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Notes on Sarawak and Northern Borneo

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PROCEEDINGS
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Notes on Saràwak and Northern Borneo.

By WILLIAM M. CROCKER, Resident of Saràwak.

(Read at the Evening Meeting, February 14th, 1881.)

Map, p. 256.

I HAVE much pleasure in presenting the Society with the result of my geographical gleanings during a residence of sixteen years in Saràwak, and in reading a few notes on the physical and political aspects of the country. I have been able to obtain some data concerning the sources of the principal rivers and the general configuration of the country; and, in the absence of more complete and accurate surveys, I trust my sketch-map may throw some light on a portion of the globe which, up to the present time, has remained almost a blank space on the map of the world.

Taking the Admiralty charts for my coast-line, the map is compiled partly from actual observations, and partly from the surveys of others.

For the Saràwak river and the upper district I am indebted to Mr. Helms, formerly of the Borneo Company; for the Sadong to Mr. Wallace. The Batang Lupar and Saribas are taken from Admiral Keppel's '*Voyage of the Dido*,' the upper country having been since explored by Mr. Everett. For the notes on the Upper Rejang I am indebted to Dr. Beccari.

The delta of the Rejang, the Pelobahan and Egan, and all the rivers to the eastward of Sirik, up to the Barram, were navigated by me in a small steamer. I kept an exact itinerary of the courses by compass, and the distance travelled I measured by time. I endeavoured to be careful in my observations, but I do not claim immunity from errors, more especially as I could not determine the longitude of my positions in the interior. The heads of rivers were filled in after careful inquiries from various natives, and by comparing notes with the out-station

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officers, who have lived for years on the different rivers. The courses of the Barram and the Limbang are taken from Mr. Spenser St. John's 'Life in the Forests of the Far East.' All the surveys of others I have reduced to the scale of my own observations.

A glance at the map will show that there are eleven principal rivers in the Sarawak territory.

Beginning at Tanjong Datu, the western boundary, and travelling to the eastward, the first river will be seen to be the Lundu; but this river is not of much importance, partly on account of the bar at the mouth, which gives three feet only at low water, and partly because it is so sparsely inhabited. The town or principal village is situated about 10 miles up the river. A small fort stands on the left bank, and a pretty little church on the right. The river is peopled by Land Dyaks and Chinese, and the principal articles of export are rice and bilian timber (ironwood). The bay between Tanjong Datu and Lundu is famous for turtle, which resort to the islands of Talang and Satang during the fine monsoon, from May to October: there is a government prohibition against killing them, and the collection of their eggs is farmed. Shoals of trobok-fish also frequent this bay; they are caught in large quantities, and their roes exported to China, where they are considered a delicacy.

The country lying between Tanjong Datu and Lundu is mountainous, in some parts rising close from the sea-shore. The magnificent mountains of Brooke and Poe, the latter over 6000 feet, rise directly from the banks of the Lundu. All this part of the country is still covered with primeval forest, and possesses good soil: capital and labour are all that is required to make this the most important as it is the most picturesque part of the Sarawak territory. Plantations of gambier and pepper have lately been opened up in Lundu, and promise well.

The lowland skirting the sea lying at the foot of the Matang and Sampadi mountains, between the Lundu and Sarawak rivers, is so intersected with streams that it is not an uncommon occurrence for even natives to lose their way, and for Chinese to die of starvation after fruitless efforts to find their way out.

The Sarawak river has two entrances, both of which are very picturesque, owing to the bold nature of the coast-line. The Moratabas, being both the deeper and safer, is generally used. It will ever be regretted that the town of Kuching, the capital of Sarawak, was not built on the undulating country near the Moratabas entrance, instead of 18 miles up the river. It is now almost impossible to remove the town, as during the last twelve years a substantial brick bazaar has been completed, besides other expensive public buildings and private residences. A new fort has just been finished, and a market and hospital are in the course of erection. Good roads are kept up by the government, and all surplus revenue is devoted to improvements. The

town of Kuching has a population of about 12,000 inhabitants, and is rapidly growing, and the trade steadily increasing.

The river is somewhat difficult of navigation, but many ships of war of considerable size have anchored off the town. A trading steamer keeps up bi-monthly communication with Singapore, and there are nearly one hundred square-rigged vessels and native schooners sailing out of the port, chiefly engaged in carrying sago and produce from the coast.

The upper country is rich in minerals; gold is worked by the Chinese, and diamonds by the Malays. All other minerals are leased to the Borneo Company, who export antimony and quicksilver in considerable quantities, as the following extract from the trade returns will show:—"Antimony exported from 1859 to 1879, 25,000 tons, value more than one million dollars. Quicksilver exported from 1870 to 1879, 15,000 flasks, value 717,500 dollars." Gambier and pepper are being cultivated with great success, and there is every prospect of a large influx of Chinese capitalists and coolies. Experiments have also been made from time to time in cultivating coffee, sugar, and tapioca, but hitherto these experiments have ended in financial failures.

