filled the interior of these trunks, it follows that they must have been without any transverse dissepiments, and hollow throughout, at the time when the sand, and mud, and fragments of other plants, found admission to their interior. The bark, which alone remains, and has been converted into coal, probably surrounded an axis composed of soft and perishable pulpy matter, like the fleshy interior of the stems of living Cacteæ; and the decay of this soft internal trunk, whilst the stems were floating in the water, probably made room for the introduction of the sand and clay.

These trunks usually vary from half a foot to three feet in diameter. When perfect, the height

nearly vertical. The interior of those whose inclination exceeded 45° was filled with an indurated mixture of clay and sand; the lower extremity of several rested on the upper surface of the bed of Coal. None had any traces of Roots, nor could any one of them have grown in its present place.

M. Alex. Brongniart has engraved a section at St. Etienne, in which many similar stems are seen in an erect position, in sand-stone of the Coal formation, and infers from this fact that they grew on the spot where they are now found. M. Constant Prevost justly objects to this inference, that, had they grown on the spot, they would all have been rooted in the same stratum, and not have had their bases in different strata. When I visited these quarries in 1826, there were other trunks, more numerous than the upright ones, inclined in various directions.

I have seen but one example, viz. that of Balgray quarry, three miles N. of Glasgow, of erect stumps of large trees fixed by their roots in sand-stone of the coal formation, in which, when soft, they appear to have grown, close to one another. See Lond. and Edin. Phil. Mag. Dec. 1835, p. 487.