Let us trace further the necessary succession of events. The chemical war is now settled by treaty of peace; but the rains of a geologic spring-time are still frequent and copious. The tides and waves stir up the fine particles resting on the bottom, and these float off to the deeper situations, where they subside as sediments—fragmental sediments. This consequence of unequal depth in different parts of the shallow ocean is augmented in course of time, by the formation of wrinkles in the crust. These resulted, as explained in Talk XX, from the lateral pressure due to the contraction of the earth within the crust. This was an incident of cooling. The wrinkles did not, at first, rise above the surface of the sea; but they formed bars and shallows, while between them were the depths. Over these bars the tides and waves stirred up sediments which settled in the deeper water not far remote.

I find no improbability in the supposition that plant life was now in existence. The fronds of fucoids could be rooted on bottoms within reach of the aërating agency of the atmosphere; and though full sunlight was not yet revealed there was a twilight sufficient to meet the requirements of the humblest forms of vegetal life. Whence this life originated, science is unable to declare. Yesterday there was no life yet, on all the planet. To-day it is here—positive organic life. In the night a sower came and unobserved, strewed the beds of ocean with germs which came to earth as a free gift; and now the world possesses a new capacity—a new starting point—a new potency. From this datum, a limitless field of speculation spreads out, which many a thinker has explored—in which many a thinker has been lost. The inductive evidences supporting this deduction are found in the beds of graphite included in the older rocks, though I do not imagine these to have been formed till many ages after the first advent of marine plants.

The time arrived when some of the ever-growing wrinkles rose dripping above the ocean level. They were not, to any great extent, domes and ridges of granite and granitic rocks. They were arches of the primeval fire-formed crust. The