

*Terraces.*—The term *terrace* applies to any level-topped surface with a steep escarpment, whether it be solid rock or loose materials. We limit it now to those banks of loose materials, generally unconsolidated, which skirt the sides of the valleys about rivers, ponds and lakes, and rise above each other like the seats of an amphitheatre.

FIG. 113.

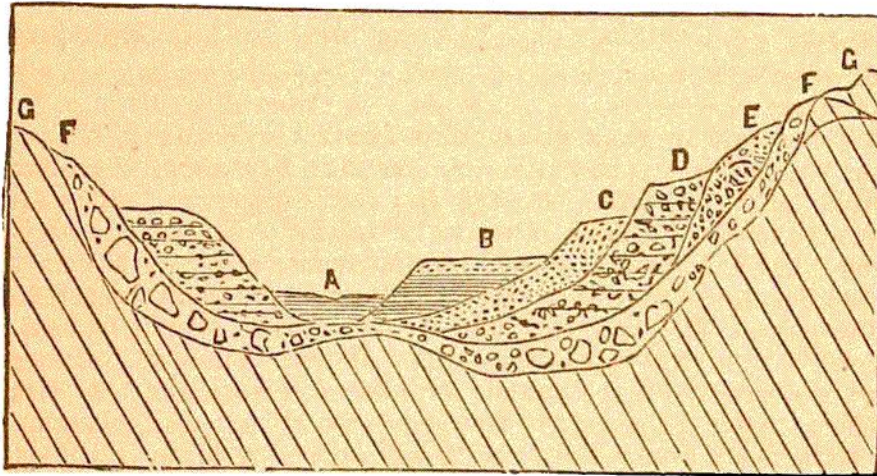


Fig. 113 represents an ideal section of a terraced valley. As we rise from the river, its immediate bank, or meadow, forms the lowest and latest terrace, A, which may be increasing from year to year by alluvial deposits. On the margin of the meadow we come to a steep slope, or talus, whose top, B, forms a second terrace. Very frequently the lower part of this second terrace is composed of clay and the upper part of sand, or small gravel. Another steep slope carries us to a third terrace, C, which is more usually of coarser materials, but thoroughly rounded and mostly sorted. A fourth terrace, D, is still coarser, and the top less level. Indeed it is here, usually, that we find those irregular mounds and ridges already described as *moraine terraces*; that is, they occur upon the highest terraces, and sometimes where no terraces exist; but it is always along the base of mountains or hills. Rising above this we frequently find deposits, E, it may be of sand, gravel, or coarser but water-worn materials, not having a level top, but more or less rounded and reaching a certain level along the side of the hill. These are generally at a great distance from any existing streams, and could not have been produced by them, though they were at a higher level than at present. In fine, these accumulations resemble *beaches*, such as now are forming on the coast. Still higher, as at F, we find the unmodified drift, which lies immediately upon the solid rocks, as at G.

Two facts respecting the occurrence of terraces are illustrated in the last figure: 1. The drift underlies all the beaches and terraces, although it appears upon the surface at a higher level. All the striæ made by the drift underlie deposits of modified drift, and are therefore older than the water-worn accumulations. The beaches underlie the terraces, and each higher terrace underlies each lower terrace. 2. On the opposite side of the