[No. 15.]

JOURNAL

OF THE

STRAITS BRANCH

OF THE

ROYAL ASIATIC SOCIETY.

JUNE, 1885.

PUBLISHED HALF-YEARLY.

SINGAPORE:

PRINTED AT THE GOVERNMENT PRINTING OFFICE.

1885.

AGENTS OF THE SOCIETY:

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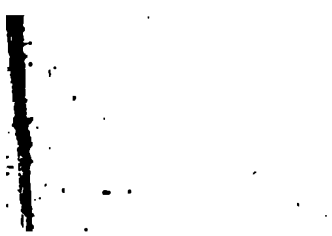

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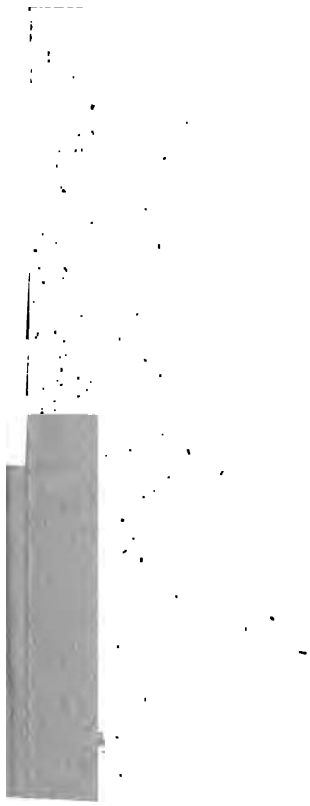

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STRAITS BRANCH
OF THE
ROYAL ASIATIC SOCIETY.

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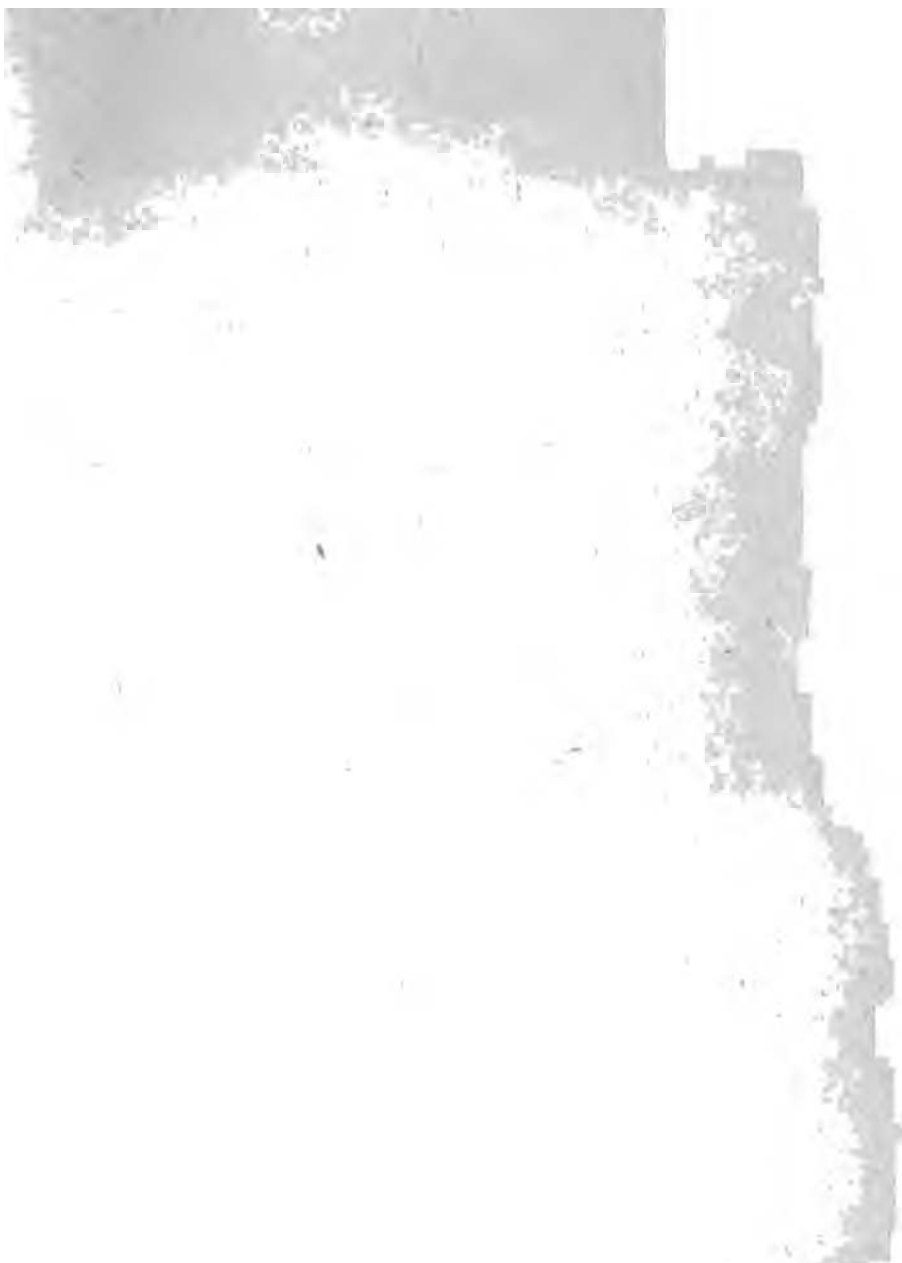
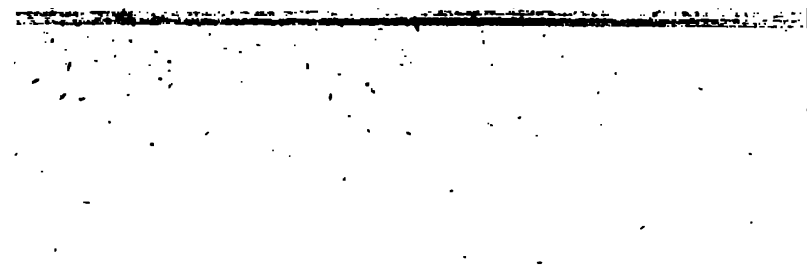
126	WRAY, L.	Pêrak.
127	WRAY, L., Jr.	Pêrak.





JOURNAL KEPT DURING A JOURNEY ACROSS THE MALAY PENINSULA.

Friday, 10th April, 1885.—Left Taipeng for Port Weld by train at 10.15 P.M., accompanied by Major WALKER, Captain GILES, and Mr. LISTER, and arrived at Port Weld after a 25 minutes' run. Shipped on board the *Alert*, lent by the Resident Councillor of Penang, and started for Pangkor at 11.15 P.M. The launch *Constance* had been sent on to Bernam the previous day with a guard, and the *Kinta* being disabled, it would have been impossible to start without the *Alert*.

Saturday, 11th April.—Arrived at Pangkor at 6 A.M. Mr. DEW, the Acting Superintendent, came on board. Went ashore with Major WALKER and Mr. LISTER, and inspected the buildings. We left Pangkor at 2 P.M., and anchored inside the Bernam River at 6.30 P.M.

Sunday, 12th April.—Under weigh at 4 A.M., and reached Saba at 6.30 A.M. Mr. JONES and Rajas INDUT and BIDIN came on board. Mr. JONES told us Mr. HEWETT had gone on to Tĕlok Măhang with the *Constance* and boats. Inspected the Police Station. I cannot understand the boldness of 12 Chinese robbers in attacking the station and village. There must have been at least thirty people actually on the spot in the shops between the farm and the station. Went down to Raja INDUT's house with him. The cholera is decreasing. Two people died yesterday, and there have been 120 deaths since the outbreak of the disease. Left Saba at 8.30 A.M. and steamed up river to Tĕlok Măhang. Here we met Mr. HEWETT with the *Constance* at 3 P.M., and after two hours' further steaming arrived at Changkat Bertam, where we camped for the night, sleeping in the boats.

Monday, 13th April.—At daylight WALKER and HEWETT returned down river in the *Constance*, and we, having got all our baggage into eleven river-boats the previous evening,

began rowing up-stream. Breakfasted on the river bank at noon, and getting into the great Bernam swamp camped for the night at Dahâ Rul the entrance to the final cutting. The banks were so low and wet we did not land, and the dew was excessive. This is where the fever was so bad when Mr. J. B. M. LEECH was cutting the canals. One of the boatmen sick.

Tuesday, 14th April.—Started at daylight, having poled from midday yesterday. Stopped for breakfast at 12.30 P.M. The river here is most lovely, but the district is quite uninhabited and uncleared. The upper reaches of the Bernam are wonderful in the beauty and variety of water and foliage. It turns out that our sick boatman has cholera. I gave him some cholera medicine, but he was so frightened that it had no effect; we did what we could for him, and at his request sent him back in a boat. At 2 P.M. continued our journey and reached Kuâla Slim at 6 P.M., where we found Mr. BUTLER (the Acting Magistrate) with 39 Sakeis and 80 Malays to carry our baggage. The Bernam river, by the construction of seven miles of canal, could be shortened by about 57 miles of its present length, but those canals must be both deep and wide if they are to be useful at all times of the year and at all stages of the tide, and the question is whether the expenditure necessary for such a work is at present justifiable. The influence of the tide is felt for 80 miles from the mouth of the river.

Kuâla Slim is 120 miles from the mouth of the Bernam river by the present channel.

Wednesday, 15th April.—At 7 A.M., 77° Fahrenheit, the aneroid shewed Kuâla Slim to be 120 feet above sea level.

Having loaded the coolies, left Kuâla Slim at 7.20 A.M., and after five hours' walking over a very fair path with no steep gradients (the first three miles having been made), we reached Kuâla Gĕlîting at 4.15 P.M. Distance 14 miles from Kuâla Slim, and 134 from Kuâla Bernam.

We found Mr. HILL and Mr. WOODGATE at Kuâla Gĕlîting waiting to go over the trace of the trunk-road with Mr. JONES.

After dinner, had a long conversation with Haji MUSTAPHA, Pĕnghûlu of Ulu Bernam, Saiyid ABUBAKAR, and WAN LENGGA of Pahang. They told me they had heard that no rafts had yet been prepared at Buntu to take me down the Pahang River,

and that I should only have to wait there; so I wrote letters to several Pahang Chiefs—Toh Bakar of Buntu, Toh Kaya of Pĕnjum, and others—asking them to assist me with rafts, men and boats, and I gave these letters to Mantri Muda and Che Wanda to take over the next morning, having determined to wait a day at Kuâla Gĕlîting. The aneroid at 4.15 P.M., Thermometer 88° F., shewed a height of 206 feet above the sea.

Thursday, 16th April.—Messrs. Jones, Hill and Woodgate went off early towards Trolah to return by Pandras and examine two alternative traces for the main-road through Pêrak. They returned in the afternoon, and we determined that the trace already made crossing the Slim just below Kuâla Gĕlîting would be the best to adopt and the shortest. We spent our day in sketching and unpacking our stores from their boxes, as it was necessary to put them up in more manageable bundles in view of the difficult ground we had to travel over.

Friday, 17th April.—About thirty of our Malay coolies deserted before daylight, and this gave us a great deal of trouble, as we had not men enough to carry our baggage. By giving the Sikhs their kits to carry, we managed to get away at 8.15 A.M., with sixty-nine Malays and thirty-six Sakeis. Butler had fever and could not move. Hill, Jones and Woodgate went back to the Ulu Bernam, and Giles, Lister and I set our faces due North for Ulu Slim. After four miles of an intensely hot and trying walk through *kampongs* and padi-fields, we reached Kuâla Brîseh, the junction of the Slim and Brîseh Rivers, and here we left the Slim, still flowing North and South, while we turned sharp to the East, following the course of the Brîseh. Three and a half miles of very stiff walking, first through burnt secondary growth and then up a steep ascent, brought us to a bathing place on the bank of the Brîseh, 1,233 feet above the sea, thermometer 85°, where at 11.45 we halted for breakfast.

After a stay of two hours and a short further climb, we came to a curious overhanging rock called Sâpor Batu (the stone lean-to) above the right bank of the Brîseh River. Here we determined to camp for the night, as our coolies said they could go no further. At a very low estimate, we made 7½ miles to-day from Kuâla Gĕlîting in a North-East and easterly

direction. The journey was infinitely more trying than the 14 miles to Kuâla Gĕlîting. Our camp was a striking sight with its fires lighting up the various groups of Sakeis, Indians, Malays and Chinese under the huge overhanging granite rock surrounded by the impenetrable gloom of virgin forest, with the faint roar of the Brîseh River rushing over its rocky bed fifty feet below.

Saturday, 18th April.—Left Sâpor Batu at 6.40 A.M., and going still easterly, with the Brîseh down in a gorge on our right, we continued the ascent till we crossed a considerable tributary of the Brîseh named Jĕlûtong Lâper, height 1,646 feet above the sea. Immediately afterwards we ascended a very steep hill, then followed a ridge and with longish ascents and short descents crossed in succession the following streams :—

7.30 A.M. S. Sâpor Ibu, 1,826 feet,
7.40 A.M. S. Sâpor Anak, 1,886 feet,
S. Sâpor Manah,
8. A.M. S. Sâpor Kayu Ara, 2,281 feet,

the thermometer reading 77° F. Fifteen minutes' walk brought us to Sâpor Buluh at 8.30 A.M., height 2,550 feet above the sea, four miles from camp and eleven and-a-half miles from Kuâla Gĕlîting. Temperature 75° F. Here a hut had been built for us, but after a halt of 25 minutes to let the baggage come up, we pushed on again almost due East up a steep ridge, and, passing Batu Hidang at 9.10 A.M., elevation 3,000 feet above sea, we reached Batu Gâjah at 9.22; height 3,100 feet; and the boundary between Pĕrak and Pahang at 9.30 A.M. The aneroid shewed that the gap was 2,854 feet above Kuâla Gĕlîting and 3,150 feet above the sea.

In a very tiny rill running West we traced the source of the Brîseh, and only a few feet on the other side was the first sign of a stream which, with eight others running between a succession of buttresses jutting out from the main range, forms, a little lower down, the Sungei Sambîlan—the most northerly of the three streams which, united, are called the Lipis; the Lipis in its turn joining the Jĕlei with a more northerly source, and, together, becoming the Pahang River. Looking into Pahang as one stands on the gap, a lofty mountain of some 5,000 feet rises on the right, this is Chunggang, while to the left towers

a higher mountain named Kâbut. These are on the true backbone of the Peninsula, which here runs very nearly due North and South, while on either side jut out spurs more or less at right angles to the main range—eastward into Pahang and westward into Pêrak. These spurs extend, as a rule, for about six miles on each side of the backbone.

Without halting at the summit, we immediately began the descent into Pahang, and, just as we had ascended a long, narrow, gradually rising ridge called Gûnong Tĕlâga with the Brîseh River flowing down its southern base, so we descended the longest of many easterly-running ridges, the Sungei Sambîlan flowing West with a slight trend to the North along its southern base, but the descent into Pahang was decidedly steeper than that into Pêrak, and after 30 minutes' walk we crossed one of the nine streams that form the Sambîlan, and found we had come down 660 feet.

The soil on both sides was only moderate, studded all over with the most gigantic granite boulders I have ever seen in the Peninsula.

On the Pêrak side, I noticed many dry watercourses full of large granite blocks. In those the water may be subterraneous, as it is on the slopes of Ginting Bidei in Sĕlângor, but more probably the long drought accounts for the absence of water. On the whole, I have never seen a range better watered than this one, and it is only surprising that the Slim is not a larger river. At 2½ miles from the boundary and a height of 2,160 feet above the sea, we breakfasted by the bank of the Sambîlan, road and river bearing 7° North of East.

At 12.37 P.M. we resumed our journey, and at 1.30 P.M. reached a spot on the river called Sangka Dua, where two branches of the river meet again after dividing and forming a large island. Height above sea 1,740 feet. Thermometer 82° F. At 1.35 P.M. crossed the river again, but here it is named the Kĕnor, and has, the natives say, already received the waters of the two branches, viz., the true Lipis, which rises from the western side of Gunong Tĕmang Bâtak (in which hill the Sungei Gĕlîting takes its rise and flows westward), and the Tĕbâlak, rising from a mountain further South, in which the Bernam River is said to have its source. The Kĕnor is now a considerable stream, and crossing it (1,564 feet above

the sea) we immediately began the ascent of what looks like an isolated hill called Bêrang. It is really, however, I should say, a long spur from the main range, over the end of which the water system passes, and which the Malay crosses as a short cut rather than follow the winding course of the river. The ascent is steep but short and of no great height, the highest point we reached being 1,734 feet above the sea, and from here the saddle is so narrow that Chung-gang can be plainly seen to the South-West and Kâbut to the North-West. This saddle runs round in an E.-S.-Easterly direction, and the descent is very fatiguing. The spur seems to be only a few feet across the top, but unusually long, and you descend by seven steps, each with a long gradual rise, and then a very steep descent. The bottom of this spur we reached at 3.8 P.M., height 680 feet above the sea, and crossing and recrossing the River Buntu, which comes from the North, we camped at the Kuâla Buntu, where it falls into the Kĕnor, and the combined rivers are here, for the first time, named the Lipis. The spot where the Buntu joins the Kĕnor is called Kuâla Buntu, and this spot we reached at 3.40 P.M., eleven miles from the boundary and fifteen miles from our last camp at Sâpor Bâtu.

Sunday, 19th April.—At 7 A.M. we left our camp, and walking through burnt secondary growth along the banks of the Lipis in a North-easterly direction reached Permâtang Linggi at 8 A.M. This place is 640 feet above the sea and still 344 feet above Kuâla Gĕlîting on the Pêrak side of the range. Kuâla Buntu to Permâtang Linggi three miles. Fourteen miles from the latter place to the boundary, and twenty-five and a half miles at least from Kuâla Gĕlîting. Good Malay walkers can do the whole distance in a day.

Toh Bakar, the headman of this district, met me on the road, and took us to his house at Permâtang Linggi, where we were received with a salute from a few muskets. About a mile before reaching Permâtang Linggi, I noticed the stream went over a bed rock of slate, and all the gold is found further down the river. Toh Bakar had prepared twenty-three small rafts for us, on which we shall have to travel to Jĕram Bĕsu—a rapid where, they tell us, it is necessary to leave the river and walk to Pûchong. I found that Toh Bakar had never been in his

life to see the Raja at the mouth of the river, and though he (Toh Bakar) is called the owner of Trûsang, one of the richest gold districts in Pahang, it is said the Raja has lately given the place to the Toh Gajah. Spent the day in writing and settling with our Malay and Sakei coolies, the latter returning highly delighted with their earnings. After dinner had a talk with Toh Bakar. He and the people with him told me of all the taxes they are called upon to pay. Once a year the people are numbered, and have to pay $1.33 a head to the Yam Tûan; this they call *Hasil banchi*. Then there is the *serah*, a form of squeeze still practised in Pahang; some worthless thing is sent from the Raja to a subject, a price is named, and the subject is obliged to purchase at that price. Again when a District Chief goes annually to pay homage to the Raja, the Chief calls upon every man in his district to pay $1 towards his expenses, and a similar contribution is demanded for the return journey. All gold must be sold to the Raja only, and it is said there is no standard of weight. It is said that most imports and exports are taxed, debt-slavery prevails in parts, and the people are liable to be called out for forced labour. The Dato' tells me that Mr. W. Cameron came here and went on to Batu Gâjah, but he is the only white man he ever saw.

A curious thing yesterday was to hear the cry, twice repeated, of a wild Sakei as yet unfamiliar with Malays. The cry was exactly like that of a wild beast, and was probably a warning to the friends of the man who uttered it; he could not have been far from us on the eastern slope of Bêrang. Some of our people caught with nets this afternoon two of the finest fresh water fish I ever tasted in the East—*ikan klah*—weighing about 6 lbs. each.

Monday, 20th April.—After no little trouble arranging our baggage for the rafts (bamboo, four feet wide and about twenty-five feet long) we left Permâtang Linggi at 8 A.M. We had twenty-four rafts manned by Toh Bakar's adherents and eight of the men I had brought over. The Dato', his son and all his people accompanied us, and the start was a most picturesque scene. Each raft had a poler at the stem and another at the stern, some baggage and one or two passengers on a raised central platform. The rafts at once began the descent of a

succession of rapids with intervening stretches of smooth and broken water, the stream running through a gorge with steep hills always on the northern side and sometimes on both, magnificently wooded down to the water's edge, the remarkable *Gapis* tree being a special feature. The bed of the stream appeared to be sometimes of slate and sometimes of sandstone, the banks usually of the latter and a good soil. No river scenery in the Peninsula have I ever seen to compare with this in beauty, added to which the novelty of shooting a long succession of fairly steep rapids made the journey most enjoyable.

At 9.15 A.M. we had to unload the rafts in order to shoot a considerable rapid called Jeram Měngâlor. This was negotiated without accident, and passing a very curious fishing weir in the form of the letter W, constructed by Sakeis, we stopped for breakfast at 10.30 A.M., having descended sixty feet in a distance of about three and a half miles. We left again at 2 P.M., passed the mouths of several small tributaries, and reaching a long straggling *kampong* called Ulu Sungei at 2.45 P.M., we tied up for the night at its lowest end named Sĕrĕbu, time 3.15 P.M., total distance, say, ten and a half miles. Unfortunately the man carrying the aneroid fell overboard from my raft and the instrument was damaged. We had to unload every raft and lift them one after another over an immense fallen tree, many similar obstructions being passed by lying down as the raft glided under one end. Altogether, without stoppages, we were five hours travelling and ten and a half miles is perhaps a low estimate of the distance, but it was carefully calculated, the compass directions being at the same time noted and shewing that the river winds considerably, the general direction being from N.E. to S.E.

At Sĕrĕbu I found the Panglîma Muda awaiting me, and a hut prepared for our reception by the influence of Toh Bakar. The people are all very polite and friendly, but their minds are unsettled, owing to the late attempt of the Raja Muda Mansur to enter the country, and they don't know whether my sympathies are with him or with the Yam Tûan. We made a number of sketches during the day.

Tuesday, 21st April.—At midnight last night we had a thunderstorm followed by a heavy storm of rain, the first for

three months here. We seem to have brought it over with us, for the night before we could see it raining at Bâtu Gâjah though it did not reach us. We have reason to be specially thankful for the fine weather we have had. Our journey across the hills would have been a very different matter in wet weather, many of the streams are unfordable in the rains, and though we might have made a very much more rapid descent from Bâtu Gâjah, it would probably not have been on our feet. Two of the twelve Bernam men we were obliged to bring to help to man the rafts showed signs of cholera yesterday; one is better, but the other worse this morning, and neither is fit for work. Left Sĕrĕbu at 7.15 A.M., and passed a rock called Bâtu Rimau. This is supposed to be a petrified tiger, his body only, his head is said to be in Jĕlei. At 8.20 A.M. we reached Kuâla Sungei Che Nek; gold is found in the *Ulu* of this river. At 9 A.M. we shot the Jeram Mĕnangis ("the rapid of tears"), and shortly after the Jeram Maalim, a considerable drop in the river. At 9.25 A.M. reached Bâtu Tâlam, and there met Haji BESAR, my messenger, in a small boat with a letter from the Yam Tûan, saying, he feared I should find the journey over the hills a difficult one, but that he had sent orders to all the headmen to assist me. At 9.45 A.M. stopped for breakfast, and leaving again at noon reached Kuâla Trûsang at 2 P.M.

Sending on the other rafts, we landed here and walked to a spot a mile distant where some twenty Chinese are mining for gold. About a quarter of an acre has been worked out by previous miners, who are said to have got 5½ *katis* from a hole 60 feet in diameter, but left owing to a poll tax of $8 a head being imposed, and the present men have only just begun stripping; one of them washed a basin of already once washed earth and obtained from it a few grains of gold. The spot is thirty feet above Kuâla Trûsang and is reached by crossing higher ground.

Returned to Kuâla Trûsang and started again at 3.40 P.M getting ourselves and most of our effects drenched by a very heavy storm of rain. Arrived at Kuâla Sĕmantan at 4.30 P.M., and there tied up for the night.

I have ascertained that the following are the prices of certain commodities sold at Pĕnjum, where the *Ulu* people have their nearest market. These prices are due to the fact that

the import of nearly every necessary and luxury seems to be farmed to certain Chinese at Pĕkan, the Yam Tûan's residence at the mouth of the river. Holding a monopoly, the farmers of course charge any price they like, and it is perhaps in consequence of this that the Chinese miners in Pahang are said to number about one hundred only, and all the Malays seem to be wretchedly poor.

1 tin Kerosene oil, $2.00.
Tobacco, $1 a *kati*.
40 bits of Gambier, 8 cents.
6 *gantangs* Salt, $1.
1 ball of Opium $22; and so on.

The highest price for rice is said to be $1 for twelve *gantangs*. The currency of the country is gold, and the following are the weights and values :—

1 Itam Tengko = 4 cents of a dollar.
1 Kĕnĕri of gold = 2 Itam Tengko = 8 cents.
1 Buso = 2 Kĕnĕri = 2 Saga = 16 cents.
1 Suku = 1 Kûpang = 2 Buso = 33⅓ cents.
3 Kûpang = $1.
4 Kûpang = 4 Suku = 1 Mas = $1.33⅓ cents.
16 Mas = 1 Bûngkal valued in Pahang at $24, which seems curious as it ought only to be worth $21.28.

About 7 P.M. I heard that a messenger had arrived from Permâtang Linggi to say that one of my Bernam coolies, left behind to return, had died of cholera. I determined to send all my Bernam men back at once, as this makes the third man who has sickened in two days. One of those with us is better, the other worse and unable to be moved. Kept on raining till late in the night. Distance travelled to-day thirteen miles, general direction E.S.E.

Wednesday, 22nd April.—Sent back Pĕnghûlu Mat Saleh and the Bernam men except the one too sick to move; left him with some money in the care of a man across the river. He is a very bad patient, refuses all medicine, and does everything he is told not to do. He looks bad, but is, I think, perhaps more frightened than really ill. We had a good deal of trouble in getting new men to supply the places of these Bernam

people, and did not get away from Kuâla Semantan till 9 A.M. At 10.30 A.M. Imam Prang Pĕnghûlu, a great Captain and headman of some influence, met me and invited me to go and spend the night at his house. I found he lived at a place called Smau, two hours' walk inland from Kuâla Dum, on the right bank of the river, and, as I should have lost a whole day by complying with his invitation and should have had to carry all our baggage inland and back again, I begged him to excuse me. He said he asked me to go to shew his friendship and good feeling, and I am afraid he was rather disappointed, but there was nothing to see at his place, and I could hardly spare the time.

At 11.30 A.M. stopped at Kuâla Dum for breakfast, after which I had a long talk with the Imam Prang and his people. They all complained of excessive taxation and the want of settled laws and customs. The Imam Prang told me that every buffalo exported is liable to a tax of $3, and this goes to the TOH GÂJAH, though formerly he himself received it. At Pĕnjum, there is a gambling farm, which pays the TOH KAYA $50 a month, and that chief also gets a tax of one-tenth on all imported cloth. A great deal of rice is imported from Kĕlantan, also silk sarongs. A good many sarongs are, however, manufactured in Pahang, chiefly at the Pĕkan.

At 2.30 P.M. saying good-bye to the Imam Prang, we started again and still meeting occasional rapids, we soon passed into a magnificent open country, where the scenery, though different from that in the Ulu, is in its way equally fine. The river widens into a broad stream, with a partly dry channel, shewing what a considerable river it must be in the rains. The bed is full of snags, and nothing whatever seems to have been done to it, but were it cleared, there is water enough for a launch, though of course nothing of the kind could get here owing to the Jeram Bĕsu rapid, which cannot be passed by boat even going down-stream. There seems to be an immense tract of level ground here. I have seen nothing like it elsewhere at such a distance from the coast. I have been told that cocoa-nuts will not flourish at over fifty miles from the sea-shore, but that is a mistake, for we have seen them everywhere.

At 3.30 P.M. we passed Kuâla Chenûer and TOH BAKAR

told me that, though his territory extended further down, his people ended here. I am told that the Jelei River, which is longer and larger than the Lipis, rises in the main range with a branch from Gûnong Tâhan—a mountain lying between the Jelei and the Tĕmĕlin. The Tĕmĕlin, which is said to be as considerable a stream as the Jelei, rises from the South-east face of Gûnong Tâhan, with a branch rising in the borders of Pahang and Trĕnggânu. Gûnong Tâhan thus stands at the meeting of Pahang, Kĕlantan and Trĕnggânu, and is not in the main range, but as this is only native report, much reliance must not be placed on it. The Lipis, Jelei and Tĕmĕlin unite and form the Pahang river. At 4 P.M. we reached Kuâla Sĕger, Dato' Kli's *kampong*, one of the most beautiful places we have yet seen on the river. It is 363 feet above the sea. The Dato' received us most cordially, and seemed a very good-tempered, intelligent old man. Distance travelled eleven miles. General direction N.E. Distance from Kuâla Bernam, 195 miles.

In the evening the Dato' told me he could not get men enough to carry our baggage past the Jeram Bĕsu rapid, and that I must stay here to-morrow whilst he collects them. TOH BAKAR told me he would now return with his men. I am sorry to hear that one of them has stayed behind with choleraic symptoms. I sent him some medicine.

Thursday, 23rd April.—CHE WAN DA arrived in the course of the morning with a number of men, and there was a great argument as to the liabilities of the owners of buffaloes, a man having been recently killed by one of those dangerous animals. TOH BAKAR came to tell me he and his people must now return, and TOH KLI would take me down to Pĕnjum. He also said he had just heard that a girl he had brought down with him and left at Batu Tâlam died last night of cholera. It is very distressing. She was perfectly well until yesterday evening, but was then attacked and died in the night. I cannot understand it. Coming across from Slim, not a man complained, the water we have had to drink has been excellent, and they have had no cholera in Pahang up to this time. I gave TOH BAKAR some medicines with directions how to use them, also a present of money to himself and his men, and we parted with mutual expressions of good-will. I have had to

prescribe for several people since I came here, fortunately with good results.

Devoted the day to writing up journal, and in the evening went out to try and find some jungle fowl, but failed. Between the river and the hills there is one great level plain covered with very short grass. Until three years ago this was a padi-field, but owing to defects in the irrigation system, they cannot now cultivate. The drought here is excessive, even the *sireh* vines are all burnt up; there are no vegetables, owing to the dryness of the ground, and the people live on rice and on what fish they can catch in the river. The villagers, principally the womenkind, wash the sand in the bed of the river for gold, and get from sixteen cents to one dollar's worth a day.

Friday, 24th April.—Left Sĕger at 7.30 A.M. and walked through the fields to Jeram Tĕmâle, about two miles, GILES going in the boats. All the trees that do flower seem to have come out in this dry weather, and we passed many covered all over with a splendid purple bloom, others bright scarlet and yellow, and the *Mĕmplas*,* the leaves of which are used as sand-paper, in full flower, a delicate pale yellow blossom with the sweetest scent. I have never seen it in flower before, nor the trees in such profusion. These level grass plains dotted over with flowering shrubs are very unlike other parts of the Peninsula. The heat is excessive even from early morning, and the nights are not cool.

