

The interior part of a mountain is therefore composed of different beds of stone, the upper of which are of soft stone and the lower of hard, and much broader at the bottom than at the top; which indeed almost necessarily follows, for, as they become so much the harder as they descend, it may be fairly supposed that the currents and other motions of the water which have hollowed the vallies and given a shape to the turnings of a mountain, will have laterally worked on the matters of which the mountain is composed, and have worn them away in proportion as they were hard or soft. Now the upper strata being the softest, it will naturally have suffered the greatest diminution. This is one of the causes to which the inclination of mountains may be attributed, and this inclination will be still less steep in proportion as the earth and gravel have been washed away by the rain; and for these reasons it is, that hills and mountains composed of calcinable matters, have an inclination much less than those composed of live rock and flint in large masses; the last in general are of considerable heights and nearly perpendicular, because, in these masses of vitrifiable matters, the upper beds, as well as the