crosses the river for the last time, just before reaching Carstairs Junction.

The railway north-eastwards from Carstairs passes through a tract of peat-mosses and kames [369, 371, 372]. From Cobbinshaw Reservoir a good view is obtained of the Pentland Hills to the right. The most southerly eminences in that chain are the East and West Cairn Hills (1839, 1750 feet), formed of gently inclined Upper Old Red Sandstone, with the deep gap of the Cauldstane Slap between them. A little farther on, the more conical eminences of the chain formed of the porphyrites, diabases, and tuffs of the Lower Old Red Sandstone rise along the sky-line and continue to bound the view on that side during the rest of the journey. To the left the eye can sweep over a wide tract of the Midland Valley. The isolated volcanic hills of Linlithgowshire are the most prominent objects, especially Binny Craig, which is distinguished by its abrupt western face and gentle eastern slope [356 and Fig. 82]. Beyond these rise the hills of Fife and the long line of the Ochil Hills, with the tops of the Trossach Mountains peering into the clouds far to the left. In front occasional curves of the line allow glimpses to be had of Edinburgh and Arthur's Seat, and the train finally comes to a stand in front of the precipitous crag on which Edinburgh Castle is perched.

## 4. WEST COAST ROUTE

## To Glasgow by Carstairs

The greater portion of this journey has already been described at p. 427. At **Carstairs** the Glasgow and Edinburgh portions of the train are separated. The route westward first skirts a remarkable district of kames [371], which are best seen to the west and north of the village of Carstairs. It crosses the Mouse Water a little above the deep ravine, by which that stream joins the Clyde [351], and then strikes into the coalfield of Lanarkshire, keeping on the whole parallel with the Clyde, but at a distance of two or three miles. The coalworkings around Motherwell and Wishaw have revealed under the boulder-clay, which here spreads all over the country, two ancient buried river channels, probably those of the South Calder River and Tillon Burn. The post-glacial ravine of the