The Samàrahan river has a bar at the mouth, but it is fortunately connected with the Saràwak by a stream sufficiently large to admit of all produce being brought to the capital without the necessity of going out to sea. This district is inhabited by Malays and Land Dyaks, who plant rice and sago.

The next river is the Sadong, which rises in the high mountains that form the boundary between the Dutch and Saràwak territories. After rushing over a rocky bed for about 30 miles, it continues a rapid stream for nearly 30 miles more, when it flows through about 40 miles of flat country before it reaches the sea. It is navigable for vessels of large size, notwithstanding there is a long shallow entrance, giving only seven feet at dead low water. The bar is composed of soft mud, and there are no dangers in the river, which deepens to six fathoms inside. There is a bore in this river at full and change of the moon, but it is not of sufficient violence to interfere with navigation. The upper country is peopled by about 6000 Land Dyaks, a simple people, devoted to the culture of rice. The principal Malay village is situate on the Simunjan branch, about 18 miles from the mouth. A block-house is here erected, and a short distance up the Simunjan stream is a coal-mine, at present worked by the government, which yields a coal of very good quality.

The Sadong river forms the boundary of Saràwak Proper, now styled the First Division of the Territory of Saràwak. It has a population of about 30,000 souls, composed of Chinese and Malays on the coast, and Land Dyaks in the interior. The Land Dyaks were formerly harassed and oppressed by the Sea Dyaks; their heads went to adorn the houses

of their more powerful neighbours, and their children were carried away into captivity and slavery. This oppression has been removed, but their progress towards civilisation is not as satisfactory as could be desired, more especially when it is known that they are a very tractable people, who might easily be induced to adopt the habits of civilised life, and who would readily accept any improvement in agriculture introduced amongst them. They have been left to themselves, and the consequence is, they farm in the most primitive way, merely scratching the ground, and scarcely producing rice enough for their own consumption.

The first river in the Second Division is the Batang Lupar. Reference to the map will show this to be a river of considerable size. There is a bar at the mouth, giving $3\frac{1}{2}$ fathoms at high water and 10 feet at low water, and the river is navigable for large vessels as far as Lingga, about 30 miles from the mouth. Just above this point the bore begins. A single wave rises to the height of about six feet above the level surface of the river, and rolls up for some 60 miles, with a roaring noise and foaming head, at a rate of several miles an hour, oversetting all it meets. This bore begins about three days before full and change, and lasts about three days after. The rise and fall of the tide is so great, and the river so full of shallows, that navigation beyond Lingga is always more or less dangerous. A government fort is placed at Simanggang, about 80 miles from the mouth, where there is a large Malay town. The upper country is peopled by some of the most warlike tribes of Sea Dyaks; a small Chinese settlement has been made at Marup. Many years ago, when His Highness the Rajah was Resident of this district, he encouraged some Kay Chinese to try the gold-field at Marup, and, to secure its development, he at first gave them government support. Since that time an extensive gold-field has been *proved*, and for many miles an alluvial deposit is found, yielding gold in paying quantities, and sometimes in pockets speedily enriching the workers.

I visited Marup some months ago. After about a hundred miles' trip up the river, and a walk of three hours inland, I came suddenly on the settlement. It was a novel sensation, finding a peaceful Chinese village in the very heart of the turbulent and head-taking Dyak country, quite a hundred miles beyond the confines of civilisation. Through the village there ran a stream of deliciously cool water, flowing over a bed of rocky boulders; immediately behind this rose high and fantastic-shaped hills, the whole forming a most interesting scene. Here these people have lived for many years, all the time on excellent terms with their Dyak neighbours; many of them had never left the spot, some had retired to China, whilst others had found a resting-place in this quiet valley, as many a cairn of stones betokened.

The principal exports from the Batang Lupar are gold, rice, rattans,

and guttapercha. An extensive coal-field has been proved at Silantek, up the Lingga river. Competent engineers report unlimited quantities of excellent coal, the only drawback to its development being the capital required to make an 18-mile railway, which is necessary to bring the coal to Lingga, a point in the Batang Lupar where a thousand-ton ship could load with safety.

The Saribas and Kalukah rivers are of less importance; they are both peopled by Sea Dyaks and Malays, the total population of the district being about 45,000 souls.

The Rejang is by far the most important river in the Sarawak territory. Its numerous tributaries rise in the very heart of Borneo, and after a rapid descent in the course of a hundred miles, in which there are numerous almost impassable rapids, it becomes a navigable river at the bifurcation of Balleh, where a fort formerly stood, but which has now been moved a few miles down the river. From this point to Kanowit it passes through an undulating country until it reaches Sibu Island, when it branches off and forms a delta, the two main streams emptying themselves into the sea about 60 miles apart. A glance at the map will show that there are numerous other diverging branches which cut up the delta into a great number of deltoid islands. The whole of this part of the country is perfectly flat, and is doubtless formed by alluvial deposits.