Having taken out of the rafts such baggage as would be damaged by water, we started again at 9.30 A.M., and reached Jeram Bĕsû at 10 A.M. This rapid and the approach to it form the most striking picture we have yet seen on this river, which presents a long succession of lovely ever-changing scenes. The river widens into a pool of dark unbroken water, with steep hills covered by virgin forest rising straight from the edge of the pool; then it narrows to the head of the rapid, which is in truth a cataract. From top to bottom of the rapid,

* Probably a *Michelia*. The ordinary *mempĕlas* is a *ficus*; (*ficus microcarpa*, *amplas* and *politoria*). See the description of this and other species of *ficus* in Java. FORBES' Eastern Archipelago, 77.—ED.

and for many miles below, the bed rock (a hard sandstone) crops out and has been cut by the water into fantastic shapes, while huge boulders are piled in picturesque confusion on either side of the channel. These rocks as we came up were covered by men in many-coloured dresses, the rafts were either lying against the rocks at the head of the cataract, or slowly filing into the basin at its head and the clouds of spray dashed up from the rapid against the deep shadow of jungle foliage made a picture not to be forgotten.

The rapid itself, comparatively small after four months' drought, is the channel of the river running under the left bank, and at first sight it did not look like a place down which either raft or boat could go in safety, but we were shortly to see that the operation, though attended with considerable risk, could be successfully performed. The rapid is about sixty yards long, with a drop of some twelve feet, the water rushes and boils and foams between walls of rock, and there are two corners in the length which make the principal dangers. Two Malays mounted a raft, one at the stem and the other at the stern, each holding a large bamboo paddle fixed in a tripod. The raft slowly reached the top of the rapid, and then leapt into the boiling stream, where the men were instantly up to their waists in water. The stern man was washed off the raft, and it looked as if nothing could save him in such a place, but while the bow man with two or three powerful strokes of the paddle kept the bow off the opposite rock, the stern man dexterously leaped again on the raft, and in a moment of time a few more strokes of the bow man's paddle had cleared the raft of the second danger—a projecting rock on the other bank —and the raft was in smooth water below. After this, a second raft was taken down in the same way, and then each man went alone on a raft, and, though one of them was again thrown off in the middle of the rapid, and the other one had the paddle whirled out of his hand as the raft took its first leap, no accident occurred. A number of rafts were then sent down by themselves, and they seemed to accomplish the journey almost better without assistance, but this was explained by the fact that the weight of even one man sinks the raft to a dangerous depth, where the points of unseen rocks may wreck it. Old Dato' KLI absolutely refused to allow us to tempt Providence

in a journey down this rapid, where a good many fatal accidents have occurred, and even tried his best to make us walk to Pûchong, but this we refused to do, and sending all our non-waterproof baggage, watches, &c. by land with the Sikhs, ew started again on the rafts.

The river from Jeram Bĕsû to Pûchong runs through a long winding gorge, and the channel of the stream passing continuously between walls of bed rock and piles of immense detached boulders, is nothing but a series of more or less formidable rapids which succeed each other with somewhat confusing speed, but it is an exciting amusement, which we would not willingly have missed. We reached Pûchong at 12.45 P.M., very hungry indeed, and the coolies carrying our baggage arriving at the same time, we sat down on the high bank of the river as we could get no shade and made a rather uncomfortable meal. People were washing for gold in the bed of the river in several places below the last rapid. From Pûchong nearly all the Sĕger people returned, and we started again at 2.20 P.M. with our own people doing most of the poling. TOH KLI however still accompanied us.

At 2.45 P.M. we met the Orang Kaya LĬPIS with a number of very small boats, a lot of men, and a Malay band, and when GILES, LISTER and I had changed from our rafts into boats, we went on again at 3.35 P.M., and reached Pĕnjum at 6.30 P.M., dark except for the light of the moon now about fifteen days old. I went down with the Orang Kaya in his boat and as it leaked got wet through.

A great reception awaited us at Pĕnjum; the high bank which rises from the river in three terraces was crowded by people some fifty of whom carried torches, their light strongly reflected by the river, here crowded with boats and rafts, made the effect very striking. As we hurried up the rough steps cut in the soil, a salute of many guns was fired, and the Orang Kaya, leading me by the hand, ushered us into a house which had been prepared for us, and made us as comfortable as possible with the means at his command. The "band" had played with great perseverance all down the river.

The distance travelled to-day was about sixteen and a half miles, and the general direction N.N.E. We did not get dinner

till 9.30 P.M., and after that the Orang Kaya and CHE ALI, who had been sent by the Yam Tûan and received me with the utmost cordiality, came in for a talk. I told the Orang Kaya I wished to go on as soon as possible, but he said there was a difficulty about boats and we could not get on to-morrow; after he had left, I received a message from CHE ALI to say that the Orang Kaya had not complied with the orders he received from the Sultan, and that the boats ought to have been ready.

Saturday, 25th April.—CHE WAN DA, who brought over my letter to the Orang Kaya and has been very useful, came to tell me he would now return to his place. He told me there was a large gold mine called Jali, worked by Chinese, an hour's walk from here. I thought of going to see it, but found the journey would be useless as they were only stripping. I understand they are working the side of a hill. It is an old mine and has yielded good results in past times. I heard from the Chinese that there is plenty of gold in the country, but no one can live here owing to the injustice, "squeezing," and want of government. They say whenever any one gets gold it is taken from him on some pretext or other, and that very few Chinese are now left in the place. If a man gets on a good mine, some chief claims it, work is stopped and not resumed, and the result is that the country is in a very bad state at the present time. A friend of Raja ISMAIL's told me that only about twenty Chinese had worked for him at Raub, and then in a very erratic and perfunctory way, sometimes stopping work altogether for months, even for a year, from want of capital.

Spent the day in writing and making a sketch of Pĕnjum from across the river. This place is 210 feet above sea level.

Sunday, 26th April.—I had begged that the boats might be ready for us at 6 A.M., but was disappointed. In spite of the Yam Tûan's letter, there were only two large boats and a small one ready for our party of twenty-five, WAN ALI giving me the best part of his boat. We put the servants into the small boat, GILES and LISTER went in the large one, and a number of Sikhs in the other large boat, but finding it leaked, we had to move them into a boat which providentially arrived at that moment sent by the Imam Prang Gâjah, with his son as ambassador, to meet us. WAN ALI was exceedingly angry

and said unkind things of the Orang Kaya Lĭpis, who kept walking on the bank in an aimless way seemingly quite unable to meet such a demand on his energy and resources. I of course said nothing, but Wan Ali told me the Yam Tûan had sent orders to all the Chiefs to assist me and treat me as they would himself. I had paid Toh Bâkar for the very great help he had given us (without any orders from his Sultan) and I also sent away Toh Kli happy with a present, for he is not well off, nor in the way of squeezing other people to do his work, but I only thanked the Orang Kaya for what he did and in any case I should have hesitated to offer him money.

I was sorry not to meet here the Orang Kaya Jĕlei, to whom the Sultan had sent a letter telling him to meet us at Pĕnjum, but the Orang Kaya lives so far off he had not time to comply with the order, and I left a message for him in case he came after we had gone. The delay in getting our party finally settled into boats was so great that we did not leave Pĕnjum till 10 A.M.

Above Kuâla Prîok, Che Wan Da met us with a present of rice, and we stopped at the Kuâla, a beautiful place, for breakfast. Che Wan Da's father lives here. On the way down the river, we passed a gigantic waterwheel fixed in the river and used for irrigating the land on the bank. The wheel (undershot) is forced slowly round by the current of the river. On its outer circumference are fixed at a certain angle lengths of bamboo closed at one end and open at the other and as the wheel revolves these bamboos in turn enter the river, mouth upwards, are filled with water, and, as they arrive at the highest point of their orbit, they, one after the other, discharge their load of water into a trough which conveys it by gravitation to the required point in the field. I have not before seen in the Malay States so large or well-constructed an irrigating wheel, but I believe they have been and still may be used in Ulu Muar.

Left Kuâla Priok at 1.30 P.M. and continuing our journey reached Kuâla Lĭpis (where this river falls into the Jĕlei) at 1.50 P.M. Here Che Wan Da left us to return to his home; he has been very useful and shewn a great desire to be friendly and helpful. The combined rivers—the Lĭpis and Jĕlei—immediately after their junction, are about sixty yards wide. The

Jĕlei carries rather more water than the Lĭpis. Camped for the night at Pulau Krinau at 5.30 P.M., having passed the following *kampongs* during the day:—Bandar Lâma, Kampong Pulau, Sĕmătong, Jĕram Lâna, Kuâla Kêchau.

Distance travelled to-day, ten miles; general direction N.N.E.

Monday, 27th April.—Started before 6 A.M. and passing Changkong, where there is a longish rapid with but little fall in it but many rocks which make it difficult for boats to navigate, stopped just below at noon for breakfast. The river is here about 100 yards wide, that is, the bed of the stream from bank to bank. There were numerous tracks of deer on the sandspit where we lunched, and while we stayed there the carcase of a wild pig floated past. Leaving again at 1.30 P.M. we camped for the night at Kûala Tĕmĕlin, where the waters of that stream join the combined Lĭpis and Jĕlei thus forming the Pahang River.*

The Tĕmĕlin, which, as I have said, comes from the North and rises in a mountain on the borders of Pahang and Trĕnggânu, is in width and body of water about the same size as the combined Lĭpis and Jĕlei, at least so it appears at the confluence, but it is a curious fact that neither the addition of the waters of the Jĕlei nor yet of the Tĕmĕlin appears to make any immediate and pronounced difference in the width or depth of the Pahang River. The growth of the stream seems gradual, and, except at the actual points of junction, the reception of the waters of the Jĕlei and Tĕmĕlin, themselves large rivers, seems to have no more effect in widening or deepening the river than is made by the addition of the waters of any of those smaller tributaries the mouths of which we pass daily. It was 5 P.M. when we reached Kuâla Tĕmĕlin, 154 feet above the sea, and with some difficulty I got here a few specimens of really excellent Malay pottery—vessels of various forms and designs for holding water.

* This place is mentiond in Perak history, on the occasion of the marriage of the Raja Muda of Pahang with a Perak princess (circ, A.D. 1600), as the place at which the Perak and Pahang envoys met. The Tĕmĕlin is the river called Tĕmbĕlang تمبلغ in the *Misa Malayu* and in the *Undang-undang ka Raja-an* (code of laws) of Perak, Pahang and Johor. See No. 9 of this Journal, p. 101. ED.

Kuâla Tĕmĕlin is celebrated in Pahang for its earthenware, but like all natives far from a market, the potters keep no stock and make only what is ordered. The shapes of the jars I got are all good, and the decoration, done with a sharp tool before the firing, is most artistic. We ordered some further specimens to be made, including incense-burners.

Distance travelled to-day 21¼ miles; general direction E.S.E.

We passed, in the order in which they are given, the following small villages or clusters of huts on our journey to-day:—Pâsir Sibau, Jeram Chĕkuas, Bâtu Gâjah, Sungei Kĕnuug, Rantau Panjang, Pulau Sa'amas, Sungei Chika, Pulau Tĕmbûnga, Changkat Glugor, Bâtu Pâpan.

Tuesday, 28th April.—Got away at 5.30 A.M., and stopped for breakfast at Kangsa at 12.25 P.M. The temperature in my boat at noon was 93° and in the water of the river 98°. The thermometer stands at 95° in the boat every day at 2 P.M. and the excessive heat of Pahang strikes us all. We notice here that the people are decidedly darker than the Malays on the western side of the Peninsula, and those Malays who have come with us from Pêrak complain especially of the great heat of the ground to bare feet when walking in the exposed fields which stretch inland from the river bank. Unfortunately I broke the thermometer to-day, but I do not think it could tell us much more than we have learnt already.

Started again at 3.45 P.M., and reached Pulau Tâwer at 4 P.M. Here we were met by the Imam Prang Indra Gâjah, the Yam Tûan's right-hand man in all matters connected with that part of the country which lies up-stream from Pulau Tâwer. The Imam Prang gave us a most cordial reception and, dragging me by the hand up the almost vertical bank (here twenty to twenty-five feet high), ushered us into a comfortable hut, which we were informed had been constructed in a day. Our subsequent proceedings, whether dressing, writing, eating or sleeping, seemed to be matters of the deepest interest to the large crowd of Malays who surrounded the place and never lost sight of us for a moment. Toh GÂJAH, who is a man of about forty, very thickset and dark, but full of laughter, informed me that he had four wives, twenty-five children and nine grandchildren. He introduced his brother and a few of his male children, and after seeing that we wanted nothing

went to arrange for men to take us to Kota Kĕlanggi to-morrow morning as I expressed a wish to visit the caves there.

No one has been for some time, and the path is said to be overgrown, so the TOH GÂJAH sent off a lot of men to clear it. The river here is about 700 feet wide (about the same width as the Pêrak River at Kuâla Kangsa); the banks are exceedingly high and steep and the river at the present time is said to be lower than ever known. The TOH GÂJAH says that if the drought continues for another two months, that is, making six instead of three dry months as usual, there may be partial famine in the place.

The TOH GÂJAH settled with his people at Pulau Tâwer twelve years ago, after he returned from Klang where he was sent in command of the three thousand Pahang men who, at the request of Governor Sir HARRY ORD, were despatched by the Bĕndahâra to assist Tunku DIA UDDIN in the struggle with Râja MAHDI.

A fine *kampong*, and houses shut in by a long bamboo fence, stretches along the bank of the river in a grove of young cocoa-nut and other fruit trees. Behind this hamlet extends an almost level plain, as far as the eye can reach, broken only to the North by a small pointed hill, and to the East by the limestone rocks in which are the caves of Kota Kĕlanggi. A considerable portion of the plain is now being ploughed for the cultivation of rice, and the rest is jungle.

Far away to the West is the mass of hills called Gûnong Raya, to the North of which lies the river down which we have come. The mountains of the main range are nowhere visible, and we are told that the mouth of the Pahang River lies from here East a little South.

TOH GÂJAH'S father was a Sumatran Malay, his mother a Pahang woman; he is reported to be a great warrior, is the Field Marshal of Pahang and ranks with the Orang Bĕsar Ampat or Chiefs of the first class. He is a man of much energy, greatly feared by the discontented faction in the upper country and greatly trusted by the Yam Tûan.

I have ascertained from CHE ALI, who is a good authority and one of the Yam Tûan's most trusted adherents, that the following are the principal Chiefs of Pahang:—

New Creation,		The Râja Muda.
		The Dâtoh Bĕndahâra.
		The Dâtoh Tĕmĕnggong.
Ôrang Bĕsar Ampat, Class I.	1.	The Toh Bandar.
	2.	Toh Kâya Chĕno.
	3.	Toh Kâya Tĕmerloh (at present vacant).
	4.	Maharâja Perba (at present the Ôrang Kâya Jĕlei holds this post).
Ôrang Bĕsar dilâpan, Class II.	5.	Toh Muda Tunggal.
	6.	Toh Jabe.
	7.	Toh Bangau.
	8.	Toh Ômar (held by the Ôrang Kâya Sĕmantan, who is also Orang Kâya Pahlâwan).
	9.	Toh Pĕnggâwa.
	10.	Toh Lêla.
	11.	Ôrang Kâya Jĕlei.
	12.	Ôrang Kâya Lĭpis.

Distance travelled to-day, eighteen and a half miles; general direction, S.E. We passed the following villages on the way:—Kampong Te, Tanjong Gâtal, Tanjong Lindong, Pulau Didâri, Kuâla Pĕdas, Kampong Kuâla Sêlan, Kuâla Kĕdundong.

Wednesday, 29th April.—I think the Toh Gâjah must have been up all night, for he appeared at midnight and again at 4.30 A.M. We got up at 5.30 A.M., but could not make a start till 7 A.M. Then, with the Toh Gâjah and nearly 100 men, all armed as every one seems to be in this State, we started down the left bank of the river for Kûala Tĕkam, a distance of one and a half miles, level walking but hot, for in Pahang, in this weather at any rate, light means heat and from daylight to dark one seems to be in a vapour bath. It was a curious sight to see in the Malay Peninsula buffaloes ploughing the slightly undulating plain of dry but not hard soil and more strange still to be told that the rice grain is then sown as wheat is in the West, the ground harrowed and no irrigation done whatever, the harvest depending simply upon the rain. These fields when fallow seem to grow no weeds, only a sparse short grass, and they are ploughed across and across like a chess-board several times before the wooden

plough gets deep enough, then sown, harrowed, and nothing more is required till the time of harvest.

These fields have for many years yielded crop after crop under these conditions, and the only renewal or manuring of the soil is the annual small flood, which rises over even these high banks, and a higher flood which comes about once in six years and drives the people out of their homes into rafts. I should suppose that with this soil and three months rainless weather, cotton might be successfully grown.

The Sungei Tĕkam was almost dry, and whilst the Malays walked up the bed crossing and recrossing what little water there was, we were dragged up-stream in a dug-out for half a mile and then landing walked over a good level jungle-path for two and a half miles reaching Kôta Tongkat 8.35 A.M. This Kôta Tongkat is a curious sort of gate through which a river appears to have run, and it is flanked on both sides by high limestone cliffs covered with foliage; these cliffs appear to shut in a narrow valley, a mile long, at the far end of which is the cave Kôta Kĕlanggi,* in reality, however, the valley is only rock-bound on the right hand side as you enter and the ancient river must have met this obstruction at Kôta Kĕlanggi, been turned by it and, cutting along the face of these limestone cliffs, made its exit through the Kota Tongkat and thence found its way, probably by the channel of the Sungei Tĕkam, to the Pahang River. There is nothing specially remarkable about Kôta Tongkat, but since the river ceased to flow through this giant gate of stone, the action of the atmosphere has formed a number of stalactites which extend from the clear cut ledges of roof to the ground (no great distance) and these probably gave to the place its present name—Kôta Tongkat.

After a short rest here (the Tou GÂJAH having succumbed to the pace at which we came from the river), we walked up the valley until we reached the foot of Kôta Balei. Up to this cave we climbed by a ladder of forty steps and then found ourselves in a vast cave lighted mainly from the entrance and completely closed at the further end, but having three subsi-

* See Mr. CAMERON'S account of his visit to these caves, No. 9 of this Journal, p. 153.

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diary caves or chambers, two on the right of the entrance and one on the left, each partially lighted by rifts in the roof. The main cave and the smaller chambers are all very fine, and reminded me of the Sĕlângor cave at Batu, though I do not think any of them equal in beauty or size that magnificent rock chamber.

We spent a considerable time in this Kôta Balei and then, descending the ladder, walked a few steps to the edge of the present insignificant stream where you find yourself facing a long, low and straight gallery with a straight, flat roof not less than twenty feet wide. This very remarkable passage with its wide flat roof only about seven to eight feet from the ground was cut by the river out of the solid rock before that ancient period when, for some reason not yet explained, the volume of water in the river became immensely reduced, or the original stream was diverted into some other channel leaving the results of the battle between the water and the rock in the form of the present caves, whence all trace of water has disappeared leaving only the evidence of its power as a constant source of admiration and wonder to the Malays of the country.

At the end of this gallery the rock has been hollowed out into a circular chamber of some height, while from the centre of the ceiling depends one enormous and strikingly beautiful stalactite. After luncheon, with lanterns and torches we explored the long dark cavern which extends into the hill from the back of this circular ante-chamber.

There is nothing to reward the explorer, but the place is infested by myriads of bats which are only with difficulty kept from striking you in their blind flight towards the lights. The masses of Malays in their many coloured dresses with the light of the torches shining on their weapons and swarthy faces, the deep shadowy gloom of the cave as a background, here and there faintly lighted by a ray from the distant entrance, made a scene very remarkable in its picturesque effect.

We left Kôta Kĕlanggi at noon and reached our hut at Pulau Tâwer in exactly two hours, after a very smart walk; the heat from Kuâla Tĕkam to the village was indescribable, and the Toh GÂJAH was quite knocked up, taking refuge in a

boat and shirking the last mile and a half. About 4 P.M. a heavy storm of rain fell and continued till late in the night. From 8 P.M. till 11 P.M. I talked politics with the TOH GÂJAH and CHE ALI and then retired to the boat to sleep so that we might be able to start in the morning without delay.

It is worthy of record that this Kôta Kĕlanggi is mentioned in the Sĕjâra Mălâiu (the Malay Annals) as having been occupied by the Siamese. The Sĕjâra Mălâiu is supposed to be the earliest written record of Malay History.

Thursday, 30th April.—Did not get away till 7 A.M., TOH GÂJAH accompanying us. At 10 A.M. passed Batu Bûrong, where the cave-making process may be very readily seen in the action of the Pahang River on a huge limestone rock which crops out from its left bank. It is said that there is a subterranean channel from the bottom of this cliff to a place many days' journey down the river. At 10.30 A.M. reached Pulau Burau, where there are said to be quantities of *sĕlâdang* (wild cattle) in the wet season. In the line of the next reach of the river and straight ahead of us lie two remarkable isolated hills called Bûkit Sĕnyum and Bûkit Sah. These hills are said to be plainly visible from the sea and used by the fishermen as landmarks.

At noon reached Tanjong Blanja, the limits of TOH GÂJAH's jurisdiction, and here we stayed for one and a half hours breakfasting and then parted with the Dâtoh and continued our journey down river. The TOH GÂJAH has done everything possible for us. I gave him my Pêrak *gŏlok* (chopping knife) and we parted excellent friends. I saw him in the river up to his waist saying good-bye to the Subadar.

Passing Kuâla Krau, a river and *kampong* on the right bank, we reached Pulau Chĕngal at 6.20 P.M., and there camped for the night. Distance travelled, 17¾ miles; general direction, South.

The following *kampongs* were passed during the day:—Klang, Sungei Kio, Tanjong Antan, Tanjong Tĕnggoh, Tĕluk Maik, Sungei Sĕbul, Pulau Raya.

Friday, 1st May.—Left at 6 A.M. and passed a Chinese sugar mill at Pĕngkâlen Bĕnom at 8.30 A.M.; subsequently we saw several of these mills on the left bank, they are driven by buffaloes, and the juice is expressed from the canes by pass-

ing them between three revolving circular blocks of wood in juxtaposition on the same horizontal plane. At 9.30 A.M. Bûkit Sĕnyum appeared directly astern of the boats, which were then dropping down a long straight reach of the river. Passing Pâsir Mandi, one hundred feet above the sea, we stopped at Tĕluk Sintang at noon for breakfast. The river here cuts deeply into the right bank forming a bay and making the width of the stream at this point very considerable.

The Bungau trees with their gorgeous purple flowers grow larger and more numerous as we descend the river, and the forest is everywhere strikingly beautiful. I saw a quantity of maiden-hair fern in the jungle to-day at our halting place, but it did not look like a new kind.

Left Tĕluk Sintang at 1.30 P.M., passed Kuâla Sĕmantan Ilir a little before 5 P.M., and reached Pulau Tĕmerloh at 6 P.M. Camped here for the night. Pulau Tĕmerloh, said to be half way between the Sultan's place and Pĕnjum, is an extensive *kampong*, admirably situated on the right bank opposite to a large island which here divides the stream.

Distance travelled to-day, twenty-one miles; general direction, South. Distance from Kuâla Bernam, 300 miles.

Passed the following *kampongs* to-day:—Jĕnĕrak, Kuâla Tĕkai, Lîpat Kâjang, Dor, Sanggang, Bintang, Tĕbing Tinggi, Balei Gantang and Bangau.

Saturday, 2nd May.—To-day the villages are larger, the river is wider though no deeper, and the banks are not quite so high. There must be a very considerable population of Malays settled on the banks of the Pahang, and its three large tributaries, of which the Jĕlei is undoubtedly the longest, and is properly called by the Malays the parent stream. We left Tĕmerloh at 3 A.M., and passed Gual, a large village on the left bank, at 9 A.M., reaching Trîang, *kampong* and tributary stream, at 10 A.M. Trîang is 88 feet above the sea. At Trîang the river was very shallow, and twice we had to drag our boat over the sand. Breakfasted at Kuâla Bra at noon, and leaving again at 2.30 P.M., reached Kĕrtau at 7 P.M., and camped there for the night. There is a hill called Bûkit Kĕrtau on the right bank, and the place at present is chiefly remarkable for the enormous extent of sand which stretches between the left bank and the channel of the river. Under the right bank, however, there

is a deep hole said to be infested by crocodiles, and these reptiles have dragged four or five people, sleeping on the sand, into the pool.

We passed the following villages and *kampongs* to-day, in the order named:—Pâsir Anam, Berâleh Kâpas, Lĕbak Bĕlĕngu, Jilam, Mĕngkârak, Tambak, Lûbok Pârap, Pâmun, Chĕrŭis, Bâtu Pâpan, Bâtu Hanchor, Lûbok Lien, Pulau Kĕnin, Sintang, Lĕmûse, Pulau Nyak.

Distance travelled, twenty-five miles; general direction, North.

Sunday, 3rd May.—It was intolerably hot and close last night, and having started the boats at 12.30 A.M., I tried in vain to sleep on the stern platform of my boat in spite of mosquitoes, and it was not till nearly 5 A.M. that sleep was possible.

It is hardly fair to complain of mosquitoes here, for though the statement that there are none in Pahang is no more accurate than that there are no snakes in Pêrak, yet there are comparatively few of these pests, in this dry weather at all events, and even after the occasional showers of rain we have had hardly any.

We stuck on a sand-bank for half an hour almost directly after starting, and passed Chĕno at 1.30 A.M. Chĕno is celebrated for making the best mats in Pahang. They are made of bleached and dyed Mĕngkuang leaves and are very pretty.

From Chĕno we pushed on down some very long reaches, each two and three miles in length, and even more, usually with islands at intervals making an ever-changing panorama of beautiful pictures. Passed Lâwan at 10 A.M., fifty-five feet above the sea, and at noon we stopped opposite Bûkit Serlin for breakfast. Left again at 2 P.M., and passing Kuâla Luit, a river formerly worked for gold, we reached Terpei at 3.30 P.M. From here there is a good view of the high mountain called Gûnong Chĕni, a long irregular triple-peaked mass of hills with a large lake, or series of lakes, at its base.

Gûnong Chĕni is seen on the right bank of the river apparently distant about five miles. The lakes are only approachable by a small river—the Chĕni (almost dry in this weather), the mouth of which we passed at 4 P.M. The Malays have a great dread of these lakes, will not live near them, though they

are full of fish, and say they are haunted by evil spirits.

Stopped for the night on the sands at Sungei Duri at 6.30 P.M., the last of the boats not coming up till 8.30 P.M. Sungei Duri is another place with a reputation for crocodiles. CHE ALI's nephew was taken here two years ago, but was rescued by his cousin, though the crocodile injured him for life. In the sixteen hours we were travelling to-day, we made thirty-one and three-quarter miles, going at times in nearly all the directions on the compass, but mainly South.

Passed the following places:—Pulau Mâlang, Bâtu Gâjah, Kuâla Jingka, Pĕsâgi, Tanjong Bâtu, Kuâla Jĕmpôl, Pĕjin, Tĕmiang, Lamê, Kuâla Mĕntĕnang, Gâlong, Lûbok Paku, Bâtu Râkit, Kuâla Tĕmĕlong, Pulau Dato'.

Monday, 4th May.—Left Sungei Duri at 5 A.M. Stopped for two hours at Pinyo, thirty-nine feet above the sea—CHE ALI's kampong—and made an unsuccessful search for peacock, but shot some golden plover. We have seen several peacock on the sands in the early morning, but they keep out of range of anything but a rifle. Passed Sungei Mĕntîga (whatever that may mean) at noon. This small stream, which flows into the Pahang River, not a day's journey from the sea, bifurcates and one branch, called Sempang, runs back towards the Rumpin river, a tributary of the Muar, so that by ascending the Muar and Rumpin rivers, crossing a few hundred yards of land and descending the Sempang, Mĕntîga and Pahang Rivers, or *vice versâ*, the Peninsula can very easily be crossed in a comparatively short time.

Stopped at Batu Buâia for breakfast at 11.30 A.M., and continuing our journey at 2 P.M. reached Tanjong Pulei at 6.30 P.M. The river is here about one thousand yards wide.

Distance travelled, eighteen miles; general direction, E.N.E.

Passed the following *kampongs* to-day:—Kinchi, Pulau Ubah, Pulau Plak, Kuâla Lĕpa, Pulau Kĕpâyang.

Tuesday, 5th May.—Started at 2 A.M., and stopped at Ganchong at 8 A.M. for an hour to allow the boatmen to breakfast. Ganchong is only twelve feet above sea level. CHE ALI went on from here in a small boat to tell the Yam Tûan of our whereabouts. At 1 P.M. reached Langger, a fine *kampong* on the left bank, where the whole population turned out to watch us breakfasting. Left again at 2.30 P.M., and reached Pulau

Klêdi, two miles above the Pĕkan, at 4.15 P.M. Here we waited, according to agreement, and in a short time CHE ALI returned with CHE GÂDOH and a message from the Yam Tûan to say that he was very unwell (consumption they say), and asking me to wait here till to-morrow to allow them to make proper preparations. We accordingly camped on the bank, and the tide falling left us ten yards of mud to cross to the boats.

Distance travelled, eighteen miles; general direction, S.E. The river is about one thousand yards wide at this point, and the banks low, but covered with grass and jungle where there is no cultivation.

Unlike the rivers on the West coast, there is no mangrove. To-day the banks were thickly populated, and we passed the following hamlets:—Kampong Temai, Blûker Acheh, Pulau Ganchong, Tanjong Rĕngas, Aur Gâding, Kampong Tĕluk, Sungei Păhang Tua, Kuâla Langger.

This sort of travelling may seem very easy and pleasant, but it has its disadvantages; for instance, at midnight I started for bed, seemingly no very difficult journey, and immediately stepped into a nest of the *sĕmut api*, or fire ant, that is an experience that no one would care to repeat. A Sikh then carried me over the mud and deposited me up to my ankles in water in a dug-out and, with the assistance of that unstable conveyance, I reached the back of my boat somewhere in the depths of which a rat had died three days before. To get as far as possible from the pestilent stench of the decaying rat, I had had my mosquito net hung in the middle of the boat, and to reach that it was necessary to crawl through two doors, each two and a half feet by two feet, and over the body of a sleeping Malay, arranged seemingly to make one's progress as difficult and uncomfortable as possible. Then I faced my curtain to find the hole through which alone entrance can be gained, and which for the best reasons is not in the side but in the bottom of the curtain, next the side of the boat, *i.e.*, with two inches of wood between it and the water. Through that hole I got by a series of gymnastic feats which no one would attempt in the light, and finally reached my goal to find the small mattress quite wet with the heavy dew, and the curtain simply wringing. Fifteen days in a boat four feet wide

and only high enough to sit up on the floor, where the thermometer registers from 92° to 95° for several hours in each day, where rats, scorpions, centipedes, and other vermin abound, and where the crew are too close to be agreeable in this climate, is an experience which forces its drawbacks on the notice of the traveller, in spite of the loveliest scenery and situations which are often more picturesque than pleasant. One result of these circumstances is that, ever since we started, not less than twenty per cent. of our party have been on the sick list, the medicine chest has proved invaluable, and, considering how often its dangerous contents have been drawn upon, it is surprising that, with so much liberality and so little skill, no particular harm has been done. The man and woman who died of cholera were never under my treatment, I am glad to say, and since leaving Sĕger we have heard nothing more of cholera.

Wednesday, 6th May.—Went ashore early this morning, and shot a couple of peacock and a brace of jungle fowl. It is certainly rather an astonishing sight to see peacock flying about or sitting on the dead stumps of an old clearing. I also saw a snipe, which is rather remarkable at this time of year and after such a drought; the ground he was in was hard and dry as a highroad. The tide is curious here, it was falling when we arrived at 4 P.M. yesterday, it fell a good deal lower, and at midnight some of our boats were high and dry; at 5 A.M. they they were still in the same position, but at 8 A.M. the tide began to rise, and at 2 P.M. it was nearly up to the top of the bank.

