

The heights to the left, with the Hopetoun Monument on their summit, are the Garlton Hills, while the striking cone which rises close to the sea on the right, and is visible for some miles of the journey, is another volcanic vent known as North Berwick Law [303, 353, 361]. On the farther side of the Firth of Forth, the hills of Fife come into view, with the light-house-crowned-island of Inchkeith in front of them. As the train enters Midlothian, Arthur's Seat [330] rises boldly in front, and the chain of the Pentland Hills [340] appears beyond to the left. At last sweeping past the base of the crags of the former eminence, the traveller enters a tunnel cut through the volcanic rocks of the Calton Hill, and, skirting the foot of the precipice on which the jail is built, finds himself in the valley that divides the Old and the New Town of Edinburgh.

2. WAVERLEY ROUTE

Carlisle to Edinburgh by Hawick and Melrose

This route affords the longest and most varied traverse of the Southern Uplands. Like Berwick, on the eastern side, **Carlisle** is a convenient centre for the exploration of the scenery and geology of a large region of the Scottish border. It commands lines of railway that lead the visitor into Nithsdale, Annandale, Eskdale, Liddesdale, and other valleys. With one exception—that of the branch railway to Langholm—these are through lines, and the features to be seen in journeying by them will be described in the account of the different routes into Scotland from Carlisle.

After quitting Carlisle the railway turns away to the north-east, and crossing a drift-covered and peaty plain, enters the Permian district of Southern Dumfriesshire. Where the Esk and Liddel join, a branch-railway runs up the lower part of Eskdale as far as **Langholm**. The geologist who has time at his disposal will be rewarded by making Langholm his headquarters for two or three days. From that centre he can ascend the valley of the Esk and see some of the characteristic features of the opener depressions in the Southern Uplands. In that valley also, near the parish church of Eskdalemuir, he will find, on the left side of the road, one of the best examples of the outcrop of a great Tertiary dyke [310, 331, 342]. The