suppose, the remaining evidence of the former passage of running water, when the levels of the country were differently adjusted.

As the slopes are greatest in the upper parts of valleys (generally), and gradually flatten towards the sea, it is commonly observed, that, from all the upper parts of these valleys, rivers abstract large quantities of the finer matter, and in times of inundation, not a little of the coarser fragments of rocks ; much of this is deposited in the lower ground, where the current is more tranquil, and generally (unless the river be very deep) slower. We must, indeed, suppose, that every where *some* wearing effect on its bed and sides is produced by every river, even to its mouth ; but this effect grows almost insensible far from the high ground which gives birth to the streams ; and long ere we approach the estuary, the wide flat meadows, which fill the whole breadth of the valley for miles in length, show what a mass of materials has been drifted away from the higher ground. Finally, where the tides and freshes meet, the sediment of both is disposed to drop ; and some rivers may be viewed as sending little or no sediment to the sea.

Thus the whole effect of drainage, including all the preliminary influences of the atmosphere, rain, springs, &c., is to waste the high ground, and to raise the low; to smooth the original ruggedness of the valley in which it flows, by removing prominences and filling up hollows ; and notwithstanding the length of years that rivers have flowed, they have, in general, not yet completed this work : they still continue to *add* materials to the lower ground, and, in a few instances, to carry out sediment into the sea.

The whole surface of the earth, then, is changing its level, by the mere precipitations of the atmosphere, and their subsequent effects ; the high land sinks, and the low land rises; but what is the rate of this progress, we have no complete means of knowing. Few ancient measures of the height of the land which has been wasted, or the area of that which has been accumu-