

forty fathoms deep. He says that, in the words of Captain Moresby, it is in truth "nothing more than a half-drowned atoll."

The form of the bank, its margin of shoals, and a line of soundings across it, giving the depth of the central or lagoon portion, are shown in the map on p. 155, from Darwin, and for which, as well as for other information about the bank, he gives credit to Captain Moresby. The cross section is still further illustrated in the cut on p. 156. The whole length of the section (or width of the bank in the line of the soundings) is seventy-six miles. From the outer rim of the submerged atoll there is a drop off to a deeper level, which is mostly fifteen to eighteen fathoms below the surface; and then to the bottom of what was once the lagoon, now for the most part forty to fifty fathoms under water, though having its shoals that are five to ten fathoms submerged. All points in the map that are shaded have a depth of less than ten fathoms; the only emerged parts are three or four spots on the western margin, as indicated on the map. The bottom over the interior is muddy; on the flat bordering it, fifteen to twenty fathoms deep, there is coral sand with "a very little live coral; the outer rim is coral rock with scarcely any live coral;" while the shoals or knolls of the interior are "covered with luxuriantly-growing corals." Darwin states also that the rim is steep on both sides, and outward slopes abruptly to unfathomable depths; at a distance of less than half a mile from one part no bottom was found with 190 fathoms; and off another point, at a somewhat greater distance, there was none with 210 fathoms.

*Metia and other elevated Coral Islands.*—Metia, or Aurora Island, is one of the western Paumotus. It is a small island about four miles by two and a half in width, and two hundred and fifty feet in height; and it consists throughout of coral limestone. Approached from the north-east, its high vertical cliffs looked as if basaltic, resembling somewhat the Palisades on the Hudson. This appearance of a vertical structure was afterwards traced to vertical furrowings by the waters dripping down its front, and the consequent formation of stalagmitic incrustations. Deep caverns were also seen.