

rivers that traverse them. As examples we may cite the great lakes of Canada, and the sea or lake of Baikal, where seals and other marine animals are still residing, having become acclimatized as the water gradually threw off its salinity. Even the sea is less salt at the mouth of the great rivers ; and, as we have already stated, in the vicinity of the polar ice, which, when it melts, furnishes an immense volume of fresh water.

Its saltness renders the sea water more fit for the flotation of ships, since its density is increased by the salts which it holds in solution. In addition, these salts must assist in preventing what is known as the *corruption of the water* ; which is, in truth, nothing more than the putrid decomposition of the organic matters it may contain.

From the table representing the composition of the water of the ocean and the Mediterranean, the reader will see that the salts of lime and potash, iodine and silica, figure therein in proportions virtually infinitesimal. Nevertheless, the lime and the silica play a part of the highest importance ; for the quantities which seem to us so trivial in the chemical analysis of a litre of water, become enormous in the entire mass of the ocean. Marine plants absorb the lime, the silica, the potash, and the iodines dissolved in the sea water ; they take up into their very texture these mineral matters. It is at the expense of the silica and the carbonate of lime that the marine animals form their solid shield, their carapace, or their shell. For the same purpose the infusoriæ seize upon the lime, silica, and potash ; and it is through the laborious lives of these polypes that the Coral Islands are built up in the bosom of the waves, to fill the mind of the observer with emotions of wonder, awe, and admiration.

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#### CORAL ISLANDS.

The Pacific Ocean and the Indian Sea are sown with islands, still in course of formation, which owe their origin to the polypes and corallines. From the waters of the ocean these zoophytes extract the lime and silicas which they find there in the shape of soluble salts. That they may increase and develop, it is necessary they should be constantly bathed by the waves. Without pause or rest they pro-