A government fort is placed on the island of Sibu, and a large Malay town is built in its vicinity. The country below this is very sparsely inhabited, but the upper waters are peopled by numerous tribes, the principal being Sea Dyaks, Kyans and Pengs, numbering over 60,000 souls. It is most interesting to study the gradation of civilisation to be found in this river, from the semi-civilised Sea Dyaks in the low countries to the tribes of the far interior, who neither cultivate the ground nor live in huts, but who roam the forests in search of game and fruits, living in an absolute state of nature.

Rice is the staple article of food on the Rejang, but here again the system of agriculture is so primitive and defective that the people do not grow enough for their own consumption. Guttapercha and rattans are exported from the district in large quantities. Bilian timber (ironwood) has been an article of export to China for many years. This trade is increasing, and there are three companies now engaged in the trade, whose headquarters are at Rejang village, which has become the shipping-port where ships of the largest size can load with safety.

The Egan branch of this river forms the boundary of the Second Division.

The Third Division is formed by the rivers Bintulu, Tatau, Balinean, Mukah, and Oya. These rivers, as well as the delta of the Rejang, have been filled in from my own observations. Nearly all of them rise

from one mountain range, the highest peak being named Ulat Bolo. The country from the coast to this range is very flat, and were it not for the valuable trade of the district, the rivers themselves would not be of much importance.

The sandy beach along the coast is fringed with casuarinas, which stand like a black wall against the horizon. There being no sign of high land, nothing presents itself to the eye but a low unbroken line of jungle. All the rivers on this coast have a bar at the mouth, giving about nine feet at the top of high water; they are, however, easily navigated by small coasting schooners during the fine monsoon, from April to November. During the north-east monsoon a heavy sea prevails, when the Malays lay up their schooners in Kuching, and all trade is at a standstill.

Kidurong Bay, the northernmost boundary of Saràwak, possesses the only well-sheltered harbour along the whole coast from Tanjong Sirik to Labuan. The anchorage in Kidurong is good, being soft mud and sand, but it would only be available for small vessels, the soundings being not deeper than $2\frac{1}{2}$ to 3 fathoms. Vessels could ride at anchor, sheltered from E.N.E. and N.W. gales.

There are government residents stationed at Oya, Mukah, and Bintulu. The forts are all built near the largest towns, at the mouths of the rivers. The inhabitants live within a few miles from the sea, and number about 20,000 souls; they are called Milanows. Their staple article of food and the principal article of export is sago. The sago palm flourishes on the marshy banks of the rivers all along this coast to about 20 miles inland; the export last year of raw sago amounted to more than 20,000 tons.

The sago palm is found on the coasts of Sumatra, Celebes, New Guinea, and the Moluccas, but will not flourish outside this limit. Borneo must, however, be looked upon as the home of this palm, as the territory of Saràwak alone furnishes more than half the sago produce of the world.

Having lived for some time amongst the Milanows, and little being yet known about them, the information I have collected of their strange customs may be interesting. They come from the same stock as the tribes of the interior, who are still living in the rudest form in which we can conceive human beings to exist; but they, being early visited by the Malays for the purposes of trade, have adopted the Malay dress, and many of them the Mahommedan religion. They are well housed, their women dress in silks and wear gold ornaments of considerable value; English glass, crockery, and cutlery are to be found in their houses, and they are in fact comparatively rich.

In every river along this part of the coast, some of them only four miles apart, we find a different dialect. Fear of the Saribas and Illanun pirates, who were constantly on the look-out for plunder in

this locality, fully accounts for the little communication that existed between them before Sir James Brooke appeared on the scene. Their houses were formerly built on posts of hard wood, raised about 40 feet from the ground, for protection against their enemies. Several of these houses still stand, but they are never replaced or rebuilt now, as, under Sarawak rule, peace and order have been restored, and the people can follow their daily avocations without fear of pirates at sea or head-taking Dyaks ashore, and now the inhabitants from all the rivers, from Rejang to Bintulu, can converse with each other.

In personal appearance the Milanows strongly resemble the other tribes inhabiting the Sarawak territory, and can only be distinguished from them by the squareness of their features; the women, however, have unaccountably won a reputation for beauty. It is true there are some good-looking girls amongst them, but as a tribe they are far behind the Malays in figure and regularity of features; they are very white (that is, an unhealthy milky white), but having to work all their lives treading or expressing the sago from the pith of the palm, their feet become large and their figures squat and stumpy. Their heads are flattened by means of pressure in infancy, but not to the extent of disfigurement. I believe the practice of flattening the heads of children is confined to the Milanows; I have not heard of its having been found to exist amongst any of the numerous tribes which inhabit the Eastern Archipelago. A similar custom prevails amongst the Indians of the Musquito shore in Central America.

