

Newcastle, for which I am indebted to William Hutton, Esq., vegetable remains occur between every lamina, and as I flake off portions bearing the leaves of ferns and other plants, another series is disclosed; the whole mass being formed of leaves and stems, closely pressed together in clay. The carbonaceous matter is sometimes in an unconsolidated state, exhibiting the matted fibres, leaves, and stems of the plants. This structure, indicating an intermediate stage in the formation of coal, is not of unfrequent occurrence in the upper secondary and tertiary carbonaceous deposits, but is rare in the most ancient beds.* The roof of a coal-mine when newly exposed displays the most interesting spectacle imaginable; leaves, branches, and stems of the most elegant and delicate forms, being embossed on the dark shining surface.

The coal-mines of Bohemia, the fossil plants of which are well known, from the beautiful work of Count Sternberg, are stated by Dr. Buckland to be the most interesting of any he had visited—but I will describe them in his own eloquent language. “The most elaborate imitations of living foliage on the painted ceilings of Italian palaces, bear no comparison with the beauteous profusion of extinct vegetable forms, with which the galleries of these instructive coal-mines are overhung. The roof is covered as with a canopy of gorgeous tapestry, enriched with festoons of most graceful foliage,

* Silurian System, p. 100.