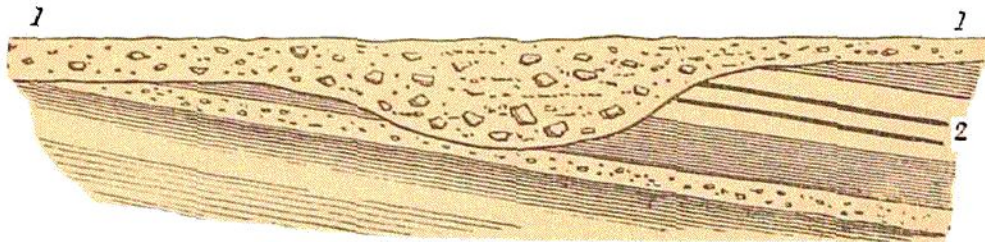


below. This may be well seen at Durham on the Wear.

‘The pre-Glacial valley,’ says Mr. H. H. Howell, in a letter which I quote, ‘runs nearly north and south from Durham to Newcastle. The river Wear, instead of following this old valley, meanders about, winding in and out of it, and at Durham cutting right across it, and passing into the sandstones of the Coal-measures, through which it has cut its way in a narrow gorge. At Chester-le-Street, half-way between Durham and Newcastle, the river Wear leaves the course of the old valley altogether, and, turning to the east, makes its way to the sea at Sunderland, passing principally through sandstones and shales of the Coal-measures, and cutting through the Magnesian Limestone, just before entering the sea.’¹

It is for this reason that coal-miners in Northumberland and Durham, while mining a bed of coal, some-

FIG. 105.



1. Boulder-clay filling a valley. 2. Coal-measures with beds of coal.

times find it crop up deep underground against a mass of Boulder-clay that fills an ancient rocky valley, of which the plain above gives no indication.

Again, if we examine the channels of other rivers in the south-east of England, we find that in places the

¹ See ‘Transactions of the North of England Institute of Mining Engineers,’ vol. xiii. pp. 69 to 85, especially the Map at p. 69 and the section p. 77.