

by the detritus which they deposit, to keep the bottom more free from growing patches of coral and consequently produce better anchorage ground ; moreover, within the harbours they usually keep channels open through, or over, the shore reef sufficiently deep and wide for a boat to reach the land, and sometimes preserve a clean sand-beach throughout. That this is their principal effect will appear from a few facts.

The map of the reef of North Tahiti, between Papieti on the left, and the west cape of Matavai harbour, on the right, here reproduced, affords illustrations of this subject.

*a.* The harbour of Papieti is inclosed by a reef about three-fourths of a mile from the shore. The entrance through the reef is narrow, with a depth of eleven fathoms at centre, six to seven fathoms either side, and three to five close to the reef. This fine harbour receives an unimportant streamlet, while a much larger stream empties itself just to the east of the east cape, *opposite which the reef is close at hand and unbroken.*

*b.* Toanoa is the harbour next east of Papieti. The entrance is thirty-five fathoms deep at middle, and three and a half to five fathoms near the points of the reef. There is no fresh-water stream, except a trifling rivulet.

*c.* Papaoa is an open expanse of water, harbour-like in character, but is without any entrance ; the reef is unbroken. Yet there are two streams emptying into it, one of which is of considerable size.

*d.* Off Matavai, the place next east, the reef is interrupted for about two miles. The harbour is formed by an extension of the reef off Point Venus, the east cape. There is no stream on the coast, opposite this interruption in the reef, except toward Point Venus, and at the present time the waters find their principal exit east of the Point, behind a large coral reef, but a quarter of a mile distant.

From such facts, it is evident that the growth of coral reefs is not much retarded about the Pacific Islands by fresh-water streams. We cannot be surprised at the little influence they appear to have exerted about Tahiti, when knowing that none of these so-called rivers are over three feet in depth ; and the