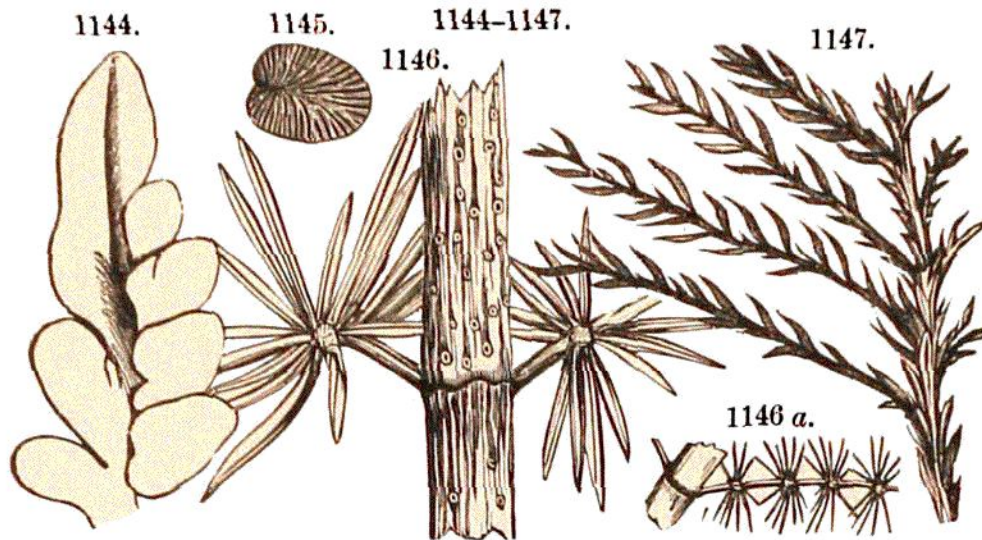


borescens, *P. Candolleana*, *P. oreopteridia*, *P. pennæformis*, *P. latifolia*, *P. Miltoni*, *P. dentata*, *P. pteroides*, *P. Pluckeneti*, *P. Germari*, *Goniopteris emarginata*, *G. elegans*, *Alethopteris gigas*; *Rhacophyllum filiciforme*, *R. lactuca*, *Sigillaria Brardii*. In addition, *Tæniopteris Lescuriana* is near *T. multinervis*, *T. Newberryana* near *T. vittata*; *Caulopteris elliptica* is allied to *C. peltigera*, *C. gigantea* to *C. microdiscus*, and *Baiera Virginiana* to *B. digitata*.

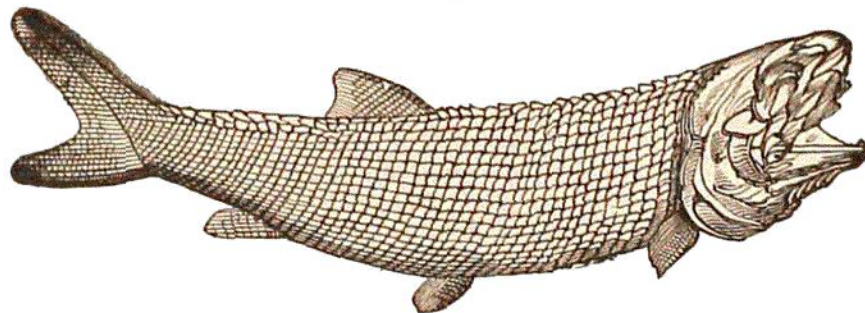


Figs. 1144, 1145, *Neuropteris Loschii*; 1146, 1146 a, *Annularia carinata*; 1147, *Walchia piniformis*. All Geinitz.

ANIMALS. — Corals of the *Cyathophyllum* family, Brachiopods of the genera *Productus*, *Spirifer*, and *Orthis*, Pteropods of the genus *Conularia*, Cephalopods of the genus *Orthoceras*, and Ganoid fishes with vertebrated tails, give a Paleozoic character to the Fauna. But there are many new tribes: among these, the most prominent is that of Reptiles.

This transition character is apparent also in the number of old animal types as well as vegetable that here nearly or quite fade out, — for it is the period of the last of the species of *Productus*, *Orthis*, *Murchisonia*; nearly the last of the extensive tribe of *Cyathophylloid* Corals, which made coral reefs of far greater extent than those of modern seas; nearly the last of the extreme vertebrate-tailed (heterocercal) Ganoids.

1148.



Palæoniscus Freteslebeni ($\times \frac{1}{2}$). Murchison.

1. **Fishes.** — Ganoids occur of the genera *Palæoniscus*, Fig. 1148; *Platyso-mus*, *Acrolepis*, *Pygopterus*, *Coelacanthus*; genera that are also Carboniferous. The figure illustrates the heterocercal feature of the species. There were also Cochlodont and Petalodont Sharks.