WILEY

Observations on New Britain and Neighbouring Islands, during Six Years' Exploration

Author(s): Wilfred Powell

Source: *Proceedings of the Royal Geographical Society and Monthly Record of Geography*, New Monthly Series, Vol. 3, No. 2 (Feb., 1881), pp. 84-97

Published by: [Wiley](#) on behalf of [The Royal Geographical Society \(with the Institute of British Geographers\)](#)

Stable URL: <http://www.jstor.org/stable/1800160>

Accessed: 13/06/2014 23:43

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

The Royal Geographical Society (with the Institute of British Geographers) and Wiley are collaborating with JSTOR to digitize, preserve and extend access to Proceedings of the Royal Geographical Society and Monthly Record of Geography.

<http://www.jstor.org>

circumstance, which no doubt upon consideration they would deem conclusive. Alexander the Great came from Persia to Afghanistan by way of Herat and Seistan and Candahar, and so got to Kabul, passing through a rich, populous, and highly cultivated country, the like of which was not to be seen in these later ages. There were ruins between Candahar and Herat which showed that there must once have been flourishing cities, and country which is now described as "stony plain" must have once been cultivated by means of tapping those springs which the Chairman had described. A study of the Greek accounts of Alexander's campaign would convince them that the country was much more cultivated then than now, and perhaps the day would come when under some great power it would become as well cultivated in the future.

The CHAIRMAN said he merely proposed to supplement the remarks made by Sir Richard Temple, by one or two illustrations. It was not generally known that the great city and capital of Southern Afghanistan, in the time of Alexander, was a perfect illustration of the argument he brought forward. The ruins of the city of Arachosia, now called *Olán Robát*, were to be found in the midst of a howling wilderness, without an atom of cultivation or a single fixed inhabitant in the neighbourhood, yet the country on the right-hand side of the road leading from Ghazni to Candahar must have been at one time cultivated throughout. The valley of the Tarnak was 15 or 20 miles across, and was now a wilderness, but as it contained the great city of Arachosia, which was the capital of the country, they might suppose that the whole of that plain was formerly cultivated. He believed that Afghanistan would sustain a population two or three times more numerous than at present existing, though no doubt to a casual observer the present appearance of the country was most desolate, especially that portion between the Khojak hills and the plain of Candahar.

*Observations on New Britain and neighbouring Islands, during
Six Years' Exploration.* By WILFRED POWELL.

Map, p. 128.

DAMPIER, in 1699, was the first to decide that New Britain was a separate island from New Guinea, he having passed through those straits which are now called by his name, and which lie to the westward of New Britain and the eastward of Rooke Island. Some portions of the island were afterwards more exactly described by D'Urville, although this navigator visited it under very adverse weather: he gives it the native name of Birara, which I found to be the name also given to a part of the island some 200 miles to the north-eastward of that portion which he describes, a circumstance which, I think, tends to prove that at some previous date the natives of the eastern and western ends of the island were connected, though at the present time their language, appearance, and customs are very different.

Before commencing a description of New Britain I will devote a short space to the Duke of York group, which consists not of one island alone as marked in the Admiralty charts,* nor even of four islands, as shown in the German survey by the *Gazelle*, but of seven principal

* This has recently been corrected by the Hydrographic Office from a survey by Lieut. G. E. Richards, R.N., of H.M.S. *Renard* in 1879.—Ed.

islands and seven smaller ones; the largest of these is Duke of York Island, which is about five miles in length, east and west, by $3\frac{1}{2}$ north and south: to the extreme north of it lies Makada Island, with two small islands called Myet lying to the eastward: these, with the northern coast of Duke of York Island, form Makada Harbour, better known as Ferguson's Harbour. This is a pretty fair harbour during the south-east monsoon, but it cannot be considered a first-rate one, owing to very strong currents that sweep through the narrow passages between the islands, and the inferior holding-ground, which is mostly white and shifting sand: the average depth is from 3 to 10 fathoms.

