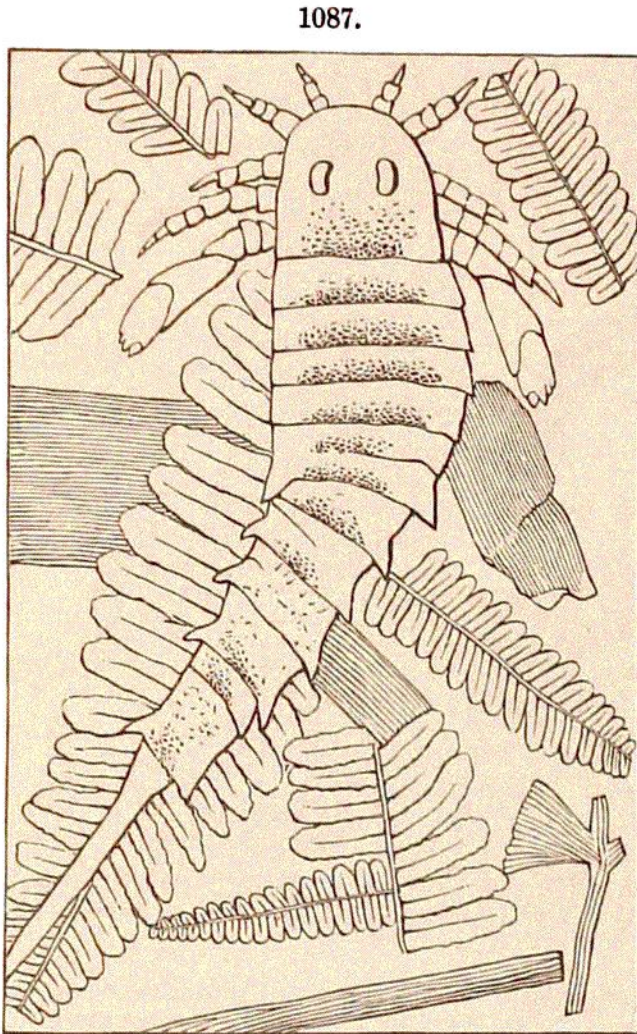


Fig. 1087, *Eurypterus Mansfieldi*. C. E. Hall, '77.

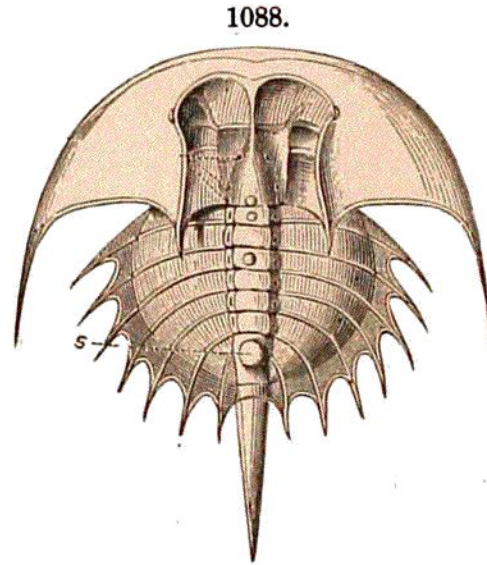


Fig. 1088, *Prestwichia Danae*. Meek and Worthen.

All the species represented in Figs. 1089–1093 are from the Coal-measures at Mazon Creek, in Morris, Ill., where they occur in the centers of concretions, and were the nuclei about which the concretions were formed. Thus entombed, they were safe against removal by infiltrating waters. The locality has afforded 16 species of Myriapods and nearly

a dozen kinds of Spiders, besides Scorpions.

8. **Insects.** — Insects are found at Morris, under the same conditions (besides Ferns and other plants), and in the shales of the Coal-measures elsewhere. The Neuropter-like, or Neuropteroid, species are common (Figs. 1096, 1097), and still more so the Orthopteroid, and especially those of Orthopteroids related to the Cockroach, a wing of one of which is shown in Fig. 1098; and less abundantly the species related to the modern Pasma and Locust, the Protophasmids (Fig. 1099). Scudder enumerates in a recent paper 133 American species of Coal-measure Cockroaches from the Coal-measures of the Continent, pertaining to 14 different genera, and nearly all are of his own describing. Of these, 56 species are from the Waynesburg coal-bed at Cassville, W.Va., where the beds are Permian, according to I. C. White; 12 from Providence, R.I.; 22 from the Lower Barren Coal-