

of which are there nearly vertical) the stratification of the incumbent coal-measures is much deranged, becoming vertical and frequently thrown backward, and bent into the form of the letter Z. Much undulation of the coal strata also prevails in many points in the interior of the basin, so that in describing the general arrangement of its beds as constituting a single basin, the expression must be construed largely and applied to its configuration when viewed on the great scale, making allowance for much of local irregularity. On the east, west and south, the coal-measures are generally covered up and concealed by the more recent horizontal strata already described, leaving a few tracts only denuded and exposed to the surface: of these the most extensive reaches from Iron Acton across the Avon to Brislington on the south of that river; another very small occurs near Newton on the east of the field, a third of more importance in the vale of Pensford on the south of Dundry hill, a fourth near Clutton, and a fifth at Coleford at the south extremity of the field; but numerous shafts are sunk through the overlying strata, some even from the inferior oolite through lias to the coal-measures, especially throughout the interval which separates the denudations of Pensford and Coleford.\*

\* The following is a section of the coal-pit which is most interesting in this respect, as passing through the greatest number of formations; it is situated on the brow of the hill about three-quarters of a mile south-east of the village of Paulton, and belongs to Mr. Hill.

	Fs.	Y.	Ft.	In.
Inferior oolite .....	3	—	—	—
Lias marl and lias, as detailed in the sections of that formation .....	26	1	1	6
Red marl and sand.....	22	—	—	—
Calcareo-magnesian conglomerate called millstone.....	1	—	—	—

All these strata are horizontal; the following, which belong to the coal-measures, are highly inclined.

	Fs.	Y.	Ft.	In.
Shale, variable in thickness.				
Great vein .....	—	—	2	4
Shale and grit .....	6	—	—	—
Little vein.....	—	—	1	8
Shale and grit .....	4	—	—	—
Three Coal-veins .....	—	1	—	—
Shale and grit .....	7	—	—	—
Middle vein .....	—	—	1	8
Shale, &c. ....	12	—	—	—
Sliving vein .....	—	—	2	4
Shale, &c. ....	7	—	—	—
Little vein under . . . . .				
Sliving .....	—	—	1	6
Shale, &c. . . . .	6	—	—	—
Bull vein... ..	—	—	—	10
Shale, &c. ....	2	—	—	—
Peaw vein.....	—	—	—	10