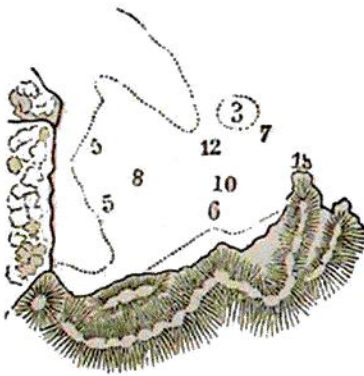


most they can do is to produce a thin layer of brackish water over the sea within the channels.

*e.* The following figure of the harbour of Falifa, Upolu, represents another coral harbour, as surveyed by Lieutenant Enmons. At its head there is a stream twenty-five or thirty yards wide and three feet deep. Notwithstanding the unusual size of the river, the coral reef lies near its mouth, and projects some distance in front of it. Its surface is dead, but corals are growing upon its outer slope.

*f.* The harbour of Rewa, in the Feejees, may be again alluded to. The waters received by the bay amount to at least 500,000 cubic feet a minute. Yet there is an extensive reef inclosing the bay, lying but three miles from the shores, and



HARBOUR OF FALIFA.

with only two narrow openings for ships. The case is so remarkable that we can hardly account for the facts without supposing the river's mouth to have neared the reef by depositions of detritus since the inner parts of the reef were formed; and there is some evidence that this was the case, though to what distance we cannot definitely state. With this admission, the facts

may still surprise us; yet they are explained on the principle that fresh water does not sink in the ocean, but is superficial, and runs on in a distinct channel; its effect is almost wholly through hydrostatic pressure, increasing the force of the underwater currents, and through their depositions of detritus. Besides these instances, there are many others in the Feejees, as will be observed on the chart at the end of this volume. Mokungai has a large harbour, without a stream of fresh water;—so also Vakea and Direction Island.

The instances brought forward are a fair example of what is to be found throughout coral seas; and they establish, beyond dispute, that while much in harbour-making should be attributed to the transported sand or earth of marine and fresh-