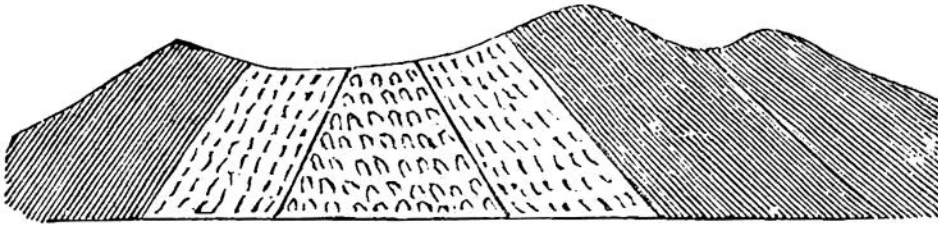


in our own country, but it is probable that the ravines and gorges, that is, the narrow defiles which, bounded by perpendicular walls of rock, communicate between more open spaces, may have been produced by these causes.

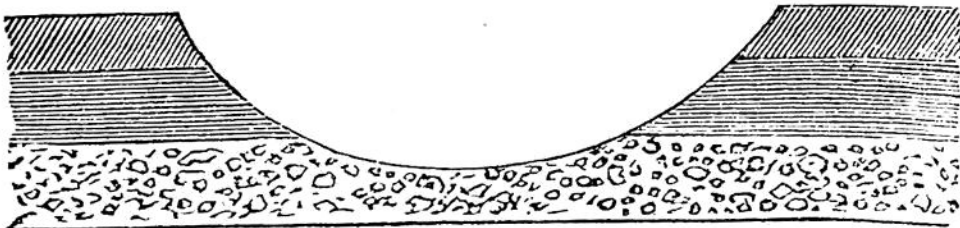
The valleys that are owing to the action of water have been divided into two classes, valleys of elevation and valleys of denudation, the one resulting from the combined action of subterranean and aqueous causes, the other from the action of water only.

The valleys of elevation are depressions made in high lands that have been formed by the fracture and upheaving of strata, the fractured parts being afterward carried away by the force of water. In all valleys of this description it may be observed that the strata, though once continuous, have been upheaved, and that the removal of the point where the strata met, after elevation, has produced the valley.



Valleys of elevation.

Valleys of denudation are those which have been produced by the action of vast bodies of water at a time after the deposition of the most recent of the ancient rocks. This fact is proved by the undisturbed position of the beds on each side of the valley. The rock found at the mouth of the Seine is covered by green sand, to the exclusion of many beds which usually intervene between them, and the same irregularity occurs in the opposite coast of Lyme, from



Valleys of denudation.

which it may be deduced that these two places were once united. So on a smaller scale it will be observed that many