

situated about the middle of the base (which may be estimated at about seven miles) but falls rather within the area. From the two sides the strata dip towards the centre of the area. On the north-eastern side, the inclination westward is estimated at one foot in four; on the north-western, when the strata crop out against Mole Copt and the Harecastle hills, the inclination eastward is still more rapid. We are not informed in what manner the strata lie along the base line by Newcastle, whether they dip north and so render this coal-field a complete and insulated basin, or whether the strata continue to range in their former planes, and thus the coal-field in this direction terminates either by a fault or by the overlaying of the superior formations. As the red marle occurs near Newcastle on the south, the latter is perhaps the more probable supposition. Between Burslem, which is nearly in the centre of the coal-field, and its eastern limit at the range of hills east of Norton church, it has been clearly ascertained that there are 32 beds of coal, of various thicknesses, generally from about three to ten feet each.

On the north-east and north-west, the coal-field appears to be bounded by the cropping out of the millstone-grit on which the coal strata rest. Mole Copt and the Harecastle hills exhibit this rock, while beneath these on the further side, the carboniferous limestone shews itself towards Congleton.

(f) THE MANCHESTER, OR SOUTH LANCASHIRE COAL-FIELD.

We have next to notice a far more extensive and important coal-field, that of Manchester, or South Lancashire; or, as it is called by Mr. Farey, the great Derbyshire and Lancashire coal-field. This commences in the north-western parts of Derbyshire, and ranges thence to the south-western parts of Lancashire: forming a crescent-like figure, with Manchester nearly in the centre: the chord or span between the opposite horns of which, is about 40 miles. Speaking generally, it may be said that the strata rise towards the exterior edge of this crescent, along which the inferior strata of millstone-grit crop out from beneath them, and dip towards its inner edge; along which they are covered by the superior strata of the newer sandstone formation, containing occasionally beds of the calcareo-magnesian conglomerate. Great disturbances however interrupt the regularity of the disposition here sketched out. In the first place, what may be called the south-eastern horn of the crescent, forming the portion of the coal-field which lies