miles in diameter, and that twenty and thirty miles should be a common size. Facts give no support to such an assumption.

d. It supposes that the high islands of the Pacific, in the vicinity of the coral islands, abound in craters; while, on the contrary, there are none, so far as is known, in the Marquesas, Gambier, or Society Group, the three which lie nearest to the Paumotus. Even this supposition fails, therefore, of giving plausibility to the crater hypothesis.

Thus at variance with facts, the theory has lost favour, and it is no longer sustained even by those who were once its strongest advocates.

The question still recurs with regard to the basement of coral islands, and the origin of their lagoon character. Shall we suppose, with some writers, that these islands were planted upon submarine banks, within one hundred and fifty feet of the surface of the sea? As has been said, there is no authority for the supposition. We nowhere find regions over our continents with elevations so uniform in height; and submerged banks of this kind are of extremely rare occurrence. If such patches of submerged land existed, the lagoon structure would still be as inexplicable as ever; for the growing reefs of the Pacific show that corals may flourish alike over all parts of the bank, where not too deep. The zoöphyte can by no means be said to prefer the declivity to the central plateau of the submarine bank; on the contrary, the part nearest the surface below low-tide level, abounds in the largest species of corals.

## II. ORIGIN OF CHANNELS WITHIN BARRIERS.

A study and comparison of the reefs of different kinds,—fringing, barrier and atoll,—throughout the oceans, is the only philosophical mode of arriving at any conclusion on this subject. This course Mr. Darwin has happily and successfully pursued, and has arrived, as we have reason to believe, at the true theory of barrier reefs and coral islands. It is satisfactory, because it is a simple generalization of facts. The explora-