

hills are diminished by the rain acting upon them with a greater degree of force, proportionate to their height, and consequently carry away the sand and gravel in more considerable quantities, and with greater violence; the river is then constrained to change its bed, and seek the lowest part of the valley: to this may be added, that as all rivers overflow at times, they transport and deposit mud and sand in different places, and that sands often accumulate in their own beds, and cause a swell of the water, which changes the direction of its course. It is very common to meet in vallies with a great number of old channels of the river, particularly if it is subject to frequent inundations, and carries off much sand and mud.

In plains and large vallies, where there are great rivers, the beds are generally the lowest part of the valley, but the surface of the water is very often higher than the ground adjacent. For example, when a river begins to overflow, the plain will presently be inundated to a considerable breadth, and it will be observed that the borders of the river will be covered the last; which proves that they are higher than the rest of the ground, and that from the banks to a certain