At that hour, on the top of high water, four large barges appeared round the point which hides the Yam Tûan's place from us, and in a few minutes reached us. They were all crowded with rowers and chiefs who invited us to take our seats in the largest boat, a long two-storeyed barge with twenty-two rowers clad in yellow jackets, *sarongs* and white trousers. Half an hour's paddling carried us over the two miles of water, and we landed at the stairs in front of the Yam Tûan's house, an immense crowd of well dressed Malays lining the steps, the bank of the river and both sides of the road from the jetty down to the gate of the reception hall, where a double line of spearmen waited and conducted us to

the hall, a nicely decorated room raised on low pillars. Here the Datoh Bĕndahâra, and Dâtoh Tĕmĕnggong, the two Chief Officers of the State, received us with great ceremony, and telling us the Yam Tûan was far from well but wished to see us, invited us to sit down. Whilst we made our way from the landing place and greeted the Bĕndahâra and Tĕmĕnggong, a salute was being fired lower down the river.

I carried on a spasmodic conversation with the Bĕndahâra for one and a half hours, during which the Yam Tûan again sent to say he meant to come and see us, and then His Highness appeared. He certainly looked deadly ill, but he was just as courteous and nice as ever, and we all thought he looked a trifle better and spoke with less difficulty (his voice was hoarse and changed, and he complained of cough and fever) when we left him than when he came in.

After I had told him of our journey, he asked us to have some coffee, &c., he and his son, a nice looking boy, joining in this part of the ceremony, and then I told him I should like to see him when he felt better and we left.

Some of the Yam Tûan's people took us across the river to a raft which had been prepared for our accommodation. On the raft is a plank house containing one large room, very comfortably furnished, and a sort of verandah all round it has been planked over so that we can sit out and watch the busy river-life with the picturesque town and palm groves for a background. Another raft much larger than ours with an upper storey (but rapidly falling into decay) was handed over to our people, and a guard of twenty-two Malays were sent to see that no harm befell us! The Bĕndahâra, Tĕmĕnggong and others came to see that everything was in order, and then we were left to ourselves. In the night there was a tremendous storm of rain with thunder and lightning, but that was hardly so disturbing as the uproar made by the rats who live under the floor of our raft, a protest I suppose against our occupation of the tenement.

Thursday, 7th May.—The Dato' Mantri of Johor called on me and we had a very long talk about Pahang and the other States.

On making up our itinerary, I find that we have come down the river two hundred and forty-one and a half miles from

Buntu, and three hundred and ninety-five miles from Kuâla Bernam, while there remains another seven miles or so to the mouth of the river.

There is much to admire in this place. Specially striking to any one acquainted with the other Native States is the appearance of the village on the banks of this large river, here about fifteen hundred yards wide, with the picturesque house rafts moored not only along the bank of the river and in face of the Yam Tûan's various houses, but along the shores of the islands which here stud the stream.

These islands are the most beautiful feature of the place; they are large, covered with cultivation in the shape of palms, the cocoa-nut, betel and *jagaree*, or with flowering trees and shrubs and fine short grass. The raft we occupy is moored to the shore of one of these islands just opposite the new mosque of Pĕkan, and between us and the opposite bank of the river are three considerable islands with wide stretches of water in between.

On shore in the village there are four notable buildings—the new mosque in the angle made by a small stream or canal coming in to the river from the right bank; one hundred and fifty yards higher up a new brick house such as those occupied by Europeans in Singapore; one hundred and fifty yards further on, the old mosque, a building with far more to recommend it as regards appearance than the new one; and immediately to the right rear of the mosque the Yam Tûan's principal house, a building which, as far as I could judge, is as satisfactory in its accommodation as it is pleasing to the eye. This house, which was built without any plan, is said to have cost $25,000, and is worth the money.

The Yam Tûan's *Balei* or Audience Hall is an indifferent structure inside the enclosure of another and less pretentious house, which stands half way between the old mosque and the new one.

The business part of the village is of the most wretched description. Two small rows of the veriest hovels, built on either side of the main road, containing in all forty or fifty dwellings constitute the "bazaar" of the principal place in Pahang. As long as the customs of the country are such that Chinese don't find it to their advantage to settle here,

there is no likelihood of improvement in this respect. At the present time the Chinese population of Pĕkan numbers about eighty, and when asked why that is so, they reply because the taxation, both in system and as including every article of import or export, is intolerable, and that if ever they import from outside, or buy in the interior anything of value, it is removed by some chief who forgets to pay for it. Chinese will put up with many evils and difficulties and much injustice that no European will tolerate, and while making every allowance for exaggeration, mistakes and wilful falsehoods, the fact that there are not more than two or three hundred Chinese in the whole of this large and rich State so close to Singapore is the best proof of how matters really stand.

This is the fourth time I have visited Pahang, and I have on this occasion had an opportunity of verifying some of the stories that have reached us in the last two years. Without proceeding to details, I can say that those whose experience of the Peninsula has been confined to the Protected Native States would be rather astonished at the manners and customs still prevalent in the governing class in Pahang and if Europeans will risk their capital in any large undertaking here and can manage to comply with their obligations, get business transacted, and obtain justice and satisfaction in their dealings with those they are brought in contact with, I think it will be a little surprising. It will also be well for them to remember that in a purely Malay State patience is not so much a virtue as a necessity.

A good many wide and well selected roads have been laid out and formed, but not metalled, in and about the Pĕkan; some fair bridges have also been constructed, and it seems as if, in any future arrangements for the housing of a large Chinese or other population, some new ground would have to be chosen for the site of a town, as there is none available upstream of the canal to which I have referred. Below that, however, land might be got and a town built with the advantage that large boats and steam-launches can get to this point and lie there while they cannot reach the mouth of the canal owing to the shallowness of the water.

All the ground about the Yam Tûan's house being already occupied, the best spot for dwelling houses is the island which

lies opposite the Yam Tûan's principal dwelling. The whole country seems to be one vast level plain only a few feet above the level of the river, the soil is excellent and would probably grow any low-country produce, while swamps seem unknown, though I have no doubt the appearance of the place is different in the wet season.

The people of the country, outside the Râjas and Chiefs, with some few exceptions, are industrious for Malays, but their distaste for work may, to some extent, be explained by the fact that a man does not care to work for more than bare subsistence if his gains can always be appropriated by his more powerful neighbour. That, at least, is an explanation offered here and in other Malay States, especially where Siamese influence is strong. *Sic ros non robis* might have been written of the Malay ryot.

The principal industries of Pahang are agriculture (the cultivation of rice and fruit), the rearing of cattle (especially buffaloes, which are very cheap here), sheep and poultry, a little gold-washing (but there are good reasons why this occupation is limited), and the manufacture of mats and silk cloth. The weaving and mat-making is done by the women, and the silk and mats produced are excellent of their kind, but very little known outside Pahang.

The present occupation of the ruling class in Pahang is top-spinning, and the example is pretty generally followed by all the unemployed male Malays in Pĕkan. There is not much to be said against this very innocent amusement, but it strikes the casual observer as curious that while the people of the Ulu (and indeed nearly every one outside this village) are crying out for the redress of manifest grievances and the introduction of something resembling fixed laws and fair government, those who have the direction of affairs devote to the spinning of tops the time that can be spared from less harmless distractions.

In many respects the State is unlike any on the western coast and more nearly resembles Kĕlantan in features and products. Pahang has undoubtedly great resources and unusual capabilities for supporting and enriching a large population and no intelligent person could see the country without regretting the circumstances which still keep it closed to

legitimate enterprise, whilst its people are unable to take advantage of the gifts lying ready to their hands.

The Map which accompanies this journal shows the route we followed from Kuâla Bernam in the Straits of Malacca, Latitude 3° 50′, to Kuâla Pahang in the China Sea, Latitude 3° 44½′. The trace of the Bernam River has been taken from existing information, lately revised by Mr. F. St.G. Caulfield, also the land route from Kuâla Slim to Kuâla Gĕlîting. From Kuâla Gĕlîting on the Bernam to Buntu on the Lipis River is roughly sketched from a time and compass survey, the distances and general direction being fairly correct, but there is no attempt at accuracy. The sketch of the Lipis and Pahang Rivers is plotted from a time and compass survey made by Captain Giles, R.A., and in this case there is no pretence to accuracy, though it will probably be some years before a more careful survey is made of this river.

So far as I know, this is the first time the Peninsula has been crossed from sea to sea by a European from any point North of the Muar River, that is to say, in the wider part where the journey can only be accomplished by crossing the main range of mountains which forms the backbone of the Peninsula. I believe that Mr. C. Bozzolo crossed from the Galena mines in Patani to the mouth of the Muda River in Kĕdah, passing however North of the main dividing range.

Fourteen years ago I saw in Klang a Frenchman who told me he had three times crossed the Peninsula from Klang to Trĕnggânu, but there are very strong reasons for doubting that statement.

Some years ago Messrs. Daly and O'Brien ascended the Muar River, crossed a few hundred yards of dry land by portage and descended the Bra, a tributary of the Pahang River, having its embouchure about eighty miles above Pĕkan, while Mr. W. Knaggs, I am told, has just crossed by the Muar and Triang Rivers, the mouth of the Triang being a few miles further from Pĕkan than that of the Bra. The shortest crossing of all is said by the Malays to be by the Muar, Rumpin and Mĕntîga Rivers.

We have crossed the Peninsula by probably the longest route, unless the ascent of the Muda and descent of the Patani Rivers be longer and feasible. The Bernam river, the largest

in some senses of those flowing into the Straits of Malacca, is the furthest North of those rivers which, rising in the main range, flow East and West to the Straits of Malacca, both the Krîan and Muda Rivers being stated to take their rise in mountains other than the main chain. The Pahang River again is universally admitted to be the longest navigable river on either side of the Peninsula, and though we did not descend the centre or parent stream, the Jĕlei, there is probably not very much difference in navigable length between that and the Lipis, and there is no recognised crossing from the western to the eastern side of the range which would take the traveller to the head waters of the Jĕlei, nor any easily navigable river on the western side that would lead up to a point on the western slopes of the main chain opposite to the source of the Jĕlei. When it is considered that the measured distance on the map from Kuâla Bernam to Kuâla Pahang is, as the crow flies, one hundred and seventy miles, the route by which we have travelled covering a distance of four hundred and two miles ascending the largest river on the western side of the Peninsula and descending the longest on the eastern, may be considered fairly direct.

The Straits Government steamer *Sea Belle* arrived on the 7th, and as I was not able to leave and Captain GILES seemed to be seriously ill, I sent him on to Singapore in the *Sea Belle* on the 8th instant.

Mr. LISTER and I remained at Pĕkan till the 14th May. In that time we saw something of the country in the immediate neighbourhood of Pĕkan, and had many opportunities of talking to Malays of all ranks on matters concerning Pahang. The Râja Muda of Pahang (brother of the Yam Tûan), who had arrived in the *Sea Belle*, landed on the 8th, and I had the pleasure of taking him to the *Balei* (Audience Hall) and seeing him reconciled to his brother. On two other evenings I had interviews with the Yam Tûan, and he took us to his principal house, and let us see the *jóget* danced by ladies of his own household. I described these dances and the *gamĕlang* accompaniment in an early number of the Journal of the Straits Branch of the Royal Asiatic Society. I noticed that on these occasions the company of onlookers was much more select than when I first saw the dances, but, as before, the

amusement was continued till nearly daylight.

On the 14th, at 1 P.M., the Yam Tûan, the Râja Muda and all the Chiefs came over to our raft to bid us good-bye, the Yam Tûan with his usual generosity giving something to every member of my party. At 2 P.M. we left in the *Sea Belle's* launch and boats, while a salute was fired from some guns in front of the new mosque, and the Sultan's flag, which he had lowered on our arrival eight days before, was re-hoisted.

The tide had nearly run out when we started, and we only just managed to get the launch out of the river, reaching the *Sea Belle* (lying a long way out) at 4 P.M. We arrived at Singapore at 8 A.M. on the 15th.

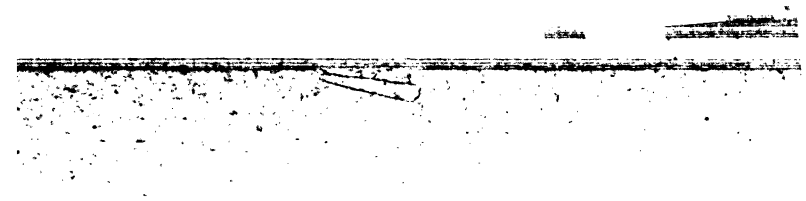
I cannot close this journal without remarking that, having journeyed through nearly all the Malay States, I have never met with elsewhere such courtesy as we experienced from all classes in Pâhang. I could only regret my inability to make any adequate return for the hospitality and kindness of the Yam Tûan.

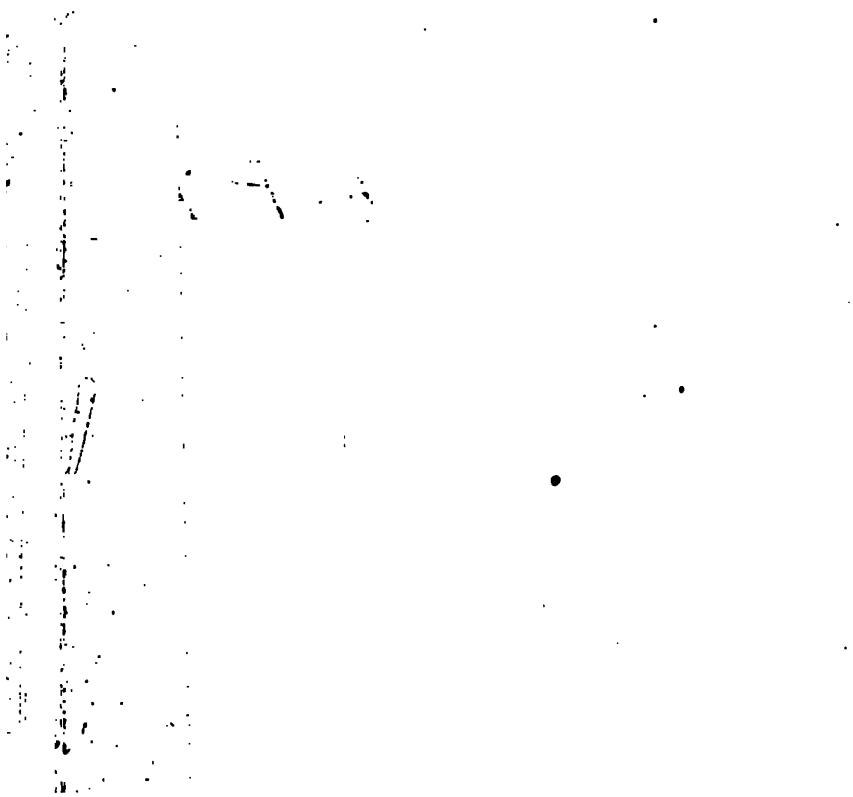
It is stated that the mouth of the Pâhang River is unapproachable in the North-East monsoon and that Pâhang is shut off from communication with the outer world (except by a few jungle paths across the main range of the Peninsula) for six months in the year. I cannot say whether that is true or not, but it is likely, and even in the best of weather no vessel of any size can get near Kuâla Pâhang, while only steam launches of the lightest draught can, in the best weather, get up to Pĕkan at all times of the tide. There is, however, an easy way to open this rich country, and that is by the construction of a road, one hundred and thirty miles long, from Johor Bharu, exactly opposite the Johor end of the Singapore-Kranji Road, to Pĕkan. About seventy miles of this road would pass through Johor territory, and the rest through Pâhang. A first class bridle-road could be constructed in eighteen months for less than $150,000, and it could at any time be widened into a cart-road or converted into a tramway or light railroad. This would put Singapore and its resources in direct communication with the lower country of Pahang, besides tapping a long stretch of land, both in Johor and Pahang, useful for the cultivation of low country tropical products.

A town should be established at the junction of the [illegible]-lin and Pahang rivers, as a centre for the trade of the [illegible]r metalliferous country, while the present road from [illegible]a Lumpor (the terminus of the Sĕlângor railway) to Ginting Bidei should be continued down the Pahang side of the main range to Bĕntong and Pĕnjum, or some nearer point on the Pahang river. The cost of these roads would be insignificant in comparison with the advantages they would bring to Pahang, and in a lesser degree to Johor and Sĕlângor; but if it were possible to get the work done under the present *régime*, it may be doubted whether those who now direct the affairs of Pahang would be able to utilize their opportunities for the best interests of the State.

F. A. SWETTENHAM.

PAHANG, 10*th May*, 1885.





THE OBJECT AND RESULTS OF A DUTCH EXPEDITION INTO THE INTERIOR OF SUMATRA IN THE YEARS 1877, 1878, AND 1879,

BY

M. A. L. VAN HASSELT.

[The following paper has been translated from the French by Mr. R. N. Bland, C. S. The original will be found in the second Volume of the Proceedings of the Third International Geographical Congress (held at Venice in September 1881), published by the Italian Geographical Society. No account, it is believed, has been published in English of the Dutch Mid-Sumatra Expedition and, in the absence of an English version of their official reports, it is hoped that Mr. Van Hasselt and his companions will not object to the publication of this translation, which has been undertaken unavoidably without their consent being first obtained.

ED.]

A SHORT time after the Commission of the Netherlands Geographical Society had decided upon a scientific expedition into the interior of Sumatra, I was, by virtue of my office, as Government "Controleur" at Soepajang, invited by the above-named Commission to take charge of one of the sections into which the expedition had been divided. Although convinced of the great difficulties of the task about to be entrusted to me, I thought it my duty not to refuse so honourable a mission.

From February, 1877, to March, 1879, we remained in the districts that had been assigned to us, and though not able to apply "*Veni, vidi, vici*" to ourselves, we nevertheless collected a mass of details regarding the country, of which, on our return, it was our privilege to render an account.

Those who are acquainted with the work in which are united the results of the Sumatra expedition, and which, thanks to the efforts of our Commission, has taken so high a place at this Geographical Congress, may have observed that our labours are not yet ended.

While we were still occupied with our report, the Netherlands Society received an invitation from the Central Commission of this Congress, to send its representatives to the ancient City of the Doges. Amongst the delegates of our Society to this Congress where so many illustrious geographers and famous travellers were to meet, the honour of representing the Sumatra Expedition, fell upon two of its Members, Mr. D. D. VETH and myself. I was specially entrusted to explain in this place the object of the Netherlands Scientific Expedition into the interior of Sumatra, and the results arrived at.

I would ask, at starting, to be allowed to refer to the published portion of the work compiled on the return of the Expedition, by its Members. I trust I may be permitted to state briefly what was known of the interior of Sumatra previous to our Expedition, and what has been done by us to extend this knowledge. Various circumstances had within recent years contributed to awaken attention to Sumatra, and our experience of the country and its people was called in to supply the existing gaps. Up to the end of the 18th century MARSDEN's book* was the only work comprising everything which at that epoch was known of Sumatra, but after that time, the scientific researches of several later travellers had accumulated knowledge and discovered new facts with regard to the Eastern Coast; these were most notably JUNGHUHN,† VAN DER TUUK, SOLOMON MÜLLER, A. HÖMER, VAN OORT and KORTHALS, OOSTHOFF, TEYSMAN, CORDES, LUDEKING, and lastly the Italian traveller BECCARI. In the branch of geographical research, BEYERINCK and CLUYSENAER chiefly distinguished themselves, and in the region of topography and geology, the Engineers VAN DIJCK DE GREVE and VERBECK. For Bencoolen and the Lampong districts we had the *data* of Major STECK, the travellers DU BOIS and ZOLLINGER, General KÖHLER, the philologist VAN DER TUUK, and various public officials of Netherlands

* History of Sumatra, London, 1783, 1784, 1811, 4°.

† The titles of all works and articles in Reviews treating of Sumatra will be found at the end of a paper upon this Island by Professor P. J. VETH, reprinted in the Statistical and Geographical Dictionary of Netherlands India, Amsterdam, 1873, p. 777 *et seq.*

India. Until MARSDEN's time the extent of the important kingdom of Palembang was little known, but the wars and military operations on a small scale which were the inevitable result of the collapse of the Sultanate and submission to the Netherlands authority, have, within the last half-century, increased our information with regard to this important country. To this the writings of SALMOND, PRESGRAVE, COURT, DE STUERLER PRÆTORIUS, GRAMBERG, TEYSMAN, WALLACE, MOHNICK and DE PRUYS VAN DER HOEVEN have especially contributed.

On the North of Palembang, are situated the kingdoms of Djambi, Indragiri and Kampar, of which the first is reckoned as a dependency of Palembang. The second is tributary to the Sultan of Lingga and consequently considers itself as within the jurisdiction of the Riouw Residency, whilst Kampar, formerly part of the ancient kingdom of Siak, now acknowledges the authority of the Residency of the East Coast of Sumatra. This part of the interior had never, previously to to our Expedition, been thoroughly explored, and of the two rivers—Kampar, and Indragiri or Kouantan—our specific knowledge was limited to their mouths and the immediate vicinity. The Residency on the East Coast embraced in 1873 the dependencies of the ancient Sultanate of Siak; after that date many now highly flourishing agricultural undertakings were established, chiefly at Deli and Langkat, and our acquaintance with this part of the island has thus been increased. Finally, the circumstance to which science is indebted for so much information with regard to the ancient kingdom of Acheen and its people, is no other, alas, than the long war with all its attendant evils, which is now said to be over,—having led to a peace by no means assured, owing to the spirit of hatred existing amongst the vanquished. Sumatra now belongs wholly to Netherlands India. In reality, however, there is in the centre and on the East Coast, a large extent of country in which the rule of the Netherlands is still a fiction, but even there its influence has been daily extending for some years.

The Coast of Acheen in the North; Tapanouli and the West Coast, down to the borders of Mount Barisan; Benkoulen, the Lampong districts and Palembang to the South; the Coasts of Siak, Deli and Langkat to the N. E.—these, gentle-

men, are the provinces now subject to our administrative system. Notwithstanding the researches of the travellers I have already mentioned, there remained a wide extent of country in the centre of the Island which was still, for the most part, if not entirely, *terra incognita*.

The maps of this region showed very inaccurately the configuration of the ground, the topography of the mountains, the courses of the rivers, the geological aspect and fertility of the soil, and the facilities for transport by land and water. With regard to all this and many other questions of ethnography, language and natural history, the works written upon Sumatra left the explorer painfully in the dark. Thus matters stood when our representative, Colonel VERSTEEG, conceived the idea of exploring these unknown regions.

Scarcely anything was known of the river, which, with its many affluents, traverses Djambi, except that its source lies south of the highlands of Padang, and a few other facts gathered in the interests of navigation. Djambi, the Sultan of which was a nominee of the Netherlands India Government, and where a Netherlands official acted as Political Agent, was looked upon as a dependency of the Province administered by the Resident of Palembang.

Djambi was as much unknown to us as Central Africa was to our fathers. Nevertheless there was more than one reason for desiring more intimate knowledge. Most of the Central Districts were celebrated for the beauty of their scenery, their unequalled richness of soil and the industry and pleasant disposition of their inhabitants.

In 1869, after the existence of rich seams of coal on the banks of the Ombilin (the upper waters of the Indragiri) had been discovered by GREVE, an Engineer, who died in the midst of his labours, serious efforts were made to provide means for the transport of this "black gold." The country lying between the coal beds and the West Coast was explored by a band of engineers under the orders of M. CLUYSENAER. They published a large work and detailed maps, but though this was useful from a scientific point of view, the estimated cost of constructing and working a railway to the West Coast was so considerable, that there could be no hope of putting such an idea into execution. This, then, was one of the most

powerful reasons for selecting this portion of the centre of Sumatra as the chief aim of the researches of our expedition. The more so, as the Government was willing to encourage travelling in all these countries, except Korintji, which, for political reasons, was closed to travellers. All the reports of the Government officials as to the attitude of the natives were favourable, and the Government itself gave full support to the undertaking of our Society by large contributions both of money and stores. The actual state of affairs, however, as we found afterwards, differed widely from what had been hoped for in Holland during the preparations for our expedition. Our companion, SCHOUW SANTVOORT, who afterwards died at Djambi, experienced this at starting, when making his perilous expedition across the island in a canoe; and when later we endeavoured to visit the petty states of Manangkabo, which divide the Netherlands territory in the highlands of Padang from the great kingdom of Djambi, we were obliged to beat a precipitate retreat owing to the hostile attitude of the Prince of Si Gountour;* and the news of the unfavourable disposition of the above-named States spread with such rapidity, that the Government thought it prudent to forbid our penetrating further into the States of Rantau, Barouk and Djambi from the west. We were therefore obliged to turn our steps towards the east. But there also, we soon discovered, when we endeavoured to explore the District of Limoun, a part of the Djambi territory, that all the original reports had been dictated by an unjustifiable optimism, and that even when a friendly chief lent us his support, the general feeling of the natives was too hostile to allow us to shew ourselves any longer without military escort, and still less, of course, to attempt any scientific researches.

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* Forbes, the Naturalist, two years later, failed to penetrate into Djambi. He was advised "not to attempt to enter without the mandate of the Sultan, "meaning not the Sultan recognised by the Dutch Government, but the previous "deposed ruler, who had taken up his court in the interior of the country and "whom all the Djambi people recognised. This was very disappointing, but I "had fared no worse than the Dutch Mid-Sumatra Expedition, which, two years "before, had been advised to turn back at that same place."—*Forbes Eastern Archipelago*, 253.—ED.

What then was the actual condition of Djambi? In 1834, the Netherlands Government had signed a treaty with the Sultan, who, no longer feeling himself able to cope with his discontented subjects, had made the first advances. But when in 1855, RATOU AHMAD NATSAROUDDIN succeeded him, difficulties arose, resulting in a military expedition to Djambi, which, by an attack on the Kraton, drove out the Sultan. The Government appointed Sultan AHMAD as his successor, and was satisfied by erecting a small fort, in which a weak garrison was stationed, leaving the conduct of the new Sultan to be controlled by a Political Agent. The expelled Sultan, generally known as Soutan TAHA, retired to the interior, where, fixing his residence at Telok Perdah on the Batang Hari, near the mouth of the Tabir, he managed to attract a number of followers.

His authority, though insignificant, was recognised by all the Chiefs along the Hari and its tributaries as far as the mouth of the Tembesi.

Sultan AHMAD, lacking the power to make himself respected, was obliged to submit to the existing state of things and to conclude a treaty of amity with his predecessor, by which the boundaries of the territory of each were fixed.

Meanwhile, the resentment of Soutan TAHA against the Europeans who had deposed him did not diminish, and he did not cease to incite revolt among all who could be considered friendly towards the Netherlands Government.

The unfortunate results of such a state of things were, as might have been expected, experienced by our comrades, who in a steam-launch were engaged in making a survey of the rivers; they were obliged to suspend their labours owing to the hostile attitude of the natives, who prevented their further advance. As I have already stated, the expedition had been divided into two parties, one of which was detailed to explore the highlands, the other to survey the river Djambi and its affluents. The leader of the latter was Mr. S. SCHOUW SANTVOORT, an officer of the Netherlands Navy, who, on his decease, was succeeded by Lieutenant C. H. CORNELISSEN. A steam-launch was placed at their disposal,—a boat perfectly suited to the work in hand owing to its dimensions and its small draught of water. The other members of the

party were Mr. MAKKINK, the pilot, and Mr. HERMANS, the engineer, afterwards succeedeed by Mr. SNIJDEWIND.

As for myself, I was at the head of the other party, assisted by the Civil Engineer, Mr. D. D. VETH, who was entrusted with the geographical, geological and meteorological investigations, as well as the preparation of negatives for photographs, and by Mr. SOH T. SNELLEMAN, whose province was zoology in its higher branches. Ethnology and the study of languages fell to my share.

In summing up the results of our researches in this marvellous country, I will first deal with geography, as this subject, at a Geographical Congress like the present, should be given the first place.

It seems superfluous to explain the success which crowned the efforts of Messrs. VETH, CORNELISSEN and SANTVOORT; with the exception of quite a small portion, the courses of the Hari and its chief affluent, the Tembesi, were minutely surveyed. It was thus discovered that the Hari, on quitting the highlands of Padang, flows due North, whence it follows that the furthest point navigable for large boats, is much nearer to the coal mines of Ombilin than it appeared to be on former maps; so much so that the Hari is of as much importance, as a highway for the transport of minerals to the East Coast, as the river Indragiri itself. In surveying the southern part of the Padang up-lands it was discovered that the rivers Mamoun and Pottar belong in no way to the Kouantan basin, but are affluents quite distinct from the Hari. But most notably in the survey of Lebong was the inaccuracy of former surveys made apparent.

The mountains of the interior of Sumatra have been described with great exactness by Mr. VETH in the 2nd part of our work, which also contains all the geological and meteorological records. The large collection of photographs of the country and of the people taken by him, are assuredly not the least part of the labours which have helped to extend our imperfect knowledge of Sumatra and its inhabitants. Again, amongst the things which we were enabled to bring back with us, I must mention an ethnographical collection* of more

* This collection is placed in the Royal Ethnographical Museum at Leyden.

than 500 objects, almost the whole of which have been reproduced in the 3rd part of our work. We trust that they will give a true idea of the life and customs of the Malays, set forth as they are in thirteen chapters of our ethnographical description. In my linguistic researches, I set myself as much as possible to note words and to collect manuscripts.

As to these latter, I frequently had them read and explained to me, in order to learn the real meaning and the proper pronunciation of words. The difficulties I had to overcome will be evident to all those who will take the trouble to examine the word-lists of the Rawas and Lebong (known as the Redjang) dialects, and the songs, puzzles and proverbs which I gathered from the lips of the people themselves, as well as the Manangkabo, Mouroi-Batou and Touankounan Tjeredeg manuscripts. Besides, I was fortunate enough to gather complete information about the figure-characters of the Rentjoung as well as the method of spelling and writing them.

This figure-writing owes its name to the manner in which the words are engraved with the point of a knife upon strips of bamboo.

I was, on several occasions, able to gather interesting information with regard to the aborigines of this part of the country—the Koubous—and I am in a position to state this curious fact, *viz.*, that their language, which at the first glance appears to differ entirely from Malay, appears on closer investigation to be almost the same language as that of the Malays who inhabit the Koubou district. Only, the pronunciation of the Koubous is harsher, and their peculiarity of expression takes the form of a dialect.

We were lucky enough to obtain some valuable botanical specimens, and some other fortunate finds go to show that our researches were not altogether fruitless. But most remarkable of all were the results of our zoological investigations. We brought back 30 mammals, 285 birds, 173 reptiles and amphibians, 385 fish, 5 to 6 thousand insects, including 323 species of lepidoptera, and a large number of molluscs.*

* The greater part of this collection is now in the Royal Museum of Natural History at Leyden.

Amongst these animals, there are many new species, especially amongst the insects of which many species had never previously been observed in Sumatra. Looking at this large number of animals collected in a comparatively short space of time, one might be led into the mistake of supposing that the formation of such a collection would be an easy matter. Without counting the difficulty of preparing and packing up most of the specimens, the very hunting for them was attended with many obstacles, and involved great loss of time. The richness of the tropical fauna has passed into a proverb, not without reason, but like most treasures, it must be sought after out of the beaten track, and it is only little by little that the paths leading to the hidden treasures of nature are to be discovered.