Port Hunter is a small port on the north-eastern side of Duke of York Island, separated from Makada Harbour by a very narrow isthmus about 200 yards wide; on this isthmus is built the principal mission house and the residence of the Rev. G. Brown, situated on rising ground on the north-western side of Port Hunter, known as Mission-house Point; this port was first discovered and described by Captain Hunter. The eastern shore of Duke of York Island is for the most part steep, rising in cliffs about 100 feet above the sea, Weira Point being the highest and most easterly point. Further south lies the entrance of Mioko Harbour, which is enclosed on the southern side by three islands, namely Mioko, Utuan, and Ulu Island; this is undoubtedly one of the most sheltered harbours in this part of the South Seas; it has a small shoal lying about the centre, but there are good passages on each side of it; it has also an entrance both at the east and west ends; the harbour is about $2\frac{1}{2}$ miles wide in the broadest part. To the south-westward of Ulu lie two more islands, the easternmost of which is Kerawarra and the westernmost Kubokonilick, the two being joined by a small reef and enclosing a small haven known as Kerawarra Harbour, which is dangerous for large vessels owing to the narrowness of the entrances; there are several shoals and sand patches lying to the westward of Duke of York as marked in the chart. Nearly due west of Kubokonilick lie two small islands, surrounded by fringing reefs with a deep water passage between, known as the Pigeon Islands, the native name of which is Palaccooroo.

The natives of the Duke of York group appear to be a mixture of the inhabitants of New Britain and New Ireland, who have crossed over at some former date; that is to say, I think that some tribe from New Britain, having been driven off the mainland (probably Birara), colonised the Duke of York group, beginning at the southernmost end, where they appear to be the oldest inhabitants and still hold intercourse with Birara; then it is probable they were either drifted in their canoes or went over to New Ireland to trade for provisions, and eventually bought wives there. I imagine this to be the case, as the Duke of York language more closely resembles that of Birara (New Britain) than that of New Ireland; yet the New Ireland natives seem to comprehend the Duke of York dialect when spoken to them, though it is not their own language, or at all like it.

When speaking of New Ireland I refer to that part immediately opposite the Duke of York group. In parts of this group they also have a custom amongst the women that only belongs to New Ireland, namely that of covering their loins, which seems to point to the fact of the women having come thence and continued the practice; the men go entirely naked. I cannot say that I found much more intelligence amongst these natives than in either of the other islands, although Mr. Brown has chosen it as his head mission station; but he preferred it on account of its central position rather than because of any intellectual superiority of the natives. With regard to the work of the mission, I cannot speak very favourably of the progress it has made during the four years since the missionaries first landed here, though it is from no want of zeal on their part, but rather from lack of sympathy on the part of the natives, who do not appear to take much interest in learning anything, except it be a new dance. The first two or three times that *lotu*, or religious service, is held at any fresh place, numbers come down to see what it is like, but after that they seem to get tired of it and keep away. I asked an old chief one day if he had been to *lotu* and how he liked it; "Well!" said he, very seriously, "I went to sleep, but it was not at all comfortable; I don't think I shall go again." However, going to sleep in church is not peculiar to savages. Excepting the boys at the houses of Mr. Brown and the teachers, I do not think there are ten converts among the Duke of York natives.

We will now turn to New Britain. Cape Stephens, the north-east point of this island, in S. lat. $4^{\circ} 7'$, and E. long. $152^{\circ} 7' 45''$, is formed by a spur of a mountain called the North Daughter, fringed by a small reef running about 150 yards from the shore, on which are two or three rocks that show above high water. This is called by the natives Goonan district. The North Daughter is a volcano rising to the height of about 1700 feet. After passing Cape Stephens to the eastward, the land trends away in a south-easterly direction, forming a peninsula on which are situated two mountains known as the Mother and South Daughter with a volcano lying between them. In May 1878, during a violent eruption of this volcano, there rose in one night on the western side of Blanche Bay (a bay nearly enclosed by this peninsula), an island of considerable extent, which forms in itself a crater, filled with boiling water. The new island is semicircular in form, the centre forming the crater, and its north-eastern side having a short reef or spur of rocks which terminates in a small island covered with bushes. A week after the island had risen, in attempting to land I found the surface too hot to stand still upon; one had to keep moving along quickly to prevent the sole of the boot being burnt, the water in the crater being in a boiling condition and throwing up large volumes of steam. The eruption of the volcano above-mentioned lasted for upwards of a month, and when viewed at night from the "Mother"

presented a most beautiful spectacle, huge lumps of molten pumice-stone being thrown up to an enormous height, and when they reached their greatest altitude, bursting like a rocket, emitting vast showers of sparks and red-hot stones, which destroyed all vegetation to leeward within a distance of about two miles. The crater itself seemed to be covered with a blue sulphurous flame, which rose and fell as if there were a vast pulse at work beneath. The whole surface of Blanche Bay, and a great part of St. George's Channel, were so thickly covered with pumice-stone that it was impossible for a boat or even a vessel to work its way through. Large numbers of dead fish and turtle were picked up on the surrounding shores of Blanche Bay.

