

If we could take all the rivers of the world into the calculation, how great the amount must be. The St. Lawrence alone drains an area of 297,600 square miles, three and a third times larger than the whole of Great Britain, and that of the Mississippi is 982,400 square miles, or more than three times as large as the area drained by the St. Lawrence. The Amazon drains an area of 1,512,000 square miles, but it is needless to multiply cases.

It is a necessary part of the economy of Nature that this dissolving of the constituents of rocks should always be going on over all the world, for it is from solutions of lime and other salts thus obtained by the sea, that plants and shell-fish derive part of their nourishment, plants for their tissues, and Mollusca and other creatures for their shells and bones. As it is now, so has it been through all proved geological time, and doubtless long before; for the oldest known strata, the Laurentian rocks, were themselves originally formed of ordinary sediments, and consist in part of thick strata of limestone that must have been formed by the life and death of organic creatures in the sea.

This waste of material by the *dissolving* of rocks is indeed evident to the practised eye over most of the solid limestone districts of England, and I shall therefore say a little more on the subject. On the flat tops of the Chalk Downs, for example, over large areas in Dorsetshire, Hampshire, and Wiltshire, quantities of angular unworn flints, many feet in thickness, completely cover the surface of the land, revealing to the thoughtful mind the fact, that all these accumulations of barren stones have not been transported from a distance, but represent the gradual destruction by rain and carbonic acid, of a vast thickness of chalk with