The men are about the middle height; they are not tattooed, nor do they use any ornaments or personal decorations. They are mild and peaceable, being quiet and gentle in disposition; they care not for heads, although a few are still kept in their houses. They are submissive to the authority of their superiors, and crime is of rare occurrence amongst them; the most serious cases with which the European Residents are troubled are "becharas," or suits connected with their sago lands. Several of them have shown a great aptitude for learning, and have even learnt to write the English character. It is to be hoped the government will soon establish schools amongst them, and that the mission will send some of the missionaries from the Land Dyaks, who seem averse to their teaching.

Polygamy exists amongst the Milanows, but they rarely marry more than one wife; and their domestic affairs being so arranged that the work is equally divided amongst all the members of the family, they are happy and contented.

The Milanows, like the Dyaks, live in gross superstition; they believe in dreams and omens, and regulate their journeys by the flight of birds. Their religion—if a belief in good and evil spirits can be called a religion—is, curiously, the same as that found amongst the

Cochin Chinese.* They believe that the regions above are similar to the terrestrial world; that mountains, valleys, streams, and lakes are found there as here, and governed by various spirits. They believe in a supreme God, who possesses power over all the spirits, whose name is "Epoo." His habitation they cannot define, but he reigns supreme in the unseen world. They have several malignant spirits of the river, sea, lightning, &c., but only one good spirit, named "Balu Adad," described as a beautiful female: all souls are given into her care at the feasts of the dead, and she conducts them to the other world.

When a man of property dies, sago trees are cut down, with the belief that they will be found ready-grown for the owner's use in the other world. An elaborately got up prahu, or small ship, is carved out of the sago palm and decorated with flags; this is placed near the grave, and is to be reproduced in the next world in the shape of a large schooner, anchored off the departed spirit's abode, ready for use. Arms, sirih box, brass guns (the current money of the Milanows), and clothes are placed in the coffin for use in the next world; the coffin is then interred for three days, during which time the deceased is supposed to be preparing for his journey. "Balu Adad," the beautiful female, now takes possession of the spirit, and conducts it to the Elysian Fields. But the troubles of the deceased are not over yet, as in the middle of the narrow road which leads to Paradise is stationed a huge and ferocious dog, named "Maweang," and woe be to him who is not provided with a small bead, named "telak," to appease this monster. For this purpose a bead of the proper description is always placed on the right arm of the dead.

When a chief dies, the body is allowed to decay, and the remains are placed in a jar, which is deposited in a large tree or post, hollowed out for the purpose. These mausoleums are usually made of bilian, or iron-wood; they are sometimes of immense size and elaborately carved, and, as the wood is almost imperishable, graves or monuments are still extant which can be traced back for generations.

The pangeran (Malay title for prince), from whom I collected most of my information, told me that his grandfather was buried in this way, and that a slave was chained to the post and starved to death, in order that he might be ready to follow and serve his master in the other world.

On making inquiries about rewards and punishments, I was informed that the same dispositions and passions which govern mankind here will govern them there; the evil-disposed will continue to be evil-disposed. Death enters the other world, and the spirit finally assumes the form of a grub or caterpillar.

* May not this be another link in proof of Mr. Wallace's theory, that Borneo was formerly attached to the mainland of Asia, or, at all events, of the theory that Borneo was originally peopled from the North?

A few months after the death of a Milanow the friends assemble for a monster cock-fighting and feasting, which lasts three or four days; sometimes as many as three or four hundred cocks are killed, the sacrifice being for the benefit of the departed spirit.

The Milanows owe their improved condition to the presence of the sago palm. The trade in sago is steadily advancing, and as the commercial price of this article has increased fifty per cent. in the last ten years, the Malays in other parts of the territory are waking to the value of the palm, and making extensive plantations, which in a few years will considerably increase the importance of this export.

It will be seen from my remarks that the principal exports from the Saràwak territory are, from the First Division, antimony and quicksilver; from the Second Division, guttapercha and jungle produce; and from the Third Division, sago. Gambier and pepper may now be added to the list, and, to show the prosperity of the country, I have only to mention that in 1854 the revenue amounted to 26,000 dollars, and that it has now reached 250,000 dollars, showing an increase of 900 per cent. The trade in 1854 amounted to 671,000 dollars, and has now reached 4,000,000 dollars, showing an increase of 600 per cent. in twenty-six years, and both trade and revenue are steadily increasing.

The climate of Saràwak is very healthy for Europeans. The rainfall ranges from 160 to 200 inches a year, but, in spite of this humidity, it is salubrious. The usual daily temperature ranges from about 72° in the morning to 88° at midday; it rarely rises over 90°, or falls below 69°.