The peninsula of the Mother and Daughters, which thus bounds Blanche Bay on the north-eastern side, is terminated by a point called Point Praed, so called by the *Blanche*. A little further along the southern end of the peninsula, and immediately under the South Daughter, is a small indentation of the land, in which the *Blanche* anchored, called Albino Bay on account of a false report of there being a white woman on shore here, who turned out afterwards to be an albino woman. Lying on the inside of the peninsula is an island called Matupi, which is very thickly populated with natives. In a north-westerly direction, about two miles off, lie two very remarkable rocks called the Beehives. The western side of Blanche Bay is hilly, rising to about 700 feet, crowned with coco-nut groves, and very thickly populated. The southernmost point of the bay is named Ruluanna Point. After leaving this point the land trends in a straight line very nearly due east, the whole extent of the coast-line being tolerably thickly wooded, but the country rising at the back in undulating grassy plains.

Gazelle Point, so named by the German exploring ship *Gazelle*, is the extreme easterly point of New Britain. From Ruluanna to Gazelle Point is known as the Kininiginun district, and it is within this district, near the shore, that my house is built, from which I have made several excursions inland, of which I intend to give an account hereafter. From Gazelle Point the coast trends away slightly to the south-westward, this part of the country being known by the natives as Birara; it is thickly wooded and well watered, rising at the back to a considerable height. The next principal point is Cape Palliser, in about S. lat. $4^{\circ} 36'$ and E. long. $152^{\circ} 20'$. The land here begins to fall away a good deal to the westward, and embraces several points and capes, the first of which is Cape Buller, which forms the northernmost headland of Spacious Bay. The next point of any importance is Archway Point, which is formed by a curious natural archway of rock, projecting some yards into the sea. The next is a long hilly point which stretches about three miles to the southward, due south, which I called, from its shape, Tongue Point. Along this coast, from Cape Palliser to Tongue Point, we constantly observed natives on shore, but were

unable to hold any communication with them owing to their assuming an exceedingly hostile appearance on our attempting to land, using the most disgusting and obscene gestures, apparently in order to show their contempt of us; indeed, in one place where we were anchored in a small cove they came down in great numbers on the beach, and commenced to throw stones from their slings to such an extent that it was considered advisable to haul further off the shore. I may here remark, in passing, that the slings they use are composed of an oblong piece of bark, with two strings about a yard in length fastened to each end, on one of which a button of pearl shell is fastened in order that the string shall not slip through their fingers. The stone rests in the centre on the oblong piece of bark. They use these slings with great accuracy and considerable force; indeed, I have seen a native discharge a stone to a distance of 250 yards with sufficient force to break it against another.

The only difference between these natives and those on the more northern portion of the island is that they wear a waistcloth; their arms are the same, namely, spears, clubs, stone tomahawks, and slings.

After leaving Tongue Point we found ourselves entering a most beautiful bay, which I named Henry Reid Bay, after the name of the missionary steam-launch which accompanied us on one of our trips down here. The bay forms a complete harbour, measuring from Tongue Point to the western shore about $4\frac{1}{2}$ miles, with a stretch of about the same extent north and south. It is surrounded by a beautifully wooded shore. On the north-west side two rivers of considerable extent enter it, the northern and smaller one called Pleasant River; the mouth of the one to the southward, only about a mile distant from the former, is large and deep; at the entrance we found a depth of from $2\frac{1}{2}$ to 3 fathoms, which depth we carried with us into the river for about half a mile, and found sufficient water up the river for the steam-launch for a distance of about three miles, the course being in a westerly direction trending slightly to the northward. At this distance up the river we landed, on the northern bank, and going about 200 yards into the bush, discovered a deserted fishing village of about twelve or thirteen huts, outside which were lying numbers of empty shells of river clam, which seems to have been the object of the natives' fishing here. The huts appeared to be of fresh construction, and could not have been long deserted, though of such slight structure that I do not think the natives could have resided in them for any length of time. The banks of the river were beautifully covered with ferns, intermingled with the sago and betel-nut palms. We observed a beautiful creeper hanging from the trees, with a magnificent red wax-like flower, also a kind of gum-tree (*Eucalyptus*). Some of the most lovely kinds of *Dracænas* lent their colours to add to the general beauty. The water of the river was perfectly fresh at a quarter of a mile inside the mouth. We did not see any signs of the natives themselves.

