

represented, just rising above the waves, covered with the cocoa-nut and other trees, and inclosing within a lagoon of tranquil water.

The accompanying section will enable the reader to comprehend the usual form of such islands. (Fig. 92.)

Fig. 92.



Section of a Coral Island.

a, a, Habitable part of the Island, consisting of a strip of coral, inclosing the lagoon.
b, b, The lagoon.

The subjoined cut (fig. 93.) exhibits a small part of the section of a coral island on a larger scale.

Fig. 93.



Section of part of a Coral Island.

a, b, Habitable part of the island.
b, c, Slope of the side of the island, plunging at an angle of forty-five to the depth of fifteen hundred feet.
c, c, Part of the lagoon.
d, d, Knolls of coral in the lagoon, with overhanging masses of coral resembling the capitals of columns.

Of thirty-two of these coral islands visited by Beechey in his voyage to the Pacific, twenty-nine had lagoons in their centres. The largest was 30 miles in diameter, and the smallest less than a mile. All were increasing their dimensions by the active operations of the lithophytes, which appeared to be gradually extending and bringing the immersed parts of their structure to the surface. The scene presented by these annular reefs is equally striking for its singularity and beauty. A strip of land a few hundred yards wide is covered by lofty cocoa-nut trees, above which is the blue vault of heaven. This band of verdure is bounded by a beach of glittering white sand, the outer margin of which is encircled with a ring of snow-white breakers, beyond which are the dark heaving waters of the ocean. The inner beach incloses the still clear water of the lagoon, resting in its greater part on white sand, and when illuminated by a vertical sun, of a most vivid green.* Certain species of zoophytes abound most in the lagoon, others on the exterior margin, where there is a great surf. "The ocean," says Mr. Darwin, "throwing its breakers on these outer shores, appears an invincible enemy, yet we see it resisted and even conquered by means which at first seem most weak and inefficient. No periods of repose are granted, and the long swell caused by the steady action of the trade wind never ceases. The breakers exceed in violence those of our temperate regions, and it is impossible to behold them without feeling a conviction that rocks of granite or quartz would ultimately yield and be demolished by such irresistible forces. Yet these low insignificant coral islets

* Darwin's Journal, &c., p. 540., and new edit., of 1845, p. 453.