In giving the preceding resumé, I have accomplished the task alloted to me, but permit me now to introduce you in imagination, for a few moments at least, to the countries visited by my companions and myself at the time that we traversed these uncultivated regions, deeply impressed with their unique beauty. I will choose those pages of our journal which describe our ascent of the peak of Korintji, or Indrapura, the highest mountain in Sumatra, and one of the highest volcanoes in the Indian Archipelago. We were in the country of the "twelve kotas," a district bounded on the S. W. by the above-named mountain, and as before ourselves no European, and still less any native, had ever attempted the ascent, the preparations for our departure occupied some space of time. Our first idea was to take with us native carriers, called *koulis*, but as it was too risky to set out with our necessary baggage without knowing anything about the nature of the ground, or even if it were possible to reach the summit, we took the precaution of sending some explorers on ahead as an advance-guard. The superstitious nature of these people, however, so excited their imagination that they returned to us with all sorts of extravagant stories of the inaccessible rocks they had seen, and the fearful monsters they had met. A second attempt on their part was more successful, and although uncertain as to being able to reach the highest point, we set out on the 5th December, 1877, full of ardour and determination. Besides

the coolies, we were accompanied by the two guides who had conducted the exploring parties, and by the Touankou of Dourian Taroung, an intelligent chief, with two of his followers. Each *kouli* carried 8 *chupaks* (4·½ kil.) of rice, whilst the two guides and the chief's followers carried between them 40 *chupaks*. Besides rice, each had to carry a part of the baggage necessary for such a long stay in the jungle: firstly, our camp-beds, and *klambous*, or mosquito curtains, articles not less indispensable than a change of clothes in case of rain; some simple cooking utensils, and some tinned provisions, to afford a change in our principal diet, viz., rice; these constituted our equipment, together with the other part of our baggage, consisting of instruments for making geographical and atmospheric observations, whilst those necessary for the collection of plants and animals were not wanting, and finally 2 chairs and some guns and ammunition completed the whole. Every portion of our baggage was carefully wrapped up in tarpaulins, which, fastened together, served as a roof for our shelter at night. Clad in the simple dress suitable for a wandering life in these wild regions, we set out, and our first task was to clear a path with our wood-knives for the *koulis*. These carriers, who, in Sumatra, are accustomed to carrying their burdens on their heads, would never have been able to get along in the small space sufficient for persons not laden, and would have been liable every moment to get caught in the lianes and thorny branches spreading out in every direction overhead, if the guides had not formed a regular bed, so to speak, for the long line of *koulis* following them. We were soon obliged to quit the path on account of the unfavourable nature of the ground, and to continue our march along the bed of a river, a change which considerably diminished our speed and compelled our *koulis* to drop a long distance behind. When we left the water to take again to dry land, our first care, while waiting for the *koulis* to rejoin us, was to look around to see if there was anything worth carrying off. We perceived an object which we were far from expecting to find in such a place, namely a human skull, which projecting out of the water was gazing at us with hollow orbits. Approaching, we discovered the thigh bones belonging to the same individual,

a Malay, who two years previously had been banished from his *negari* on account of leprosy. Ten *soukè* of rice had been set apart for him, and he had betaken himself in this direction provided with an axe, a chopper, a wallet containing tobacco and *sirih*, and a flint and tinder. Thus equipped, he had begun to climb the great mountain, the Peak of Korintji in order to seek among the mountain-spirits a cure for his frightful malady.* He may, perhaps, have reached the summit, but it would seem that the spirits did not grant his wish. Though it may seem inhuman to treat fellow creatures in this way, we must remember that the instinct of preservation, in countries where the population is too often decimated by epidemics, leads easily to measures of this kind. We perched the skull, blanched by the alternate action of air and water on the end of a pole by the riverside, so as to find it easily on our return, feeling sure that no one would come in the interval to dispute with us this strange product of the soil. We followed the path which led from the stream towards the mountain slopes, and which was nothing but a broad track formed by elephants and rhinoceroses. This brought us at about 3 o'clock in the afternoon to Timbouloun. There, we found such an excellent resting place for the night, amidst a conglomeration of projecting volcanic rocks, that we resolved not to push on further, and all the more so because the *koulis* were still far behind. It was only an hour afterwards that the first arrived, and as their number gradually increased, we had to listen to confused accounts of the difficulties they had undergone, and the misfortunes they had met with.

The short time remaining before sunset was occupied in following up for a bit the course of the river, and not far from our encampment, we came across a stream, the limpid water of which dashed down from a height of 20 feet between

* Among Malay races mountain-tops are resorted to as places of seclusion and penance, as being the abode of powerful spirits. See (as to Java), Journ. Ind. Arch., IV. p. 119; Forbes, Eastern Archipelago, 193; (Sumatra) Id. 198; (Borneo) Tijdschrift voor Ned. Ind. 4 Jaargang, 2 deel. p. 9; Prim. Cult. II. 249; (Madagascar) Ellis' History of Madagascar, I. 84; See also Journ. Ind. Arch. IX, 125; and Ellis' Polynesian Researches, I., 397 and IV., 404.

ED.

granite walls. The water dripped ceaselessly from trailing creepers and from the rocks which overhung the cataract. Everything around was damp, the air chill, and the silence, which weighed like lead upon the whole scene, was unbroken, save for the monotonous noise of the falling drops. In the meantime some of our *koulis* began to cut down young trees and branches, and to drag them to the place where we intended to form our bivouac. The lopped branches formed the supports of our dwelling-place, which, thanks to the natural shelter we had found, was for once quickly enough put up, and in which, besides our baggage, there was space enough to lodge our followers. A little distance on our left, a large fire was lighted at which our cook busied himself in preparing a meal as frugal as it was welcome. A second fire was lighted in front of the hut, its tall flames casting such fantastic shadows around that we had no fear of being disturbed by any wild beast. After long marches, such as we made nearly every day of our expedition, one is not much disposed to prolong the evening after having dined. The conversation soon begins to flag, and the slightest hint is sufficient to convince the company of the advantage, nay the necessity, of going to rest. We found this to be so, and whilst the *koulis* were, according to their custom, squatting round the fire engaged in animated conversation, we were stretching our wearied limbs on our camp-beds, which though very simple, made a much more comfortable bed than the bare ground. The next morning we made haste to continue our journey, and just allowing enough time to cook a few handfuls of rice, which with ship's biscuit formed our breakfast, we were on our way by half-past 6 o'clock.

We still followed the track formed by the pachyderms, which led us upwards to the north of the mountain. We advanced very slowly, having continually to clear the path of fallen trees, and twisted creepers.

We marched in front with the guides, and towards 11 o'clock we arrived at a hut which had previously sheltered them, but which we could not now make use of, on account of its distance from any water we could drink, and also because our day's task was by no means done. At about 3 o'clock in the afternoon we came to the last hut occupied by the guides,

rather more favourably situated by reason of its proximity to water. We commenced at once, therefore, to establish ourselves there, and after we had cleared and levelled a space of 6 mètres long by 2 broad, we put up a long shed or *pondok*.

I will not weary you with a too detailed account of our undertaking. Suffice to say that after several fruitless attempts to push forward, we resolved on the 7th December to leave our *koulis* behind with the baggage, and to endeavour ourselves, each escorted by two men with axes, to reach the summit by different routes.

On the 8th of December, about half-past twelve, I was only about 200 mètres from the summit, when my guide, stumbling over a loose stone, fell on his face. Turning round, I found him sitting on a rock, his mouth was bleeding and his knee and arm were bruised. At this moment a violent peal of thunder, with at least a hundred reverberating echoes, broke over our heads. My guide instantly began to urge a return. "Let us go back, Tuan, since we know the way. It is beginning to get dark and we are going to have heavy rain." A second thunder-clap, as loud as the first, sounded almost as he spoke.

"The mountain is angry," he continued "do not let us wait longer." Looking up towards the summit where a short time before a picturesque crest of jagged rocks had stood out above the gravel slopes of the mountain, I could perceive nothing but a black and threatening cloud. There was nothing for us but to return. But this was not so easy, the stones which previously had seemed so solid, broke away every moment under our feet, bringing down others in their fall.

Arriving at the spot where we had quitted the forest, we resolved to follow up the course of the river as well as possible as far as the cataract just above our hut. In this we succeeded, and at about 2 o'clock in the afternoon we reached our bivouac.

On the sixth day after leaving the plain, we at last got to the top. It was on my hands and feet that I climbed the last part, and the view that then met my eyes made me start back with surprise, what I had taken for the top was but the narrow rim of a yawning crater with precipitous sides. More

than 1,000 mètres below, water and sulphur were seething and giving off vapours, which filled the cavity for moments at a time, and then lifted so as to reveal to us the whole bottom of the abyss. This floor presented a sandy surface, with lakes of sulphur here and there, easily recognisable by their yellow colour, and a number of small arteries connecting them. To my right and left the cliffs were more elevated, and prevented my seeing the surrounding country, leaving only a view of the summits of mountains in the distance. Notwithstanding the grand spectacle presented by the high lands of Padang, I could not, but express a feeling of disappointment at our situation, for I saw that it would be very difficult to make our way round the lofty and rugged edge, whose exterior slope, at an angle of not less than 45° was composed of such loosely holding shingle, that a single step was sometimes enough to send immense stones rolling down the precipice.

A few moments later M. Veth rejoined me, and after having satisfied himself that the rocks on our right were absolutely inaccessible, he proceeded to try and discover, more to the south, a spot level enough to set up the tripod rest of our telescope, by means of which we were to observe the surrounding country. After a quarter of an hour's climb he called for the instruments; the Mandor, or head of the *koulis*, with his men, advanced a few steps, but then sat down, declaring that they were giddy. Only two coolies ventured to follow me to the spot where my companion was waiting. Climbing over sharp rocks, we at last reached a level space of a few mètres. Our observations, however, had to be very brief, for big clouds collecting on all sides hindered all exploration. To the S. E. towards the Gounoung Toujouk (seven mountains) we noticed a large lake shut in by serrated peaks, forest clad. In bygone ages this mountain, had evidently been a gigantic volcano, such as the Peak of Korintji at the present day.

N. W. from the foot of the Gounoung Toujouk, the first rice fields of Korintji are situated on the banks of a considerable torrent. These fields were flooded and shone in the sunshine like polished plates of metal. Lastly, when a big cloud suddenly intercepted our view, we noted the state of the

barometer and the thermometer. The first indicated 495 millimètres, the second 7°8. C. On the following day we succeeded in reaching the highest summit of the mountain.

We had been forced to send back five coolies who had broken down, and even the Chief of Dourian Taroung himself was obliged to leave us through illness. As our provisions were sensibly diminishing, and we were afraid that the rest of the coolies would not be able to stand the fatigue and cold much longer, we decided to return.

I must not quit this subject without making some observations upon the character of the *fauna* and *flora* of this volcano, which rises to a height of 3,600 mètres.

As far as the place where we spent the first night, the forest generally resembled those we had already so often traversed, containing a considerable number of large trees linked together by strong creepers and heavy *rotân-manau*. The *kalé* rises side by side with the *waringin*, the sacred tree of the Hindoos, the *koubang*, the *sianouk*, or milk-tree, with its white bark, and the wild *kabau* or *kapok*. The undergrowth consists of large-leaved bamboos, with knotted stems which interlace in every direction, of the *dahun katari*, much used in Malay households, of the *balun-king* with its edible flowers, and a large variety of ferns and grasses.

Advancing upwards, towards our second halting place, bamboos were replaced by varieties of *pouar*, whilst along the river banks the *djombou-ajar* were met with, and further on, in the jungle, *meranti* and other straight-stemmed trees. At this elevation rattan is still common enough, but as in the case of the lianes, it is finer and weaker than in the lowlands.

Ascending higher still, the trunks of the various species of the *kali*, and the *djirah-pâdang* diminish in size, and we notice that they are twisted, knotted, and covered with different kinds of moss. The rattans and climbing plants become more and more rare, grasses take the place of the *pouar*, to be replaced in turn by the thick-stemmed *pakou-rasam*, a species of fern which, together with other volcanic plants, is found right up to the summit.

Above a height of 2,500 mètres, no trees worthy of the name are to be met with, but various kinds of flowering, or

sweet-smelling shrubs, such as the *lâwang*, the bark of which has an odour of orange-flowers, as also the flowers, the leaves, and the fruit of the *sarikmandjari*, a number of sharp edged grasses, and several graceful species of nepenthe. At the highest point, which exceeds 3,000 mètres, wherever a little vegetable soil is collected in corners of the porous rock, are to be seen, besides the plants already mentioned, the *lobak* with its yellow flowers, and the *tjapo-gounong*, whose little white flowers and pointed velvet leaves remind us of the Edelweiss of the Alps. I will not go into the question as to whether the presence of these plants proves the fertility of the soil, but it is certain that the soil of the gentle slope to the east and to the north-east of the Peak, is singularly rich, and perfectly suited to agricultural enterprise.

In digging the ground for the foundations of our hut, as well as in places where landslips had occurred, I ascertained that the vegetable soil was in places more than a mètre in depth. But in order to obtain satisfactory results from the cultivation of this district, it would first of all be necessary to supplement its present scanty population with a supply of labourers from Hindostan, Java, or elsewhere.

The result of our observations of animal life, after leaving the foot of the mountain, may be stated in a few words. The large animals did not show themselves, which indeed they rarely do, for in the depths of these vast forests animal life seems exinct. The tracks of the rhinoceros were only met with up to a height of 2,000 mètres, those of the elephant not beyond 1,500 mètres; wild chamois frequent the inaccessible rocks, and choose out those crevices and grottos which by their projections afford them cover from the wind and rain. Up to the very top we found tracks and droppings of this *antilocarpus sumatrensis*. With regard to insects, we remarked at the summit, some bees, gad flies, some small black insects under stones, and here and there a butterfly. We also met with a species of brown pigeon, perhaps the *Treron Nasica*, and some smaller birds with green wings and red heads. Leeches were only perceived up to a height of 1,300 mètres, while spiders, especially those of the family of *Lycoeides* do not go higher than 3,000 mètres.

We came down the mountain much more slowly than we had gone up. Still the rate at which we were going prevented us from bestowing sufficient attention on the natural features by which we were surrounded, and on the peculiarities of the mysterious forests in which the struggle for existence is ceaselessly going on—a struggle which man is often unable to explain.

What a delightful feeling it is to reach, at the close of day, an open space where one can give oneself wholly over to the repose and comfort of a bivouac. Many of these places will remain indelibly in our memories. Thus on the evening of the 5th October, we arrived at Sungei Sapi, a most picturesque spot. Our people were already busy putting up a shelter for us under the river bank. The banks rose sheer up both sides, leaving only a clear view of the water up and down stream. Our hut was quickly built on the stony soil of the upper part of the river-bed, which was then dry. Soon the fire for preparing our repast was lit, whilst near at hand resounded the axes engaged in felling the trees destined for building our *pondok* or hut. All around is movement, not, however, to be of long duration, for as soon as the strictly necessary labour is over, everyone makes himself as comfortable as possible, in order to make the most of this charming resting-place.

Let us take the trouble to more minutely examine the ground around us. By the path leading to the river, and at a short distance from it, we notice coffee-bushes, durians, mangosteens, and jambu-trees. It is evident that these are not forest trees, but are the living remains of a village, which, like so many others, has disappeared. Not a house whose inhabitants might have told us their story has been left standing; nothing has survived but these few fruit trees which nature will reclaim in like manner, so as to completely wipe out every vestige of the past.

To our left, the river flows slowly over a bed of stones, and not far away is hidden from us by a bend.

On our right hand the scene is very different. The water flows impetuously and dashes itself down from a high rock into a deep basin, falling in a broad sheet with a continual roar, like an avalanche of pearls, and bringing with

it an icy current of air. It would be impossible to imagine a more picturesque bit of water scenery than this natural basin. As long as the day-light lasted we made notes, or arranged the collections made during the day.

The approach of night forced us to give up our work, and we placed our chairs at the water's edge enveloping ourselves in fragrant Havana smoke. The subdued effects of twilight are unfortunately unknown in these countries. It is as though the sun were in haste to hide himself, and in this enchanting spot the night fell suddenly and covered all our landscape with its black veil.

Then almost at once we heard the leader of the insect orchestra take up his office, and with a diabolic note give the signal to begin. The light of phosphorescent cockchafers shine fantastically amidst the trees, bats flit like shadows around our resting-place.

The *koulis*, who have lighted a second fire on the other side of the hut, are squatting round it, intercepting the light, which thus falls only on a portion of the river and hardly reaches the distorted tree-roots which a land-slip has exposed on the opposite side.

Our rice will soon be ready; our old cook is giving it his whole attention. Clad only in a pair of trousers, he is sitting cross-legged and is with imperturbable gravity stirring his rice with a long spoon. His whole figure is stiff, severe, and rigid, as though it were carved in wood. Of the Malays seated between us and the fire, we can only distinguish the outlines, whilst every feature of their companions who are sitting opposite to us is vigourously brought out by the red gleams, produced by the light of the flaming wood upon their browned faces and bodies. And while they rest themselves, smoking their cigarettes, they listen attentively to one of their number who is telling the history of some previous excursion. Doubtless, nowhere does nature offer more splendid spectacles than in these distant forests. There is no monotony, on the contrary, an infinite variety. Sometimes the surroundings inspire us with calm, at other times we are awed by the stern force with which nature works out her ends. The aspect of water rushing downward from the mountains with ever increasing impetuosity,

tearing a way for itself through and over the most colossal and massive rocks, is truly terrific.

And what shall we say regarding the fine layer of earth, which covers the rock, and which, although often not more than a few centimètres in depth, yet nourishes and gives its vital forces to a forest of gigantic trees, of brushwood and lianes infinitely varied, and wearying the imagination with their diversity of form and colour?

Our European forests cannot be compared with the flora which Sumatra presents to our astonished eyes. Gigantic trees strike their tenacious roots into the earth, or project them into the air, as though nervously defending themselves against the attacks of assailants.

In straight lines and fantastic curves, branches, leaves, trunks and roots, twist in and out disputing for nourishment; here lianes attach themselves like tightened ropes to the trees, or else twist in spirals round a young tree, whilst there, they are poised without support, cork-screw fashion. What is the meaning of this spiral without a prop? The victim which it formerly entwined, succumbed to its stifling embrace and fell into dust, leaving only the fatal knot which had strangled it. No plant can grow without a struggle: parasites are everywhere, on the bark, on the branches, on the leaves. It may easily be understood how hard it is to recognise the parent amidst this chaos; the parasites climb from branch to branch, until the last leaf disappears, and the last twig, bending beneath their weight, succumbs, and hangs like the powerless arm of a vanquished man. And all this luxuriant verdure, striving to climb on high in order to enjoy the sparkling sun-light, twists about and forms an inextricable network, which only the wood-knife and the axe can unravel. The rattan winds about like a snake between the most delicate stems as well as between the thickest trunks, and rears its spiny head, like a plume, amidst the tops of the loftiest trees.

From time to time a bamboo grove presents an agreeable change to the eye. The large stems spring forth majestically, to fall afterwards in graceful curves; sometimes the path is blocked by a fallen tree, which in its heavy fall has dragged down a whole plantation with it, while crushing a

portion of the forest opposite. Knowing that time with his inevitable scythe will put all things in order, the native in such a case avoids the obstacle, goes round it, and clears himself a new path which rejoins the old one further on.

Gloomy obscurity and heavy silence weigh upon these forests, never visited by Europeans, and seldom by Malays. At midday, surrounded by native followers, there should be nothing to alarm one in such a place, nevertheless one lifts one's head with a shudder, when the mysterious stillness is broken by a falling leaf, fluttering down and grazing the tree-branches, or by a loosened stone rolling down a ravine. It is the influence exercised by this tropical nature.

Thus in a framework of verdure, the torrent rolls down from rock to rock with foam whiter than snow, until, become at last a cataract, it sways the broad leaf of the *pisang*, as easily as the lace-like fern. The basin into which it is ever pouring its limpid water contains myriads of shining fish, which find nourishment in the fruit which the torrent brings down with it. And when chance rays of sun-light manage to pierce the dome of verdure, then one's eyes are greeted with a splendour of tints and colours, which one must have seen before one can admit that it is impossible to describe them.

But other surprises are in store for us in these wild localities. When after marching for several hours, or rather jumping from stone to stone in the bed of a river, one enters the forest, one is struck by the incredible mass of dead leaves which one meets with, and which form a fertile soil for the trees from which they have fallen. All these leaves are covered with a mildew as glossy as silk, delicate as a spider's web, and white as snow, standing out against a dark background. Indeed one is afraid to make a step lest one should destroy in an instant these works of art of such inimitable delicacy and elegance. In the midst of these is enthroned the Giant of the Forest, the *malaboumei*, a tree whose trunk is a mètre and a half in diameter, and which rears its majestic head straight overhead at a height of 100 feet.

It is natural that one should be singularly impressed by this contrast, or rather by these extremes which meet, as the proverb says, like the first and last pages of a treatise on Botany placed side by side.

The tree-trunks are covered with many species of plants, belonging, it is true, to the same family, but varying infinitely in their development. Here are rattans twining round a tree like the boa round its prey. There the *akar lamboutou* thick as man's arm grows side by side with the *rotan emboun* as fine as thread.

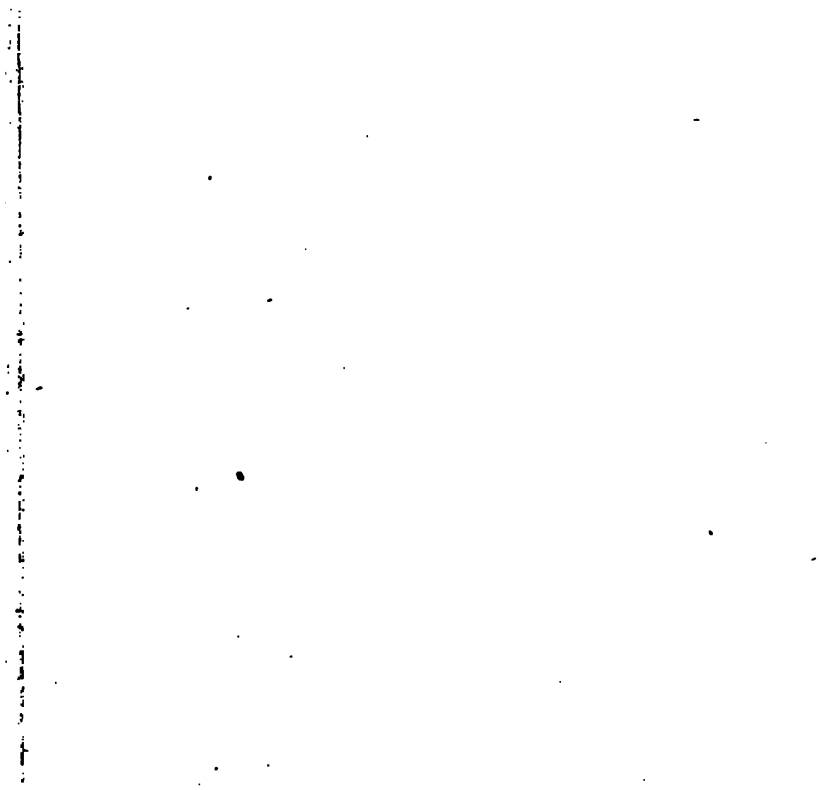
As has already been remarked, few large animals are met with in these regions. Sometimes one hears the shrill note of the argus pheasant. Occasionally a monkey is visible leaping and swinging from one branch to another. But as far as the smaller animals are concerned, an attentive explorer may observe much. Amongst insects, we found many whose only means of defence lay in their disguise, creatures which so much resemble, in form and colour, the earth and the plants amongst which they live as to be mistaken for them. They must have had many enemies to be obliged to assume this disguise in order that their species may preserve its vitality.

Before ending this narrative, I must touch upon the charms which night offers amidst these forests. Hardly has the darkness set in and the stars begun to gleam through the leafy roof than the forest is lighted up by a thousand fires which, at first stationary, seem to be resting in the tree tops in order to afterwards take flight in graceful curves, and at last be lost to sight, like shooting stars.

Even the leaves, the dead twigs, the very soil itself, seem to give forth a phosphorescent radiance. This formless mass covering the earth, which but lately impeded our march, is now enveloped in a mysterious light; we might describe it as an enchanted garden, like those of the Arabian stories, if this simile were not worn threadbare.

It is unfortunate that this fairy-like scene is marred by the music of cicadae, which far from producing the harmonious sounds which would be appropriate to *une belle nuit fantastique*, assail our ears with piercing cries, uttered with demoniacal strength and a pertinacity only to be paralleled by the bass notes in this impromptu concert which are supplied by the mountain torrent.

Such are the sights that nature unfolded to us in Sumatra. It will easily be understood that we shall not readily forget them.



Further Notes on the Rainfall of Singapore.

FIVE years ago I had the privilege of submitting a few notes on the rainfall of Singapore, which appeared in No. 7 of this Journal. I now purpose to add a few more remarks on this interesting study.

In the last notes above referred to, the registers of two places only were taken into account, viz., those of the old criminal Prison between Brass Bassa and Stamford Roads, for the rainfall in Town, and Mr. Knight's on Mount Pleasant, Thompson Road, for the country; but in 1880, on the removal of the Criminal Prison to its new locality, the former was discontinued, and later on Mr. Knight changing his residence the latter also.

It, therefore, became necessary to take a more general view, and a table has been prepared of the Mean Annual Rainfall of Singapore as observed at present at seven stations, which, through the kindness of Dr. Rowell, Principal Civil Medical Officer, Straits Settlements, in permitting me to have access to the records, I now have the pleasure of submitting, together with charts shewing the ranges of the Mean Annual Rainfall, and Rainy Days since 1869. It will be an easy matter to continue these charts, say at intervals of five years, and thus arrive at some idea of the law of the rainfall of Singapore.

Mr. Skinner in his article on "Straits Meteorology" (No. 12 of this Journal), is of opinion that it is "not too early to endeavour to obtain some results from the series of Rainfall returns" now to hand, and has ventured to connect certain outbreaks of cholera, *beri-beri*, &c., with the rainfall. The concluding paragraphs of that article are very hopeful and promising. The chart accompanying this paper apparently bears out his anticipations that "an excess of rain may be looked for in the years 1884-85," for the line is an ascending one; but it requires the tracings of a few more years to get a clear knowledge of the rhythm of the alternations of periods of lesser and greater ascents before

the corresponding fallings. For instance, the chart shows a sudden fall in the amount of rain for 1871 and 1872, with a slowly increasing rise up to 1875, followed by a still lower fall in 1877 (the lowest recorded). In 1878 there is almost double the rainfall of 1877, rising still higher in 1879, from which period down to 1883, the annual rainfall was steadily decreasing, but in 1884 it again ascended, and may ascend further if Mr. Skinner's conclusions rest on a sound basis.*

The continuous and steady improvements in the sanitary condition of Singapore town and suburbs within the last eight years have been so marked, that it would hardly be fair to draw conclusive inferences from the old returns of health by comparing them with those of recent dates, and attributing any differences to the rainfall. For instance, when cholera broke out as an epidemic in 1873 (having been in the first instance imported from Bangkok where the disease was raging virulently) Singapore was suffering badly from want of water, the season was unusually dry, nearly all the wells such as they were—many being mere pits a few feet deep without any protective wall—had almost run dry, the brick conduit for bringing the water from the impounding reservoir was a failure, as the water could not rise in the aqueduct over the canal, so that the poorer people resorted to the filthy canal water when the tide had ebbed. The largest number of cases of cholera occurred in the vicinity of that canal *commencing* from the Lunatic Asylum, which suffered severely, *extending* to Kampong Kapor, which was a regular hot-bed for developing, continuing and spreading the disease, and *terminating* at Rochor. There were also some cases of cholera from Kampong Malacca and the crowded parts of the

* It is certainly well to wait until we have a larger series of annual returns before generalising on such a matter too positively; and this branch of the subject is only touched upon now to invite the attention of all who may keep or study our Meteorological Records. But from the evidence already accumulated the long drought of 1882-83, which ended last August, was, I maintain, clearly to be anticipated; for it closed the solar period dating from the limited rainfall (160 inches) in 1872-3, and the subsidiary dry period, showing the fall of 148 inches only, in 1876-7. An excess of rain may, in the same way, be looked for in the years 1884-5, and still more in 1885-6: but not so great an excess, these years merely closing the subsidiary period of excess from 1879-80 (228 inches).—**Journal No. 12 of the Straits Branch of the Royal Asiatic Society, pp. 254-5.**

town south of the Singapore river, places deficient in water supply, and where sanitation of any sort was never thought of.

Then, again, in 1875-77, outbreaks of cholera in an epidemic form were mainly averted by the untiring exertions of Messrs Bayliss and Colson who had charge of the water-works then in course of completion. They opened up the conduit in several places near the Race Course, and stationed a steam engine at the distal end of the aqueduct and pumped the water across the canal, rendering the precious element available to large numbers of people ; and, later on, by the completion of the water-works, good wholesome water was distributed throughout the town, which has helped to produce so marked a change, that since then, cholera or choleraic diarrhœa has not appeared in an epidemic form.

As regards *beri-beri*, I think the Medical returns will show a marked falling off in the numbers treated since the removal of prisoners to the new Jail.

There can be no question that a great many unknown influences are at work on and around this globe of ours which more or less affect the health of its inhabitants. For some time past attention has been drawn to the wonderful spots on the sun, and they have been the subject of study of many observers, but the results must necessarily be slow. That the moon also has a share in some of these influences must be conceded, for it is well known that atmospheric disturbances are more frequent at certain stages of the moon's phases than at others, and quite recently there has been free expression regarding the influences caused or to be caused by the perihelia of certain planets, so that the conclusion is still forced on us, that it is as yet premature to calculate with any certainty on this question ; yet every little effort towards helping its solution should be encouraged, and in time the skein which now seems tangled may be unravelled.

In connection with this line of thought it may be suggested that in this, almost the wealthiest of the British Colonies, it is *not too soon* to provide for an observatory under an Astronomer and Meteorologist. The equatorial position of Singapore gives to the Astronomer a more interesting

field for observations than can be obtained at higher or lower latitudes. But till such an idea is taken up by the powers that be, those who have the means, time and inclination can contribute much information by daily observations of the sun when possible, registering the sun spots, if any, and thus ascertain if there be any connection between their occurrence and our rainfall; and the Principal Civil Medical Officer would also help considerably if he could see his way to having rain gauges and registers kept at Changi or Siranggong (extreme east), Tanjong Karang (west), at the Police stations, Bukit Timah Road 7th mile, and Selitar; a more general average of the rainfall could thus be ascertained. The absence of a station or stations well in the centre of the island is a drawback, the more so as many of the streams running into the impounding reservoir, which supplies the town with its drinking water, are fed by the rains falling on the southern aspect of Bukit Timah. There should be little difficulty in teaching the Police Sergeants in charge of the stations to keep the register.

J. J. L. WHEATLEY.

Chart shewing the rise and fall of Rain during the Years 1869 to 1884, Singapore.