In addition to my map of the north-west coast, I have added a small sketch-map of Borneo, showing the general configuration of the country. Nearly all the large rivers have their sources in the centre of the island, where, according to native report, there is a very high mountain, named by some "Tibang," by others "Tidong," from which rise the Bulongan and Kutei, flowing to the eastward, and perhaps the *Kina Batangan*, a splendid river which flows through the country ceded to the North Borneo Company, and which empties itself into a bay on the north-east coast; the Barito, or Banjer Massin, flowing to the southward, and the Kapuas and Rejang flowing to the westward. Nearly all maps of Borneo show a continuous chain of mountains running from north-east to south-west; but this in reality has several breaks. The highest known mountain in Borneo is Kina Balu, in the North Borneo Company's territory, which, according to Admiralty surveys, has an altitude of 13,698 feet; probably Tidong, in the interior, is the next highest, and there are several ranging from 6000 to 8000 feet above the sea.

The chain of mountains is continuous from Tanjong Datu to Simingit, longitude 113°. On a journey I lately made to Lake Seriang, in His Netherlands Majesty's territory, I passed through a perfectly flat country, although away to the north-east could be seen high mountains,

which the natives call the One Thousand One Hundred Hills. These mountains seemed to stretch away to the north-east, and doubtless the general watershed of the country is formed by the line running in the direction indicated on the map.

There are several lakes in Borneo; the largest is supposed to be Lake Kina Balu, which in all existing maps of Borneo is marked as lying to the southward of the Kina Balu mountain, in the newly acquired territory of the North Borneo Company.

Mr. J. Hunt, who communicated an account of Borneo, in 1812, to Sir Stamford Raffles, reported the existence of this lake, and stated that it was the source of many of the great rivers of Borneo, and was five or six fathoms deep in some parts, interspersed with small islands, the water being of a whitish hue, but perfectly salubrious.

But I do not believe that any such lake exists, nor am I alone in this opinion. Mr. Spenser St. John, who ascended Kina Balu, and who had a good view over the country lying to the south and south-east, says that it certainly does not lie in that direction, where he says there is a large plain. But a man who accompanied Mr. St. John said that he had traded with the villages on the banks of the lake, and asserted that, standing on the beach, he could not see the other side.

Mr. St. John must have lived long enough in Borneo to know the value of native reports. Not long since, I passed the night in a Dyak house in the Sadong district, where I met an old man who informed me that he was a Malow—one of a tribe living on the upper waters of the Kapuas. He assured me in the most solemn manner that he had seen men with tails; he said he ascended the Kapuas to near its source, and then walked across to the head of the Banjer, which rises near a very high mountain named “Batu Bulan” (moon stone). Here he fell in with a tribe of men with tails. He could not speak their language, but he and his friend managed to make themselves understood, and were treated very kindly by them. They remained seven days and nights amongst the tribe. Both men and women had tails. They wore bark of trees as a covering, through which a hole was made for the tail to pass through; they planted paddy, and lived in long houses. These and other particulars he recounted, which gave a colouring of truth to his statements. I have heard these stories continually from other sources, but I am convinced these wonders are all invented by Dyaks and travellers, who have returned from long journeys into the interior, for the purpose of magnifying their own importance.

From personal experience of lakes in Borneo, I am inclined to think that the numerous rivers which no doubt descend the Kina Balu mountain in the rainy season would naturally overflow the plain mentioned by Mr. St. John as lying to the southward, and that the district thus inundated, having been visited by native travellers, has been mistaken for a lake. I have visited two lakes in Borneo;

one marked in the map as lying at the head of the Simunjan river, in the Sadong district. I found the lake surrounded by an amphitheatre of hills, which accounted for the accumulation of water in the rainy season, the place being quite dry in the fine monsoon.

I have very recently visited Lake Seriang, in Dutch territory. After a four days' journey up the Batang Lupar, in a canoe manned by fifty men, Mr. Maxwell, the Resident of the district, myself, and party reached Lobok Antu Fort, walked to Nanga Badow, where the Dutch are building a small military station, and on the following day started at 6 A.M., and after a three hours' walk reached a small stream named the Pesaya, down which we pulled for about four hours before we reached the lake. During the last hour of our pull we found the whole neighbourhood under water, and passed through a desolate-looking country, there being nothing but a little brushwood above high-water mark, and the blackened and charred remains of what were once fine jungle trees.

This lake has been described as 25 miles long and 9 miles wide, and we found it a fine sheet of water, with four gunboats anchored off an island. Nevertheless, I was told that in 1877, after a drought, it quite dried up; in fact, the remains of a settlement, since abandoned, were pointed out to us on Majang Island, which was attacked by Dyaks, who took advantage of the drought to approach by land. The Dyaks were driven off, but they fired the jungle in their retreat, destroying the forest for miles around.

