

(c) GREAT COAL-FIELD OF SOUTH YORKSHIRE,
NOTTINGHAM, AND DERBYSHIRE.

Advancing to the southern parts of Yorkshire, we arrive at the great Yorkshire and Derbyshire coal-field which rivals, or even surpasses in importance, that of Northumberland, with which it so closely agrees in the direction, inclination, and character of its strata, that it may not be improperly considered as a re-emergence of the same beds from beneath the covering of magnesian limestone which has concealed them through so long an interval.

This coal-field occupies an area nearly triangular, but with a truncated apex. The base, or broadest part being at the northern extremity; and the apex, or narrowest, at the southern; its greatest length, which is from north to south between Leeds in Yorkshire and Nottingham, is above 60 miles. Its greatest breadth, from east to west, which is in the Yorkshire portion, is about 22 miles.

Like those of the Northumberland Coal-field its strata range from north to south; dip to the east, where they sink beneath the super strata of magnesian lime, and rise to the west and north-west, in which directions the lowest measures at length crop out against the rocks of the millstone-grit series, which constitute the higher ridges of the Penine Chain.

Mr. Farey has inserted in his agricultural report on Derbyshire, a list of all the principal coal-pits in this field: which might be more easily consulted, were it not confused by the insertion of the pits of several other coal-fields unconnected with this, and disposed in an alphabetical order; the very worst arrangement that can possibly be adopted with a view to geological reference, for which a disposition according to geographical situation is almost indispensable. He has likewise furnished several other particulars from which the following are extracted.

It is ascertained that the strata of which the whole formation consists, are numerous. There are 20 gritstone beds, numerous strata of shale, bind, and clunch, alternating with several beds of coal of different thickness and value, the lowest of these is termed the millstone-grit, beneath which no workable coal is found. Some of the gritstone beds are of great thickness, and are described as consisting of grains of semi-transparent silex, united by an argillaceous cement; in some of the beds there are subordinate ones, in which the cement is very small in quantity, and from which are quarried grindstones for cutlers, &c. The beds of *shale* consist of a slaty argillaceous sub-