After leaving the river we proceeded on our course down towards Turner Point, which is the southern point of Henry Reid Bay, on the way observing a small island lying close in to the southern shore; also, about $1\frac{1}{2}$ mile to the northward, a small reef, on which there was a considerable break. Henry Reid Bay averages for the most part a depth of about 20 fathoms, though it shallows considerably towards the southern shore. Whilst anchored in the bay we observed several large hornbills flying about amongst the trees, making that curious rushing noise with their wings, like a railway train in motion, which obtains for them their native name of *Banga-banga*. We also observed the foot-tracks of cassowaries on the shore, and one evening we saw a small wallaby come down to the beach, apparently to lick the salt off the stones.

After rounding Turner Point we came upon a long stretch of low land, the beach running very nearly north and south, for a distance of about four miles; on it we observed a large number of natives, who were waving green branches and gesticulating to us. After we had anchored, Mr. Brown and myself determined to go on shore, though, having been so badly received by the natives further northward, we were rather doubtful of the result. On landing, the natives at first appeared to be rather shy of us, but after some little persuasion, and showing them strings of beads and red cloth, they began to venture round us, whereupon we commenced to barter for some small things they were wearing, such as armlets, necklaces, and so forth. The first man who obtained a few beads, as soon as he had them in his hand, appeared to be so much overcome by the enormity of his wealth, that he rushed off along the beach yelling like a maniac, presumably to show his friends the wonderful treasure that he had obtained from the mysterious creatures who had come to visit them. After this the others were more eager to obtain a similar treasure, and pressed round us, trying to barter everything they had on, even the very rings out of their ears. On one occasion, wishing to purchase a pig, and not knowing very well how to set about it, being ignorant of the dialect, which is totally different from that of the natives in the north, I asked Mr. Brown how I should manage, or what he thought would be the best way of making them understand. He said, "Why don't you try grunting?" whereupon I began to grunt most vociferously. The effect was magical: some of them jumped back, holding their spears in readiness to throw; others ran away, covering their eyes with their hands, and all exhibited the utmost astonishment and alarm; in fact, it was so evident that they expected me to turn into a pig, and their alarm was so irresistibly comic, that Mr. Brown and I both burst out laughing, on which they gradually became more reassured, and those that had run away came back, and seeing us so heartily amused and that I had not undergone any metamorphosis, began to laugh too; but when I drew a pig on the sand with a piece of stick and

made motions of eating, it suddenly seemed to strike them what was the matter, for they all burst out laughing, nodding their heads, and several of them ran off, evidently in quest of the pig that was required. After this they were very much more friendly, and took us off to show us a village close by. When we got there it struck me at once, there being no women or children about, that it was a village that they had lately conquered, and on coming closer my idea was confirmed by large heaps of human bones lying about, all charred and blackened by fire. I picked up what appeared to me to be a shin bone, and showed it to one of the natives with an inquiring look; whereupon he snatched it out of my hand, and pointing to his own leg, put the bone into his mouth and then began munching all round it, rubbing his belly at the same time and laughing, as much as to say it was very good. Although there were such large numbers of bones about I did not see any skulls, which leads me to imagine that they take them away to their own village as trophies. There was no appearance of any one living in the houses, which I believe to be in consequence of their having the same superstition as the natives more to the northward, namely, that if a man lives in the house of an enemy who has been killed in battle, he will be haunted by the spirit of the dead man. The houses themselves were beautifully made, and far superior to any that I had seen before in the island; they were built in semicircular shape, with the roof sloping down to the ground at the back, the front being filled in by beautifully worked wicker-work, leaving a small door in front. The inside of the house was really very well decorated, for natives, with figures and designs, some burnt into the wood, and others stained with dyes made from the juice of different nuts. The village itself was built in a circle, leaving an open space in the centre, which was planted with small trees and variegated plants. I cannot account for the village being deserted in any other manner than that these natives, who were now showing it to us, must have surprised it at night, thus catching all the inhabitants asleep. We bought a good many curious implements of war and ornaments from them; they had shields, really very cleverly ornamented; their spears were the most dangerous weapons of that description that I have seen in New Britain, the points of them being tipped with cassowary's claw, and only fastened on with a kind of wax or gum, so that when the spear was buried in the body, the cement would be melted by the heat, and on the weapon being drawn out of the wound, the cassowary's claw would be left imbedded in the flesh. Their clubs are varied in shape, some being well carved with even knobs all round the end, and some, like one that Mr. Brown bought, shaped in the exact form of a bill-hook, though where they can have got the idea from I cannot imagine. Some of the articles of ornament were pretty well carved; these were tortoise-shell earrings, armlets of the same material, or made out of the spiral conch, and curious masks, made of network, and cleverly

worked in with feathers, which they stretched over their faces when dancing. The natives themselves wore a very neatly stained waistcloth, marked in very good pattern, in most cases with the colours red, yellow, and black. All the men that we saw appeared to be circumcised, except one old man who wore no waistcloth, and who had an air of great authority amongst them, though I do not think he was a chief, but rather a wind-maker or doctor.

