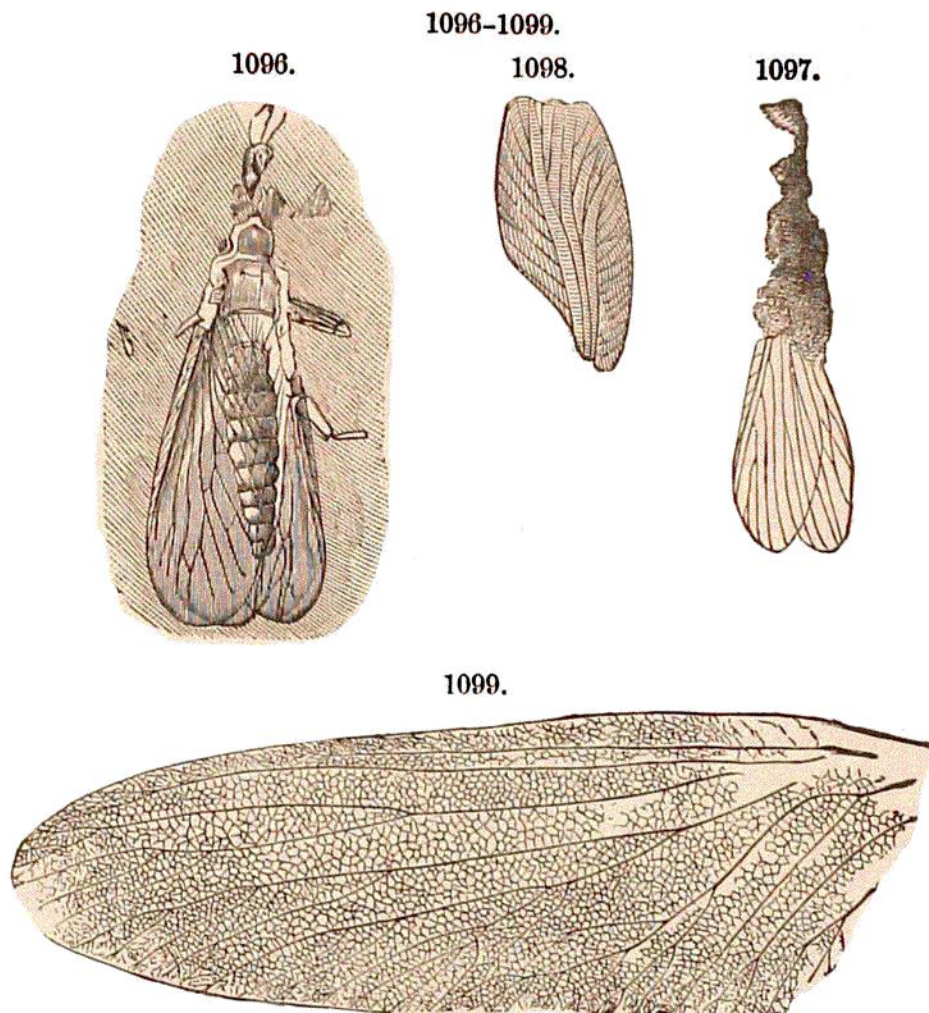


been found at two localities. All of the great marshes of the Continent appear to have been infested by Cockroaches. Probably the Neuropteroids were equally numerous, although less common as fossils. The Insect fauna



NEUROPTEROID INSECTS. — Fig. 1096, *Miami Bronsoni*; 1097, *Gerarus Danae*. ORTHOPTEROIDS. — Fig. 1098, *Etoblattina venusta*, anterior wing; 1099, *Paolla vetusta* ( $\times \frac{3}{4}$ ). Fig. 1096, D.; 1097, Scudder, '88; 1098, Lesquereux; 1099, S. I. Smith.

was also remarkable for the large size of many species. A Protophasmid of the genus *Haplophlebium* of Scudder, from Cape Breton, related to the Locust, had an expanse of wing of seven inches. In a Neuropteroid of the genus *Megathentomum*, from Illinois, the breadth of a wing was two inches, and the length over three. No Beetles (Coleoptera) had been found in the American Coal-measures up to 1894. The absence of Butterflies and all Lepidoptera, and of Hymenoptera and Diptera, is considered certain.

9. **Vertebrates.** — *Fishes.* The class of Fishes in the Carboniferous included only Selachians and Ganoids; and the Ganoids had still the ancient feature of vertebrated tails. Two of these Ganoids, one of them, a *Cœlacanthus*, having the vertebral column extending along the middle of the tail, the other, a *Eurylepis*, are illustrated in Figs. 1100, 1101; they are from a black, very carbonaceous shale, at Linton, Ohio, which abounds in Fishes, and has