

The observations forming the basis of the work were made in the course of the cruise of the Wilkes Exploring Expedition around the world during the four years from 1838 to 1842. The results then obtained are published in my Report on Zoöphytes, which treats at length of Corals and Coral Animals, and in a chapter on Coral Reefs and Islands forming part of my Geological Report.

The opportunities for investigations in this department afforded by the Expedition were large. We visited a number of the coral islands of the Paumotu Archipelago, to the north of east from Tahiti; also some of the Society, Navigator, and Friendly Islands, all remarkable for their coral reefs; the Feejee Group, one of the grandest regions of growing corals in the world, where we spent three months; several islands north of the Navigator and Feejee Groups, including the Gilbert or Kingsmill Group; the Sooloo sea, between Borneo and Mindanao, abounding in reefs; and, finally, Singapore, another East India reef-region.

Most agreeable are the memories of events, scenes and labours, connected with the cruise:—of companions in travel, both naval and scientific; of the living things of the sea, gathered each morning by the ship's side and made the study of the day, foul weather or fair; of coral islands with their groves, and beautiful life, above and within the waters; of exuberant forests, on the mountain islands of the Pacific, where the tree-fern expands its cluster of large and graceful fronds in rivalry with the palm, and eager vines or creepers intertwine and festoon the trees, and weave for them hangings of new foliage and flowers; of lofty precipices, richly draped, even the sternest fronts made to smile and be glad, as delights the gay tropics, and alive with waterfalls, gliding, leaping, or plunging, on their way down from the giddy heights, and, as they go, playing out and in amid the foliage; of gorges explored, mountains and volcanic cones climbed, and a burning crater penetrated a thousand feet down to its boiling