

volcanic action had become comparatively quiet and deluges of hot water ceased. There appears, therefore, to be some reason for the fact that the reefs are small, and have seldom reached the surface. The Sooloo Group is but one of the volcanic clusters in these seas. Java, several of the Philippines, and other islands south of these last, with the northern shore of New Guinea, make up a wide region of fires, and it cannot be doubted that the frequent eruptions prevented the growth of anything more than isolated corals, for a long period, over each of these areas. For other causes we must look to the nature of the coasts, fresh-water streams, and marine currents; we leave it for other investigators to apply the explanation to particular coasts.

The coast of China owes its freedom from corals to the cool temperature of the waters, the coast being wholly outside, as has been stated, of the coral-reef seas.

One interesting fact should be noted:—the most extensive reefs in the East Indies are to be found in the open seas, between the large islands; these islands, at the same time, often being without proper reefs, or with mere traces of coral. This is the case between Borneo and the range of large islands south: the China Sea is another instance of it; north of New Guinea, a few degrees, is another. How far this is due to their being distant from the scenes of igneous action, and from the detritus and fresh water of island streams, remains to be determined. A sinking island becomes a more and more favourable spot for the growth of coral as it descends; for as its extent diminishes, its streams of fresh water and detritus also decrease. It might therefore be expected, on this account alone, that such isolated spots of land, away from all impure waters, in the open ocean, should become the bases of large reefs. The existence of these reef-islands is, therefore, no necessary proof of greater subsidence than the coast adjoining has undergone. Still the fact of a greater subsidence is not impossible or improbable:

In the *Indian Ocean*, the Asiatic coast is mostly free from growing coral. The great rivers of the continent are probably