

been worked near the Maltraeth æstuary, and probably extends along the whole line. A few years since, shafts were sunk in the vicinity of Trefdraeth; and new trials have recently been made with success at Pen tre beren, about five miles north-east from the old pits. The veins are described as thick and extensive, and the coal of excellent quality.

2. FLINTSHIRE.

Carboniferous Limestone of North Wales, and Coal-field of Flintshire.

Before proceeding to the coal-field of Flintshire, it will be necessary to trace the line of carboniferous limestone skirting the edge of the North Welsh mountains, which, on arriving in that county (Flint), form the base of its coal-measures.

This commences near the port of Crickhaeth, on the south of Carnarvon, and hence proceeds northwards in an interrupted line along the shore, until it arrives at that town: here its strata dip in an angle of 10° or 12° towards the water, and rest on a conglomerate of quartz pebbles in a calcareous cement. From this place it proceeds along the Menai, forming its eastern bank as far as Bangor Ferry; beyond which point it is cut off, by the approach of mountains of older formation to the sea. The line recommences in the lofty promontory of Ormes head, a large detached hill, situated at the eastern extremity of the mouth of the æstuary of the Conway. This vast unconnected rock has no doubt been formerly an island, being at present joined to the main land only by a neck of low marshes. Some copper, though in no great quantity, is procured from two mines near the top of the mountain. The ore is malachite, found between the limestone in strata about two inches thick: the limestone resembles in appearance those varieties that contain magnesia. The limestone cliffs commence on the coast about four miles south-east of this promontory, and follow the line of the coast by Abergeley (where are some old lead mines) to the mouth of the Clwyd. In the vale of the Clwyd may be traced the old red sandstone, on which this formation appears to rest: it is perhaps co-extensive with this rock, but has never been particularly noticed. Beyond the Clwyd, the limestone is prolonged through Flintshire, where it forms the base of the coal-field we are about to describe; its direction continues to be westerly, as far as the neighbourhood of Holywell (where extensive lead-mines are worked in it); thence it turns southward, passes a little on the east of