The following extract is taken from my Diary, written on Lake Seriang, Friday, February 27th, 1880:—

"A heavy squall during the night had cleared the air. I came on deck to find it delightfully cool, and the view over the lake very pretty. To the westward lie the nearest mountains, the highest being about 2000 feet. The lake in the wet season stretches away to the foot of the nearest of these hills, although there is now about two miles of jungle intervening. On all sides, at a considerable distance, mountains can be seen on a clear day, the several streams from which empty themselves into the lake. The only high land is a small island on which once stood a settlement. It is of no great extent, being at present only a few feet above high-water mark. A Malay told me yesterday that the last time he visited the lake the whole country was inundated. On that occasion he saw a Malay boy eating sugar-cane, and on asking where he got it, as he saw nothing but water, the boy told him he had dived down to their garden, which was on the island, and at that time several feet under water. Our boys amuse themselves fishing, and seem delighted at their success; the lake is literally swarming with fish, and in the dry season, when the waters abate, they are caught by the Malays in immense quantities, their roes only being preserved for the Pontianak market."

I have given these extracts to show how lakes in Borneo are affected by the seasons.*

The centre of Borneo is still an unknown land, and offers a good field for an explorer. It would not be a difficult journey to go from the Bintulu, in Saràwak territory, into the Rejang, up which the traveller would have to proceed for some distance, and then, by an eight or ten days' journey overland, reach the head of the Banjer, down which he could proceed, thus crossing Borneo from north to south. Another good and probably easier route would be to cross from west to east, by ascending the Rejang, in Saràwak territory, and going down either the Bulongan, Kutei, or Kina Batangan. It would be necessary to take a party of friendly Dyaks from Saràwak, when such a trip could be organised and the journey performed without much difficulty or danger.

A small government steamer runs about 200 miles up the Rejang river, which might be an inducement for this route to be selected. I should advise going up the Rejang and down the Kina Batangan (a river quite unexplored), more especially as a Danish traveller, Mr. Carl Bock, has just succeeded in going up the Kutei and down the Banjer Massin.

In conclusion, I would call attention to the prosperity of the little state of Saràwak. Consul-General Ussher wrote as follows in 1877, after paying us a visit:—

“It is not every government that, on a yearly revenue of 40,000*l.* sterling, would be enabled effectively to rule 25,000 square miles of territory, with a population of 240,000 souls, to keep up a respectable standing military force, to garrison and maintain fourteen forts, to pay a competent staff of European officers and native authorities, to maintain three gunboats, to protect commerce and agriculture, and generally to guarantee safety to life and property within its limits. In the mean time the people appear to be generally contented and happy, and although there are defects to be found in the rule of Saràwak, they are such as require time to amend. Saràwak is not yet forty years old. Its power is based upon the remembrance of, and gratitude due to the late Rajah Sir James Brooke, as well as upon the firm administration and even-handed justice of the present government.”

I do not say there are not defects in the Saràwak rule, I do not say the Dyaks are advancing in civilisation as fast as might be wished, I do not say that the figures I have given of the revenue and trade are much in themselves; but I do say that Sir James Brooke's scheme of developing a native country by native means, guided by English intelligence,

* Since this paper was read, I have heard that my theory about Lake Kina Balu has been confirmed by Mr. Pryer, a gentleman in the service of the North Borneo Company, who has explored the country to the south of Kina Balu mountain, and in his report sent home states that no lake is to be found at or near the position marked in all maps of Borneo.

is an undoubted success; and in spite of Sir James Brooke's fears that she could not stand alone, Sarawak has, quite alone and unaided, achieved and maintained an independence of which she may well be proud.

It is much to be regretted that whilst Sarawak has thus advanced, whilst the people under her rule are contented and happy, the subjects of the adjacent state of Brunei are still groaning under misrule and oppression. Of this I could adduce overwhelming evidence, showing how the wretched inhabitants are ground down by the exactions of petty princes. I understand the country ceded to the North Borneo Company is being opened up by following out the policy of Sir James Brooke, i. e. to rule the natives through and by their chiefs, respecting their religion, customs, and laws; to encourage amongst them habits of thrift and industry, and gradually to introduce progress and civilisation with peace and good order.

At the present time, the only British settlement in Borneo is the island of Labuan, which lies immediately off the entrance of the Brunei river. Every one acquainted with the history of Labuan knows it has not progressed, nor has the settlement produced the good results which were once anticipated.

A glance at a map will show how important it is to England that, with our present possessions in the Straits of Malacca and China, and the importance of our commercial relations in the Far East, we should still further strengthen our position in those seas. This position North and North-west Borneo afford. The splendid harbours on these coasts, in which the combined fleets of the world could ride in safety, and the unlimited supply of coal, secure a commanding position in the event of a naval war. Already the Russians possess strongly fortified settlements on the Manchurian coast to the north of China, and are said to covet the commodious havens of the Korea, where their daily increasing fleets might find protection. It is therefore manifestly of paramount importance to British interests and trade that England should maintain her supremacy in those waters by securing those advantages in Borneo which are now within her grasp, and which can be acquired with such evident benefit to the nation.

