

all its strata. And this explanation, as appears from some later papers in *Tilloch's Journal*, Mr. Farey is now himself inclined to adopt.

(d) BETWEEN ASHBORNE AND DERBY.

We have next to speak of the indications of coal on the south of the Penine chain,—between it and the Trent. The horizontal deposits of the newer red sandstone, which, as we have seen, sweep in what is called an unconformable and overlying position, round this extremity of the chain, generally conceal all older rocks from observation. Coal has, however, been proved to exist within this tract at two points; both so nearly contiguous, as probably to form parts of one coal-field, situated about half way between Ashborne and Derby. These points are Sprinx-hall in Edlaston parish, and Darley moor. On the east and west of the coal-field thus assumed, are patches of mountain limestone at Wild park, in Magginton parish, and Birchwood park in Boston. Millstone-grit also occurs on the Trent at Stanton bridge.

(e) COAL-FIELDS OF NORTH STAFFORD.

Turning from the south along the western side of the Penine chain, we meet in the north of Staffordshire with two detached coal-fields; namely that of Cheadle, and that of Newcastle-under-Line, called the Pottery coal-field.

The Cheadle coal-field appears to consist of an insulated basin of the lower members of the coal series surrounded by, and reposing upon, millstone-grit; which latter rock, according to Mr. Farey “from Dilhorn northward round by Ipstone edge, and southwards to near Oak Moor Mills, declines towards Cheadle as a centre; being covered by the lower part of the coal series in Ipstone, Foxley and Kingsley. Near Cheadle, and to the south of it the coals are thicker and better in quality; but the great thickness of quartz gravel which occurs southward and round that town prevents the tracing these very satisfactorily.” p. 173.

Of the Pottery coal-field which next claims our attention, a short description is inserted in Pitt's *Topographical History of Staffordshire*. This coal-field appears to occupy a triangular area of which the apex is situated near Mole Copt hill; hence the sides diverge to the south-south-east and south-south-west, in each direction about ten miles. Newcastle-under-Line is