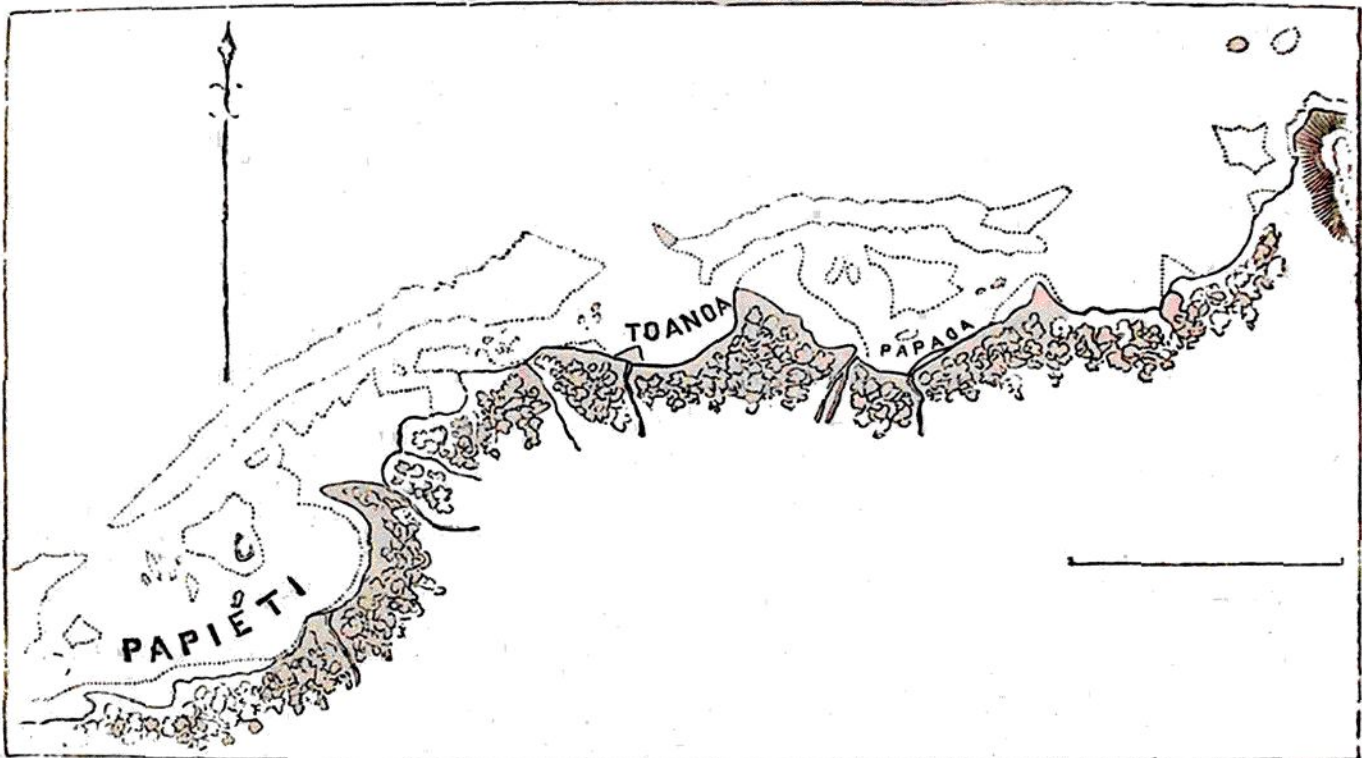


bours ; and in other parts it is very intricate, though throughout navigable by large vessels. The island of Upolu, of the Samoan group, is bordered by a reef nearly a mile wide on part of its northern shore ; but the waters within are too shallow for a canoe at low tide ; and therefore, notwithstanding its extent, the reef is rather a fringing than a barrier reef. Within the green belt that incircles Bolabola (p. 109) there is a large and deep channel navigable by ships.

Beneath these channels lies, in general, the coral rock of the reef-region—the inferior part of the great reef formation whose



CORAL REEFS OFF THE NORTH SHORE OF TAHITI.

upper portions constitute the so-called barrier and fringing reefs. The rock would necessarily resemble that of the inner reefs already described ; but there should be a larger proportion of the white compact limestone made from the fine coral sands carried off from the higher reefs by the currents.

Yet the bottoms of these channels are not always made up of calcareous or coral sands and fragments ; for the volcanic or basaltic lands they adjoin are a source of ordinary mud ; and the river courses of the land and the tidal currents of the sea will often determine the nature of the bottom, or may cause in it alternate variations.