

the Florida reefs, and the strength of the Gulf Stream in the channel between the Keys and Florida, the adjoining seabottom consists mainly of common mud, with relics of deep-water life, and only sparingly of coral debris. According to Mr. L. F. de Pourtales, between twelve fathoms and one hundred, in the Florida channel, outside of the reef, coral fragments occur, but are rare; dead specimens of *Cladocora* and *Oculina* occur to a depth of about 50 fathoms. But on the other side of the channel, "along the Salt Key Bank, dead corals were dredged up in 315 fathoms; but this is at the foot of a very steep slope washed by the edge of the Gulf Stream; which is much better defined here than on the Florida side." The bottom, in the Florida channel, of 100 fathoms, is a rocky plateau, and outside of 200 fathoms, a mud full of foraminifers, *Globigerina mud*, as it is called from the species characterising it; and yet this channel is situated beneath the Gulf Stream and close by the Florida reefs. The facts seem to show that in most regions the reefs contribute little calcareous matter to the deep ocean. This may be otherwise over the bottom, of comparatively little depth, of a great Archipelago like that of the East Indies.

#### IV. INNER REEFS.

In the still waters of the inner channels or lagoons, when of large extent, we find corals growing in their greatest perfection, and the richest views are presented to the explorer of coral scenery. There are many regions—in the Feejees, examples are common—where a remote barrier incloses as pure a sea as the ocean beyond; and the greatest agitation is only such as the wind may excite on a narrow lake or channel. This condition gives rise to some important peculiarities of structure in the inner reefs, in which the inner margin of the barrier reef participates.

In the general appearance of the surface, the inner generally much resemble the outer reefs. They are nearly flat, and though mostly bare of life, and much covered with coral sand,