http://www.geology.19thcenturyscience.org/books/1845-49-Lyell-TravelsNA/README.htm

and almost all the rest have a near affinity to, species found in the Glasgow and other British coal measures. Among the rest is *Bellerophon Urii*, and two others of the same genus; *Euomphalus carbonarius*, several species of *Nucula*, one of *Loxonema*, and a *Producta*, allied to *P. scabricula*.

Among the plants occurring usually in the shaly roof or ceiling of the coal, are many identical with European species, such as *Calamites dubius* and *C. nodosus*, *Pecopteris arborescens*, and two other species in ironstone shale, both in fructification; also *Lepidodendron tetragonum*, *L. aculeatum*, *Neuropteris cordata*, *N. gigantea*, *Sigillaria reniformis*, *Caulopteris*, *Stigmaria*, *Asterophyllites tuberculata*, *A. foliosa*, and many others.

I have alluded to two species of ferns (*Pecopteris*) in fructification. One of these, abundant in the Jack Porter mine, appears to agree with the European *Hemitelites Trevirani* of Göppert. It agrees in its venation and the position of its sori with the recent subgenus *Goniopteris*. When we consider how rapidly the fructification decays on the back of the leaves of ferns, it is wonderful to see them thus petrified. The resemblance, moreover, of some of the common American and European coal plants, such as *Pecopteris lonchitica*, and *P. Serlii*, to ferns now living, such as *Pteris caudata*, and *P. aquilina*, is well worthy of notice. The leaves would be undistinguishable if the veins in the fossil species were not finer, closer together, and more perpendicular to the mid-rib, than in the recent ferns.

The specific agreement of so many of the American coal plants with European fossils implies a