

nel, analogous to the lagoon of the *atoll*, and varying from one thousand to twenty thousand yards in width. One of these reefs encloses a dozen rocky islets. At the island of Borabora, the barrier is transformed into earth; but the white line of enormous breakers, sown here and there with numerous low and little islands, which the palm-tree enriches and adorns, separates the gloomy ocean from the placid surface of the inner channel, whose limpid waters bathe alluvial shores embellished with all the luxuriant bloom of a tropical vegetation. This gorgeous belt of verdure extends to the foot of the wild abrupt mountains of the interior.

Dr. Darwin, in 1858, explored with peculiar care Keeling Island, or Cocoa Island, which lies to the south of Sumatra. It is no more than a circular reef, crowned with a garland of very narrow islets, which leave open on the north a passage for vessels. In the central basin—a spacious and secure natural harbour—the water is calm and transparent, with a smooth white sandy bottom; it measures several miles across. Dr. Darwin accompanied Captain (afterwards Rear-Admiral) Fitzroy* to an island in the recess of this basin, to see, on the windward side, the dash of the breakers on the encircling reef. The cocoa-nut trees formed gay emerald festoons which stood out in strong relief against the azure vault of heaven; the level calcareous margin, besprinkled with scattered blocks, was washed by foamy billows.

In the sea water the chemist also discovers, though, it is true, in infinitesimal proportions, sundry metals, such as iron, copper, lead, and silver. The old copper arising from the sheathing of ships sometimes contains so much silver that it has been thought worthy of extraction. A curious calculation, based on the age of vessels, and on the route they have traversed during their voyages, shows that the waters of the ocean must hold in solution two million tons of silver.†

There is a question often propounded by the common people, to which they can obtain no satisfactory reply, and which, indeed, the most eminent physicists find

* [For fuller details the reader should consult the late lamented Admiral Fitzroy's narrative of the "Exploring Voyage of the *Beagle*;" Dr. Charles Darwin's "Journal of a Naturalist;" and Mr. Wallace's "Malay Archipelago."]

† [The grounds of this somewhat fanciful computation are set forth by Sir John Herschel, in his "Physical Geography," p. 22, *et seq.*]