

We shall further illustrate this point, by a brief description of the manner in which the remains of vegetables are disposed in the Carboniferous strata of two important Coal fields, namely, those of Newcastle in the north of England, and of Swina in Bohemia, on the N. W. of Prague.

The Newcastle Coal field is at the present time supplying rich materials to the Fossil Flora of Great Britain, now under publication by Professor Lindley and Mr. Hutton. The plants of the Bohemian Coal field laid the foundation of Count Sternberg's *Flore du monde primitif*, the publication of which commenced at Leipsic and Prague in 1820.

“ In those varieties which go under the name of Cannel, Parrot, and Splent Coal, the crystalline structure, so conspicuous in fine caking coal, is wholly wanting; the first kind of cells are rarely seen, and the whole surface displays an almost uniform series of the second class of cells, filled with bituminous matter, and separated from each other by thin fibrous divisions. Mr. Hutton considers it highly probable that these cells are derived from the reticular texture of the parent plant, rounded and confused by the enormous pressure, to which the vegetable matter has been subject.”

The author next states that though the crystalline and uncrystalline, or, in other terms, perfectly and imperfectly developed varieties of coal generally occur in distinct strata, yet it is easy to find specimens which in the compass of a single square inch, contain both varieties. From this fact, as also from the exact similarity of position which they occupy in the mine, the differences in different varieties of coal are ascribed to original difference in the plants from which they were derived. *Proceedings of Geological Society. Lond. and Edin. Phil. Mag. 3rd Series Vol. 2. p. 302. April, 1833.*