In bartering with them I found that they did not know the use of iron hoop, so much prized by the natives of New Guinea, nor did they seem to care about a tomahawk when I showed it them (they themselves using stone tomahawks). They would only barter with us for beads and red cloth—a circumstance which seems to me pretty conclusive that they can have had very little, if any, intercourse with white men.

Return Point, at the bottom of Spacious Bay, was the furthest we visited on this side of the coast. Captain Hunter mentions Spacious Bay in these words: "At noon we found ourselves ten miles to the E.S.E. of Cape Buller before a deep embayment which exists between Cape Buller and Cape Orford, and which, in this part, must reduce the connection north of New Britain to a narrow isthmus; the deep and spacious bay spoken of above was not sufficiently explored to affirm that it does not disconnect the two portions of New Britain, but if so the channel must be narrow and was not distinguished from the offing."

We will now return to Cape Stephens, and travel westward along the northern coast of New Britain. As I said before, Cape Stephens is formed by a spur of the North Daughter, which is evidently formed by volcanic action, and is called the Goonan district; this district extends about three miles along the coast, which trends nearly in a S.S.W. direction. There is good anchorage along the whole of this coast during the south-east monsoon, but the best is about two miles to the southward and westward of Cape Stephens, about a quarter of a mile from the shore, and is distinguishable by one remarkable green tree standing by itself close to the water's edge. The next district is known by the natives as Ruterwool; the coast still trends in the same direction, the shore is low and shelving, but the country inland is composed of hills of volcanic appearance about 500 or 600 feet high; coco-nut groves cover the coast and hills at the back. About four miles from Cape Stephens along this shore, off a slight elbow in the coast-line, there lies a small shoal about 500 yards from the beach. To the southward and westward of this shoal there is good anchorage in the south-east monsoon. Next is Tarlily Bay, so named after the chief who lately caused the Rev. G. Brown so much trouble by murdering and eating four of his teachers, as it is in this district and on this coast that his possessions lie. It is formed by the south-western part of Ruterwool on the east side, and Junior Mission-house Point on the west. The shore is low and shelving, with many large banana plantations and native houses on it;

fringe-reefs run out into the bay to the distance of about 200 yards, but there is anchorage to be found all over the bay to the distance of three-quarters of a mile from the shore in from 9 to 10 fathoms.

Junior Mission-house Point is the north-eastern point of the Kabakadaie, and is distinguished by the New Britain Mission-house, which is built on it. This point on the bay side falls abruptly to the beach in cliffs of about 40 feet drop. On the north-western side it is more shelving, but has moderately steep hills at the back. The point has a considerable fringe-reef lying from it about a quarter of a mile, inside of which there is a boat-passage. Kabakadaie is a long straight piece of coast, running in a west-south-westerly direction from Junior Mission-house Point to Shoal Point. It is fringed by a reef the whole distance; bottom, shoaling gradually from 20 to 6 fathoms, may be got from three-quarters to half a mile off the reef. The hills are well cultivated, and the shore thickly populated and lined with coco-nut trees. Fresh water may be obtained here. Shoal Point, the westernmost point of Kabakadaie, is formed by a low hill, with white sandy beach and a reef that runs about a mile to sea, terminating in shallow and dangerous water.

Luin Bay is formed by Shoal Point on the eastern and Luin district on the western side. It forms a fair anchorage for small vessels. Luin district and Cape Luin are formed by high land. From Luin Bay to Cape Luin the shore is fringed, at first, by a small fringe-reef, which gradually increases until, off Cape Luin, it extends to a very dangerous reef reaching about one mile and a half from the shore in a north and westerly direction. There are also three smaller shoals to the northward of the large reef, the outer one at a distance of about a mile and a half.