In introducing the author of the paper,

The **PRESIDENT** said he had the pleasure of introducing to the Meeting Mr. Crocker who was about to read a paper on the geographical and political aspects of Sarawak and North Borneo. Mr. Crocker had peculiar advantages for doing this, inasmuch as he had spent no less than sixteen years of his life at Sarawak, and had taken an active interest in all its affairs. During a large part of the time he had officiated as Resident, and during the absence of Rajah Brooke he had administered the affairs as President of the Administrative Committee. Throughout the whole period he had taken an intelligent interest in the interior of Borneo, an island second only in size to Australia, and which contained, probably, nearly as much unknown land as any other portion of the globe of equal dimensions. What the future of Borneo and the

islands surrounding it would be was, of course, hidden in obscurity, but probably the paper would throw some light on this question.

At the conclusion of the paper,

Mr. ALFRED DENT, on being invited by the President to speak, said he was afraid he could give but very little geographical information with regard to North Borneo, as he only visited there for three months. During the past eighteen years very little had been written about the island. Mr. Spenser St. John, who spent many years in Sarawak and Labuan, published in 1862 his book on the 'Forests of the Far East,' in which he gave a better account of North Borneo than could be found anywhere else. Mr. Wallace's works date from his visit to these parts about the same time. Previously books had appeared by Admiral Keppel, Sir Rodney Mundy, and Sir Edward Belcher. The earliest information of any value obtainable with regard to North Borneo seemed to be contained in a pamphlet written in 1769 by Mr. Alexander Dalrymple, who was well known in those days. He took a very great fancy to North Borneo. He was in the employ of the East India Company, and in 1763 obtained for them a cession of the whole of North Borneo, as detailed in a plan that he put before the Company for extending the commerce of England in that direction. The cession included all the territory from the Kimanis river on the west coast (about 5° 20' N.) to south of Cape Kaniongan on the east coast (about 1° N.). The East India Company paid but little attention to their new acquisition, whilst the Dutch have since advanced their boundary a good deal further north than Cape Kaniongan. The territory that the Sultans of Brunei and Sulu have lately ceded to the North Borneo Company extends from the Kimanis on the west as far as the Sibuco river on the east coast (about 4° 20' N.). Mr. Crocker had referred to the scarcity of harbours in Sarawak; North Borneo had the advantage of exceptionally good harbours, such as Ambong, Abai, and Gaya, the last being one of the finest harbours it was possible to imagine, capable of holding all the fleets of the world, and perfectly sheltered from both monsoons. Marudu Bay, on the north, was also well sheltered, and a great deal of trade went on in the neighbourhood. On the east coast, among the most important harbours was that of Sandakan, which was evidently regarded as of great value many years ago, there being an Admiralty chart of it dated 1774. Thirteen rivers flow into Sandakan Bay, one of them being a branch of the great Kina Batangan, the mouth of which was only discovered a few months ago. Whether these great rivers, the Sibuco and the Kina Batangan, run north or south was still quite a mystery. The country therefore offered a grand field for geographical exploration. Mr. Pryer, who was at present the Company's Resident at Sandakan, and was very fond of travelling, had made several excursions into the interior; but he was not a practical surveyor, and therefore did not lay down the course of rivers, &c., in the way that could be desired. Mr. Witt, who resided on the west coast, had explored all the country from Gaya Bay round Marudu Bay to the Kina Balu, and had sent home very interesting reports of his travels. The success of Sarawak encouraged the Company with which he (Mr. Dent) was associated to undertake an enterprise which would, no doubt, in these days be regarded as rather extraordinary; it was indeed the foundation of a new colony, for which North Borneo appeared to offer all the elements of success; he had friends associated with him, and felt confident that British energy and capital would not be wanting to carry out an enterprise with so promising a future before it. The present population was about 100,000; but the Malays would not work for wages, and the Chinese must be looked to as the chief helpers in opening up the country.

Mr. W. LOCKHART said, though he had never been in Borneo, he had been much interested in the country when he was in China and the islands of the Indian Ocean. At Java he heard a great deal about Borneo from the Dutch residents and the English