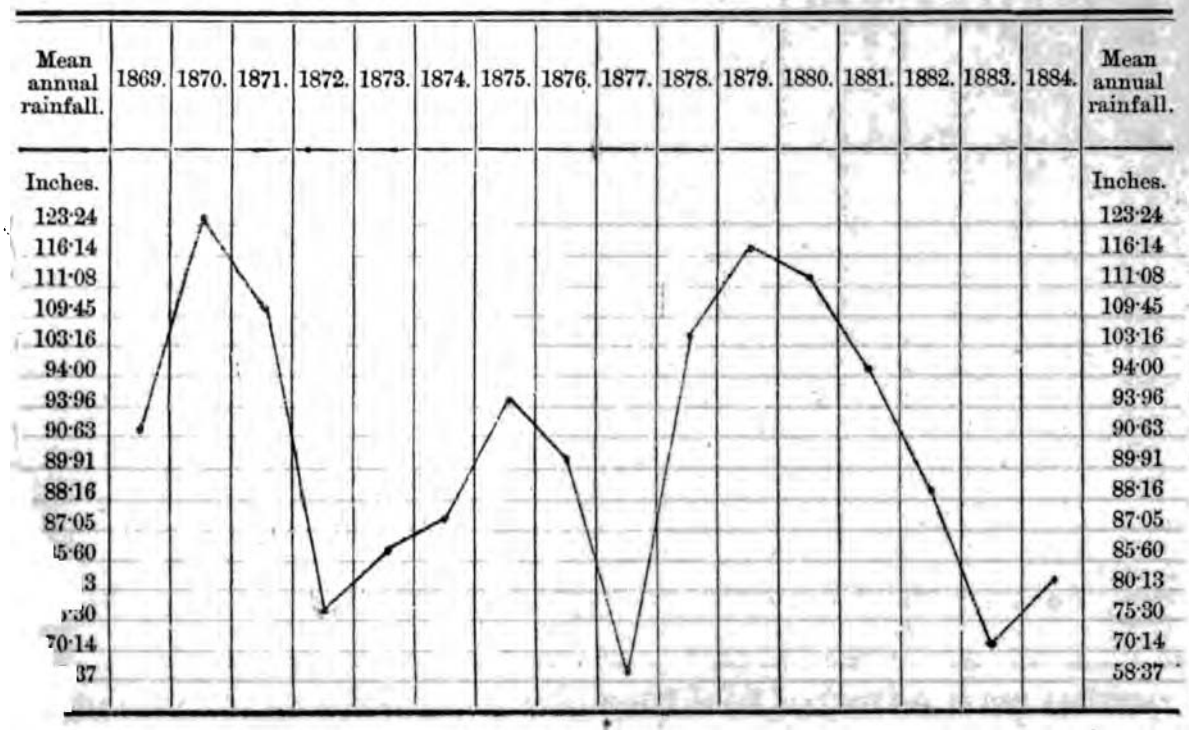
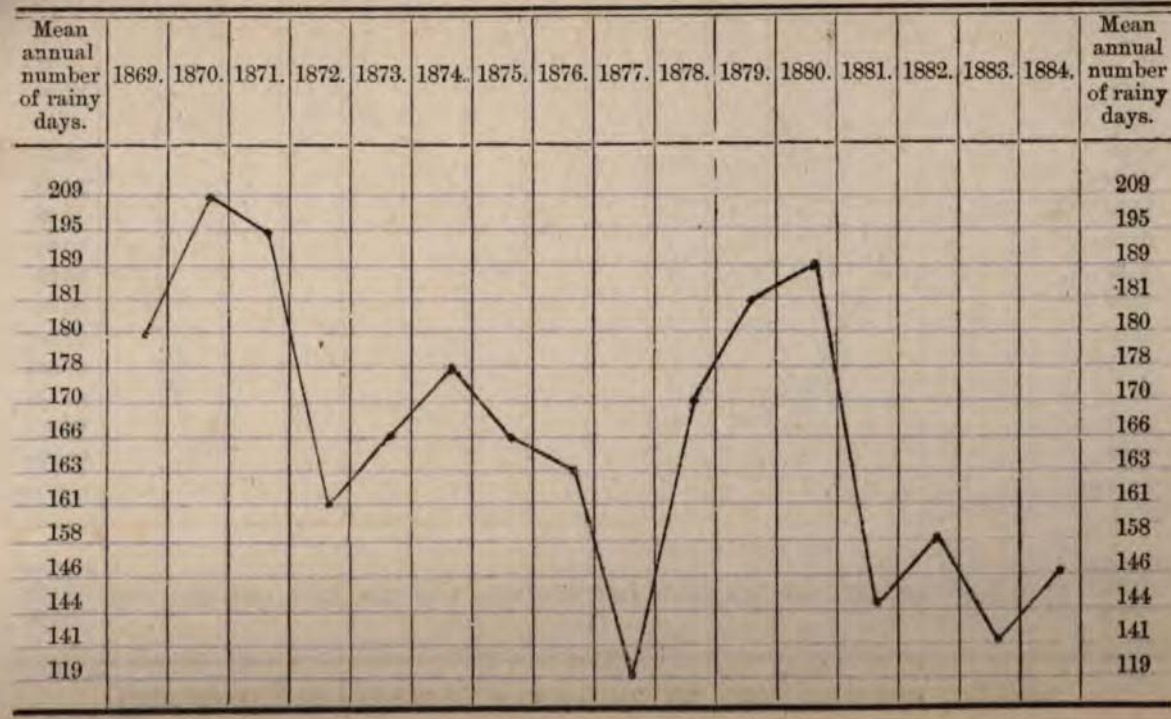


Chart shewing the increase and decrease of Rainy days during the Years 1869 to 1884, Singapore.



1884, Singapore.

Years.	Jany.			Dec.		Total.		Years.
	Inches.	Days.		Inches.	Days.	Inches.	Days.	
1869	3·93	1	21	20·66	26	90·63	180	1869
1870	18·25	2	25	18·13	18	123·24	209	1870
1871	11·05	1	17	12·56	16	109·45	195	1871
1872	2·37		22	6·00	15	75·30	161	1872
1873	7·16	1	20	5·16	17	85·60	166	1873
1874	3·88	1	20	7·56	17	87·05	178	1874
1875	2·91	1	18	6·50	15	93·96	166	1875
1876	3·97	1	19	10·13	21	89·91	163	1876
1877	2·89		11	8·07	17	58·37	119	1877
1878	13·57	1	16	9·91	20	103·16	170	1878
1879	19·18	2	15	10·15	18	116·14	181	1879
1880	5·17	1	21	8·56	16	111·08	189	1880
1881	13·35	1	16	13·32	16	94·00	144	1881
1882	6·58	1	15	7·21	15	88·16	158	1882
1883	3·18		18	7·76	19	70·14	141	1883
1884	8·81	1	12	12·00	11	80·13	146	1884
Means	7·89	1	18	10·23	17	92·27	167	Means

A GLIMPSE AT THE MANNERS AND CUSTOMS OF THE HILL TRIBES OF NORTH FORMOSA.

In a previous number of this Journal,* I touched lightly on the subject of the probable origin of the Hill Tribes of Formosa, adding at the same time a short vocabulary of a dialect spoken by certain tribes and families occupying the savage forest-clad mountains to the South-East and South of the Chinese town of Banca 艋舺 the quondam emporium of foreign and native trade in the North of the island—a town said some twenty years ago to have been composed of thirty to forty thousand Chinese souls. Its position as a trading centre has been somewhat interfered with of late years by the rival town of Twatutia 埕稻大 (situated only a mile or so to the North of Banca), whose growing importance is owing almost entirely to the establishment there of foreign mercantile houses, and to the rapid development of the tea trade, of which Twatutia is the principal mart.

It is my present object to give a description of the aboriginal tribes living in the hills in rear of Banca extending in various directions towards Sû-oh Bay on the East coast, and more especially of those tribes living nearest to the western borderland in the neighbourhood of Kŏt Chiu 尺屈 formerly a Chinese border outpost, as well as of those residing in the mountains at the back of San Ko Yeng 永角三 and to the East also of To Ko Ham 嶺科大 extending down to the "Sylvian and Dodd" ranges in the vicinity of the "Petroleum Wells" discovered by myself in the spring of the year 1865.

* Journal No. 9, pp. 69–84.

The Hill Savages of North Formosa are, without doubt, exactly like other human beings in the shape of their bodies and number of their limbs, and although they are as wild as the animals which roam about their country, have no written language of their own, and live in a most primitive style, yet there are no signs of a Darwinian tail, neither do they at all give you the idea that their progenitors were of the monkey species.

The men are not remarkably tall; in fact I should say that few of them measure over five feet nine inches, and the majority of them are, probably, under five feet six inches. In the South of the island, it is said, the men are of a larger mould than those residing North of Latitude 24 N.

The complexion of old men of the tribes is very sallow and often swarthy; that of young, healthy warriors much lighter and clearer, but there is observable in the majority of faces a dark tinge not to be seen in the faces of Chinese, not quite so dark as the complexion of mixed descendants of Portuguese settlers in Macao, but resembling more the tint to be seen in the faces of fair-complexioned Japanese. They are, if anything, darker-skinned than ordinary Chinamen who have not been exposed to the sun; but the peculiar strain referred to, does not appear so distinctly in the younger members of the tribe, or so strong, as it does in the complexions of those who have taken an active part in hunting, fighting, and in the hard daily struggle for existence.

The skin of the darkest savage of the North of the island is not so dark as the complexions of many representatives of Spain, southern France and Italy, and in higher latitudes, many faces of Celtic type shew as dark a hue as that observable in the faces of the aborigines of the North. In old members of the tribes, the colour of the skin assumes a duskier and sallower tint, constant on the frequent exposure to the sun and to the weather, but with all this, there is no similarity of colour to that visible in the faces of African negroes.

The strain of negro blood was plainly visible in the faces of the wrecked Pellew Islanders, but in the colour

of the skin and in the texture of the hair of the northern tribes there are no signs of negro extraction. Their hair is invariably dark and lank, not curly or frizzled, their lips are not so thick even as those of Malays, and the high noses possessed by many approach often the European type. With these evidences before us, it is safe to assume that these savages have inherited an intermediate colour not apparently traceable to negro admixture. The diversities of colour in men, whether in a civilised or wild state, have puzzled enquirers, I imagine, up to the present day, and it is impossible to say with any certainty now, after all the speculations and theories enunciated in books on the subject, whether our first parents were created black or fair-skinned. The stronger reasons are in favour of the former colour, in any case the hot rays of the sun seem to have the effect of only tanning the skin brown, even in the tropics, and this effect in Formosa, where, in the valleys, it is extremely hot for more than half the year, would appear to have no hereditary consequence on the colour of young savages who are launched into the world year after year. The colour of the skin of all peoples must necessarily be a guide to descent, for it must be inherited, of course with modifications. I have considered it advisable to allude to this subject to prove that the savages of North Formosa are not apparently directly descended from the Eastern negro section of the human family, specimens of which are to be found in the islands of the South Pacific Ocean. It is well known that there are certain dark curly-headed tribes in the Philippine group, and possibly similar representatives of that class of people may later on be discovered in some of the numerous valleys of Formosa amongst the tribes to the South of the 24th parallel, when the whole of the country between Mount Morrison and the Sylvian Range has been thoroughly explored. The colour of the skin of all the Northern tribes I have seen appears to be of a uniform hue, without any variety, beyond a darker or lighter complexion observable when comparing bronzed and swarthy old men with younger members of the tribe who have never been much exposed to the weather.

The general contour of the face resembles somewhat that

of a Malay, but the lips of the Formosan savage are not so thick, neither are their noses (excepting in few instances) quite so flat as those of the Malays whom I have seen at Singapore and in China. It may safely be said that there is nothing in their physiognomy which resembles the Chinese, their natural enemies, whom they imagine to be the only other inhabitants of Formosa or indeed of the world.

On first meeting a savage of the true type (not beggar savages who are to be found on the borders and often in Chinese villages), you notice immediately the wide difference between him and the Celestial whom you have left on the opposite side of the borders, not only in the shape of his head, but particularly in the expression of the eye, which reminds you more than anything else of the wild and anxious gaze of a Scotch deer-hound. The eyes of most of the young warriors are strikingly black and piercing, they always appear to be on the move, staring to their full extent and gazing with a clear but eager look as it were at some far distant object beyond you. In the eye of the younger huntsmen and warriors, you cannot recognise care, but the look of those in their prime speaks of anxious thought for the morrow and is an index of the general feeling of insecurity, which must frequently and naturally exist amongst men who almost daily encounter dangers from contact with their human enemies, in the shape of neighbouring unfriendly tribes or the wily Chinese invader, as well as at times the wild animals of the forests, on the flesh of which they are, for the most part, dependent for their subsistence. The expression referred to is not one of fear, but denotes rather a life of care and anxiety.

The head being generally small and round, the face is not particularly large or full. The eyes are very dark-coloured and straight cut, not at all oblique. In those of good-looking young men and women, the lashes are dark and long, eyebrows black, strong and thick, but not overhanging. In some faces they often nearly meet at the root of the nose. They are decidedly a very distinct feature of the face, as beards and whiskers are unknown and a moustache is seldom attempted, though I have seen certain old members of tribes

wearing a resemblance to one: as a rule all hairs appearing on the chin or cheek are plucked out by the roots, a small pair of tweezers being used for the purpose.

The shape of the heads of savages varies considerably, though the majority of them appear round and rather small. Their faces are for the most part of a Malayan type, some have a Jewish cast, and again you observe faces whose profiles resemble those of Europeans. I am inclined to think that these differences in physiognomies are attributable to the mixture of Malay, Philippine and Polynesian blood with the original ancient stocks previously existing in the island.

The men of the northern tribes are in the habit of tattooing the forehead and chin in horizontal lines of about three quarters of an inch in length, and one-sixteenth part of an inch in breadth right in the centre of the forehead from the parting of the hair, which is always in the middle, to the root of the nose.

On the chin, also, are similar horizontal lines, and these are, as a rule, the only tattoo marks that are visible on the faces of the men. On the body they tattoo slightly, but it is not very general amongst them. The men have also a curious custom of piercing the lobes of their ears. Each lobe has a hole through it, large enough to receive a piece of bamboo about the size of a Manila cheroot. They usually wear therein hollow pieces of young bamboo with tufts of scarlet long-ells sticking out of the opening at the upper end; others insert pieces of what appears to be white cuttle-fish bone, about four inches long, with a disc made of the same material in the outer end. On the foreheads of some of the men may be seen similar flat but round pieces of cuttle-fish bone, fixed there by means of a piece of string round the head or attached to a circlet or wreath of embroidered camlets or native-made cloth. On their small, tight-fitting caps, they frequently fix circular pieces of this white cuttle-fish bone, or whatever it is. It seems to be quite a common article of barter amongst them. They use strings of small beads made of cuttle-fish bone not only as ornaments for their heads and necks, but as a "circulating medium." Necklaces, earrings and trinkets of various kinds are made of it. The

aborigines of the northern and central mountains are immensely fond of all sorts of trinkets. Round the necks of old men and young warriors are seen necklaces of wild boars' tusks and teeth of animals. They are worn often as heirlooms, but principally as symbols of individual prowess. They often load their necks with metal trinkets, cuttle-fish beads, &c., to which they attach numerous little appliances connected with the priming and loading of their matchlocks, a motley sort of collection, which excites the curiosity of the beholder. Every man who possesses a gun *(pâhtûs)* wears round his neck curious-looking priming-flasks full of powder, and over his shoulder, or round his waist, an oblong-shaped case, made of skin, often containing several cylindrical-shaped wooden receptacles full of powder. He has generally about him a small bag containing shot and long iron projectiles almost the size of the little finger, which are slipped down the muzzle of the long-barrelled matchlock on top of the powder without any wad between. Matchlocks, however, are not very common in the interior, and even the border tribes are only scantily furnished with them. The majority of the men are armed with bows and arrows, with which they make good practice at stationary objects. Bowmen wear round their waists a deer skin strap, or arrow-belt, and not a man is without a long knife called *lalāo*. Another common appendage is a bag made either of hempen cloth or skin, about four or five inches broad and nine or ten inches long, in which they place dried tobacco leaves. Tobacco grows wild in many parts of the country inhabited by the savages, and in Chinese territory it is cultivated to a large extent in certain districts. The savages simply sun-dry it, then rub it in their hands and place it in their pipes. In this form it is very mild. Foreigners make it into blocks by placing the leaves one above the other; a little water is then sprinkled over them, sometimes a dash of rum, the leaves are then pressed into a compact block, or are compressed into a circular shape about the size of the wrist and tapering to a point at both ends. Tobacco made in this form is tied round tightly together with rope, and is a very good substitute for what is called ship's tobacco. Native-grown tobacco, has been often prepared in this way by sailors on board

British gunboats visiting Tamsui, and has been much appreciated by every one fond of a pipe.

Chinese cultivate the tobacco plant, and large quantities are exported in junks to the mainland, where it is "cured" according to Chinese taste, and in this form is re-imported for the use of Chinese only. The plant seems to thrive in Formosa luxuriantly, and it is a wonder that no attempt has been made here to manufacture cigars and cheroots for foreign exportation. Judging from the quality and size of the leaf, there ought to be no difficulty in producing cigars equal to those made in Manila.

The aborigines of the North one and all smoke tobacco. Men and women invariably do so, and even young boys and girls are addicted to this pleasant vice, and as the plant grows wild and Formosa is a feverish and aguish country, it is not astonishing that smoking is such a common habit amongst them. Their pipes are made of hollowed bamboo and the stem (*tútú bidnâ kûi*) is also made of very thin bamboo reed, being about half a foot to a foot in length, according to the taste of the owner. The bowls are often very tastefully and prettily carved and are frequently ornamented with pieces of metal. When not in use, the pipe is generally stuck in the hair at the back of the head by both men and women.

The clothing of these so-called savages living in the lower hills adjoining Chinese territory is, especially in the summer months, very scant. It consists chiefly of a coat, called *lúkús* resembling very much an enlarged singlet open in the front and as a rule without sleeves. Four straight pieces of native hempen cloth are sewn together two to the back and two in front, leaving room for the arms to pass through, sewn also at the top over the shoulders, but open in front, exposing the chest and stomach. Sometimes they are buttoned across the chest, and sleeves are occasionally worn by border savages. These coats cover the back entirely, and reach down nearly as far as the knees, and although they are usually made of plain, coarse, bleached, hempen cloth, they are almost always embroidered from the waist downwards, or interwoven with either blue or scarlet threads of long-ells, which they obtain from the

Chinese borderers.

The patterns vary very much, resembling somewhat the carvings to be seen on their pipe stems and not unlike the tattoo lines and bars on the faces of the women. They shew great diversity as well as regularity of design, and if not imitations derived from outside sources, they indicate not only originality but great taste. In addition to the *lúkús* the men wear round their waists a strip of woven hemp four or five inches broad, embroidered in the same way as the lower part of the *lúkús*. This girdle or belt is called *habbock*, and is worn next to the skin as a rule, but sometimes outside the coat. The *lúkús* and *habbock* are almost the only articles of clothing worn by the men in the lower ranges of hills, but on the higher levels many wear coats with sleeves, and sometimes clothes made of the skins of animals.

In the summer months, one often meets men and boys roaming about with absolutely no clothes on at all. Some consider "full dress" to consist of a rattan wicker-work closely fitting cap (*mobu*), others strut about all day long with only the belt or *habbock* round their waists, with the *lalāo* stuck in it.

The blade of the *lalāo* is about a foot and a half long and is always kept sharp. It is set in a haft of wood, which is usually adorned in the same way as their pipes, with carvings and pieces of metal. The blade is protected by a sheath of wood on one side and an open wire work guard on the other. At the end of this scabbard is often fixed part of the tail of a Chinaman, or other enemy, who has fallen a victim in some border war or on some head-hunting expedition. The *lalāo* is a most necessary article to possess, for with it they cut their way through the jungle and thick undergrowth, with it they give the death-blow to the game they hunt; they use it in dividing the animals they kill, they eat with it as sailors do with their knives, they cut and split firewood with it, and last of all they cut off the heads of their enemies with this most useful implement. The blades are made by Chinese and are obtained by the savages in barter for deer's horns, &c.; often they are taken from the bodies of Chinese killed by them

in their numerous encounters with their would-be exterminators.

On occasions the men sometimes wear tied over their right shoulder and flowing down the back and across the chest, a square piece of variegated cloth (worn by women as a sort of petticoat, tied round the waist and reaching to the knees), but this article of apparel is worn more by the women than the men.

They wear another kind of coat, or rather jacket, called the fighting jacket. It is made in every way like the *lúkús*, but in its size. Instead of extending low down the body, it only reaches as far as the waist, and is more like a shell jacket without sleeves than anything else. It is made of hemp, very closely interwoven with threads of scarlet long-ells, a colour which, amongst the northern tribes, seems to be the favourite. Further south, towards the Sylvian Range, coats embroidered with blue thread of long-ells are more the fashion. The long-ells and camlets used by the border savages are obtained from their neighbours, the Chinese hillmen. In describing the dress of the savages, I am alluding at present more especially to that worn by men living in the hills to the North of N. Lat. 24, and to the East of 121 E. Long. There appears to be very little variety in the costumes worn in this region, that is, in the lower ranges of hills, but at 6,000 to 8,000 feet above the sea level, great differences in the appearance of the dresses as well as in the manners and ways of the people are observable. A rather curious apology for a great coat is worn in damp or rainy weather, of which they get a very full share at all times of the year, for the lofty mountain ranges, varying from 4,000 to 12,000 feet running nearly the whole length of the island, offer a great attraction to rain clouds.

This coat is made generally of the skin of the large brown deer, only partially cured by exposure to the sun and wind. The design is about as rude as anything can be, a slit of about six inches in length is made in the hide and at the end of the slit a circular piece of the skin is cut out, allowing just room for the neck. The stiffness of the hide and the narrow space

allowed for the neck prevent the coat dropping off the shoulders. A man with a covering of this kind can screw himself into such a position that no part of his body is exposed, excepting his head, and on this he places his jockey-cap-shaped rattan cap, with the peak at the back, thus securing perfect protection from rain. A few other articles besides those named are carried, such as hand nets, fishing gear, rope port-fires (made of hemp or the bark of a tree), worn round the wrists of men armed with matchlocks, &c., but such articles will be referred to later on.

(To be continued.)

J. DODD.

GENEALOGY OF THE ROYAL FAMILY OF BRUNEI.

[The following translation from a native Manuscript, which has been kindly communicated to the Society by His Excellency, W. H. TREACHER, Esquire, Governor of British North Borneo, is a supplement to Sir HUGH Low's paper published in No. 5 of this Journal, pp. 1-35.

ED.]

——:o:——

THE issue of MARHUM TUMBANG DI RUMPUT were Pangeran di Gadong OMAR, who had many descendants, and Bandahara BONGSU, and Sultan KAMALUDIN, who also had many descendants; we cannot enumerate them because there were so many of them; many of them became slaves; ask of others their history.

MARHUM DI LUBAH, Sultan KAMALUDIN, begat Pangeran di Gadong ABDUL and Pangeran di Gadong TAJUDIN, who both became Ministers, and Pangeran PADUKA TUAN and Pangeran KAMARINDRA, who were both *Chatriyas*.* Pangeran TUAH, Pangeran NEIAN, Pangeran ONTONG, Pangeran BADARUDIN, Pangeran KADIR and Pangeran APONG were all his sons by concubines.

He also had daughters—Raja BULAN, Raja PUTRI, Raja NURALAM, Pangeran BONGSU, Pangeran SRI BANUM, Pangeran RATNA and Pangeran TUAH, all borne by concubines.

Sultan MUHAMMAD ALA-EDDIN married Pangeran SRI BANUM, a daughter of Pangeran Bandahara ONTONG, by whom he had two children, the eldest Pangeran MUDA AMIR BAHAR, who refused to be made Sultan, the other Sultan OMAR ALI SAIFUDDIN, who succeeded to the throne.

Before Sultan MUHAMMAD ALA-EDDIN became Sultan, his wife Pangeran SRI BANUM died, and he married Raja BULAN and begat Pangeran MOTALAM and then he became Sultan. MARHUM DI LUBAH made him Sultan because he was of the line of the Sultans.

* A particular rank or order of nobility in Brunei, a corruption of *Kshatriya* (Sanak.), the military caste of ancient India.—ED.

On the death of Sultan MUHAMMAD ALA-EDDIN the throne went back again to MARHUM DI LUBAH.

Pangeran Tummonggong AMPAH, half brother by a concubine of MARHUM DI BRUNEI (Sultan MUHAMMAD ALA-EDDIN) married Raja BULAN.

Sultan OMAR ALI SAIFUDDIN married Raja PUTRI and begat Sultan MUHAMMAD TAJUDIN. On Raja PUTRI's death Sultan OMAR ALI SAIFUDDIN married Raja NURALAM and has a son Sultan MUHAMMAD KHAN Z'UL ALAM. On the death of Raja NURALAM he married Pangeran ISTRI BONGSU, widow of Pangeran PAMANCHA KASSIM, who bore a child called Pangeran SALIHA, who was the daughter of Pangeran PAMANCHA KASSIM.

Sultan MUHAMMAD KHAN Z'UL ALAM, whose name was Pangeran AYAH, married Pangeran SALIHA and begat Rajah NURALAM, the mother of Sultan OMAR ALI SAIFUDDIN, who is now reigning, and Pangeran MUDA MOTALAM, who was called Sultan MUHAMMAD ALAM. On the death of Pangeran SALIHA he married Pangeran NURALAM, daughter of Pangeran SRI RAMA and begat Pangeran MARIAM and Pangeran PASAR.

Pangeran MARIAM begat Pangeran SULIMAN and Pangeran BABU FATIMA, who became the wife of the present Pangeran di Gadong. When Pangeran NURALAM died Sultan MUHAMMAD KHAN Z'UL ALAM married Pangeran SELAMAH, also a daughter of Pangeran SRI RAMA, and begat SRI BANUM, Pangeran MUDA HASSIM,† Pangeran MUDA MUHAMMAD, who is now Pangeran Bandahara, and Pangeran SITI KHATIJAH. He had many children by concubines.

The eldest son of Sultan MUHAMMAD ALA-EDDIN, above referred to, named Pangeran Muda AMIR BAHAR, begat Pangeran NASIRUDIN, who was styled Pangeran Maharaja Dinda, and who begat Pangeran Muda ANAK BAHAR, who became the son-in-law of Sultan MUHAMMAD KHAN Z'UL ALAM and begat Pangeran ISTRI NURALAM, Pangeran Anak Besar MUHAMMAD SAMAN, Pangeran Anak Tengah ISMAIL, Pangeran Anak Damit OMAR ALLI and Pangeran ISTRI. This latter became the wife of the Sultan OMAR ALI SAIFUDDIN, now on the throne.

W. H. TREACHER.

† Pangeran MUDA HASSIM married the niece of the late Sultan MUMIN and had three daughters and two sons. One of the latter was called Pangeran Muda Chuchu Besar and the other Pangeran Muda Chuchu Damit.

FRENCH LAND DECREE IN CAMBODIA.

THE different systems adopted in raising a revenue from land and providing for alienation, inheritance, &c. in certain Asiatic countries brought under European rule were briefly reviewed in this Journal in a paper which appeared in No. 13.* Descriptions of the native tenure and revenue system as they existed in Cambodia up to 1884 were there cited.† With the progress of events, it is now in our power to note the latest effort of European administrators in Asia to deal with the problem of harmonising native customs, as to this department of government, with civilised notions of freedom and justice.

The Convention concluded between France and Cambodia last year provides for much more direct interference by the French in the administration of the latter country than existed under the Protectorate during the previous twenty years. The alleged necessity for this is thus stated by a writer in *Excursions et Reconnaissances*, VIII, 206 (November and December, 1885):—

"It was necessary that France, the protecting power, should at last intervene. Without wishing to interfere unreasonably in the administration of the country, it was necessary that the revenue realised by the land-tax, ceasing to be devoted to the augmentation of the personal wealth of the King or privileged mandarins, should be the source of productive expenditure; it was necessary that the peasant should become owner of his land, and the slave master of his person; that justice should be regularly administered, and that, placed at first within the reach of all by the creation of minor courts, it should be secured by the existence of superior tribunals. It was necessary beyond everything that the execution of these reforms should not be evaded, as so many promises have been during the last twenty years, by the ill-will of mandarins

* *The Law and Customs of the Malays with reference to the Tenure of Land*, Journal, Straits Branch, Royal Asiatic Society, No. 13, p. 75.

† p.p. 100 and 130.

interested in maintaining the existing state of affairs."

"The perusal of the decrees which follow will shew better than any commentary how it has been decided to solve all these difficulties. The tax in kind has been abolished and the right of private property in land created. The eight provinces formed out of the fifty-seven old ones are placed severally under the superintendence of a French Resident; a civil list is assigned to the King, while the headmen of provinces and the judges receive salaries which justify the exaction from them of integrity and industry. Finally, at the Court of the King, France is represented by a Resident-General who, instead of being, as in the past, an almost powerless spectator of Cambodian decline, will have a firm hand over all branches of the administration."

The decrees here alluded to include one relating to the political and administrative organisation of Cambodia, one providing for the judicial organisation, one abolishing slavery, one creating private property in land, and one abolishing tax in kind levied on paddy. All of these are of interest to Englishmen, to whom no experiment in colonisation and in the government of subject races can be a matter of indifference. But only the two last, as bearing upon land-tenures and land-revenue, and therefore related to the subject of the paper already mentioned, are here translated. Whether the political condition of the country will admit of their peaceful introduction remains yet to be seen.*

W. E. MAXWELL.

* "The last mail from Indo-China brings also some particulars as to the situation in Cambodia. This country is far from being pacified; if it is true that our soldiers have been victorious in all engagements and that they have inflicted enormous losses on the insurgents, it is none the less true that the whole country is disorganised, that anarchy reigns there, and that security is wanting. What is most painful to us to notice is that these tidings only reach us through the post, that in the seven months during which the insurrection has now lasted the Governor of Cochin-China has given no details, except when they have been forced from him, and that it is only now that we are beginning to learn the names of the killed and wounded. Undoubtedly it was necessary not to give the movement more importance than it deserved, but it is, to say the least of it, strange that we should not have been informed, until a month after the event, that Pnom-Penh, the capital of Cambodia, had been attacked."—*Annales de l'Extrême Orient*, July, 1885, p. 27.

ORDER RELATIVE TO THE CREATION OF PROPRIETORSHIP IN LAND IN CAMBODIA.

Part I.

Of the Creation of Property in Land.

1. The territory of Cambodia, up to this day the exclusive property of the Crown, is declared to be the property of the State.

2. All persons holding lands by virtue of documents indicating a temporary hiring or alienation will be required to deposit the same, during the six months next following after the publication of this order, in the hands of the Resident of the Province, who will grant receipts for them.

After having been verified by the Resident-General, these documents will, if their validity is established, be countersigned and returned to the parties interested.

3. In default of compliance, within the period specified, with the requirements of the preceding section, land-holders will forfeit all rights.

Part II.

Division of the State-domain.

4. The State-domain includes,

lands assigned as an endowment to the Crown;

lands employed for public purposes *(le domaine public)*;
reserved lands *(le domaine de réserve)*;
alienable lands *(le domaine aliénable)*.

In the endowment of the Crown is included all the immoveable property placed at the disposal of His Majesty the King of Cambodia, with power to him to collect the revenues thereof and to dispose of them at his pleasure, subject to the reservations contained in this order.