Man Island is a large island about six miles east and west by three north and south, lying about $6\frac{1}{2}$ miles to the northward of Kabakadaie. It is formed by two hills, rising in the centre to about 700 feet. There are two small fringe-reefs on the south-eastern and on the south-western point, otherwise it is steep to all round. There is no anchorage off it. The hills are thickly wooded, but there are patches of cleared land for cultivation in many places. The natives on Man Island are apt to be troublesome. Midway Shoal is a very dangerous reef, lying almost in mid-channel between Shoal Point and Man Island; it is awash at low water, one stone showing. A sharp look-out should be kept from the mast-head for this shoal in making the passage from Cape Stephens to Port Webber, the most advisable route being to keep Man Island close aboard on the starboard hand (say a mile and a half) until clear of it; then steer for Cape Luin; this will take a vessel clear of Midway Shoal. Urara Island with its reefs is an island about one mile east and west, lying to the north-westward of Cape Luin about three miles. It is low and wooded, thickly inhabited, and is surrounded by a fringe-reef on the north, south, and eastern sides, which extends

from the beach about half a mile. At the western end there is a considerable reef, which extends about a mile and a half in a westerly direction, on which is a sandbank, dry at high water. To the north-westward of Urara lies a large detached reef extending to the northward about $1\frac{3}{4}$ mile. In the passage between this reef and Urara Island is a sunken reef, with $1\frac{1}{2}$ fathom at low water.

Port Webber is a large embayment about six miles deep, formed by the Luin district on the eastern side and Byning district to the westward; at its head is the district called Cambira. Mount Beautemps Beaupré forms a good mark for a vessel entering Port Webber, and, if steered for, will take her clear of the slight fringe-reefs that edge the coast on the Luin side. In the eastern arm of the bay, good anchorage will be obtained at a distance of about half a mile from the shore at a depth of about 13 fathoms. A vessel should not go into a depth of less than about six fathoms, as the water after this shoals very quickly on this part of the coast. This forms a good harbour, and is very convenient for watering. The Luin district on the Port Webber side is hilly and broken; in many places the hills are bare and grassy, in others thickly wooded. The coast has large groves of coco-nut trees along the beach, and the bay is quite clear of reefs.

The Cambira district forms a tract of low land towards the beach, but further inland it rises in undulating grassy hills, for the most part crowned with groves of coco-nut trees. In the distance may be seen Mount Beautemps Beaupré, rising to the height of 1800 feet. The western side of Port Webber, in the Byning district, is very high and mountainous, with rugged peaks rising about 2000 feet.* Captain Bruck, of the German barque *Etienne*, examined this part of the coast for an anchorage, but reported that he found no satisfactory place.

Materbert Island lies nearly west from Urara Island, about $6\frac{1}{2}$ miles distant, and is distant $13\frac{1}{2}$ miles in a north-westerly direction from the anchorage in Port Webber. It is a small rocky island, a quarter of a mile in length, lying about half a mile from the mainland. There is a small reef projecting from the eastern end, also a somewhat larger one on the western point, which trends towards the main shore, but leaving a deep water passage between it and the mainland, which is again divided by a small shoal. The mainland is low, with white sandy beach, which forms a small bay opposite the island, where there is a river of very good water, convenient for watering. The best anchorage lies between the island and the mainland, in about 16 fathoms mud; this is as far to the westward along the shore as it is advisable that a large vessel should go, and even small vessels should be very careful in proceeding further, on account of the numerous reefs and shoals, and strong currents.

The little that is known of the northern coast of New Britain is due

* 1640 feet on the Admiralty Chart.—Ed.

to D'Entrecasteaux. Indeed, it was the scene of the last of his labours before he died. It is stated in the Admiralty sailing directions that the coast between Cape Lambert and Cape Stephens has not yet been examined.

After leaving Materbert the coast-line trends in a north-westerly direction, two indentations occurring before coming to Byning Bay, having passed on the way Matukanaputa Island, a small rocky island about 60 feet in height, with many coco-nut trees on it, and a considerable number of native houses. It has a long reef extending about one mile and a half to the south-east. A small reef a quarter of a mile in extent lies on the western side of the island. To the northward and westward lie several reefs, and the navigation is very dangerous. Byning Bay is a deep indentation in the coast, having a reef on its eastern side, between which and the shore is good anchorage for a small vessel, but the main body of the bay is deep and steep-to; several small islands lie on the eastern side of the entrance. The coast still trends to the north-west, and the shore is low and shelving, but high and mountainous at the back; numerous reefs and shoal patches lie all along it, making navigation extremely difficult. Further on a sandbank rises, with reefs on all sides. At a distance of about six miles to the northward of Cape Lambert lie the Scilly Islands, six in number, the largest having two mounds on it about 60 feet in height. They are well wooded.

