steeper slopes. Let it be further assumed that the erosion of the surface is nine times greater over the latter than over the former area, so that while the more level parts of the country have been lowered one foot, the valleys have lost nine feet. If, following the measurements and calculations already given, we admit that the mean annual quantity of detritus carried to the sea may, with some probability, be regarded as equal to the yearly loss of $\frac{1}{6000}$ of a foot of rock from the general surface of the country, then, apportioning this loss over the surface in the ratio just given, we find that it amounts to $\frac{5}{9}$ of a foot from the more level grounds in 6000 years, and 5 feet from the valleys in the same space of time. Now, if $\frac{5}{9}$ of a foot be removed from the level grounds in 6000 years, 1 foot will be removed in 10,800 years; and if 5 feet be worn out of the valleys in 6000 years, 1 foot will be worn out in 1200 years. This is equal to a loss of only $\frac{1}{12}$ of an inch from the table-lands in 75 years, while the same amount is excavated from the valleys in $8\frac{1}{2}$ years.

It may seem at first sight that such a loss as only a single line from the surface of the open country during more than the lapse of a long human life is almost too trifling to be taken into account, as it is certainly too small to be generally appreciable. In the same way, if we are told that the constant wear and tear which is going on before our eyes in valleys and water-courses, does not effect more than the removal of one line of rock in eight and a half years, we may naturally enough regard such a statement as probably an underestimate. But if we only permit the multiplying power of time to come into play, the full force of those seemingly insignificant quantities is soon made apparent. For we find by a simple piece of arithmetic