In the public domain are included—roads, highways, railway lines and their appurtenances; streams navigable for vessels or rafts, as well as their banks or shores to a breadth of eight *mètres* beyond the ordinary level of high water; all the ways of communication in general; buildings, lands and premises appropriated to a public purpose.

5. The Crown endowment and the public domain are inalienable; the immoveable property composing them can neither be pledged or mortgaged.

6. The reserved tracts include such immoveable property as the government decides to withhold from immediate alienation and to reserve for the wants of the future, although they form a portion neither of the Crown endowment nor of the public domain.

Such immoveable property is inalienable as long as it continue to be classed under this category; it may, however, be pledged or mortgaged.

7. The alienable tracts comprise all lands, the alienation of which is authorised as occasion arises. They may be classified, in each *commune*, in different classes, which will only be disposed of successively, so that lands of the second class will only be alienated after those of the first have been exhausted, those of the third class after the complete alienation of the second, and so on.

8. Land revenue of all kinds, and the rents derived from the immoveable property of the State-domain, with the exception of the Crown endowment, go to the credit of the State budget, which benefits similarly by the sums realised by the sale of alienable lands.

9. The classification of the lands of the State-domain into—

the Crown endowment,
the public domain,
the reserved portion, and
the alienable portion,

will be carried out, and may be modified from time to time by an order of the Resident-General, confirmed by the Governor of Cochin-China, after consultation with the Council of the Government of Cambodia.

The division, according to *communes*, and the classification of the alienable tracts will be effected by the provincial Residents, after consultation with the native authorities, and sanctioned by the Resident-General.

Part III.

Of the Administration of the State-domain.

10. The State-domain is administered, under the high authority of the King and of the Governor of Cochin-China, by the French Resident-General, represented in the provinces by the Residents.

The Resident-General executes, either in person or by those to whom he has delegated authority, all the instruments which affect the State-domain; purchases, sales, concessions, contracts, exchanges, leases and agreements, and represents it in Courts of law.

Part IV.

Of Occupiers.

11. Exceptional advantages will be offered to occupiers of the soil.

Those who have established themselves upon lands forming part of the alienable domain will be admitted, in preference to all other persons, either to become the owners of such lands on a gratuitous title, or else to acquire them by private contracts in consideration of a payment calculated on the

intrinsic value of the soil independent of any added value resulting from improvements made by such occupiers.

12. Those who have established themselves on lands appropriated to the public domain or the reserved tracts will have to quit them within a period to be fixed by the Resident of the province; but they will receive, free of cost, if they desire it, a concession of land sufficient to indemnify them for any losses resulting from compulsory removal.

When the lands in respect of which such evacuation is to be effected are occupied by standing crops, the period aforesaid can only commence from the day of their removal.

13. Every person who shall occupy in the future, without the license of a competent authority, a piece of land belonging to the State, shall be liable to a fine of four times the letable value of the land occupied.

Part V.

Of Alienation.

14. The land of the State may be alienated by means of free gift *(concession gratuite)*, of sale by private contract, and of sale by public auction.

15. Free concession of fifty *hectares** and under, in the country, or of one thousand square *mètres* and under in centres of population, may be granted by the provincial Residents, after consultation with the native authorities; but they will not take effect until after approval by the Resident-General.

16. Concessions of greater extent may be made by the Resident-General. When they exceed three hundred *hectares*, in the case of country lands, or three thousand square *mètres* in the case of populous centres, they must, in addition, be ratified by the Governor of Cochin-China, after consultation with the Council of the Government of Cambodia.

17. Sales by private contract of land of a value of two hundred dollars and under may be concluded by the provincial Residents and confirmed by the Resident-General; above two hundred dollars, they may be concluded by the Resident-

* One *hectare*=two acres one rood thirty-five perches.

General; when they exceed two thousand dollars, they must, in addition, be submitted for the approval of the Governor of Cochin-China, the Council of the Government of Cambodia being consulted.

18. The putting up of land for sale by public auction must, in every case, be authorised, as a preliminary measure, by the Resident-General, who has subsequently to confirm the report of the sale. This report must, in addition, receive the approval of the Governor of Cochin-China, in consultation with the Council of Government of Cambodia, if the price realised at the auction exceeds two thousand dollars.

19. In case the confirmation of the Resident-General, or the approval of the Governor, is refused, the alienations mentioned in sections 16, 17 and 18 will be rendered void and will be of no effect.

20. The draft of the instrument of free concession or of private contract is shewn on the counterfoil of the register of alienations kept at the Residency of the Province in which the land is situated: a duplicate is made out on the detachable part of the same register and an extract thereof upon the butt attached to the latter. These three documents are signed by the provincial Resident and by the purchaser or *concessionaire*, or by two witnesses if the latter be illiterate. The detachable copy and its butt are then torn off and despatched to the Resident-General, who will transmit them, if necessary, to the Governor.

After all the prescribed formalities have been performed, the butt is detached from the duplicate and kept at the Chief Residency *(la Résidence Générale)* while this latter is made over to the party interested to serve as his document of title.

21. The approval of the Governor of Cochin-China may be given in a general way, by a resolution mentioning the various instruments, to several alienations.

22. Sections 8, 9, 10, 11, 13, 14, 15 (the three first paragraphs only), 16, 17, 18 and 19 of the resolution of the 22nd August, 1882, relating to the alienations of public land in Cochin-China, shall be applicable to sales by auction of public lands in Cambodia. The Resident-General is to perform the functions which in Cochin-China devolve on the Director of the Interior.

23. The instrument of alienation may contain a stipulation exempting the land from taxation, either wholly or partially, for a period which shall in no case exceed four years.

The purchase money will be payable either in cash at the time of delivery of title, or by annual payments calculated in such a manner that the purchaser will find himself entirely free within a maximum period of ten years.

24. The cost of taking possession must be defrayed entirely by the purchasers and *concessionaires*.

25. Instruments by which the alienation of State lands is effected are exempt from all fees for registration or otherwise, with the exception of a fixed charge of 20 cents for delivery of title, which will be levied at the time of registration in the register of alienations, on which a minute of sales by auction will be entered.

26. The alienation of State lands takes final effect—in the case of free concessions, by the discharge, for four consecutive years, of the land-tax; or, in the case of alienations burdened with a payment, by the entire payment of the purchase-money.

27. The Resident-General can always direct the revocation of alienations which have not taken final effect, either for non-compliance with the clauses of the contract, or for insufficient or bad cultivation.

The eviction of the purchaser or *concessionaire* is pronounced, after a preliminary suit, by the authority who ordered the alienation, subject to the confirmation or approval of the superior authorities whose concurrence is necessary as laid down in sections 15, 16, 17, 18 and 19.

28. No demise of State lands for farming can take place if it has not been previously authorised by the Resident-General; such demise will then be concluded by the provincial Resident, entered on the register of leases specially kept for that purpose (which will be kept in the way indicated in section 20 as to the register of alienation), and confirmed by the Resident-General in the same way as sales by private contract where the purchase money is less than two hundred dollars, before the detached duplicate is issued to the lessee. This latter can in no case be exempted from payment of the land-tax.

29. Leases of land belonging to the State will be chargeable with a fee of twenty cents on delivery of title. This fee will be levied at the time of the entry on the register of leases.

30. Christian institutions, pagodas, mosques and other religious establishments, will be permitted to keep in full property the lands occupied by them on the 17th June, 1884, the day of the signature of the Pnom-Penh Convention, that is to say, temple-grounds, cemeteries, schools, and priests' houses, with their gardens and out-houses.

Part VI.

Of Registration of Lands.

31. During the six months next following after the publication of this order, there will be opened, for each *commune*, or, if necessary, for each section of a *commune*, quarter, or hamlet, a register of the lands comprised in it, the form of which will be decided upon hereafter.

These registers will be kept in French by the provincial Residents.

32. All mutations of immoveable property must, under pain of nullity, be certified to the headmen of cantons, who will receive the instrument by virtue of which the mutation is effected, will give a receipt for it, and will forward it without delay, through the successive grades of headmen *(par la voie hiérarchique)*, to the provincial Resident for entry on the register of lands of his Residency.

The certificate of the parties interested is verified by a statement signed by the Resident and written upon the instrument of transfer.

No mutation of title can be effected by a verbal contract.

33. The registers of lands will be commenced afresh every five years.

Part VII.

Of Dispossession.

34. No one shall henceforth be obliged to surrender his

property except in the case of its being required for public purposes, and in consideration of fair compensation previously paid.

35. Lands in respect of which dispossession is effected on account of their being required for public purposes, will become part of the State-domain and be classified under the head of *le domaine public*.

36. Whenever there shall be occasion for dispossession, the nature of the public purposes for which the land is required shall be previously declared by an order of the Resident-General. This order will describe the lands to be appropriated, will declare their appropriation, will state, if necessary, any reasons for urgency in fixing the date from which possession will be taken, and will appoint the non-official members of the Committee mentioned in the following section.

37. Within (at the latest) the three months next following the order of the Resident-General, a Committee consisting of—

1, the Provincial Resident, or his deputy, President;
2, the Headman of the *arrondissement* and the Headman of the *canton*, within which the land appropriated is situated;
3, the two non-official members appointed by the order prescribed in s. 36;

shall proceed to the spot, inspect the land appropriated, listen to the claims of the owners and other persons interested (notice having been given to them at least eight days previously) and fix the amount of the compensation.

The Committee will draw up a Report of its proceedings and forward it without delay to the Resident-General, who will pay, within three months from the date of such report, the sums thereby awarded.

38. Except in cases of urgency, possession shall never be taken until the compensation has been paid.

The taking of possession must never be delayed longer than the month following such payment.

If urgency has been formally declared to exist, possession will be taken on the date fixed in the order of the Resident-General.

In either case, the fact of possession having been taken must be recorded in a report by the Provincial Resident.

39. Every act of dispossession which shall not be in conformity with the preceding regulations is hereby declared to be void and of no effect, provided that this shall in no way affect any liability, civil or criminal, which may have been incurred by those officers who may have ordered, prosecuted, carried out, or in any manner taken part in the same.

General Procedure.

40. Any matter not provided for in the present Regulation shall, on the motion of the Resident-General, be determined by the Governor of Cochin-China, the Council of the Government of Cambodia being consulted.

41. The Resident-General is charged with the carrying out of the present order, which shall be enrolled wherever needful, and inserted in the *Journal Officiel de la Cochin-Chine Française* and in the *Bulletin Officiel du Cambodge.*

Given at Pnom-Penh, the 28th October, 1884.

CHARLES THOMSON,
Governor of Cochin-China.

(Seal of the first Minister).

ORDER ABOLISHING THE TAX ON PADDY.

1. The tax upon paddy levied by the *Oknhaluong* is, and shall remain, abolished.

2. The foregoing decision shall apply to the harvest, now in progress, for 1884.

3. Paddy intended for the manufacture of spirits shall continue to be charged with a duty of ten per cent.

4. The representative, for the time being, of the Protectorate is charged with the enforcement of this decree.

Given at Pnom-Penh, the 18th November, 1884.

CHARLES THOMSON,
Governor.

(Seal of the first Minister).

By order of the Governor,

J. FOURÈS,
Representative (provisional) of the Protectorate.

MALAY LANGUAGE AND LITERATURE.

THE Malay language is a member of the Malayan section of the Malayo-Polynesian class of languages, but it is by no means a representative type of the section which has taken its name from it. The area over which it is spoken comprises the peninsula of Malacca with the adjacent islands (the Rhio-Lingga Archipelago), the greater part of the coast districts of Sumatra and Borneo, the seaports of Java, the Sunda and Banda Islands. It is the general medium of communication throughout the archipelago from Sumatra to the Philippine Islands, and it was so upwards of three hundred and fifty years ago when the Portuguese first appeared in those parts.

There are no Malay manuscripts extant, no monumental records with inscriptions in Malay, dating from before the spreading of Islam in the archipelago, about the end of the 13th century. By some it has been argued from this fact that the Malays possessed no kind of writing prior to the introduction of the Arabic alphabet (W. ROBINSON, J. J. DE HOLLANDER); whereas others have maintained, with greater show of probability, that the Malays were in possession of an ancient alphabet, and that it was the same as the Rechang (MARSDEN, FRIEDERICH), as the Kawi (VAN DER TUUK), or most like the Lampong (KERN),—all of which alphabets, with the Battak, Bugi, and Macassar, are ultimately traceable to the ancient Cambojan characters. With the Mohammedan conquest the Perso-Arabic alphabet was introduced among the Malays; it has continued ever since to be in use for literary, religious, and business purposes. Where Javanese is the principal language, Malay is sometimes found written with Javanese characters; and in Palembang, in the Mĕnangkabo country of Middle Sumatra, the Rechang or Renchong characters are in general use, so called from the sharp and pointed knife with which they are cut on the smooth side of bamboo staves. It is only since the Dutch have established their supremacy in the archipelago that he

Roman character has come to be largely used in writing and printing Malay. This is also the case in the Straits Settlements.*

By the simplicity of its phonetic elements, the regularity of its grammatical structure, and the copiousness of its nautical vocabulary, the Malay language is singularly well-fitted to be the *lingua franca* throughout the Indian archipelago. It possesses the five vowels, *a, i, u, e, o*, both short and long, and one pure diphthong *au*. Its consonants are *k, g, ng, ch, j, ñ t, d, n, p, b, m, y, r, l, w, s, h*. Long vowels can only occur in open syllables. The only possible consonantal nexus in purely Malay words is that of a nasal and mute, a liquid and mute and vice versa, and a liquid and nasal. Final *k* and *h* are all but suppressed in the utterance. Purely Arabic letters are only used in Arabic words, a great number of which have been received into the Malay vocabulary. But the Arabic character is even less suited to Malay than to the other Eastern languages on which it has been foisted. As the short vowels are not marked, one would, in seeing, *e, g.*, the word *bntng*, think first of *bintang*, a star; but the word might also mean a large scar, to throw down, to spread, rigid, mutilated, enceinte, a kind of cucumber, a redoubt, according as it is pronounced *bantang, banting, bentang, buntang, buntung, bunting, bonteng, benteng*.

Malay is essentially, with few exceptions, a dissyllabic language, and the syllabic accent rests on the penultimate unless that syllable is open and short; *e, g.*, dátang, namáña, bĕsár, diumpatkanñálah. Nothing in the form of a root word indicates the grammatical category to which it belongs; thus, *kāsih*, kindness, affectionate, to love; *ganti*, a proxy, to exchange, instead of. It is only in derivative words that this vagueness is avoided. Derivation is effected by infixes, prefixes, affixes, and reduplication. Infixes occur more rarely in Malay than in the cognate tongues. Examples are—*gūruh*, a rumbling noise, *gumūruh*, to make such a noise; *tunjuk*, to point, *telunjuk*, the forefinger; *chūchuk*, to pierce, *cherūchuk*,

No. The Roman character has not yet been adopted in the Straits Settlements, either in the Government Vernacular Schools, or by the Native Press.

ED.

a stockade. The import of the prefixes—mĕ (mĕng, mĕñ, mĕn, mĕm), pĕ (pĕng, pĕñ, pĕn, pĕm), bĕr, (bĕl), pĕr, pĕl, ka, di, tĕr,—and affixes—an, kan, i, lah—will best appear from the following examples: root word *ājar*, to teach, to learn; *mengājar*, to instruct (expresses an action); *bĕlājar*, to study (state or condition); *mĕngājari*, to instruct (some one, trans.); *mĕngājarkan*, to instruct (in something, causative); *pĕngājar*, the instructor: *pĕlājar*, the learner; *pĕngajāran*, the lesson taught, also the school; *pĕlajāran*, the lesson learnt; *diājar*, to be learnt *tĕrājar*, learnt; *tĕrajārkan*, taught; *tĕrajāri*, instructed; [*pĕrāja*; (from *rāja*, prince), to recognize as prince; *pĕrajākan*, to crown as prince; *karajāan*, royalty]; *ājarkanlah*, teach! Examples of reduplication are—*ājar-ājar*, a sainted person; *ājar-bĕrājar*, (or *bĕlājar*), to be learning and teaching by turns; similarly there are forms like *ājar-mĕngājar*, *bĕrājar-ajāran*, *ājar-ajāri*, *mĕmpĕrājar*, *mĕmpĕrājarkan*, *mĕmpĕrajāri*, *tĕrbĕl-ājarkan*, *pĕrbĕlājarkan*, &c. Altogether there are upwards of a hundred possible derivative forms, in the idiomatic use of which the Malays exhibit much skill. See especially H. von Dewall, *De vormveranderingen der Maleische taal*, Batavia, 1864; and J. Pijnappel, *Maleisch-Hollandsch Woordenboek*, Amsterdam, 1875, "Inleiding." In every other respect the language is characterized by great simplicity and indefiniteness. There is no inflexion to distinguish number, gender, or case. Number is never indicated when the sense is obvious or can be gathered from the context; otherwise plurality is expressed by adjectives such as *sagāla*, all, and *bānak*, many, more rarely by the repetition of the noun, and the indefinite singular by *sa* or *sātu*, one, with a class-word. Gender may, if necessary, be distinguished by the words *laki-lāki*, male, and *pĕrampūan*, female, in the case of persons, and of *jantan* and *bĕtīna* in the case of animals. The genitive case is generally indicated by the position of the word after its governing noun. Also adjectives and demonstrative pronouns have their places after the noun. Comparison is effected by the use of particles. Instead of the personal pronouns, both in their full and abbreviated forms, conventional nouns are in frequent use to indicate the social position or relation of the respective interlocutors, as, *e. g.*, *hamba tuan*, the master's slave, *i. e.*, I. These nouns vary according to the different localities. Another peculiarity of

Malay (and likewise of Chinese, Shan, Talaing, Burmese, and Siamese) is the use of certain class-words or coefficients with numerals, such as *orang* (man), when speaking of persons, *ekor* (tail) of animals, *kĕping* (piece) of flat things, *bĭji* (seed) of roundish things; *e, g., lĭma bĭji tĕlor*, five eggs. The number of these class-words is considerable. Malay verbs have neither person or number nor mood or tense. The last two are sometimes indicated by particles or auxiliary verbs; but these are generally dispensed with if the meaning is sufficiently plain without them. The Malays avoid the building up of long sentences. The two main rules by which the order of the words in a sentence is regulated are—subject, verb, object; and qualifying words follow those which they qualify. This is quite the reverse of what is the rule in Burmese.

The history of the Malays amply accounts for the number and variety of foreign ingredients in their language. Hindus appear to have settled in Sumatra and Java as early as the 4th century of our era, and to have continued to exercise sway over the native populations for many centuries. These received from them into their language a very large number of Sanskrit terms from which we can infer the nature of the civilizing influence imparted by the Hindu rulers. Not only in words concerning commerce and agriculture, but also in terms connected with social, religious, and administrative matters, that influence is traceable in Malay. See W. E. MAXWELL, *Manual of the Malay Language*, 1882, pp. 5-34, where this subject is treated more fully than by previous writers. This Sanskrit element forms such an integral part of the Malay vocabulary that in spite of the subsequent infusion of Arabic and Persian words adopted in the usual course of Mohammedan conquest it has retained its ancient citizenship in the language. The number of Portuguese, English, Dutch, and Chinese words in Malay is not considerable; their presence is easily accounted for by political or commercial contact.

The Malay language abounds in idiomatic expressions, which constitute the chief difficulty in its acquisition. It is sparing in the use of personal pronouns, and prefers impersonal and elliptical diction. As it is rich in specific expressions for the various aspects of certain ideas, it is requisite to employ always the most appropriate term suited to the particular

aspect. In MAXWELL'S *Manual*, pp. 120 *sq.*, no less than sixteen terms are given to express the different kinds of striking, as many for the different kinds of speaking, eighteen for the various modes of carrying, &c. An unnecessary distinction has been made between *High Malay* and *Low Malay*. The latter is no separate dialect at all, but a mere brogue or jargon, the medium of intercourse between illiterate natives and Europeans too indolent to apply themselves to the acquisition of the language of the people; its vocabulary is made up of Malay words, with a conventional admixture of words from other languages; and it varies, not only in different localities, but also in proportion to the individual speaker's acquaintance with Malay proper. The use is different as regards the term *Jāwī* as applied to the Malay language. This has its origin in the names Great Java and Lesser Java, by which the mediæval Java and Sumatra were called, and it accordingly means the language spoken along the coasts of the two great islands.

Malay is probably spoken with greatest purity in the Rhio-Lingga Archipelago and in the independent states of Perak and Kedah, on the western coast of the peninsula of Malacca. In other states of the peninsula (Johor, Tringganu, Kelantan) dialectical divergencies both as to pronunciation and the use of words have been noted. The most important and the most interesting of all the Malay dialects is that of Menangkabo (Menangkarbau) in the residency of Padang and in Upper Jambi, in Central Sumatra. It abounds in diphthongs, and prefers vocalic to consonantal terminations, thus changing final *al* and *ar* into *a'*, *il* and *ir* into *iye*, *ul* and *ur* into *uwe*, *as* and *at* into *e'*, *us* into *uwi*; final *a* mostly passes into *ō*, so that for *sudāra* and *sudāgar* they say *sudĕrō*, *sudĕgō*; the emphatic *-lah* is turned into *-malah* or *malah há*: the prefixes *bĕr*, *pĕr*, *tĕr* are changed into *bă*, *pă*, *tă*, or *bără*, *pără*, *tără*. Among other changes in pronunciation may be noted *ūrang* for *orang*, *mungko* for *maka*, *lai* for *lāgi*; they use *nan* for *yang*, *na'* for *hendak*, *deh* for *oleh*, *ba'* for *bāgai*, *pai* for *pergi*, *ko'* for *jikalau*, &c. In some districts of Menangkabo (Palembang, Lebong) the Renchong character is in general use in writing this dialect, for which purpose it is far better suited than the Arabic. As early as 1822 a small tract on the customs and traditions

of Moko-Moko, in this dialect, was printed with a translation at Bencoolen. But it is only in recent years that the Dutch have commenced to pay the dialect the attention it deserves, by publishing texts, with transliteration and translations and supplying other materials for its investigation. See the *Transactions* and *Journal* of the Asiatic Societies of Batavia and the Hague the *Indische Gids*, and more especially the philological portion, by A. L. VAN HASSELT, of *Midden-Sumatra*, iii. 1 (Leyden, 1880), where also the best and fullest account of the Renchong character is to be found. Of other Malay dialects in Sumatra, only the one spoken at Achih (Achin) deserves mention: in Java the Batavian dialect shows the most marked peculiarities. The numerous and greatly divergent dialects spoken in the Molucca Islands (valuable information on which has been supplied by F. S. A. DE CLERCQ, G. W. W. C. VAN HOEVELL, and A. VAN EKRIS) and in Timor differ so materially from the Malay of the peninsula of the Menangkabo that they cannot be called Malay dialects at all; whereas the Malay spoken in some parts of the Minahassa (Celebes) scarcely differs from Malay proper.

There is no grammar of Malay by a native writer with the sole exception of a small tract of 70 pages, entitled *Bustānu 'lkātibīn*, by Rāja ALI HAJJI of Rhio, which was lithographed in the island of Peñengal in 1857. A. PIGAFETTA, who accompanied MAGELLAN in his first voyage round the globe, was the first European whose vocabulary of Malay words (450) has come down to us. Next in the field were the Dutch, who provided a medium of intercourse between their traders and the Malays. F. HOUTMAN'S *Vocabulary and Conversations, in Dutch, Malay, and Malagasy*, appeared at Amsterdam in 1603; and it may be noted that the Malay spoken in those days does not appear to have materially altered since. The same dialogues appeared in English and Malay in 1614. Since then numerous grammars, dictionaries, and conversation books have been brought out by English and Dutch writers. As the best helps at present available for the study of Malay may be recommended W. E. MAXWELL'S *Manual of the Malay Language*, London, 1882 (especially valuable for its full treatment of the idioms); P. Favre, *Grammaire de la langue Malaise*, Vienna and Paris, 1876; and *Dictionnaire Malais-Français*, *ib.*, 1875,

2 vols.; *Dictionnaire Français-Malais, ib.*, 1880, 2 vols.; J. J. DE HOLLANDER, *Handleiding bij de beoefening der Maleische taal en letterkunde*, Breda, 1882; J. PIJNAPPEL, *Maleische Spraakkunst*, Hague, 1866; and *Maleisch-Hollandsch Woordenboek*, Amsterdam, 1875. The printing of VON DEWALL'S *Dictionary*, edited by H. N. VAN DER TUUK, is still in progress at Batavia.

Literature.—There are two kinds of Malay popular literature—the one in prose, the other in poetry. The former comprises the proverbs, the latter the "pantuns." "Agriculture, hunting, fishing, boating, and wood-craft are the occupations or accomplishments which furnish most of the illustrations, and the number of beasts, birds, fishes, and plants named in a collection of Malay proverbs will be found to be considerable" (W. E. MAXWELL, *Malay Proverbs*). H. C. KLINKERT, published a collection in the *Bijdragen tot de taalkunde van N. I.* (Journal of the Asiatic Society of the Hague) for 1866, pp. 39-87. See also J. HABBEMA on the Menangkabo proverbs, in vols. xxv. and xxvi. of the Batavian *Tijdschrift*, and FAVRE'S *Dictionnaire Malais-Français, passim.* The pantuns are improvised poems, generally (though not necessarily) of four lines, in which the first and third and the second and fourth rhyme. They are mostly love poems; and their chief peculiarity is that the meaning intended to be conveyed is expressed in the second couplet, whereas the first contains a simile or distant allusion to the second, or often has, beyond the rhyme, no connexion with the second at all. The Malays are fond of reciting such rhymes "in alternate contest for several hours, the preceding pantun furnishing the catchword to that which follows, until one of the parties be silenced or vanquished." See T. J. NEWBOLD, *Account of the British Settlements in the Straits of Malacca*, vol. ii. 346; KLINKERT in the *Bijdragen* for 1868, pp. 309-70; L. K. HARMSEN in the *Tijdschrift*, vol. xxi. pp. 480-533 (Menangkabo). If the Malays have kept entirely aloof from the influences of Islam in this the most characteristic part of their literature, they have almost equally preserved their independence in the other departments. Not that this may be considered entirely to their credit; for, if they had endeavoured to infuse into their writings some of the spirit of Arabic and Persian historiography, poetry, and fiction, it could not but have benefited the character of their own liter-

ary productions. As it is their histories and chronicles are a strange motley of truth and fiction; their poems and novels lack coherence and imagination, and are singularly monotonous and devoid of that spirit of chivalry which pervades the corresponding branches of literature among the leading nations of Islam. As Malay copyists are much given to making arbitrary changes, it happens that no two MSS. agree, and that of many a popular work different recensions exist, which, moreover, often go by different names. This circumstance greatly tends to increase the difficulties of editing Malay texts. Works on specially Mohammedan subjects (theology, law, ethics, mysticism) are of course only imitations of Arabic or Persian originals; there are also numerous novels and poems treating of purely Mohammedan legends. But not only is there traceable in many of these a slight undercurrent of Hinduism and even pre-Hinduism; the Malays possess also, and indiscriminately read along with their Mohammedan books, quite as many works of fiction of purely Hindu origin. The want, however, of political cohesion, and of a national spirit among tribes so scattered as the Malays are, which could have favoured the growth of a national epic or national songs, sufficiently accounts for the absence from their literature of any productions of this class, such as exist in Bugi and Macassar literature. The most popular of their poetical productions are the *Sha'ir Ken Tambūhan*, *Sha'ir Bidāsāri*, *Sha'ir Jauhar Mānikam* and *Sha'ir Abdu'lmulūk*, all of which have been printed. Among the prose works there are various collections of local laws and customs *(undang-undang)*, chronicles (such as the *Sajarat malāyu*), books on ethics (the best are the *Makota sagāla raja-rāja*, and the *Bustānu'ssalātīn*, and a very large number of works of fiction and legendary lore, some of which possess much descriptive power. They all bear the title Hikāyat, and the following are the best-known: *H. Hang Tūah*, *H. Hamzah*, *H. Ismā Yatīm*, *H. Jumjumah*, *H. Bakhtiyār (Sādah Bakhtīn, Gholām)*, *H. Sīmiskin*, *H. Sultān Ibrāhīm*, *H. Srī Rāma*, *H. Pandāwa līma*. Several of these and many other works not mentioned here have appeared in print (with or without translation) chiefly in Holland, Batavia, and Singapore, and extracts have been given in the various Malay chrestomathies by Dulaurier, De Hollander, Niemann, Van der Tuuk, Gra-

SHUIS, and in MARSDEN'S *Malay Grammar*. The best recent Malay writer was 'ABDULLAH IBN 'ABDELKADIR Munshi of Singapore, who died, it is said of poison, at Mecca, some eight and twenty years ago. His autobiography, "Journey to Kelantan," and "Pilgrimage to Mecca" are patterns of Malay style, though the author's contact with educated Europeans is traceable in them, while his translation (from the Tamil version) of the *Panchatantra* is free from such influence.

Malay literature is fairly represented in England in the British Museum, the India Office, and the Royal Asiatic Society, and descriptive catalogues of the Malay MSS. in each of these libraries are available. See NIEMANN in the *Bijdragen*, iii. 6, p. 96-101; VAN DER TUUK in *Tijdschrift voor Ned. Indië* for 1849, i. p. 385-400, and in the *Journal of the Royal Asiatic Society*, new series, ii. p, 85-135. An account of the Leyden collection, by J. PIJNAPPEL, is given in the *Bijdragen*, iii. 5, pp. 142-178. The finest collection of Malay MSS., upwards of 400 volumes, is in the library of the Asiatic Society of Batavia. See L. W. C. VAN DEN BERG, *Verslag van eene verzameling Maleische, &c., handschriften*, Batavia, 1877. If it had not been for the loss, by fire, on their passage from India, of three hundred Malay MSS., the property of the late Sir T. S. RAFFLES, England would now boast of the largest assemblage of Malay MSS. in the world. On Malay literature in general, compare G. H. WERNDLY, *Maleische Spraakkunst*, Amsterdam, 1736, pp. 227-357; E. JACQUET in the *Nouveau Journal Asiatique*, vol. ix. (1832), pp. 97-132, and 222-253; T. J. NEWBOLD, *British Settlements in the Straits of Malacca*, 1839, vol. ii. pp. 215-368; E. DULAURIER, *Mémoire, lettres, et rapports*, Paris, 1843; J. J. DE HOLLANDER, *Handleiding bij de beoefening der Maleische taak en letterkunde*, Breda, 1882, pp. 277-388; and G. K. NIEMANN, in *Bijdragen*, iii. 1 (1866), pp. 113-46, 333 *sq.*

R. R.

[The foregoing paper, which is extracted from the Encyclopædia Britannica (1883) is from the pen of Dr. REINHOLD ROST, the learned librarian of the India Office Library, a friend to Oriental research of every description.

