A.—2.

a conspicuous buoy on the Wood's Shoal near the anchorage; and I am inclined to think that, to make the harbour quite secure from danger of approach by night, it would be necessary to establish a beacon, with a light when mail steamers were expected, on the east extreme of the sea reef south of the entrance, as there would be no other approach-light from the eastward, and the Thickombia light, suggested further on, would not lead a vessel clear of this dangerous horn of the reef. Cost of leading lighthouses, buoys, and beacons, about £250. Beacon on sea reef, £200. It would also be necessary to maintain a pilot with boat and boat's crew, also quarters ashore; and it would be his duty to attend to all lights and marks. As regards N'galoa Harbour for a coaling-port, the same remarks would apply here as to Suva Harbour, although the fringing reef on the south-west side of N'galoa Island is much narrower, and a reclamation might be effected under the lee of this point at considerably less trouble. However, I could not report as to details on this matter, not having visited the port for several years. But, as regards coaling, it will hardly be necessary to have large stores within comparatively such a short distance from the Bay of Islands, New Zealand, and a small hulk could be easily secured in a safe position.

Concerning the relative merits of these two harbours as regards their positions in the Fiji

group :--

In the case of Suva: The two routes open would be—that is, coming from the north-eastward,—First, through the Nanuku passage, and either south of Ngau Island between it and the Mumbo-lithe Reef (Admiralty Chart No. 2691), which always has breakers on it, past Nasilai to Suva, or round the north side of Batiki Island, &c. In these cases it would be necessary to establish a good sea light, revolving or flashing dioptric, at considerable elevation on the Island of Wailangilala, a low island covered with cocoanut palms, the total height of which is 70ft., and having an accessible harbour within its reef. This island is at the north-east entrance to the Nanuku passage, and this light would be the first made on approaching the group. Also a good light on the Island of Batiki to cover the dangerous reefs of the Horseshoe and of Nairai, or a light on the small islet on the south extreme of the reef south of Ngau Island. These are the shortest routes, and with two lights and inter-insular pilots, if it be thought necessary, who could be picked up and dropped at Wailangilala and Suva, there would be little risk. Leaving Suva the route would be to the westward of Kandavu Island, although with a light at Na Solo the latter might be preferred.

Second, by keeping outside the whole group until, coming from the north-eastward, the islands of Ongea Levu and Ongea Driki with its off-lying reef would be made and rounded, and then a course steered to clear Totoya Island, which has an elevation of nearly 1,200ft., and so on between the Na Solo and Nasilai lighthouses to Suva Harbour. This route is freer of danger than the first two, but it lengthens a vessel's passage eighty to ninety miles. It would also be necessary to have a good sea-light—that is, either a revolving or flashing dioptric one—exhibited from a comparatively small structure on the Island of Ongea Driki, which is 300ft. high, this site being selected in lieu

of the Nuku Songea Reef on account of its height, and being more accessible.

In the case of N'galoa Harbour: The two routes above described would equally apply, except that in the first case a clearer course could be run after clearing the Nanuku passage. The southwest extreme of this passage is marked by the three small islets of Nukutolo, which are 40ft., 80ft., and 100ft. high respectively, and situated four miles to the westward of the Island of Yathata, 840ft. high, the first two mentioned being to the westward, and joined together by a reef. After passing these islets a straight course would be steered towards Kandavu Island, passing south of the Mumbolithe Reef, which would be the only danger before reaching the Island of Kandavu, on the east extreme of which, however, there would be no approach-light. On this route the lights above mentioned on Wailangilala and Ngau Islands would be also required. On the second route, after passing round Ongea Driki, the Island of Matuku, 1,260ft. high, would be sighted on a direct course to N'galoa Harbour. In any case it would be most beneficial to establish a sea-light on the peninsula of Thickombia, south of Mount Washington, west extreme of Kandavu Island. A light on this point would enable vessels coming either from the Australian Colonies or New Zealand to make for it with confidence in thick weather, when Mount Washington is often covered low down with clouds, and thence shape their course either up the Kandavu Passage to Suva or on to N'galoa Harbour.

Taking into consideration the several merits or otherwise of the two harbours and their approaches as ports of call for mail steamers, I am inclined to recommend the Port of Suva, to be approached by the Nanuku passage with lights as above recommended on Wailangilala and Ngau Islands, together with an improved leading light in Suva Harbour, or, if the extra distance round the group be preferred to any apparent risk in passing through it, then the one sea-light at Ongea Driki would only be required. I do not think that any former objections that may have been held by any underwriters as to the danger of mail steamers entering the group could hold good now, for I consider that, with the Nasolo and Nasilai lights, the port of Suva can be approached now with less risk than can N'galoa Harbour be, which has no approach-lights, and the entrance to which cannot always be so clearly made out even by day. As regards wharves and warehouses at either port or harbour, I am hardly in a position at present to give much information, as the several localities should first be visited. It would be possible probably to obtain the necessary material and labour in this colony, but the former would, I think, be more advantageously procured from either Vancouver Island or New Zealand. I forward herewith two Admiralty charts, Nos. 167 and 2691, showing the above routes and positions of the various alternative lights alluded to. In a short and general memorandum of this description it has not been possible to enter into many details.

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