not the opportunity of surveying it; he probably found it impossible to enter even in a boat, as we did.

In the open sea between the Mergui Archipelago and the Andamans, the influence of the prevailing wind again shows itself in a north-easterly set of

½ mile to 1½ mile per hour.

A south-easterly and south-south-easterly current sets with considerable force down through the Mergui Archipelago and past the Seyer Islands; and from lat. 10° N. and long. 35° E., a strong current in the same direction sets, at the rate of $\frac{3}{4}$ to $1\frac{3}{4}$ mile per hour, into the entrance of the Malacca Strait. This current may probably be found some degrees farther to the eastward; but I have been unable to gather any facts in support of such a theory, though I know of nothing in opposition to it.

Sumatra.—On the N. coast of Sumatra the current of the s.w. monsoon follows the form of the land to the westward; but this portion of the sea is sheltered from the influence of the wind. A slight return current to the

eastward may be experienced in about lat. 61° N.

Between Acheen Head and the Great Nicobar an extraordinary current is found running to the south-westward in the teeth of the monsoon at the rate of $\frac{3}{4}$ to $1\frac{1}{2}$ mile per hour; it extends to the parallel of 5° N, and nearly to the 92° meridian, when it turns to the s. and s.e. Where this current meets the ordinary north-easterly set strong ripplings are observed. It may be taken advantage of by ships bound westward from the straits of Malacca, but it is at present but little known.

3.—Extract from a Letter on Queensland from Sir Charles Nicholson, Bart., f.r.g.s., to Governor Sir G. F. Bowen.

Communicated by the DUKE OF NEWCASTLE, F.R.G.S.,

August 22, 1861.

"WITH fine weather and a good steamer, the trip from Rockhampton to Port Denison may be rendered both short and agreeable. The coast-line for the whole distance is bold and well-marked, and the hills with which it is backed often present bold and picturesque outlines. After leaving the broad expanse of Keppel Bay, and the secure shelter and anchorage it affords, the course of a vessel is an open sea-way, in which a few rocky and well-marked islets occur. These are sufficiently prominent to prevent any impediment to navigation by night. After reaching the Percy Islands, and from thence on to the entrance of Port Denison, a succession of islands, seemingly countless in number, and varying in size from a single rocky projection to areas of some square miles in extent, are scattered along the whole coast. They are generally clothed with grass and wood, the latter consisting apparently of the 'Arancaria Cookei.' The outlines they present are generally most striking. Occasionally with bold and rocky summits, some of which must be little short of 1000 feet in height. at other times presenting grassy slopes stretching up amongst the deep-wooded sides of hills, it is difficult to imagine anything more beautiful than the tout ensemble thus presented to the eye of the traveller whilst gliding through the waters of these Australian Cyclades. Some of them must have permanent water, as a small cascade may be seen in a ravine on one of the most striking of the group, which, if I recollect rightly, is known on the chart as 'Prudhoe Island.' Secure landing may be found in most of these islands, in the numerous little sandy beaches and bays with which their sides are environed.

"On approaching Port Denison the scenery becomes bolder on the coast. Mount Dryander attains an altitude of nearly 3000 feet. Cape Conway is an abrupt rocky promontory, and Gloucester Island, which faces one of the sides

of the bay, presents a long serrated ridge of granitic rocks, which at a distance seem destitute of all vegetation, and remind the traveller who has been in the Red Sea, of the mountains of the Sinaitic Peninsula, and of Aden. On rounding Gloucester Island the waters of Port Denison are reached, presenting a broad and nearly circular basin, the largest diameter of which is probably five or six miles. It is nearly land-locked, although exposed somewhat to the south-east. The point forming the north entrance is a peninsula, which at high water forms an island, with an abrupt cliff rising some four or five hundred feet towards the sea, and gradually sloping off towards the west into a bed of mangrove-swamps. The view from this promontory is very imposing. To the east the bold mural precipices of Gloucester Island, to the south the lofty isolated peak of Mount Roma; and, stretching to the far-west, a succession of The bay of Port Denison is unfortunately hills and undulating plains. shallow, its greatest depth in the centre not exceeding 25 feet. The shores are low and shelving, and some difficulty (in the absence of a jetty or pier) is encountered in landing except at high water. At other times boats are unable to reach the shore, and the only means of landing are, as far as passengers are concerned, the back and shoulders of a sturdy aboriginal black; or, in the case of goods, a bullock or horse-team, which has to be driven some 200 or 300 feet into the sea.

"The site of the future town (named after Governor Sir George Bowen) appears to be judiciously selected on a small ridge on the northern side of the bay. It is proposed to connect this with the peninsula forming the northern

entrance of the bay by means of a causeway.

"The great drawback to the settlement appears to be a deficiency of fresh water. This all-essential article is at present supplied from some native wells. Such a source must evidently be limited and precarious. The River Don, which is within four miles, will, however, it is said, furnish if needed an

adequate supply of water to the inhabitants, if the native wells fail.

"The country immediately adjacent to the township, and beyond the mangrove-swamps, consists of a rich, light, sandy soil, apparently well adapted for the growth of cotton, and other tropical vegetable productions. An extensive and fertile tract of country, consisting of open bush, is said to extend for a considerable distance inland, and to be well adapted for grazing purposes. A station has been already formed 40 miles from the township, and the natives have as yet given no serious trouble to the white population.

"From all that I can collect we may, I think, safely infer that the future town of Bowen will acquire considerable importance as the centre of a fertile country, and as an outlet for the pastoral districts of the Kennedy, for the wool and tallow which they will ere long produce. There are, however, I apprehend, some serious drawbacks to its prosperity. These will be chiefly found to consist in the insufficient supply of fresh water, in the shallowness of the basin of the harbour, the low shelving beach, and the difficulty and labour which now attend the landing of goods and passengers. These drawbacks are, however, capable of removal or mitigation.

"I believe that an important step has been taken in the occupation of this part of the coast of North-Eastern Australia. All credit and honour are due to Mr. Dalrymple, by whose zeal and energy this new locality has been opened up, and is now being settled upon what, I trust, will be a prosperous basis.

"Before leaving the settlement I met with several parties of young men, who had just returned from explorations to the north and north-west, in search of pastoral 'runs.' It is impossible not to be struck by the courage, enterprize, and endurance, of these pioneers of civilization in the Australian wilderness. One party, consisting of three Europeans and an aboriginal boy, had been absent in the bush for upwards of five months, during which interval they had never met with any white man and had been frequently menaced by the blacks. For a considerable period prior to their return they had been living upon a diminished ration of flour and bacon, and were in a great degree dependent for subsistence upon fish and native animals. Their journey had extended as far as the basaltic table-land of Leichhardt, towards the sources of the Burdekin. They purpose occupying a large pastoral tract in this region, and were thinking of bringing stock from Melbourne by sea. The point they

had fixed upon for stations was nearly abreast of Rockingham Bay.

"One important point connected with the progressive occupation of the north-east coast of Australia is the hastening of the period when steam communication with India and Europe will follow this route. Port Denison is only 600 miles from Cape York, and the latter not more than 1100 miles from Timor, from which a regular line of steam communication exists with the various Dutch East Indian settlements, and thence to Singapore. Some 1600 or 1700 miles is all that is really at present needed in steam communication to connect Queensland with the Old World. Why do we not supply the small link thus wanted to complete the golden chain that so nearly encircles the civilized world?"