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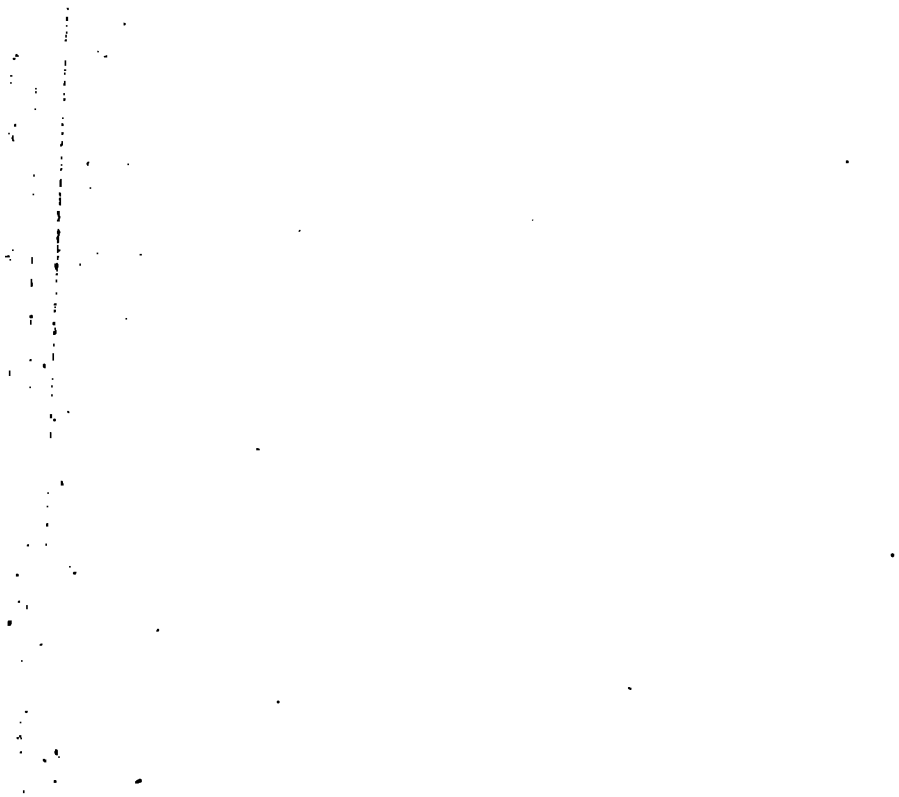

A MISSIONARY'S JOURNEY THROUGH LAOS FROM BANGKOK TO ÛBON.

I AM glad to be able to communicate to the Straits Branch of the Royal Asiatic Society some notes made by a Missionary on his way from Bangkok to Ûbon to convert the Laos tribes.

Missionaries penetrate gradually and from different directions into the midst of these savage tribes, and try to convert them to Christianity. The story of what occurred among the wild Ba-huars, an independent tribe on the West of Cochin-China near the 14° lat. N. and 106° long. E. (Paris), is well known. In the beginning of 1884 five Missionaries were murdered by brigands while they were engaged in establishing a Mission among the Chau tribe in the West of Tonquin.

For some time past the Mission in Siam has maintained a Station at Ûbon, near 15° 20′ N. lat. and 102° 30′ E. long. (Paris) on the Seimoun, a tributary of the Mekong. It is the Narrative of a Missionary on his way to Ûbon which I have now the pleasure of communicating.

N. C.

It is not a carefully composed narrative that I propose to give you, but simply a journal kept from day to day, written often by the light of a torch, or of the setting sun, when, tired by the day's march, we had pitched our camp for the night. In order to take the place of Père Rondel, invalided, I started with

Père Xavier Guégo, who had already been for two years a Missionary in Laos. We bought in Bangkok such things as were absolutely necessary, these being of an exorbitant price among the Chinese of Laos, viz., cotton goods, thread, cooking utensils, medicines, etc. On Septuagesima Monday, the 11th of February, 1884, two boats loaded with luggage took their departure for Thakien, four days' journey N. E. of Bangkok. The following Thursday we were at Thakien, where the inhabitants entertained us during the few days employed in preparing the carts to be used on our journey. These carts were the same which had brought down our *confrères* from Laos a few days before. On Wednesday, the 20th February, the carts started; we followed a few hours later, and overtook them, and halted at mid-day at the village of Ban-seng. This village is at the entrance of the forest, which we were not to leave again after this point. There is nothing but one immense forest, in some places very dense, in others relieved by clearings in the midst of which villages are scattered about. It is a thick wood, through which passes a road just broad enough for a cart, there is not room for a man either on the right or on the left. Here and there one comes across a clearing. It must not be supposed that the road is free from obstructions; now it is a deep rut which nobody fills up, now it is an enormous root which blocks up part of the road-way and which has to be crossed at the risk of seeing the cart smashed into a thousand pieces. We advanced in this way with our ten carts and relays of bullocks, which either followed or preceded us by a short distance. Sometimes a wheel would lose its spokes, and sometimes an axle would break (these axles are merely bars of some tough wood which go through the wheels and have to be renewed frequently).

At last, about 9 o'clock, we reached a muddy pool and pitched our camp on its banks. This consisted in arranging the carts in a large circle, in the centre of which the bullocks and horses were tethered to stakes driven into the ground. Their drivers spread their mats on the grass under the carts and passed the night there. As for ourselves, we had manufactured two little tents which we set up between two carts. Large fires, fed with fuel by watchmen who mounted

guard armed with muskets, were a safeguard against wild beasts and robbers.

Thursday, 21*st*.—Daylight had hardly appeared when I wakened the camp and rang to prayers. Then each made his way to the cart that served as our kitchen, to swallow a cup of tea, while waiting for breakfast, which might be a long time coming, for it was necessary first to reach the regular halting-place, otherwise no water was to be got. The bullocks were yoked, and we started—my *confrère*, on horseback, leading the way, while I brought up the rear in order to keep an eye upon stragglers. After an hour's march, there was a sudden halt, and I went from one cart to another asking what was the matter. Each had stopped because the one in front of it had stopped! It turned out that a wheel was broken, the damage was repaired with rattan, and we went on again. About midday we stopped near a pool and cooked our breakfast, while the bullocks, unyoked, cropped the fresh herbage. We were at the village of Ramachai, but we were in want of a spare felloe, for which we sought in vain. Our people went off to the Laosian village of Ban-kula and thence brought back the piece of wood that we wanted. We then set off. The route here was over loose, white sand, which made it very heavy travelling for the bullocks. In the evening we reached two muddy marshes; here, at the pool known as Nong-pi-ieng, we camped.

Friday, 22*nd*.—Towards the evening we arrived at a small village—a group of little huts built upon piles in the middle of an enclosure formed of felled timber. We did not halt here, for the water was not good and the custom-house of Muang Sanam is only a kilomètre further on and there is a good spring there.

The mention of a "custom-house" is calculated to make you suppose that we were approaching a collection of houses protected by a military station. But in this country a *douane* is a much more simple affair. No registers, no commissioners! Two men sprawling peacefully in a hut of leaves await, at the frontier of a province, the passage of cart and bullocks and levy a tax on the owners.

Saturday, 23*rd*.—A short stage. Busy preparing an altar.

Sunday, 24*th*.—Mass. We camped in the evening on the banks of a torrent, which is nearly dry in this season.

Monday, 25*th*.—We found in the evening on the surface of the ground a kind of iron ore which the most intelligent of our followers called "stone of Bien-hoa." This substance seems to me to be somewhat curious; it looks as if it were formed of little globules of iron, or like the slag which is taken from a furnace after smelting. Blocks of this stone are found at distant intervals, quite isolated one from the other. We camped near a little torrent.

Tuesday, 26*th*.—We started again, crossing the stream Huai Khai, and met four bullock-carts accompanied by some Siamese. This is the first time for five days that we have come across any human being.

Wednesday, 27*th*.—We had to cross the river Sakëo, which never dries up, and the bed of which is at the bottom of a deep ravine and is disfigured with stakes and snags.

The descent was negotiated, and we crossed over and halted for breakfast. Four or five Burmese caravans were encamped not far from us, and in another direction a party of Cambodians. These people had come from the provinces of Sourin and Sisaket to buy gambier, which they eat with the betel-leaf and areca-nut. They had been here for more than a week and had not yet been able to make their purchases, owing to their not having complied with some formality or other insisted on by the local authorities. While we took our meal, we received several visits. The first to come was a judge from the town of Amnet, twelve leagues from Ûbon, who was on his way to Bangkok, and was good enough to take charge of a short note to Monseigneur Vey giving him news of us. By degrees all these folks disappeared on their way south, in the direction by which we had come. About 2 o'clock we too started. We had been on the march for about three quarters of an hour when we reached the custom-house of Sakëo, which is situated on the side of a road as large and straight as ours in Europe. It goes from the province of

Kabin to Battambang. Constructed originally by a Phya (high Siamese official) to secure easy communication with the Cambodian provinces subject to Siam, this road might be of the greatest use to travellers. But since the date of its construction it has not received any repairs whatever, and the forest therefore is taking possession of it again. In this very year (1884) a telegraph line hes been erected along this road, over its entire length, by the agency of Frenchmen from Saigon (this line goes from Saigon to Bangkok). In the evening we camped at a pool called Nong Salika. A caravan of Chinese traders from Sourin had established themselves before our arrival, and among them was the nephew of an old Chinese Christian whom I had known at Bangkok. He was travelling towards Kabin to sell skins, silk, etc., and intended to bring back with him cloth, hardware, etc. His correspondent at Kabin being a Christian, I entrusted him with a second letter for Bangkok.

Thursday, 28th.—At 3 p. m. we reached the frontier of the province of Vathana. We were all fasting, and we established ourselves in the sheds which had been built for the workmen employed on the telegraph line. Night had already fallen when we heard the sound of a band of men advancing in our direction. Père XAVIER got up to see what was happening, and saw a black mass a few feet in front of him. "Who goes there?" "Phra Aphai." Torches were bought and Père XAVIER then saw that the black mass was an elephant of the largest size followed by two smaller ones. The travellers were in search of a lodging for the night, and as there still remained one large shed unoccupied, they settled themselves down in that.

Friday, 29th.—To-day we rested, and watched at our leisure the travellers of last night. Their chief is a Cambodian mandarin subordinate to Siam. Of the three elephants which he had with him, two were intended for the King of Siam as presents.

The mandarin came to pay us a visit, and informed us of the object of his journey. He is, he said, the son of Phya Anuphat (a high official) and the second mandarin of the Province

of Siem-rab. In return for the elephants which he was going to offer to the King, he hoped for certain favours. We paid a visit to the Governor, for whom we had brought letters from Bangkok. His house is a tumble-down affair. He is of Laosian race, about sixty years old, and has under his government about two or three hundred houses scattered about in the forest, the population of which is Cambodian.

Saturday, 1st March.—For the last time we crossed the telegraph line, which we then quitted in order to take the road to Nong-bua (pool of Lokas). At one o'clock we resumed our journey, and camped in the evening at the village of Bang-sang inhabited by Laosians.

Sunday, 2nd.—Our itinerary instructed us to go by Nong-phi, and Tong-nong—two pools which are close to the roadside—but the dryness of the weather obliged us to take another course, viz., by Ban-kin. Starting at half-past two, we travelled through forest, everything being most distressingly dry; at night we slept in the forest, the bullocks having to go without water. Our rice was cooked with the little which we had in reserve.

Monday, 3rd.—At ten o'clock we arrived at Ban-kin. Water good and abundant. At two o'clock the signal for departure was given, but two bullocks were missing and had to be recovered. We got away at last. Road bad. On the left a chain of mountains of considerable height was observable. At night we camped on the banks of a pool.

Tuesday, 4th.—Excellent water in the morning, muddy water in the evening.

Wednesday, 5th.—In the evening we arrived at the village of Huari-Sameron and pushed on to Kra-sa-mëmai, where we passed the night in the middle of a field.

Thursday, 6th.—Early in the morning the headman of the village visited us at our camp, and brought us the provisions which we had asked for the night before on our arrival. These consisted of rice, fowls and red chillies. We were able also to procure here an additional cart for eleven ticals; this extra assistance was absolutely necessary, for we were ap-

proaching a chain of mountains which we should have to cross in order to reach the plateau of Ûbon. About half past four we emerged in an extensive clearing covered with reeds which were still green; we judged that we should here find the water we wanted so much, and we found accordingly a clear and abundant supply.

Friday, 7th.—We reached Puthai-saman at a tolerably early hour. Puthai-saman was formerly an important town, or perhaps rather an imposing temple erected to the worship of Buddha. It is one of those monuments of Cambodia which are so much renowned, and which astonish all travellers by their original and beautiful architecture. These monuments indicate the existence, among the people who conceived and carried them out, of a very advanced degree of civilization. We were tempted to inspect one of these precious specimens of the architecture of the *Khmers*, as savants would say.

It was not more than eight o'clock when we reached the east gate of the ruined city, which is flanked on its four sides by an enormous moat filled with water, the breadth of which is at least from thirty to forty mètres. The sides of the moat are composed of enormous blocks of Bien-hoa stone and have a slope of about forty-five degrees. Everything was hidden from view by large trees, creepers, shrubs, and high grass which have taken possession of the locality. We camped outside the east gate. While breakfast was being got ready, I penetrated into the middle of the ruins. I shall not undertake to give a very exact description of them. This has already been done by the numerous learned travellers who have written about the ruins of Angkor-vat and Angkor-lom. The plan, the buildings, the details, are the same in all. Everything has been reproduced, down to the smallest piece of carving. These ruins differ one from another only in area. Puthai-saman seems to be Angkor-vat on a reduced scale.

Follow me then step by step through the midst of colossal statues lying on the ground, stepping over a fragment of fallen wall, or a tree lying prostrate on the ruins. I reached the east gate by an immense causeway or bridge spanning the moat which I have just mentioned. On both sides, and an-

like those of Angkor-vat, a long dragon supported on the knees of a whole row of seated statues; these have the legs crossed and one of the hands under one thigh.

After two hours spent in crossing these ruins, I endeavoured to make a plan of all that I had seen. This city or temple is built according to regular bearings, and forms a complete square.

On the four sides, each facing one of the cardinal points, enormous causeways thrown across a broad and deep moat gave access to the inner side of the outer wall. In front of these gateways, about three or four mètres from the moat, and as if intended to protect the entrance, there were square enclosures, provided with a single door, above which rose a pile of cruciform buildings topped by pyramids.

The inner buildings, which it would be difficult to describe, were surrounded by a second ditch, less broad and deep than the first. There were four gates magnificently sculptured and defended, as it were, by monstrous figures with human bodies and hideous faces—regular demons. The general mass of buildings was composed of galleries all connected one with another and crowned with domes at the points where they crossed; these domes were more and more lofty in proportion as they approached the centre, the middle one towering above all the others. The coping of all the walls, whether inner or outer, is formed of little *sema* (mounds) * in the middle of which is a Buddha seated. The large moat is kept abundantly supplied with water from two little streams.

Saturday, 8th.—It was with regret that we quitted these ruins. Who can tell us their story? What has become of those who built this city? Learned authorities are reduced to conjectures. The people of the country can furnish nothing but fabulous legends; according to them, these buildings are the work of the angels. After a troublesome journey through dense forest we camped on the banks of a muddy pool.

Sunday, 9th.—After breakfast Père Xavier went ahead to purchase provisions and to hire men and carts to enable us to

* *Sema*, the sign by which a grave is known; a mound, a barrow.

it is now nothing more than an enormous heap of ruins on which trees and creepers grow at pleasure. It was in the midst of these that I made these hasty notes. Several doors and windows, however, were to be seen, appearing out of the ruins. I sounded all the parts of these. Returning to the southern gate, I continued to follow the long wall of bas-reliefs. Here the direction in which the figures are walking changed. On the wall which terminates at the southern gate they were walking towards the East; now they were advancing towards the West. This southern gate—I speak of the inner erection which must have been the palace, or a great temple raised in honour of Buddha—furnishes access to four porticoes of colossal proportions, the roofs of all being composed of enormous blocks of stone shaped and placed one on the other. I continued to climb over the blocks lying about in all directions, and I reached a series of galleries in sufficiently good preservation to allow one to judge of the general plan. Here, as in almost all similar buildings of the races of Indo-China, the outside is generally finished while the inside, on the contrary, is hardly commenced. Is this intentional, or was the work abandoned before it was completed? Many savants are of the latter opinion. The gallery which I traversed is in the shape of a cross; it joins other galleries, the point of intersection being in all cases topped by a dome or a pyramid. In one of the doorways, there was still to be seen a frame of carved wood partly destroyed by white ants and exposure. In the opposite doorway, there is also a little fragment, but these were the only traces of wood I could find. In a small inner court near the doors and windows, there are statues of Siva let into the wall; the figure wears a diadem on its head, and holds a lotus in one hand, and a garland or snake in the other. The neck is ornamented with a phallus, and the feet with two rings. Beyond this court, a pyramid rises above a doorway; the stones are so put together as to form the features of a fabulous personage. This figure is repeated on all four sides. At the present time only one remains, all the others have fallen down.

In front of the south gate and spanning an inner moat, there is a large causeway, not so long as the one outside the main enclosure, which is bordered by fragments of a balustrade

Thursday, 13*th*.—After crossing a ravine, we gained the plateau beyond. We were about to push on to the top, when a Cambodian caravan, consisting of thirty carts, on its way from Sourin to Battambang, came in sight on the only road. We passed the night on the road.

Friday, 14*th*.—After the morning's stage, we halted on the banks of a pool. Another Cambodian caravan, composed of twenty carts, passed close to us. This one came from Sourin and was bound for Nakhon Siemrab in Cambodia, on the banks of the Touli-sap (great lake) to buy fish.

We reached the plateau of Korat, all the chief difficulties being passed. About one o'clock we were able to camp for the night under the sheds prepared for the white elephant. In the evening another train of Cambodians passed, coming from Korat and going to buy fish at Siemrab.

Saturday, 15*th*.—After great difficulty in renewing our stores of provisions, we started and passed through the village of Ban Kham. The road passes through an open undulating country. The forest has been cleared over a great stretch of ground, and there is an extensive view. Towards the East, a hill was visible, which is probably a portion of the range which we had just left. The soil was now less dry, and we came across numerous springs, some of which were ferruginous. It was still broad daylight when we entered Ûlok. We pitched our tent close to that place.

Sunday, 16*th*.—A day of rest. Splendid pasture.

Monday, 17*th*.—We left the village of Ûlok at dawn. Beautiful vegetation was on all sides of us. If the country were not so often harried by bands of ruffians, numerous villages might exist here comfortably. On our left, we passed one of many abandoned villages. Robbers had carried off everything, and had then set fire to it. We reached Ban-nai-mut and then Ban-khu, making the latter our halting-place.

Tuesday, 18*th*.—We passed through the village of Bak-tran, halting at night at Ban-dai.

Wednesday, 19*th*.—We skirted the village of Ban-kathum. The head-man, hearing of our approach, came to meet us in

order to warn us to keep away. Small-pox was making great ravages in the village. Detained by a storm, we passed the night in an old pagoda of the village of Tamnon.

Thursday, 20th.—There are still three or four more provinces through which we have to pass and then we shall reach the end of our journey. The first thing in the morning we set off in the direction of Muang Songlé, under a pelting shower of rain, and reached the shelter prepared for the white elephant, where we breakfasted. An hour's march brought us to Muang Songlé. As we left the forest, we could see the town on a slight eminence. The scene is a most charming one, the lofty stems of palms and betel-nut trees forming a perfect bouquet of verdure, while the houses are lost to view behind the leaves of bananas. We camped on the north side, occupying a building set apart for the use of travellers on the banks of a stream, whose waters fall into the Seimun, the river of Ûbon.

Friday, 21st.—We reached the village of Ban Nong Mek. In this part of the country, numerous pines are intermingled with the forest trees. We camped at the village of Sameron.

Saturday, 22nd.—Our guide was to have taken us by Khantararum, but he missed the way, and we went by Ban Huai and Pi Nai.

Sunday, 23rd.—We were taken to the site of a village which had been plundered and abandoned. Here we established ourselves for a couple of days.

Monday, 24th.—Went out shooting green pigeons and peacocks.

Tuesday, 25th.—We reached Khu Khane a little before midday. Once more the building erected for accommodation of the white elephant and his attendants served as our place of shelter. Two days before, according to the inhabitants, two Europeans had halted at the same place, but from what they said I concluded that these must have been Cambodian half-castes. They came to sell opium. We passed through the village of Ban Samié and at ten o'clock at night we reached Ban Xam Lom.

Wednesday, 26th.—This plain is covered with numerous villages. We passed the night at Ban Pheng-puai.

Thursday, 27th.—We breakfasted at the village of Ban Thum. At night we travelled by torch-light. When we were within half a kilomètre of the village where we intended to sleep, a wheel of one of the carts gave away, a section of the tire and three spokes being broken. It was impossible to make the necessary repairs on the spot, so I left the cart and bullocks under the charge of three men and went on to the village with the other carts. There I had a wheel taken off one of the latter, to take the place of the broken one of the cart which had been left behind. During the night the broken wheel was repaired.

Friday, 28th.—We left the village of Ban Song Sang, where we had slept, with the intention of going as far as Ban Nong. We passed the *huai* (torrent) of Khajung by a large bridge built in the preceding year. The bridge was a good one, but the roadway, being formed of planks placed loosely on the cross-pieces, reminded one of the keys of a piano as the carts went over it. The road presented no difficulties, so, notwithstanding darkness, we pushed on by torchlight. At last, as our guides no longer knew the way, we camped where we were, for fear of going wrong. Our compass shewed us the blunder which the guides were making; our right course was N. E. and we were going N. W.

Saturday, 29th.—In the morning, after some search, we hit upon the right road, about six hundred mètres to our left. The mistake was quickly rectified, and the country being level and free from underwood, we were able to make short cuts. We passed Ban Khin and then Ban Non Noi and Ban Non Jai and slept at Ban Kho, the last village before Ûbon. We slept in the midst of carts which had pulled up on the road.

Sunday, 30th.—This very day we were to be at Ûbon! We set off in advance at a canter. In an hour we were on the banks of the Sëimun, opposite the town. The river, though very low at that time, seemed as broad as the Loire at the Pont de la Belle Croix, at Nantes. We followed the bank upstream, it being about six o'clock in the morning. Père

XAVIER pointed out to me the site of our station, but I could not make it out in consequence of the trees and bushes which cover the banks. We soon dismounted and fired several rounds. I blew a horn also. We were heard; the children were the first to arrive, followed soon after by the grown-up people. Mass was just over when our signals announced our arrival. The two Pères came down at last; not too robust either of them, fever having tried them severely. They procured us a boat which took us across the river with our steeds. With what joy did we embrace one another!

Our first act was to enter the humble chapel and to thank God for the protection granted to us by Him during so long a journey. Some hours later our carts arrived, and during the afternoon we conveyed them across in boats. Blessed be God for ever.

G. DABIN.

Ûbon, 30th March, 1884.

[In their Annual Report for 1883,* the Council of this Society made an appeal to those who are favourably placed for the purpose, to further the objects of the Society. Allusion was made to the exceptional opportunities for observation possessed by the French Missionaries in the East. The foregoing paper shews that that appeal has not been in vain and it is with great[pleasure that I have performed the task of translating from the French the MS. sent to me through the Revd. N. J. COUVREUR, Procureur des Missions Étrangères at Singapore.

W. E. M.]

* Journal No. 12. p xv.

VALENTYN'S ACCOUNT OF MALACCA.

(Resumed from p. 74b of Journal No. 13 of June, 1884.)

Leaving this prince and his new city for a while, let us return to Malakka, where more treachery was being plotted against its great conqueror ALBUQUERQUE.

Râja ISUTINUTIS, wronged by King MAHMUD, had already, before the arrival of ALBUQUERQUE, tried to expel that prince: having made up his mind to obtain possession of the town with the aid of some Javanese and one Pati (1) from Japâra, he thought it now the right time to renew the attempt, the more so that he knew there were but very few Portuguese troops.

So he sent a letter to the King's son, who had fled to the island of Bintam, (*i.e.*, Bintang, or more correctly Bentan) informing him of his intentions, but his letter was intercepted, and he, a man of eighty years of age, his son PATIAGUS, and his brother-in-law, who tried to enter the fortress, were arrested and decapitated in public, while their houses and property were destroyed and laid waste, and their memory consigned to oblivion. It was to no purpose that his widow offered to pay one hundred thousand ducats if their lives were spared.

Intent then on revenging herself, she promised her daughter in marriage to a Moor called PATICATIR (OSORIUS calls him PASECATIR and MAFFEJUS, QUITIRIUS) who had been appointed head of the Moors by ALBUQUERQUE, on condition that he should avenge the death of her husband, son and brother-in-law, PATICATIR having often previously in vain asked for her hand while ISUTINUTIS was still alive.

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(1) "Pâti Ûnus" according to FARIA Y SOUZA, who afterwards became King of Sunda.

The marriage having been concluded quite secretly, the widow engaged 6,000 troops, and with their aid attempted to carry his plots into execution, but ALBUQUERQUE put him to flight on the first engagement, and thus broke up at once all his power and influence.

Having established peace here in 1511, ALBUQUERQUE appointed RODRIGO BRIT PATALYN first Governor of Malakka, and NINACHETU Shahbandar and head of the Moors. SAINALAHDIN, the King of Pasi (Pâsei), who had once before deserted to MAHMUD, was again restored to favour, but notwithstanding went over a second time to the enemies of ALBUQUERQUE.

ALBUQUERQUE then left Malakka in charge of PATALYN with a garrison of 300 Portuguese, sent one of his captains with a squadron of ten sail to the Singapore Straits, and returned with four vessels to Malaar (Malabar?) to keep a watchful eye upon the plots of ABADILCHAIN against Goa.

He, however, not only failed to carry out his expedition, but narrowly escaped with his life, his vessel having struck and sunk in a storm off Pasi on the Island of Sumatra. Though this happened at night, he and his crew were saved; but he lost Nakhoda BEGUA's bracelet with the precious blood-stanching stone. (1)

After suffering many distresses and being almost starved, they arrived safely at Cucheen (Cochin on West Coast of India) in February, 1512.

Meantime the Portuguese (at Malakka) had been again attacked by PATICATIR, but he was so completely defeated by PETREJUS ANDRADO that he did not venture a further attempt. The PATI ONIUS (2) previously mentioned from Japâra, who had eight years before promised his aid to Râja ISUTINUTIS, now at last appeared before Malakka with a fleet of 3,000 (3) sail, having secured at the same time many adherents in the town itself, but he likewise met with total defeat, and barely succeeded

(1) For an account of this wonderful ornament, see pp. 73 and 74 Journal, S.B., R.A.S., No. 13 for June, 1884, and note.

(2) Pâti Ûnus.

(3) FARIA Y SOUZA says ninety sail, which sounds more probable, with 1,200 men (an average of 133 to each vessel) and a good supply of artillery.

in escaping himself in a small craft, the only one left of the whole fleet, after losing more than 8,000 men. (1) The loss of the Portuguese on the other hand was not more than 20 men killed though they had many wounded in this severe engagement. The Portuguese Governor PATALYN and his Captain ANDRADO were much praised by ALBUQUERQUE for their gallant behaviour.

Once again Malakka ran the risk of being reconquered by the Malay kings. TAEHAR MADJELIS (TUANKO MASELIS according to Portuguese historians) a Moor from Bengal, was the originator of this new plot. Being on good terms with one PETER PERSON, a friend of the Governor, he had arranged with his adherents that he should first kill PERSON, and this was to be the signal for a general massacre A few days afterwards having been invited to dinner by PERSON, he tried to execute his plot, but instead of killing PERSON, he only wounded him; this of course caused an alarm and frustrated all their plans. (2)

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(1) FARIA Y SOUZA's account agrees as to the completeness of Pâti Unus's defeat, but differs in his account of his fleet, concerning which he remarks:—"Several of his ships were equal in size to "the largest Portuguese galleons, and the one destined for himself "was larger than any ships then built by the Europeans." And, again:—"After a furious battle of some endurance, Unus fled, and "was pursued all the way to Java, where he preserved his own vast "vessel as a memorial of his escape, and of the grandeur of his "fleet, and not without reason, as a merchant of Malakka engaged "to purchase it of PERCY for 10,000 ducats if taken."

(2) FARIA Y SOUZA's account of this affair is as follows:—"King Mahomet had not yet lost all hope of recovering Malakka, "to which he now drew near: and having in vain attempted to "succeed by force, he had recourse to stratagem. For this pur"pose he prevailed on a favourite officer named JUAN MAXILIZ "to imitate the conduct of ZOPIRUS at Babylon. Being accord"ingly mutilated, JUAN fled with some companions to Malakka, "giving out that he had escaped from the tyrannical cruelty of "his sovereign. RUY DE BRITO, who then commanded in the "citadel of Malakka, credited his story, and reposed so much con"fidence in his fidelity that he was admitted at all times into the "fortress. At length, having appointed a particular day for the

When the King of Djohor found that all his attempts miscarried, he deemed it advisable to conclude a permanent peace with the Portuguese (1514), which was preserved for some years.

The Viceroy ALFONSUS ALBUKIRK sent his cousin GEORGE ALBUKIRK the same year (1514), to Malakka to succeed the valiant RODRIGO PATALYN as second Governor of that place (Malakka).

NINACHETU was dismissed at the same time, and the King of Campar appointed Shahbandar (1) in his place (no one knew the cause of his dismissal); he was so chagrined at this that he committed suicide by burning himself on a pile after delivering a solemn speech to the people.

ABDALLAH, the King of Campar, was soon afterwards attacked by the King of Bentan, but with the assistance of the Portuguese easily beat off his enemy. But some years later the King of Djohor induced the Portuguese, by false imputations, to suspect the King of Campar his own son-in-law, so that they bribed assassins to kill him; but it is also said that he was publicly executed on a charge of conspiring to surrender Malakka to the enemies of the Portuguese. (2)

" execution of his long-concerted enterprise, on which Mahomet " was to send a pary to second his efforts or to bring him off, he " and his accomplices got admitted into the fort as usual, and im- " mediately began to assassinate the Portuguese garrison by means " of their daggers, and had actually slain six before they were able " to stand to their defence. BRITO, who happened to be asleep " when the alarm was given, immediately collected his men, and " drove the traitor and his companions from the fort at the very " moment when a party of armed Malays came up to second their " efforts. The commander of this party, named JUAN CALASCAR, " on learning the miscarriage of JUAN MAXILIZ, pretended that he " came to the assistance of BRITO, and by that means was permit- " ted to retire."

(1) FARIA Y SOUZA says " Bandara," *i.e.* " Bĕndahara."

(2) This is the account given by FARIA Y SOUZA, who says that MAHOMED, the King of Johor, caused it to be noised abroad that ABDULLAH, his own son-in-law, had gone to Malacca with his knowledge and consent for the express purpose of getting an opportunity of seizing the fort by a sudden and unexpected attack, which false

GEORGE BRIT succeeded (1515) GEORGE ALBUQUERQUE as third Governor of Malakka, just before the arrival of the new Viceroy of India, LOPEZ TOAREZ ALVARENGA, successor of ALFONSUS ALBUKIRK.

Nothing of importance happened while BRIT was Governor. He died here (at Malakka) in 1517. This death gave rise to sharp disputes between two high Portuguese Officials as to the succession, and FERDINAND PETREJUS ANDRADO, who touched at Malakka on his voyage homewards from China, tried in vain to reconcile them. Meantime whilst NUGUEZ VASCO PEREIRA was temporarily administering the Government, ALFONSUS LOPEZ COSTA had been appointed fourth Governor of Malakka by King EMANUEL.

The King of Djohor, being disinclined to suffer the Portuguese to remain any longer in such quiet possession of Malakka, waged war against them once more, attacked them suddenly, and had some very sharp engagements with one ALEXIS DE MENEZES, (1) the Portuguese commander, but without obtaining the slightest advantage. When DE MENEZES had left, the King resumed his attack on the town, besieged the fortress for seventeen days, and made an assault on it, but was repulsed by the Portuguese. After this last defeat he remained quiet for a short time.

