to see how we are to discriminate between superficial and subterranean solution; and until some separation of this kind is made, it seems hardly legitimate to class the whole of the dissolved matter with that carried in mechanical suspension as a measure of the annual loss from the surface of the land.

There is another point of view from which a geologist may advantageously contemplate the active denudation of a country. He may estimate the annual rainfall and the proportion of water which returns to the sea. If he can obtain a probable average ratio for the earthy substances contained in the river-water which enters the sea, he will be able to estimate the mean amount of loss sustained by the whole country. Thus, taking the average rainfall of the British Islands at 36 inches annually, and the superficial area over which this rain is discharged at 120,000 square miles, then it will be found that the total quantity of rain received in one year by the British Isles is equal to about 68 cubic miles of water. If the proportion of rainfall returned to the sea by streams be taken at a third, there are 23 cubic miles; if at a fourth, there are 17 cubic miles of fresh water sent off the surface of the British Islands into the sea in one year. Assuming, in the next place, that the average ratio of mechanical impurities is only $\frac{1}{5000}$ by volume of the water, the proportion of the rainfall returned to the sea being $\frac{1}{4}$, then it will follow that $\frac{1}{8800}$ of a foot of rock is removed from the general surface of Britain every year. One foot will be planed away in 8800 years. If the mean height of the British Islands be taken at 650 feet, then, if the ratio now assumed were to continue, these islands might be levelled in about five and a half millions of years. Much more detailed observation is needed before