

accumulations going on within them are, therefore, wholly of coral. The reefs within the lagoons correspond very exactly in mode of growth and other characters to the *inner* reefs under the lee of a barrier.

IV. NOTICES OF SOME CORAL ISLANDS.

The preceding descriptions represent the general character of atolls, but are more especially drawn from the Paumotus. There are some peculiarities in other seas to which we may briefly allude.

Among the scattered coral islands north of the Samoan Group, the shore platform is seldom as extensive as at the Paumotus. It rarely exceeds fifty yards in width, and is cut up by passages often reaching almost to the beach. In some places the platform is broken into islets. Enderbury's Island is one of the number to which this description applies. The beach is eleven or twelve feet high. For the first eight feet it slopes very regularly at an angle of thirty to thirty-five degrees, and consists of sand, coarse pebbles, or rounded stones of coral, with some shells; and there is the usual beach conglomerate near the water's edge. After this first slope, it is horizontal for eighty to two hundred feet, and then there is a gradual rise of three to four feet. Over this portion there are large slabs of the beach conglomerate, along with masses from the reef-rock, and some thick plates of a huge foliaceous *Madrepora*; and these slabs, many of which are six feet square, lie inclining quite regularly against one another, as if they had been taken up and laid there by hand. They incline in the same direction with the slope of the beach. The large *Madrepora* alluded to has the mode of growth of the *Madrepora palmata*; and probably the entire zoöphyte extended over an area twelve or fifteen feet in diameter. The fragments are three to four inches thick, and thirty square feet in surface.

As a key to the explanation of the peculiarities here observed, it may be remarked that the tides in the Paumotus are two to three feet, and about Enderbury's Island five to six feet, in height.