

broken as to admit the influence of waves and winds. Some of the large atolls of the Maldives are properly atoll archipelagos.

The sizes of atolls offer no objection to these views, as they do not exceed those of many barrier reefs. Some of the larger Maldives, according to the crater theory, would require a crater forty to ninety miles in diameter, with a rim made up of subordinate craters. No hypothesis of such extravagance is necessary. The facts all fall in with known principles, and are illustrated by known and established truths, without hypotheses of any kind.

Reefs surrounded by shallow seas, gradually deepening outward, require no different principle for their explanation from reefs with abrupt depths around. The explanation of the peculiarities of the Bermudas, on page 188, can now be fully understood. If the original island had a high, bold mountain ridge along its south-eastern front, and low sloping land for the most part to the northward and westward, the result would have been what we find in fact. Previous to the elevation of 250 feet, indicated by the height of the hills, the shallow region on the north and west of the high land (the existing reef-region), must have been mostly bare of living corals, because lying at too great a depth. The elevation brought it near enough to the surface to again become a coral plantation. This *near enough*, in the Bermuda seas, means forty to fifty feet, for soundings show that wherever the depth is seven to eight fathoms the bottom is free from living corals. If the three great bays, A, B, C (see map of the Bermudas, p. 183), correspond to subordinate atolls, in a ring-group, then the subsiding peaks of the land became the centres of annular reefs; and the two eastern of the peaks were evidently quite close together.

It is of interest to follow still further the subsidence of a coral island, the earlier steps in which are illustrated in the preceding figures. One obvious result of its continuation is a gradual contraction of the lagoon and diminution of the size of the atoll, owing to the fact already noted, that the detritus