Cape Lambert is bold and steep; about 12 miles to the north-westward of it lie a long chain of reefs, running in a southerly direction, Wreck Reef being the most northerly one we examined; but the natives report them to extend round outside the Scilly Isles, and to join the reefs to the eastward off the island of Matukanaputa. It would be impossible to give a description of the numberless reefs and shoals lying off this portion of the west coast, but the chart will give the principal ones. I shall therefore not attempt it; confining myself to the general warning; but the utmost caution is necessary.

Open Bay is a fine open bay, about $15\frac{1}{2}$ miles wide across its entrance. Sandy Point is a low, white, sandy projection, with a shelving coast, off which the water is shallow to a considerable distance. After rounding Sandy Point the coast trends slightly north of east, having a small island (Turtle Island) off it, about $3\frac{1}{2}$ miles from Sandy Point. The island has several reefs around it, the longest of which trends to the southward. Deep water was found immediately after rounding Sandy Point; Port Powell is a small harbour lying five miles due east; it has an entrance of about a quarter of a mile wide, and then extends inside to a width of about 1 mile by $1\frac{3}{4}$ mile in depth, having an even bottom of 15 fathoms (mud). All over it is well sheltered, and fresh water can be obtained at a short distance from the shore on the eastern side. It would make a capital refitting place for smallish vessels. The coast of Open Bay

trends south by east from Port Powell about three miles, when it draws further to the eastward, forming the eastern extremity of Open Bay. On the south the coast is broken into smaller bays, fringed by reefs, the shores of which are very deep and steep-to, forming bad harbours. Hixon Bay is a large open bay which we did not examine, and we ascertained that the Ledanseur Island of the charts does not exist, its deceptive appearance as an island being caused by the mountain called the "North Son," being separated from the "Father" by a tract of low-lying land invisible from the offing. Heath Island lies close to Cape Deschamp, and is high, about 200 feet, and steep-to all round. Cape Deschamp is steep-to with high cliffs. Long Point is a long low point of land immediately below the Father Mountain. Low Point is a similar point immediately below the South Son.

Duportail Island lies about $4\frac{1}{2}$ miles due west from Long Point. It is 5 miles long by $2\frac{3}{4}$ wide; has two mountains, one a conical peak, and the other a volcano with a very peculiar crater, of which I made a drawing. Two small islands lie from three to four miles to the westward of it, both rising like rocks from the water. Between Anne Island and Duportail lies a dangerous narrow reef, one fathom below water, and is merely a ridge of coral, so narrow that it might easily escape notice. Close Island is a small island lying close to Duportail Island on the south.

Of the "Father and Sons" Mountains, the "Father" and "South Son" are active volcanoes, the Father being the most active of the two. It throws up great volumes of smoke and a substance that, viewed from the foot of the mountain, looks like mud, though it may be ashes. The present crater has so evidently grown out of the ruins of an older one, that I am inclined to think it must be formed of more than merely volcanic ashes, though I do not think it can be lava. The "South Son" does not eject such a volume of smoke, neither is there any solid substance thrown up with it, though there is the same appearance of a new and an old crater. Both these mountains are well wooded up to the old craters, but the slopes of the new craters are quite destitute of vegetation. The "Father" is about 4000 feet high, and the "South Son" about 3000 feet; the "North Son" is much lower than either of the others, being only 1300 feet, and to all appearance it is an extinct volcano; its crater, however, has all the appearance of having been very much shattered at some former time by a very severe eruption. The natives here brought off great lumps of grey obsidian.

Mount Duportail is an active volcano, the crater having a very peculiar appearance, very much resembling the mouth of a huge whale, as if the mountain had fallen in half at the summit. It does not emit much smoke, except after rain, when there is a much larger volume. It is well clothed with vegetation on all sides of the crater, but is quite bare between the two summits.

All these islands are thickly inhabited, and the men have more intelligent faces than those of the inhabitants of the north; they also wear waistcloths, and their ornaments are of a very superior make to those worn elsewhere on the island of New Britain. The natives of Open Bay were very friendly towards us at one place called Watto. They appeared distinctly to remember having seen my vessel before, in company with one that they expressed as "puffing and shrieking." Their imitation was so graphic that I at once concluded that they meant Mr. Brown's steam-launch, which had accompanied me on my tour to Spacious Bay, which lies immediately on the other side of the island. This bay I afterwards found, on plotting my chart, to be separated from Open Bay only by a narrow isthmus of four miles in breadth, the isthmus for the greater part being plain-land, but interspersed here and there with high volcanic upheavals.

