

the nearest Lias, near Droitwich in Worcestershire. Indeed, I firmly believe that the Lias and Oolites entirely surrounded the old land of Wales, passing westwards through what is now the Bristol Channel on the south, and the broad tract of New Red formations, now partly occupied by the estuaries of the Dee and Mersey, that lie between Wales and the Carboniferous rocks of the Lancashire hills.

The strata that now form the wide Oolitic tableland, have a slight dip to the south-east and east, and great atmospheric denudations having in old times taken place, and which are still going on, a large part of the strata, miles upon miles in width, has been swept away, and thus it happens that a bold escarpment, once—for a time in Yorkshire and the Vale of Severn—an old line of coast cliff, overlooks the central plains and undulations of England, from which a vast extent and thickness of Lias and Oolite have been removed. That the sea was not, however, the chief agent in the production of this and similar escarpments will be shown further on.

An inexperienced person standing on the plain of the great valley of the Severn, near Cheltenham or Wotton-under-edge, would scarcely expect that when he ascended the Cotswold Hills, from 800 to 1,200 feet high, he would find himself on a second plain (9, fig. 57, p. 304); *that plain being a high tableland*, in which here and there deep valleys have been scooped, chiefly opening out westward into the plain at the foot of the escarpment. These valleys have been cut out entirely by frost, rain, and the power of brooks and minor rivers.¹

If we go still farther to the east, and pass in

¹ Such valleys are necessarily omitted on so small a diagram, and the minor terraces on the plain, especially such as 7, are exaggerated.