It follows from the above, that while the coral-reef seas are about fifty-six degrees wide in mid-ocean, they are

*In the Pacific* twenty-five degrees wide on the west coast of America, and forty-five degrees on the Asiatic side.

*In the Atlantic*, about fifteen degrees wide on the African coast, and forty-eight degrees on the coast of America.

If we reckon to the extremity of the bend in the Gulf Stream, the whole width of the coral-reef sea off the east coast of America will be over sixty-four degrees; while off the west coast of America the width is hardly eighteen degrees. It is obvious that these facts enable us to explain many seeming anomalies in the distribution of coral reefs.

The other causes which influence the distribution of reefs operate under this more general one of oceanic temperature, that is, within the coral-reef boundary lines. The effect of a deep abrupt coast on the distribution of reefs has been pointed out (p. 89). The unfavourable character of sandy or muddy shores, and the action of detritus, marine currents, and fresh waters have also been stated (p. 93), and it is not necessary to touch again upon these points.

Not less striking are the effects of *volcanic action* in preventing the formation of reefs; and instances of this influence are numerous throughout the Pacific. The existence of narrow reefs, or their entire absence, may often be thus accounted for. For example, in the Hawaian Group, the island of Hawaii, still active with volcanic fires, has but few traces of corals about it, while the westernmost islands, which have been longest free from such action, have reefs of considerable extent. The island of Maui exemplifies well the same general fact. The island consists of two peninsulas: one, the eastern, recent volcanic in character, with a large crater at summit; and the other, the western, presenting every evidence, in its gorges and peaks and absence of volcanic cones, of having become extinct ages since. In conformity with the view expressed, the coral reefs are confined almost exclusively to the latter peninsula. Other examples are afforded by the Samoan or Navigator Islands. Savaii abounds in extinct craters and lava