

The proportion of mineral substances held in suspension in the water of rivers has been already (p. 643) discussed. It is most advantageous to determine the amount of mineral matter by weight, and then from its average specific gravity to estimate its bulk as an ingredient in river-water. The proportion by weight is probably, on an average, about half that by bulk.

It may seem superfluous to insist that the earthy matter borne into the sea from any given area represents so much actual loss from the surface of that area. Yet this self-evident statement is probably not realized by many geologists to the extent which it deserves. If a stream removes in one year one million of cubic yards of earth from its drainage-basin, that basin must have lost one million of cubic yards from its surface. From the data and authorities which have already been adduced (p. 649), the subjoined table has been constructed, in which are given the results of the measurement of the proportion of sediment in a few rivers. The last column shows the fraction of a foot of rock (reckoning the specific gravity of the silt at 1.9 and that of rock at 2.5) which each river must remove from the general surface of its drainage-basin in one year.

Name of River	Area of basin in square miles	Annual discharge of sediment in cubic feet	Fraction of foot of rock by which area of drainage is lowered in one year
Mississippi . .	1,147,000	7,468,694,400	$\frac{1}{8000}$
Ganges (Upper) .	143,000	6,368,077,440	$\frac{1}{888}$
Hoang Ho . . .	700,000	17,520,000,000(?)	$\frac{1}{1484}$
Rhone	25,000	600,381,800	$\frac{1}{1688}$
Danube	234,000	1,253,738,600	$\frac{1}{6846}$
Po	30,000	1,510,137,000	$\frac{1}{789}$

At the present rate of erosion, the rivers named in this table remove one foot of rock from the general surface of