

formed here, giving rise to a rock like that of Bermuda, with contorted strata : perhaps the constancy of the direction of the winds, or the smallness of area, or the absence of adequately binding plants will account for it.

The shore of Raine Island was of glistening white calcareous sand, made up of fragments of shells, corals, and Foraminifera. Immediately above the beach line, where grass commenced and with it the breeding-place of the terns, the colour of the sand became redder, and consolidated crusts were common upon its surface, as at Bermuda. The sand rock is mostly redder than the beach sand from which it is formed. Perhaps this is due to the loss of a certain quantity of lime, and consequent greater proportion of iron ; or perhaps to the action of the birds' dung.

On the island I found eleven flowering plants ; I believe there are no more. Two of these are grasses. The grass covers tracts bordering the shores, where no other plant grows, and it is here that the terns breed. I could find no moss, fern, or lichen on the island, so that here, from the action of drought and extreme heat, the conditions are just the opposite of what they are in an Antarctic island, such as Possession Island, where Cryptogams only grow. Some Fungi, and low algæ possibly, on the birds' dung, and perhaps some parasitic fungi on the plants, seemed to be the only Cryptogams in the island. There were even no seaweeds to be seen cast up on the beach.

There were no vestiges remaining of the gardens made on the island in 1844, by the crew of the "Fly," and planted with cocoanuts, pumpkins, and other plants ; all has been overwhelmed by the drift sand. I found what I hope may prove a favourable spot, and planted pumpkin, tomato, capsicum, water melon, and Cape gooseberry seeds. I think the latter plant very likely indeed to grow. There is very good black vegetable soil in places on the island.

The most striking feature at Raine Island is formed by the birds. They are in such numbers as to darken the air beneath as they fly overhead, and the noise of their various mingled screams is very trying to the ears at first, but not so painful as that of a penguin rookery. Eleven species of birds were seen on the island. A heron, seen only at a distance, the cosmopolitan "Turnstone," and a small Gull (*Larus Novæ Hollandiæ*) appeared to be casual visitors to the island, as they were not nesting there ; the Turnstones being seen in flocks on the shore.

The birds breeding on the island were as follows :—A Land-rail (*Rallus pectoralis*), a widely spread species, occurring commonly in Australia, Central Polynesia, the Moluccas, and the