

About six miles north from Dumfries, however, the hills on either side draw together, the Permian rocks cease, and the Nith flows for about three miles through a series of ravines in the Silurian greywacke and shale. The valley then once more expands into a wide basin, which is filled with Carboniferous and Permian sandstones, and some volcanic rocks of Permian age [330]. The village of **Thornhill** stands nearly in the centre of this basin. Looking westward to the left the traveller can see how marked is the contrast between the outlines of the craggy Silurian hills and the smooth undulating surface of the younger drift-covered rocks of the basin. Beyond **Carron-bridge** Station the railway runs through a tunnel cut in the Permian volcanic rocks and Carboniferous sandstones, and then strikes for the Nith, which is now seen on the left hand far below, flowing in a deep narrow valley cut out of the Silurian strata. After about five miles the Silurian hills once more retire on either side, and a wide basin of Coal-measures now lies between them, forming the **Sanquhar** coalfield [285, 300]. Several necks of volcanic agglomerate in the neighbourhood of Sanquhar mark the positions of volcanic vents of Permian age. On the south-west side of the basin the Coal-measures lie unconformably on the older rocks of the hills; but on the north-east side, the boundary-line is a fault with a down-throw of about 1200 feet, some of the highest parts of the Coal-measures being thereby brought down against the bases of the Silurian hills [Fig. 65]. About two miles to the east of **New Cumnock** the line of railway emerges from the Southern Uplands into the Midland Valley by the course of the Nith, which here forsakes the Ayrshire lowlands and strikes abruptly into the uplands [304]. About midway between New and **Old Cumnock** a small loch may be seen on the right. It lies on the watershed (635 feet), and after heavy rains discharges both into the Firth of Clyde and the Solway. At Old Cumnock the railway crosses the Lugar Water. Five miles farther on, from the lofty viaduct across the River Ayr, a glimpse may be obtained of the deep ravine cut by that river through the Permian volcanic rocks and red sandstones which lie in the centre of the Ayrshire coal-field [330].

As the train gradually descends into Ayrshire the picturesque mountain group of Arran may occasionally be seen far to the left rising from the opposite side of the Firth of Clyde