

department, would have proved greatly an overmatch for them in the end.

The wilder tracts of Northumberland are composed of the Millstone Grit and Mountain Limestone; and never before had I seen this latter deposit developed in a style that so bears out the appropriateness of its name. It is in Northumberland, what it is rarely or never in Scotland, a true *Mountain Limestone*, that rises into tall hills, and sinks into deep valleys, and spreads laterally over a vast extent of area. The ocean of the Carboniferous era in England must have been greatly more persistent and extended than the ocean whose deposits form the base of the Coal Measures in the sister country: it appears to have lain further from the contemporary land, and to have been much less the subject of alternate upheavals and depressions. We were several hours in driving over the formation. As we entered upon the true Coal Measures, the face of the country at once altered: the wild, open, undulating surface sunk into a plain, laid out, far as the eye could reach, into fields closely reticulated with hedge-rows; the farm-houses and gentlemen's seats thickened as we advanced; and England assumed its proper character. With a change of scenery, however, we experienced a change of weather. We had entered into the cloud that seemed so threatening in the distance from the top of Carter Fell; and a thick, soaking rain, without wind, accompanied by a lazy fog that lay scattered along the fields and woods in detached wreaths of gray, saddened the landscape. As we drove on, we could see the dense smoke of the pit-engines forming a new feature in the prospect; the tall chimneys of Newcastle, that seemed so many soot-black obelisks, half lost in the turbid atmosphere, came next in view; and then, just as the evening was falling wet and cheerless, we entered the town, through muddy streets, and along ranges of