

500 or 600 feet, and it seems tolerably uniform in this respect.

The course of this rock round the South Welsh basin has been sufficiently defined in treating of the limits of the basin itself; it forms a zone varying from two miles to a furlong in breadth, according as the position of the beds approaches to an horizontal or vertical position; to the west of Milford-haven however these limestone beds seem generally cut off, the limestone rests throughout on old red sandstone; on its southern line it throws off several branches which diverge more or less from the main chain, or sometimes accompany it in nearly parallel lines; thus the peninsula of Pembroke exhibits between the coal-field and the sea no less than three parallel zones of limestone separated by two ridges of old red sandstone, the limestone lying in troughs between them. Caldy Island, near Tenby, exhibits magnificent sections of the middle limestone zone, and the sandstone on which it rests, the strata being almost vertical; the peninsula of Gower (between Carmarthen and Swansea bay) has a central ridge of old sandstone with parallel zones of limestone resting on either side, and the south-east of Glamorganshire exhibits a similar arrangement, with the exception that here the sandstone, which is traversed by the vale of Ely, is often concealed by more recent horizontal deposits of calcareo-magnesian conglomerates, new red sandstone and lias, which formations also rest on the back of the most southerly zone of carboniferous lime along the coast from the mouth of the River Ogmore to the Taafe.

The carboniferous limestone of the forest of Dean forms a zone encircling, and dipping beneath, the coal-basin of that forest as before described; thence it crosses the Wye near Tintern Abbey, and is prolonged on the west as far as Penhow castle, about seven miles distant. Its beds rest on the old red sandstone. It presents the usual fossils and minerals; and in some of its beds ferruginous ores, accompanied by brown spar and pearl spar, are worked.

The carboniferous limestone surrounding what we have termed the Somersetshire and South Gloucester coal-field, presents more complicated details. On the south it appears in the long ridge of the Mendip hills, extending from Mells to the Bristol channel, with a line of bearing from east-south-east to west-north-west. This chain consists of a central axis of old red sandstone, flanked on its opposite declivities by parallel bands of mountain limestone, dipping from it in opposite directions in angles varying from 30° to 70°. This central axis is not however visible throughout its whole course, being occasionally entirely over-arched, and concealed by the calcareous strata; but it appears in four ridges, forming the most elevated points of