

To the same period probably belongs the Surturbrand of Iceland, (See Henderson's Iceland, vol. ii. p. 114.) and the well-known examples of Brown-coal on the Rhine near Cologne and Bonn, and of the Meisner mountain, and Habichtswald near Cassel. These formations occasionally contain the remains of Palms, and Professor Lindley has lately recognized, among some specimens found by Mr. Horner in the Brown-coal near Bonn (See Ann. Phil. Lond. Sept. 1833, V. 3, p. 222), leaves closely allied to the *Cinnamomum* of our modern tropics, and to the *Podocarpus* of the southern hemisphere.*

* At Pützberg near Bonn, six or seven beds of Brown-coal alternate with beds of sandy clay and plastic clay. The trees in the Brown-coal are not all parallel to the planes of the strata, but cross one another in all directions, like the drifted trees now accumulated in the alluvial plains, and Delta of the Mississippi; (See Lyell's Geology, 3d edit. vol. i. p. 272.) some of them are occasionally forced even into a vertical position. In one vertical tree at Pützberg, which was three yards in diameter, M. Nöggerath counted 792 concentric rings. In these rings we have a chronometer, which registers the lapse of nearly eight centuries, in that early portion of the Tertiary period which gave birth to the forests, that supplied materials for the formation of the Brown-coal.

The fact mentioned by Faujas that neither roots, branches, or leaves are found attached to the trunks of trees in the Lignite at Bruhl and Liblar near Cologne, seems to show that these trees did not grow on the spot, and that their more perishable parts have been lost during their transport from a distance.

In the Brown-coal Formation near Bonn, and also with the Surturbrand of Iceland, are found Beds that divide into Laminee