

(d) OLD RED SANDSTONE OF THE SOUTH-WESTERN COAL-DISTRICT.

It is in the districts connected with the coal-basins, which form the subject of the present chapter, that this formation is exhibited on the largest scale. Hitherto we have only seen it constituting a few not very important beds towards the base of the Penine chain, but shall now survey it as exclusively constituting lofty and extensive mountain groups, and occupying entire counties.

In this quarter, then, the old red sandstone constitutes the common base on which all the coal-fields above described rest, thus connecting them into one whole; and together with those coal-districts forms the external chains which border on the south and east the transition mountains of South Wales. We may trace it from the borders of Shropshire and Staffordshire near the Clee hills, sweeping across Herefordshire of which it occupies nearly the whole, with the exception of a ridge of transition limestone which, rising in arched strata, emerges from beneath the sandstone near Shucknell in the south-east of that county, extending to Longhope near Mitchel Dean in Gloucestershire; this ridge creates an undulation in the sandstone dividing it into two troughs, that on the east lying between this interposed ridge of transition limestone, and that of similar formation which forms on the borders of Worcestershire the Abberley hills, and the western slope of the Malvern group, against which the beds of this sandstone crop out.

This great tract of old red sandstone has its western boundary against the transition chains of South Shropshire and the western confines of Herefordshire, following nearly the course of the rivers Corve in the former, and Arrow in the latter county.

From the south-west of Herefordshire, the old red sandstone is prolonged on either side of the vale of the Usk, through Brecknockshire, forming the lofty mountains called the Beacons of Brecon on the south of that river; and those connected with Trecastle beacon on the north; the beds on the south dip beneath the calcareous border of the great coal-basin, which here follows a line nearly coinciding with the confines of Brecon and Glamorganshire; and those on the north rise against the subjacent transition rocks of the Eppynt hills.

This sandstone tract narrows in its progress through Brecon, being more than twenty miles across from north to south near Abergavenny on the east, and not above two or three near Castle Carreg Cennen on the west. This difference arises partly from the higher inclination of the beds, and partly from