

often occur in the calciferous grit of Tilgate Forest ; and sometimes large masses of lignite, fissured in every direction, and having the interstices filled with white calcareous spar.\* Some of the Tilgate sandstones are discoloured from the abundance of very minute particles of lignite, resulting from the disintegration of the foliage of the peculiar ferns that once clothed the country of the Iguanodon.

That the original structure and composition of a plant affected its carbonization, there can be no doubt ; for in the same layer of stone, the stems resembling palms (*Endogenites*, *Wond.* p. 373. *Foss. Til. For.* plate 3.) hereafter described, invariably possess a thick, outer crust, of coal : while the stems and roots of the *Clathrariæ*, plants allied to the *Yucca*, or *Dracæna*, (see *Wond.* p. 373.) have not a particle of carbonaceous matter, but are surrounded by a reddish brown, earthy crust. The nature of the stratum in which the plants were imbedded, must of course have also influenced the bituminous fermentation. Vegetable remains when interposed between beds of tenacious clay, by which the escape of the gaseous elements set free by decomposition was prevented, appear to have been most favourably situated for their conversion into lignite or coal. This subject is treated of at length in *Wond.* p. 632. That the production of lignite is still going on there can be no doubt ; and the

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\* A fine specimen of this kind is in the British Museum.