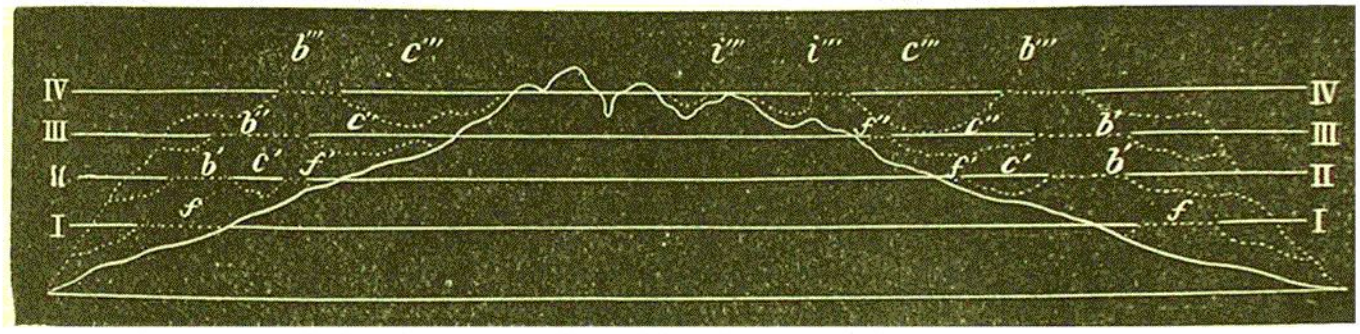
—it is a narrow platform of rock at the surface, dropping off at its edge to shallow depths, and then some distance out, declining more abruptly. Let the same island become submerged till II is the water line:—the reef extends itself upward, as submergence goes on, and may have the character at the surface represented by *b' f' b' f'*. There is here a fringing reef and also a barrier reef, with a narrow channel between, such as we have described as existing on the shores of Tahiti (see p. 206); *b'* is a section of the barrier, *c'* of the channel, and *f'* of the fringing reef. Suppose a farther submergence, till III is the water line: then the channel (*c'' c''*) within the barrier becomes quite broad, as in the island of Nairai or Angau; on one side (*f'''*) the fringing reef remains, but on the other it has disappeared, owing perhaps, to some change of



SECTION ILLUSTRATING THE ORIGIN OF THE BARRIER REEFS.

circumstance as regards currents, which retarded its growth, and prevented its keeping pace with the subsidence. With the water at IV, there are two islets of rock in a wide lagoon, along with other islets (*i''' i'''*) of reef over two peaks which have disappeared. The coral reef-rock by gradual growth has attained a great thickness, and envelops nearly the whole of the former land. Nanuku, the Argo Reef, and Exploring Isles are here exemplified, for the view is a good transverse section of either of them. *b''' b'''* are sections of the distant inclosing barrier, and *c''' c'''*, and other intermediate spots, of the water within.

The supposed similarity between these ideal sections and existing islands is fully sustained by actual comparison. The figure beyond is a map of the island of Aiva, in the Feejee Group. There are two peaks in the lagoon, precisely as above;