From Low Point the coast-line trends in a general direction to the south-west. This part of the coast we did not examine, except Hummock Head, which is formed by two small hillocks with a slight embayment to the southward. Chard Island is about $4\frac{3}{4}$ miles in length, lying nearly east and west. It has two low hills, the highest and most easterly being about 100 feet high. Vessy Island is low-lying and well wooded, having but one small hillock at the western end. MacDonald Island is a small island lying about four miles west of Vessy Island. These islands all appear to lie pretty close to the coast, which after leaving Hummock Head is very low and shelving.

Commodore Bay is apparently full of shoals and reefs, though it was not examined with sufficient accuracy to determine the extent of the dangers. In Commodore Bay lies Norton Island, a small rocky islet about $1\frac{1}{2}$ mile from the nearest point of the coast. Cape Hoskins is a bold cliffy point, having high mountains at the back, but with a long dangerous reef running three miles in an easterly direction.

North-east from Cape Hoskins, 10 miles off, lies Fairway Reef, which is about three miles long, lying in a general direction of north-east and south-west; having two sandbanks, the most easterly of which is dry at high water, the other being awash at the same time. About west by north from Fairway Reef lies Jenkins Island, six miles distant. It is about three miles in length, having a slight rise in the centre. From each extremity of the island there extend two considerable reefs, about three miles in length. Jenkins Island is distant from Island Point three miles; between them the water appears exceedingly discoloured and dangerous.

On the mainland, about six miles south-west from Island Point, stands Mount Pyramid. It is about 2000 feet high, and received the name it bears on account of its remarkable shape, which is exactly that of a pyramid. In fact, it would be difficult to imagine that such a perfect pyramid could have been formed without human agency.

Further along the coast of the mainland we come to "Two-peak Mountain," which is about 2000 feet high, and is so called from its having two distinct summits. Point Macullock lies immediately below it, and is fringed by a very long reef, about six miles in extent, running in a north-east direction. Deception Point is a long low point, lying three miles north-west of Two-peak Mountain; it is thickly wooded down to the water's edge. Du Faure Island is a large high island, seven miles in length, lying west-by-north and east-by-south. On it are two mountains, each about 1000 feet high. Cape Wilson is a long low point, thickly wooded down to the water. It lies in lat. $5^{\circ} 7' S.$, long. $150^{\circ} 2' 30'' E.$ This is the last and most easterly point on the mainland examined by us.

Gicquel Island, Raoul Island, High Island, and Willaumez Island are all high mountainous islands. All of them appear to be formed of volcanoes now extinct; Willaumez Island being $18\frac{1}{2}$ miles long. Cape Campell is the extreme north-east point of Willaumez Island, being a high cliff, and steep-to. Rock Islands are two small rocky islets, lying just south of Cape Campell. The passages between all these islands appear to be very dangerous and full of reefs. Fitz Island is of small extent, and lies south-east 17 miles from Cape Campell; it has two hummocks, about 100 feet high, and on the northern coast lie two remarkable looking rocks.

The natives of these parts of the coast were, after much persuasion, beguiled into friendly intercourse, and it was very evident that they had had no previous intercourse with white men. They appear to be a fairly intelligent race, though exceedingly timid. I bought a large number of ornaments from them, which proved to be of very fair workmanship, though they are not so good as those of the natives further to the eastward.

GEOGRAPHICAL NOTES.

Progress of Mr. Stanley's Expedition on the Congo.—Mr. A. Cohen, our Consul at Loanda, made a visit to the trading stations on the Lower Congo, towards the end of September last, and reached Vivi (or M'vivi) the permanent station established by Mr. Stanley at the foot of the Yellala Falls. He gives a similar account of the position of the settlement—on an elevated plateau overlooking the river—to that of Commander Sidney Smith.* The appearance of the place, he says, is now that of a small town; it contains, besides the residence of Mr. Stanley, dwelling-houses for his European staff, workshops, warehouses, and huts for his labourers, and a garden producing vegetables of almost every description. From the river's edge to a distance of about 30 miles, upwards along the hilly banks of the Congo, where he has established

* *Ante*, vol. ii. p. 183.