channel approximately in its present course, but varied and widened by subsequent river action; and, as it cut out that valley, the escarpment, by the influence of rain and other atmospheric causes, gradually receded to the points marked 1, 2, 3, 4, 5, and *a*, the last being the present escarpment. For all observation tells us that escarpments of a certain kind work back in this way, that is to say, in the direction of the dip of the strata.

One reason of this is, that escarpments often partly consist of hard beds lying on softer strata. The softer strata are first more easily worn away along the line of strike, and thus an escarpment begins to be formed. Once established, the weather acting on the joints and other fissures in the rocks, takes more effect on the steep slope of the scarp than on the gentle slope that is inclined away from the scarp. The loosened detritus on the steeper slope slips readily downward, and is easily removed by floods of rain; and thus the escarpment constantly recedes in a given direction, while on the opposite gentle slope, the loosened detritus, smaller in amount, travels so slowly that it rather tends to block the way against further waste. In this way we can explain how the Wye and the Usk break through the Old Red Sandstone and find their way to the estuary of the Severn; why the Severn itself breaks through the Upper Silurian escarpment of Wenlock Edge; why certain other rivers—such as the Dee in Wales, and the Derwent in Cumberland—cut through escarpments of Carboniferous Limestone; and how, indeed, the same kind of phenomena are everywhere prevalent under similar circumstances. Of this I shall say more when I come to treat of the Oolitic and Cretaceous escarpments.

But when we have to consider the origin of some of