

little angular scars left by the removal of the leaves. Some of these trees have been found almost entire, from their roots to their topmost branches. One specimen, ⁴⁹forty feet high, and thirteen feet in diameter at the [^]base, divided towards the summit into fifteen or twenty branches, was discovered in the Jarrow coal-mine.* The foliage of these trees consists of simple, linear leaves, spirally arranged around the stem, and appears to have been shed from the base of the tree with age. The markings produced by the attachment of the leaves are never obliterated; and the twigs and branches are generally found covered with foliage, as in the specimen here figured (*Lign.* 30.).

The internal organization of the stems of the *Lepidodendra* differs from that of the *Sigillariæ*, in the absence of the woody cylinder and medullary rays, which constitute so peculiar and important a character in those plants. The *Lepidodendra* have only an eccentric, vascular, medullary zone, the interval between which and the bark is filled up by cellular tissue.† In their structure, external configuration, mode of ramification, and disposition of the leaves, these trees accord so closely with the *Lycopodiaceæ*, that, notwithstanding the disparity

* Wond. p. 658. This specimen is figured and described in *Foss. Flor.*

† See M. Ad. Brongniart, *Archives du Muséum d'Hist. Nat.* Tom. I. (for 1839) Pl. XXX.