

(see fig. 463), supposed by A. Brongniart to be allied to *Cycas*, is another link between the Permian and Carboniferous vegetation. Coniferæ, of the Araucarian division, also occur; but these are likewise met with both in older and newer rocks. The plants called *Sigillaria* and *Stigmaria*, so marked a feature in the carboniferous period, are as yet wanting.

Among the remarkable fossils of the rothliegendes, or lowest part of the Permian in Saxony and Bohemia, are the silicified trunks of tree-ferns called generically *Psaronius*. Their bark was surrounded by a dense mass of air-roots, which often constituted a great edition to the original stem, so as to double or quadruple its diameter. The same remark holds good in regard to certain living extra-tropical arborescent ferns, particularly those of New Zealand.

Psaronites are also found in the uppermost coal of Autun in France, and in the upper coal-measures of the State of Ohio in the United States; but specifically different from those of the rothliegendes. They serve to connect the Permian flora with the more modern portion of the preceding or carboniferous group. Upon the whole, it is evident that the Permian plants approach much nearer to the carboniferous flora than to the triassic; and the same may be said of the Permian fauna.

Fig. 463.



*Noeggerathia cuneifolia.*  
Ad. Brongniart.\*

\* Murchison's Russia, vol. ii. pl. A, fig. 3.