ing small deltas beneath the surface at their mouths. Tides and currents would sweep this along the coast, and after a time the tops of the deposits would be brought above the surface, and no more materials could be deposited upon them by rivers; hence these must push their detritus further into the ocean, and thus a new submarine bank would form outside of the first, and at a lower level. When the second had reached the surface of the water, it would be lower than the first, because the land had been rising during the process of its production. In the same way a third and a fourth bank will form in succession, and thus there is a series of terraces presented to view. These are delta terraces, and it is not essential that they should have been formed under the ocean, but wherever one stream flows into another.

The streams emptying into these estuaries would produce a current toward the ocean, which would spread the detritus along the shores in the same direction, and produce the lateral terraces, having a slope at least as great as that of the current. In order to form successive lateral terraces, it is only necessary to suppose the drainage and erosion to go on till the rivers have sunk to their present beds, which could not take place till the continent had risen above the ocean to its present height, or the water had sunk.

There is another mode in which lateral terraces might have been formed, and are now forming, where a stream must cut its way through alluvial materials. The mere erosion would form terraces of equal height along the stream; or all the detritus on one side might be swept away by the stream, so as to leave a terrace only on the other side. But after a channel has thus been made to some depth, if a freshet occurs, the current will act powerfully upon one or the other of the banks, and sweeping them away will form a meadow when the flood has subsided. In subsequent floods, this meadow will receive fresh accessions of alluvial matter, and of course be somewhat raised up. Meanwhile the river is cutting a deeper and deeper channel, so that at length it can no longer rise high enough in floods to spread over the meadow, which has now become a second terrace, because the sinking of the stream by erosion would prevent the meadow from ever rising as high as the original bank. Being no longer able to overflow the meadow, it begins again, in time of freshet, to wear away the bank, and to form a second and lower meadow, which ultimately becomes, as above described, a third terrace, and thus may the work go on and the number of terraces be increased, as long as the river can deepen its channel.

Gorge terraces connect different basins together, being situated about gorges. The current transporting materials toward a gorge would have its compass diminished by the narrowing of the basin, so much as to cause a deposition of the materials near the gorge. However small these accumulations may be at first, in process of time, they might become even greater than an ordinary terrace. But the same current which transported the detritus to the upper part of the gorge may have its velocity greatly increased in passing through