

shores would remain victorious. Another power has taken part in the strife. The organic force seizes one by one the atoms of carbonate of lime, and separates them from the boiling foam to re-unite them in a symmetrical structure. What matters it that the tempest sweeps away in millions enormous blocks of rock! What avails it against the unresting toil of myriads of architects, working night and day! Here we see the soft and gelatinous body of a polype conquer, through the action of vital laws, the immense mechanical power of the ocean-waves, which neither the art of man can resist, nor the inanimate works of nature.

The city of Berlin is built on a bed of living infusoria, about sixty-six mètres in thickness. We are speaking of microscopical animals, ten thousand of which ranged side by side will not cover a greater extent than twenty-seven millimètres, while it takes a million to make a milligramme.

In the heathery moorlands of Lunebourg a bed of the same kind is known to exist; but this does not exceed seventeen to eighteen mètres in thickness.

Some others are known of less importance, in North America; they are only six to seven mètres thick.

This explains to us how it is that certain ancient rocks, stratified beds of great solidity, and actual mountains are entirely formed of the shells of infusoria.

According to Ehrenberg, a cube of chalk of twenty-seven millimètres is made up of a million of these microscopic animals.

Schleiden estimates that the layer of chalk which covers the surface of a carte-de-visite represents nearly one hundred thousand shells of animalcules.

The *tripoli* of Billin in Bohemia, as well as that of the Mauritianus, is entirely composed of siliceous shells so perfectly preserved, that Ehrenberg, to whom we owe the discovery, has been able to compare them with the shells of those living animalcules to which they present the greatest analogy.

Twenty-seven cubic millimètres of the Billin *tripoli* do not contain less than forty-one millions of infusoria!

Now the schists of Billin extend over a surface of thirty-two to forty square kilomètres, with a depth varying from sixty-six centi-