

were evolved in pairs, or were *dichotomous* to the top. The extremities of the branches were terminated by a fructification in the form of a cone, formed of linear scales, to which the name of *Lepidostrobus* (Fig. 45) has been given. Nevertheless, many of these branches were sterile, and terminated simply in fronds (elongated leaves). In many of the coal-fields fossil cones have been found, to which this name has been given by earlier palæontologists. They sometimes form the nucleus of nodular, concretionary balls of clay-ironstone, and are well preserved, having a conical axis, surrounded by scales compactly imbricated. The opinion of Brongniart is now generally adopted, that they are the fruit of the *Lepidodendron*. At Coalbrookdale, and elsewhere, these have been found as terminal tips of a branch of a well-characterised *Lepidodendron*. Both Hooker and Brongniart place them with the Lycopods, having cones with similar spores and sporangia, like that family. Most of them were large trees. One tree of *L. Sternbergii*, nearly fifty feet long, was found in the Jarrow Colliery, near Newcastle, lying in the shale parallel to the plane of stratification. Fragments of others found in the same shale indicated, by the size of the rhomboidal scars which covered them, a still greater size. *Lepidodendron Sternbergii* (Fig. 43) is represented as it is found beneath the shales in the collieries of Swina, in Bohemia. Fig. 46 represents a portion of a branch of *L. elegans* furnished with leaves. M. Eugene Deslongchamps has drawn the restoration of the *Lepidodendron Sternbergii*, represented in Fig. 47, which is shown entire in Fig. 44, with its stem, its branches, fronds, and organs of fructification. The Ferns composed a great part of the vegetation of the Coal-measure period.

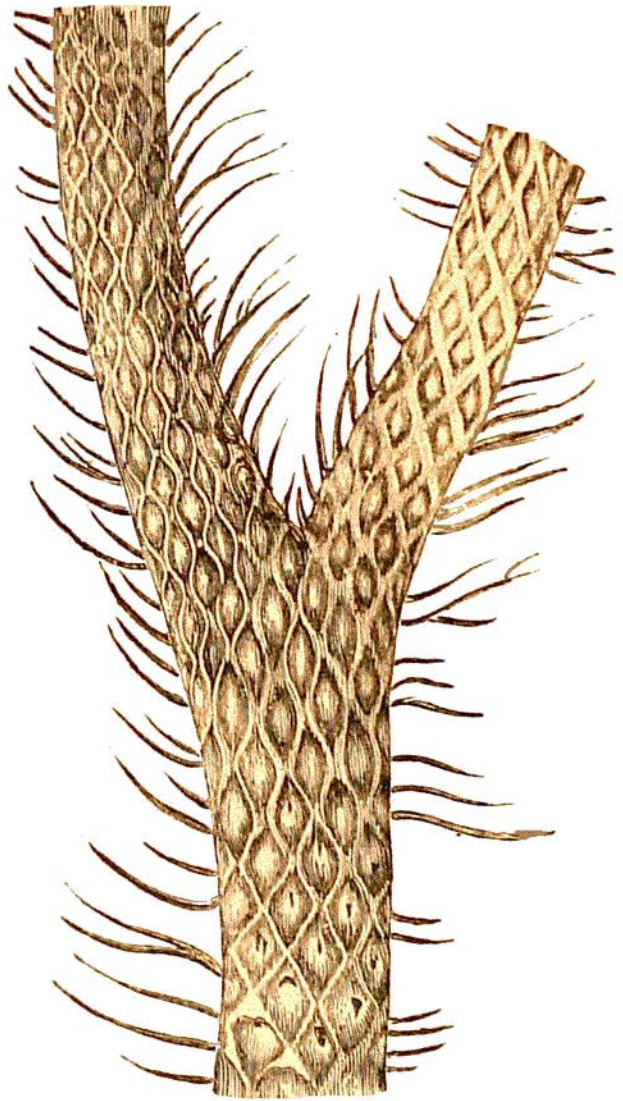


Fig. 43.—*Lepidodendron Sternbergii*.