

We are indebted to Dr. Darwin for almost all we know of Coral reefs. He has collected together a prodigious mass of geological facts, and built on them a theory; and although we ought to take with considerable caution any new theories connected with geological science, it is due to Dr. Darwin to say, that all the facts which have yet been brought to light harmonize with his theory; and so far it is entitled to respect. These Coral reefs present an evidence of the elevation of the earth's surface on some spots; for we find very large formations of coral reef, now high and dry above the surface of the sea. That these reefs were formed under water, is capable of absolute demonstration. The little polypi who formed them cannot live for half an hour out of water; and when a reef has thus been raised above the level of the sea, by submarine volcanic action; the heat of the sun, during one half-hour, will destroy every one of the myriads of insects who composed it, and leave the reef only, as a monument of their toil. This island having thus been raised, other generations of polypi construct perhaps another reef in a larger outward circle; so that we have one circle within another of different height marking different ages of formation. These reefs, near the shore, and which are not, therefore, of any considerable depth, are called fringing reefs; but there is another description of reef which Darwin denominates the Barrier reef; these are of enormous magnitude, and are generally some miles from the coast. On the coast of New Holland, there is one, at least, 1000 miles long, varying in its distance from the shore from 20 to 60 miles. Into this enormous harbour, in the process of ages, the silt of the ocean has

been driven, so that on the side of the Barrier reef, nearest the land, there is only 70 fathoms depth, but on the outside, no fathoming line which any ship ever took out, has been able to fathom it. Lines of 7000 and 8000 feet have been sunk without touching the bottom. Now here arises a difficulty, which Dr. Darwin has endeavoured to solve. The polypi who formed the reefs, cannot work at a depth of water much exceeding 10 fathoms. The weight of water would be such at a greater depth as to destroy these little gelatinous animals. How comes it then that we find monuments of their activity at a depth of 8000 feet? Dr. Darwin supposes that the lower part of these enormous reefs was, when it was formed within 10 fathoms of the surface of the sea; that the earth on which it was based has been, during successive ages, gradually sinking; and that as it has sunk, the polypi have raised their work by the erection of new dwellings within the 10 fathoms' depth, leaving their former work, which we now behold as dead coral. Dr. Darwin's theory was illustrated by a series of most interesting drawings from plates in his forthcoming volume; and so much of the clearness of the lecture depended on those diagrams, that we fear we should fail in any attempt to give an analysis of this part of the lecture, unassisted by diagrams. Besides which, the space which we can devote to such a lecture precludes our following the Professor further. He closed by a reference to the coast of Patagonia, as exhibiting some well-defined and clearly marked examples of the successive elevation of various tracts of country, and by an ideal section of that part of the coast, based, however, upon generally ascertained facts, shewed that these successive elevations were of volcanic origin; that mountains of lava had been forced up from the bowels of the earth, carrying with them even the lowest formations, and piling even the lowest strata in that wild and terrible confusion which the barren surface of that country exhibits. At the close of this lecture, Dr. Lubbock, as Chairman of the Museum Committee, rose to express the public thanks to the Professor for his lectures; and the warm cheering with which his manly address was welcomed, shewed the general satisfaction with which those lectures had been received. We are happy to say, that the Professor, in his reply, stated that, crowded as his time was with engagements, he hoped on a future occasion to resume his Lectures.