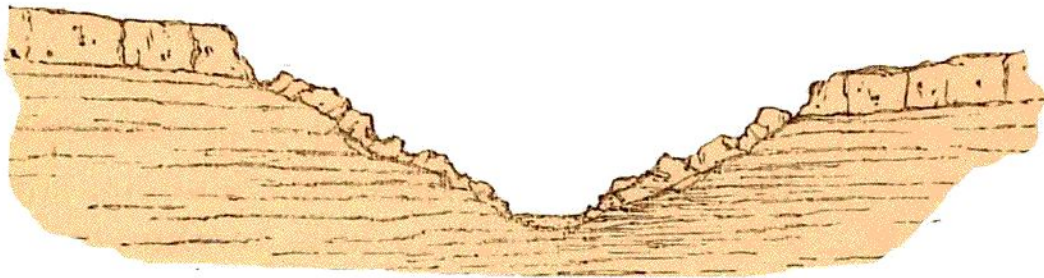


side has slipped bodily away, part lies in tumbled ruins all the way down to the river, and part still stands in tower-like peaks and solid flat-topped castlelike masses, called Alport towers and Alport castles.

This is the law of waste in such cases :—

FIG. 66.



The upper strata of the tableland consists of thick beds of sandstone, much jointed, and easily permeated by rain-water; the shale beneath becomes softened and slippery, and great masses of sandstone slip over the brow, and, once there, by gravity find their way to the bottom of the valley. Just in proportion as the river attacks and carries away the crumbling ruins below, the upper part of the slip gradually creeps down the slope, till at length it reaches the river. Thus repeated slips take place on one or both sides of the valley, and though the river is always deepening its channel, the waste from the hill-sides, by slips and rain-waste, is proportionate to the average deepening, and thus the valley goes on increasing both in depth and width.¹

It requires little imagination to divine how such valleys began to be formed by streams running in slight inequalities on the very top of the sandstone plateau, till at length, channels being cut through the sandstones,

¹ These and many other valleys are also deepened and widened by the process described at pp. 533-36 in regard to the Moselle, &c.