merchants. In Singapore and in China also, the prosperity of Borneo was a constant subject of conversation. The Dutch had been on the island for many years, and had very prosperous settlements there; but he hoped that any Englishman who undertook commercial enterprise in the island would not follow the example of the Dutch in their treatment of the natives. He hoped rather that the English mode of procedure would stir up the Dutch to treat the natives better than they had hitherto done. There were great numbers of Chinese scattered over Borneo, as well as in all the other islands of the Indian Ocean; and any one who had travelled much in that part of the world must have noticed the immense number of Chinese settlers who were continually flocking to the parts where commercial enterprise was possible. For instance, at Banca it was the Chinese who worked the tin mines, and produced the tin which was brought to Singapore and to England. They were also the chief labouring class in Sumatra, and there were large numbers of them in Singapore. Many of them had flocked into Batavia, and were there the most respectable of the merchants of the place. They drove into the town in handsome carriages with four splendid horses or ponies. The European merchants generally drove in a small gig with one horse and an outrider, and kept their handsome carriages for their wives and children in the cool of the evening; but the Chinamen brought their carriages into the town. They were, in fact, the merchant princes of the Eastern Islands, and monopolised a very large amount of the commerce and wealth of those regions. He had greatly admired their skill and power in colonising places to which they went, and he regarded them as, next to the English, the best colonists in the world. They were frugal, industrious, temperate, not under the influence of the demon of drink, made for themselves a home wherever they settled down, and thus became rich and respectable members of the community. He had seen them in various places and knew their capabilities, and he believed that a great deal of the future prosperity of North Borneo depended on the way in which Chinese immigrants who were certain to come there would be treated. If the behaviour of the Government towards them was one of amiability and kindness, they would prove themselves splendid workmen wherever they went. Singapore was a striking instance of what they could do. In that place they began in a small way. They went into the country, cultivating pepper gardens and sago plantations, lived frugally, worked industriously, and laid by their accumulated wages until they became wealthy occupiers of the places in which they dwelt. They would do the same in Borneo if they had the opportunity. The action of the Americans towards the Chinese must not be imitated in Borneo. If the citizens of the United States were treated in China as the Chinese are treated in the United States, there would be great outcry and remonstrance made immediately. In the year 1840, when he was in Singapore, he had intercourse with Rajah Brooke, who had just arrived at that place and started to begin that remarkable enterprise, the successful result of which had been described in the paper. Sir James Brooke was well qualified to accomplish the great work which he undertook: he was kind and amiable and courageous, and acted right nobly as an English gentleman, so that he had left his mark upon that part of Borneo which would never be effaced. To Rajah Brooke great respect and commendation were due from all Englishmen who loved their country, and who were glad to see the sons of that country go forth into the world to carry on great and beneficent enterprises. Much fault had been found with him because of sundry attacks that he made upon the pirates in the neighbourhood of Sarawak, but those attacks were forced upon him by the frightful calamities which those pirates were constantly inflicting upon the villages on the sea-coast. Even peace might be purchased at too great a price, and Rajah Brooke could not remain quiet while the country was being depopulated. It was a good thing for Sarawak that with such an iron hand he swept those pirates

from the sea. In this work he was thoroughly and worthily aided by Admiral Sir Henry Keppel. Any one who had seen what pirates did when they attacked a village, could have no sympathy with them or their actions. He believed that the success of Chinese colonisation in Sarawak would be imitated in other parts of Borneo. The work they had done for the benefit of the Dutch Government in Java was most remarkable, and they were quiet and orderly. As heathen they had vices peculiar to themselves, but still they were the best colonisers in Asia, and great results would follow the arrival of large numbers of them in Borneo. He would advise the gentlemen connected with the North Borneo Company to foster the immigration of Chinese into their territory. Labour contracts should not be entered into as in Cuba and Queensland, but they should be allowed to sell their labour in the best market. They would then work hard for the future prosperity of the colony.

The PRESIDENT, in proposing a vote of thanks to the author of the paper, said he had given them a great deal of information which had evidently been carefully and accurately collected. Englishmen were very apt to consider themselves the great colonisers of the world, and indeed they had done a work of which they might justly be proud. They had taken possession of and extended themselves over immense tracts of country, which were likely to perpetuate a race as vigorous and enterprising as our own; but there were certain climatic conditions which opposed their spreading in every region of the world. Although men like Sir James Brooke and Mr. Dent might lead the way in civilising districts at present inhabited by barbarous or semi-barbarous people, it was quite clear that Borneo could never be settled by persons of English race; and as it seemed to be the fate of inferior races to give way to others more energetic, it was probable that the huge islands of the Eastern seas would in process of time be inhabited by descendants of the Chinese race. There was, however, one great feature of present times which could not be overlooked. Unfortunately it could not be said that wars had ceased, but they were now generally on a comparatively small scale, and the devastation caused by them was slight indeed when contrasted with that of the wars of past days. He believed that if an accurate census could have been taken in India at the time that England became possessed of it, and if another were taken at the present day, it would be found that the population had increased by upwards of 50,000,000. No doubt, as Asia became more and more under the domination of the three great empires, Russia, China, and Great Britain, the population would increase enormously, and in process of time would overflow to the south, just as in ancient times it overflowed to the west. The west was now too strongly occupied to permit of wholesale immigration. In all probability China, with its 400,000,000 inhabitants, was destined to find an outlet in the magnificent islands to the south. The Chinese constitution was fitted to the climate which persons of the English race were unable to stand.

Notes on the Chobe River, South Central Africa.

By Dr. BENJAMIN F. BRADSHAW.

Map, p. 256.

THE accompanying map of the Chobe river is taken for about 40 miles up from its mouth, and drawn from memory, as I had no instruments with me, and went into that part of the country more with the intention of hunting and obtaining natural history specimens, than making geographical explorations; but having travelled more or less for the last six years either along the bank of the river or in a boat, its peculiar