

freestones and shales of the Oolites. The contrasts of these different kinds of rock, the variations in their characteristic scenery, and the persistence of feature which marked each band of strata gave him constant subjects of observation and reflection.

By degrees his surveying duties took him farther afield, and brought him in contact with yet older formations, particularly with the Coal-measures of Somerset and their dislocations. At the age of four-and-twenty, he was engaged in carrying out a series of levellings for a canal, and had the opportunity of confirming a suspicion, which had been gradually taking shape in his mind, that the various strata with which he was familiar, though they seemed quite flat, were really inclined at a gentle angle towards the east, and terminated sharply towards the west, like so many "slices of bread and butter." He took the liveliest interest in this matter, and felt convinced that it must have a far deeper meaning and wider application than he had yet surmised.

His first start on geological exploration took place the following year (1794) when, as engineer to a canal that was to be constructed, he was deputed to accompany two of the Committee of the Company in a tour of some weeks duration, for the purpose of gaining information respecting the construction, management, and trade of other lines of inland navigation. The party went as far north as Newcastle, and came back through Shropshire and Wales to Bath, having travelled 900 miles on their mission. The young surveyor made full use of the opportunities which this journey afforded him. He had by this time satisfied