

that the drainage of the country to the north was drawn into it. But I do not think this the probable explanation.

Looking at the facts in connection with the whole problem of the denudation of the country, I believe that we must regard the trenching of the Ochil ridge to have been begun before the ridge had as yet appeared. We must carry our imagination back to that immensely remote period when the present broad valley between the Ochil and Sidlaw range, on the one side, and the Grampians, on the other, was filled up with Old Red Sandstone, and when the Tay began to flow in a depression of the sandstone plain. The river gradually worked its way downward through this sandstone covering. How far, when the river began its operations, the top of the anticline had been levelled off, cannot be known. But the igneous rocks, if exposed at the surface, could not have formed a continuous ridge, for the river flowed across their site. At the same time, the whole surface of the country was lowered by denudation. The sandstones, being more easily removed, were lowered faster than the volcanic rocks. Hence the former were worn down into a plain, and the latter were left protruding as a ridge. But the river, having meanwhile taken its course across the line of the ridge, continued to saw it through as it emerged from the general degradation of the land.

Rising on the eastern flanks of Ben Lomond, the Forth issues from the Highlands by the narrow defile of Aberfoyle. It there crosses the great fault, and strikes across the vertical bands of conglomerate which form so prominent a feature in that picturesque locality. Its course is here not only not in accordance with, but actually in defiance of, geological structure. Winding across the great plain of the Flanders Moss, the river passes through the contracted part of its valley between Stirling and the Bridge of Allan,