

the demolition of a continent must be enormously slower than during earlier periods.

It must not be forgotten, however, that as already remarked, the estimates here given, inasmuch as they are based only on the material removed in mechanical suspension, are probably understatements of the truth. If we take into account also the material carried away in chemical solution, the rate of subaerial denudation will be considerably heightened. It is difficult, however, to apportion the loss of dissolved substance from the surface of the land. The salts contained in solution in river-water are derived not only from the superficial rocks, but probably to a much greater extent from springs which sometimes carry up dissolved substances from considerable depths. In the end, no doubt, as the level of the land is reduced by subaerial waste, this subterranean solution will tell, but it can hardly be said sensibly to affect the lowering of the level from century to century. Mr. Mellard Reade, from his researches into this subject, believes that the amount of solids in solution is on the whole about one-third of that of those in suspension. He finds this to be the ratio in the Nile, the Danube, and the Mississippi, the last-named being in many respects a typical river. If, as he proposes, we add this additional loss by chemical solution to the amount of material removed in mechanical suspension from the Mississippi basin, the annual lowering of the level of the basin will be raised from $\frac{1}{6000}$ to $\frac{1}{4500}$ of a foot.³¹⁹ It is quite true that the loss of mineral matter from the whole basin would be equivalent to that sum, but there would obviously not be strictly a lowering of the level of the basin to that amount. It is difficult

³¹⁹ T. Mellard Reade, Presidential Address, Liverpool Geol. Soc. 1884-85.