The new Viceroy, DIDACUS LOPEZ SEQUEIRA, appointed one CORREA Captain of the Portuguese Garrison at this place in 1519 to frustrate the repeated attacks of King AHMED SJAH, and one GARCIA DE SALA to be fifth Governor to relieve the invalid Governor ALFONSUS LOPEZ COSTA.

A little before this the King of Djohor had made another attack upon the town, but being again repulsed with great

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report obtained credence from the Portuguese Commander and led to ABDULLAH's downfall. This, he says, led to the natives, who much appreciated ABDULLAH's administration, leaving Malacca in such numbers that it was almost left desolate.

(1) According to FARIA Y SOUZA, this attack was made in the time of BRIT (or BRITO), and DE MENEZES arrived to assume the Government with a reinforcement of 300 men just in time to prevent Malakka falling into the hands of the enemy, and appointed COSTA Deputy Governor in place of BRITO, who was dying.

loss and disgrace, (1) he abandoned his plans for a long time.

In 1521 GARCIA DE SALA was succeeded by another Governor. During his governorship GEORGE ALBUKIRK and ANTONIO BRIT came this way for the purpose of besieging Bintam, but it did not come to anything. (2) GARCIA DE SALA in that year (1521) resigned the governorship to GEORGE ALBUKIRK, who was thus the sixth Portuguese Governor. In 1522 the people of Bintam again came forth against Malakka with eighty vessels, but GEORGE ALBUKIRK having been already informed that the Laksamana of Djohor was coming with a numerous and powerful fleet, despatched a strong Portuguese fleet to meet him, and a fierce fight ensued. Sixty-five Portuguese were killed, and their vessels were compelled to retreat to Malakka: the Laksamana likewise quietly withdrew.

Meantime several Portuguese, who had landed at Pahang in ignorance that the King there was son-in-law to the King of Djohor were murdered; many others were compelled by the King of Djohor to embrace the Mahomedan faith, while those who refused to do so were tied to the mouth of a cannon and blown to pieces.

About this time also a force from Bintam appeared before the town (Malakka) took SIMON DE BREO and thirteen Portuguese by surprise, slew them all, and burnt their vessels. GARCIAS HENRIK who, on his return from the Moluccas, was cruizing off the island of Bintam, was drawn into an ambuscade by the vessels of the Laksamana, lost both his vessels, and was obliged to retreat to Malakka after making a gallant defence, in which almost all his men were killed.

All these small advantages gained over the Portuguese made the King of Djohor so proud, that he again entertained the idea of attacking Malakka by sea and land and making a

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(1) FARIA Y SOUZA says the King of Bintang (Bentan) which is practically the same thing, and that the Portuguese succeeded in taking the Malay Fort at Moar with 300 cannon.

(2) FARIA Y SOUZA describes Bentan as "having two strong "castles and its rivers staked to prevent the access of ships, so "that it was considered almost impregnable, and though ALBU-"QUERQUE went with 18 vessels and 600 men, he was obliged to "retire."

fresh effort to expel the Portuguese. He then collected a force of 20,000 men, 16,000 of which he despatched by land under the command of a renegade Portuguese Captain called AMLAAR, while the Laksamana had to take the other 4,000 men to blockade the Malakka roadstead.

AMLAAR immediately marched on the town and very soon succeeded in making a trench sixty palisades wide near the village of Quillyn [*i.e.*, Kampong Kling, as it is termed], but he was unable to take advantage of it, for GEORGE ALBUKIRK had it repaired at once.

The siege lasted for about a month, after which it was raised and the besiegers beat a retreat, on hearing that relief had been sent from Goa. This happened about 1525. They had hardly left when MARTYN ALFONSO DE SOUZA arrived with a fleet to the rescue of the town, and he was told that during the siege people had paid fifty ducats for a fowl.

The Governor appointed the said DE SOUZA Admiral of the Portuguese fleet in place of his cousin GARCIAS HENRIK, and the very first act of the new Admiral was to blockade the river of Bintam with five vessels and so prevent the entrance or egress of anything.

In 1526 PETER MASCARENHAS was appointed Governor of Malakka, being the seventh Portuguese Governor.

The King of Djohor soon after again besieged the town, but the brave MASCARENHAS would not brook such provocation; he began to take aggressive action, and declared war against the King of Bintam, who called his son-in-law of Pahang to his aid, but both the Laksamana of Bintam and the King of Pahang's Admiral were completely defeated and put to flight, and the Portuguese conquered the whole island (*i.e.*, Bentan).[1] The said King of Bintam (a creature of the King of Djohor, the lawful King having been expelled) died of grief soon after. The other King then re-appeared and submitted to the Portuguese who restored him to his throne.

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(1) FARIA Y SOUZA states that MASCARENHAS took Bentan with twenty-one ships and four hundred Portuguese soldiers and six hundred Malays under Tûan MAHOMED and one Sinai Raja, though it was well fortified and defended by seven thousand men.

After the taking of Bintam, the King of Djohor left the Portuguese unmolested for some time.

In 1527 GEORG KAPRAAL was appointed eighth Governor of Malakka, and nothing of importance occurred during his government, the King of Djohor being still at peace with the Portuguese.

In 1528 the Viceroy LOPEZ DE SAMPAJO appointed PETER DE FAR ninth Governor of Malakka, and his government was also a peaceful one, the King of Djohor not having yet recovered the shock his power had received.

In 1529 GARCIA DE SA arrived at Malakka as the tenth Portuguese Governor.

The inhabitants of Atsjieu (in Sumatra) gave him much trouble, but we will treat the subject later, when we deal with the affairs of that island, mentioning only this that GARCIA having discovered that one SANAGE was conspiring with the enemy ordered him to be thrown out of the tower of the fortress.

I cannot say who succeeded GARCIA DE SA as Governor of Malakka, but I have been able to trace the names and dates of the following Governors, viz., STEPHANUS GAMA in 1537, RUY PAZ PAREIRA in 1545, SIMON MELO in 1547, PEDRO DE SYLVA in 1551, and his brother Don ALBARO ATAYDO in 1552.

I am equally ignorant of the names of the Governors from the last-mentioned date up to 1604, when that brave Portuguese Don ANDREA FURTADO DE MENDOZA (of whom we will speak more at length later) administered the supreme authority as Governor of this place.

We cannot say much about the events of that period, the Portuguese historians having recorded nothing about them.

AHMED SJAH, the exhausted King of Djohor (*i.e.*, after the failure of his repeated attacks on the Portuguese), continued to rule his country till 1540, and was succeeded after a reign of twenty-seven years by Sultan ALAWODDIN SJAH, ("ALA-ĔDDIN SHAH," Malaice "ALA-ÛDIN") who was the fourteenth King of the Malays, the second of Djohor, and the eighth Mahomedan King.

It was during the reign of this King (9th October, 1547)(1) that the Achinese laid siege to Malakka, causing damage to the value of more than a million, and only raising the seige on account of famine.

We have found nothing recorded of the life of this King and of his successor, beyond the fact that he reigned 19 years, *i.e.*, from 1540 to 1559, and that he was succeeded by Sultan ABDUL DJALIL SJAH as the fifteenth King of the Malays, the third of Djohor, and the ninth Mahomedan King.

This prince ruled this people 32 years, died in 1591, and was succeeded by Sultan ALAWODDIN SJAH III. He, the sixteenth King of the Malays, the fourth of Djohor, and the tenth Mahomedan King, reigned 19 years.

It seems to me that the first Dutch made their appearance either at this place (Malakka) or at Djohor in the twelfth or thirteenth year of this reign (*i.e.*, in 1603 or 1604).

It appears also that he (ALAWODDIN SJAH III) was styled Yangdipertuan, that he resided at Batoe Sabar, (2) six miles higher up the river (*i.e.*, above Johor Lama) and that he had a brother, called Radja BONGSOE, who lived on friendly terms with the Dutch.

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(1) FARIA Y SOUZA makes it in October, 1571, and states that the Achinese raised the seige on TRISTRAN VAZ DE VEGA completely defeating a Malay fleet in the Moar river; it may be a separate occasion, but it looks like the same, and SOUZA makes no mention of the one referred to at the date given in the text, which seems to have been so serious that he would hardly have omitted to notice it.

He also mentions in the time of DE VEGA an attack on Malacca by a fleet sent by the Queen of Japára consisting of eighty large galleons and two hundred and twenty smaller vessels, but the besiegers were severely defeated after a seige of three months. This was almost immediately followed by an attack by the Achinese, who, however, abandoned the siege in a panic, thinking there were some special stratagems being devised against them, when as a matter of fact, the Portuguese were in sore straits, and might easily have been overcome.

(2) "Sawar" said to mean a kind of fishing-weir. (See Malay Proverbs, No. 2 of Journ., S.B., R.A.S., p. 145.)

I find that one ROCHE DE MELLO was Portuguese Governor of Malakka in 1598.

I think that probably Admiral JACOB HEEMSKERK was the first of our people who had any trade with the King of Djohor: he captured a large Portuguese carrack on his return voyage from China, touched at Djohor, and left behind there in 1603 one JACOB BUYZEN, who would, he was sure, be treated as a friend, the King being a mortal foe of the Portuguese, and doing his utmost to harass them.

When in October, 1603, the vessels *Ziericzee* and *Hollandse Thuyn* (Dutch garden) under the command of Commodore JACOB PIETERZOON VAN ENKHUYZEN (forming part of the fleet under WYBRAND VAN WARWYCK) arrived at the Singapore Straits, they met with a prahu or canoe of the King of Djohor bringing a letter from JACOB BUYZEN, which informed them that during the last month two Portuguese men-of-war, four galleys, and twenty smaller craft had arrived at that place, under the command of ESTEVAN TEXEIRA DE MADE, a man of great fame: that these vessels were waiting for some ships, which were expected to arrive there within a couple of months from Japan and Maccassar, and which they had to escort safely to Malakka out of danger from the Dutch vessels.

It appeared from a letter of the supercargo JACOB BUYZEN, dated the 7th October, that the Portuguese of Malakka were besieging Djohor, and the King wrote to our Commodore to beg him most earnestly, that our troops might assist him in relieving his city from this siege. BUYZEN added, besides, that Radja BONGSOE, the King's brother, intended to come very soon on board the Commodore's vessel and to remain there till their joint efforts should have vanquished the Portuguese; it, was this very Radja BONGSOE who was with Admiral HEEMSKERK when he had captured the carrack already mentioned.

Our Commodore then gave battle to the Portuguese fleet during the whole day and put her to flight right through ours, whereupon Radja BONGSOE and JACOB BUYZEN after having witnessed this naval combat, arrived on board the Commodore's vessel, and Radja BONGSOE after having thanked him cordially for the eminent service he had done them, presented him with a fine kris, after which he and BUYZEN left him.

The only losses we suffered in that fight, were five or six men killed, and a few men wounded on both vessels. The King of Djohor, much pleased with this victory, and with our assistance, arrived that very night with his fleet of forty prahus and four or five fine galleys near our two vessels, when he was visited by our Commodore in his own galley, to whom that Prince likewise showed his gratitude by presenting him with a splendid kris.

When the Commodore made some inquiries about pepper, the King answered him, that he would be able to forward some to him within a short time, if his river were kept open and free.

Radja Bongsoe, accompanied by many Malay gentlemen, came again on board of the vessel *Ziericzee* on the 10th October; we fought the Portuguese that day, and put them again ot flight, but the King, though he was present with his prahus, left all the work to be done by us, and only looked on.

He then visited the Commodore accompanied by his two brothers (one of whom was the King of Siak), and offered him his thanks; the Commodore then presented him with a Japanese sword with a silver hilt and sheath, and Radja Bongsoe with a fine musket, whereupon that Prince took leave of him.

On the 1st September, 1603, Andrea Furtado de Mendoza succeeding Fernando Albukirk as Governor of Malakka, as Governor-General of the Southern Provinces of India, and as Commander-in-Chief of the royal fleet, sent in the beginning of 1604 an Ambassador to the said King of Djohor to acquaint him with this change, and to announce to him that he wished to live in peace with him, though he had been at war with the former Governor of Malakka.

The King sent the reply, that he too desired to make peace, but that he wanted to know first the terms of that peace.

Don Andrea Furtado then required that the King should part with the Dutch (having dealt already too much with them), deliver them up to him, and deprive them of their property, and he informed him that there should never be peace if the King of Djohor would not accept the said conditions. On the 8th February the King gave a flat refusal, and briefly said that he would rather see his whole country ruined than

betray or deliver up the Dutch, who stood under his protection.

The 3rd May, 1604, Admiral WARWYCK having returned to the Djohor river, the King presented him with two and a half bharas of pepper, whilst he presented the King with a quantity of powder and some balls. He sailed again on the 20th of the same month.

In February 1605, FURTADO resolved to besiege Batoe Sabar, but when he heard that our Admiral WYBRAND VAN WARWYCK was in its very neighbourhood, he gave up his plan.

On the 14th of the same month, our Admiral was informed, that in the meantime the Portuguese fleet had been reinforced considerably, numbering now 7 men-of-war, 30 bantings, 20 galleys, and 10 Javanese sampans, and further that ANDREA FURTADO had threatened the King with an early visit, and if he again failed to conquer Batoe Sabar he would willingly pay the King tribute.

In the meantime some vessels of our fleet, under the command of Admiral C. SEBASTIAANSE, had captured off Patani a fine and richly laden Portuguese carrack, called *St. Anthony*, and the *Wissingen* (joining the said Admiral's squadron off Patani in February that year) had also captured on the 14th January, 1605, off Pedra Blanca another carrack coming from Cochin-China and consigned to Don ANDREA FURTADO.

We found in the first carrack the following goods, viz:—

2,000 piculs of white powder-sugar and some baskets of sugar-candy;
4,500 piculs of Tintenaga or Spelter (zinc);
223 fardels of Chinese camphor;
90 fardels Agelwood; (1)
18 leaden boxes of musk-balls;
11 boxes of vermilion;
22 boxes of Chinese fans:
209 fardels of raw silk, and 75 fardels bad yellow silk;
6,000 pieces of variegated porcelain;
10 casks of coarse and fine porcelain;

(1) "Kâyu gaharu."

some gilt couches and knick-knacks, one lot radix China, (1) one lot benzoin, 150 baskets with prepared silk, velvet, damask, taffeta and fine silk, besides some boxes with gold-wire.

In the second carrack we found:—

174½ piculs of Agelwood;
33½ piculs of Benzoin; (2)
2 small casks with Chinese camphor, and some common sarongs.

The *Wissingen* had captured another small Portuguese ship off Solor, laden with ninety-two bharas Sandal-wood and 2½ pikuls of tortoise-shell.

The *Wissingen* sailed on the 15th September with the captured carrack *St. Anthony* from Patani to Djohor to try and get a cargo at that place. WYBRAND VAN WARWYCK followed on the 27th October, and dropped anchor on the 12th November in the mouth of the Djohor river near the said carrack at about 1½ miles from the *Wissingen*. The vessels *Amsterdam* and *Dordrecht* were under his command. Admiral CORNELIS SEBASTIAANSE'S squadron was also lying in the roads here.

The King called in the aid of both these Admirals, which SEBASTIAANSE pledged himself to give, whilst VAN WARWYCK begged to excuse him for this time.

The letters, addressed by H. H. Prince MAURICE to the King, were then presented to him, which he received with much respect. Admiral CORNELIS SEBASTIAANSE presented him at the time with two brass guns, and VAN WARWYCK gave him four small barrels of gunpowder, 40 shot-cartridges for the said cannon, 12 Japanese swords, four Portuguese muskets with shoulder-belts, some pieces of prepared silk and a shot-proof armour.

The two Admirals presented the King at his request with two small wide-mouthed guns cannon-royal, and some shot-

(1) "Jin seng," or "Jinsam," as it is also called, supposed to very invigorating. It is stated that it is only found near the mountains, a man shoots an arrow, and if it falls where the "jin seng" is to be found, a flame appears, which guides him to the spot.

(2) "Kĕmĕnyan," burnt by Malays and aborigines in most of their charms and spells.

cartridges for the same, from the vessel *Dordrecht* and with an iron pederero (small field piece) and ten small barrels of gunpowder and some shot-cartridges from one of WARWYCK's vessels, in order that he should be better able to repel the assaults of the Portuguese.

Admiral VAN WARWYCK left Djohor on the 10th December with his vessel the *Wissingen*, after having strongly recommended the King to take good care of his people, who were left behind with a valuable cargo, and the Admiral SEBASTIAANSE soon followed him with his vessel the *Amsterdam* and the carrack *St. Anthony*.

At the beginning of January, 1606, our Admiral CORNELIS MATELIEF DE JONGE having met with Admiral STEVEN VAN DER HAGEN off the island of Mauritius, and having heard from him in what state Malakka was, set sail with his fleet to that town, but Don ANDREA FURTADO had fortified it considerably during the last three years, and besieged Djohor with an army of 8,000 men. The said Admiral sailed for Malakka on the 27th January and dropped anchor on the 30th April at half a mile distance from the town. (1)

He at once manned all his boats and sloops and ordered them to set fire to four ships, just aground opposite the town. These were ships of 200, 100, and 80 lasts each. Though the garrison fired five shots, they all missed the boats.

The same night MATELIEF informed the King of his arrival.

The day before, our sloops having captured three prahus of the King of Quedah, loaded with sarongs, the Admiral sent them back to that King and assured him, that he wished to live in peace with him.

The Admiral then assembled a Council of war, and the Council of all the shipmasters and merchants, and they resolved to approach as near Malakka as five fathoms of water (1) would bring them, and to bombard the town from the fleet.

The vessels neared the coast with neap tide to a depth of $3\frac{1}{2}$ fathoms of water, (1) but even at that distance their small cannons-royal were of no use; though a few balls did hit some of the houses, they could not reach the fortress.

(1) There is something wrong about the distances and cannon range here, perhaps "league" should be read for "mile?"

The artillery of the town answered our fire; but the *Witte Leeuw (White Lion)*, was the only vessel once hit, whilst the most effective shot from our side, was the one, that hit the St. Paulus Church, so-named by the Dutch; ALBUQUERQUE dedicated it to "Our Lady of the Annunciation," belonging to the order of the Jesuits.

MATELIEF in the meantime ordered four boats to survey the North side of the town, and to take soundings, for if possible he intended to land there and to take its suburb; but he had to abandon his plan, the soil being too muddy, the Portuguese having raised strong stockades there to defend their houses.

He had erected in the meantime a battery of 24 pounders at Ilha das Naos, (1) one of the islets near the town, and had equipped it also with two small cannons-royal, and intended to bombard the town from that place, it being much nearer than the nearest place where the vessels could anchor.

Our Admiral having been informed in the meantime that it was almost impossible to make a descent on the south side of the town, intended to land on its north side, hence he garrisoned the said islet with some 30 men.

We then opened our fire from the battery of the 24 pounders in the afternoon of the 2nd May, and soon silenced the two batteries on the south side of the town.

Now and then the artillery of the town fired at our vessels, but without any effect; they did not fire at the battery however. But when MATELIEF saw that all this firing to and fro was of no use, he deliberated with his Captains, wheter it would be better to leave the town alone and go first to meet and give battle to the Portuguese fleet, or whether it would be more advisable to take the town first; after a mature deliberation he resolved to ask the opinion of the King of Djohor, chiefly because he wanted to make sure if the latter would help him and what his assistance would consist of.

They did not expect much from the aid of the King of Djohor, but they forwarded a message to him, and it was decided that they should wait for his answer, before acting in any way; the more that there was nothing known about the arrival of the Portuguese fleet.

(1) Pûlau Jâwa, lying opposite St. Paul's Hill.

Meanwhile the Portuguese had burnt down the southern suburb.

MATELIEF ordered ten men of the crew of each vessel to *Pulau Sapta*, (1)a pretty big island about two miles from Malakka, to make ten gabions for each vessel, to be used when they should attack the town.

MATELIEF was informed on the 4th May, that our fire had wounded some of the inhabitants of the town, and that the Portuguese fleet with the Viceroy and Archbishop on board was soon expected from Goa, first to come to the rescue of Malakka, and then to reconquer the Moluccas and to fight the King of Djohor; that the place had but very little victuals, but that there were many guns with a large supply of ammunition, that there were more than 3,000 slaves and Malays within the town, but not more than 80 Europeans.

On the 5th of May, two prahus of the King of Djohor, with the SJAHBANDAR of Singapura, Sri Râja NEGARA, (2) reached our fleet; they came to see if there were Dutch vessels in this neighbourhood, and they assured our Admiral, that it was certain that the King would come this way as soon as he knew of the Admiral's presence, so they would go back that very night.

On the 13th, the Admiral received a letter from the King of Djohor informing him that he should join him within four days, and that he should bring as many troops as he could assemble.

After the receipt on the 14th of a letter of the same tenor, there appeared on the 17th some vessels with three hundred men under the command of the King's brother Radja SABRANG, he (the King) being absent.

The then reigning King of Djohor, called Jangdipertoehan, was the eldest of three brothers. He was a lazy and indolent prince, sleeping almost the whole day, getting drunk, and amusing himself with his women, whilst he left the business

(1) Probably Pûlau Ûpeh (which is somewhere about 2½ miles from the town, but then, as may be seen by the rocks on its shore side, extending further towards the town), as they were going to attack on the North side.

(2) Royal drum; or possibly connected with Sansk: *nagara* or *nagari*, country.

of government to his brother, Radja SABRANG, or Radja BONGSOE, and to the high court dignitaries.

His other brother, the King of Siak, who had married a daughter of the King, or a sister of the Queen of Patani, was also a bad sovereign; he came very seldom to Djohor, but remained at Siak, which was a fief of Djohor.

The third brother, who, like the King of Siak, was also of another mother, was called Radja LAUT: but the said three princes were not to be relied upon, owing to their fondness for drinking. Radja SABRANG was the only exception.

He then came to welcome the Admiral, and presented him a golden kris inlaid with some common diamonds.

They had a long talk together, and MATELIEF told him that it was his intention to take Malakka and to keep it for him, but Radja BONGSOE did not like that, and asked him, why he should assist him to besiege the town, if after all the Dutch would keep the place, for in that case it was only a change of neighbours, and that *we* did not assist *him*, but that *he* then assisted *us*.

MATELIEF then asked him, what would be his reward if he took the town, whereupon Radja SABRANG promised him to give him a suitable place for building store-houses to put their goods and provisions in, which they were allowed to import duty free. But MATELIEF answered that his offer amounted to nothing, that many native princes had made him the same offer, though he had never rendered them any services; he also pointed out that the present town of Malakka did not belong to the King of Djohor, but that it was a town built by the Portuguese, and that only the surrounding country had at one time been the property of the King.

Finally, he gave in about the town and agreed to leave Malakka in our possession, if MATELIEF would promise to make war upon Atsjien, which MATELIEF however refused to do, being at peace with that State; but he promised that, either he would assist the King of Djohor if Atsjien declared war against him, or he would do his best to appease the King of Atsjien.

Finally, the following agreement was entered into on the 17th May, 1606, and signed by the different parties:—

1. Admiral MATELIEF promises to take Malakka from the Portuguese with the aid and assistance of Djohor, after which the town will remain in the power of the States-General (Holland), but the surrounding country will be under the King of Djohor, provided we shall be allowed to take of it as much as we may require to fortify the town;

2. The States-General are allowed to cut timber in the territory of the King, to build ships, and to provide for all the other necessities of the town;

3. All the vassals of the States-General are allowed to discharge their ships and to land their goods in the town without paying any duty;

4. No other Dutch or European merchants may trade in the countries of the King, without first having obtained leave from our Governor at Malakka to do so, and they will be considered enemies if they trade without the said permission;

5. His Majesty can re-people and govern the burnt down suburb, known under the name of Campo Clin, (1) without any interference of the States-General. His Majesty shall if possible take up his residence at that place and fortify it, whilst the States-General shall assist him to do so;

6. All the guns and cannon which are found in the town after its conquest shall belong to the King, one part of which he is allowed to remove at once, whilst he must leave the other part for the defence of the town, until the States-General shall have provided it with other artillery;

7. All the merchandize, money and any other goods that shall be found in the town are to be divided in two portions, one to go to the States-General, the other to the King;

8. Any goods not belonging to vassals of the States-General must be landed in the said suburb [Campo Clin]; but the subjects of the States-General are allowed to purchase them there freely and to carry them from there to the town;

9. Both parties promise to assist each other faithfully against the Portuguese and Spaniards, but not in the case of a war with another nationality, unless it be to stand upon the defensive only;

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(1) *i.e.*, Kampong Kling.

10. Neither of the two parties shall make peace with the King of Spain, without the consent of the other;

11. If any subject of either party gives offence in matters of religion, the offender shall be brought up and punished by his own authorities;

12. If any subject of one of the two parties has a claim in the way of debt upon a subject of the other party, the defendant shall be called before his own authorities;

13. Both parties bind themselves to surrender deserters or runaway criminals.

The said treaty was sworn to and signed by both parties, by each of them according to the customs of his country.

The Admiral then delivered to Radja SABRANG a letter addressed to the King and coming from His Highness Prince MAURICE, which letter was accompanied by the presents also sent to the King by the said Prince, which presents consisted of a long fusil, a double-barrelled pistol inlaid with mother-of-pearl, two other pistols, a sword of honour, and a halberd, besides those sent by the Directors of the East India Company, consisting of one fine harness, two halberds and six cuirasses.

Mr. MATELIEF thereupon landed on the 18th May, with 700 men, and falling in with a troop of 400 Portuguese and black soldiers armed with muskets and pikes, he immediately attacked them, and drove them back to the suburb.

Finding a strong thick wall there (1) they at once threw up an entrenchment, from behind which they opened such a hot fire upon the enemy, that he had to abandon his position, which was set fire to by its own inhabitants.

After having made a rapid personal examination of the town, Mr. MATELIEF found near it a pretty large river, (2) which to cross would be rather a hard task, seeing as he did so many strong turrets and such solid heavy walls round the town that it would have been very easy for the Portuguese to prevent him from taking the town; besides that he had not forces

(1) Pintu Tranquerah?

(2) The Malacca river, separating the fortress and main town from the suburbs.

enough for the purpose, many of his soldiers being laid up already with sickness, and as for the assistance of the Malays, he did not feel inclined to rely too much upon it.

In the meantime he ordered his troops with the assistance of the Malays to construct a battery in the said suburb, and armed it with two 17 pounders, with which he intended to silence the fire of the enemy on that side of the town.

By this time Mr. MATELIEF had noticed, that whenever he had asked Radja SABRANG for the help of his men he indeed promised to send him people, but they never appeared; and concluding that there was something amiss between the King of Djohor and his brother, he became aware, that he was knocking at a deaf man's door, the more so that they had conceived a sentiment of jealousy against each other. Finally, becoming convinced that he could never take the town with the small number of troops under his command, he thought it advisable to raise the siege and re-embark his troops, especially when the Bandahara had told him plainly that the Malays intended to leave the whole business to us, under pretence that Ternate and Ambon had also been taken by us without the assistance of the natives.

I wish to take this opportunity of correcting an erroneous statement I made in foot-note (5) p. 50 of No. 13 of this Journal for June, 1884. The arms on the old gateway there mentioned are not Portuguese, though I was so informed by a Portuguese Consul, but Dutch after all, the Batavian lion is clear.

D. F. A. H.

NOTICES OF BOOKS.

Rapport à M. le Ministre de l'Instruction Publique sur une Mission aux Iles Philippines et en Malaisie (1879-1881), par M. le Docteur J. MONTANO. *Paris,* HACHETTE, *1885.*

Every contribution to the scientific literature of the Philippines is of value, for though these islands have been under European dominion for over 300 years, it is astonishing how much there is still to be learned about them. There is no complete work which embraces the whole subject of the geology, geography, and natural history of this group. One has to look for the botany in old Fray BLANCO's work, or pursue it through the voluminous pages of A. DE CANDOLLE's *Prodromus*. A valuable illustrated work on the forest flora of the Philippines has been lately published at Manila by Señor VIDAL. But both works are incomplete. The geology of the island may be sought in the various papers supplied to the *Boletino del Carte Geologico di España*, a work now extending to many volumes. M. JAGOR has given many valuable details in his *Reisen in den Philippinen* (Berlin 1873), a work which has been translated into Spanish, French, and English. There is also an Appendix by J. ROTH on the geology of the islands. Baron RICHTHOFEN has published some observations on the nummulitic limestones of Binangonan. Finally, M. VIDAL has published (Madrid, 1874) a Memoir on the mountains of the Philippines.

In the numerous works published by the monks about their missions, which are very voluminous, there are scattered notices of geology and natural history, which have more value than one would imagine from the imperfect state of scientific knowledge when they were written. In these may be found many interesting details of hurricanes, earthquakes, and volcanic eruptions. The history of the Dominican Mission in the Philippines is in

six volumes, while the works of the Augustinians and Jesuits are too numerous to specify.

In spite of all these, however, a good general work embracing all the departments of science is still a desideratum, for the material of which Dr. MONTANO's Report is a contribution which cannot be too highly praised. His opportunities for observation have been considerable. He visited in succession Luzon, Calamianes, Palawan, Balabac, Mindanao, and Panay, besides making long journeys inland, especially in the little known island of Mindanao. His qualifications for making the most of such opportunities appear to be of the highest order, and thus we have notices, necessarily brief it is true, in almost every department of science.

The Report is divided into five chapters, viz. :—1.—Geology ; 2.—Meteorology ; 3.—Anthropology ; 4.—Pathology ; 5.—Dialects; 6.—Political Geography, including Agriculture and Commerce. Zoology and Botany are to form the subjects of a subsequent work.

One would suppose, from the volcanic nature of these islands, that the geology would be somewhat uniform and that the author's notes would be confined to notices of volcanic products with investigations on the disturbances to which the group has been subjected. But sedimentary and fossiliferous rocks are not wanting in the islands. The formation ranges from the lower paleozoic to miocene, through, like all the eastern islands, mesozoic rocks appear to be wanting. The writer of this notice, when visiting the Calamianes group some few months back, was surprised to find the island of Coron and many other smaller islands entirely composed of precipitous limestone similar to what is found in Selangor and Perak in the Malay Peninsula. And what makes the resemblance still more striking is that immediately opposite, on the island of Culion, the rocks are paleozoic and ferruginous, decomposing into laterite just like what is found in the tin formations at Thaipeng. Limestone is also found in the north-west of Luzon, and also miocene rocks and broken fossils mostly of foraminifera. As a general rule, it may be said that the sedimentary rocks belong more to the southern islands. In Mindanao there are quartz veins with gold in slates, also tertiary rocks. There

is also coal in the central and southern islands. Dr. MONTANO explored a good deal of the River Agusan in Mindanao. Between Bislig and Catel he found traces of an extensive upheaval of the coast line. Large banks of madrepore coral were raised above the level of the sea, extending in wide horizontal strata rounded by the waves which the north-east wind frequently dashes over them. The mineralogical notices in the Report are not very numerous, and the chapter concludes with a long account of earthquake phenomena. Of course, the great earthquake of 1880 is not passed over, but the author gives the account and diagrams of the Jesuit Padre FAURA, which have been already published. Dr. MONTANO's remarks and observations on seismology are very interesting.

The meteorological portion of this work is less satisfactory, inasmuch as the author did not reside long enough in Malaysia or the Philippines to enable him to form any conclusions from actual observation. He might, however, have obtained excellent material from the published reports in Singapore, just as he has availed himself of the published reports of the Jesuit Observatory at Manila. These are very complete, but the whole subject, including that of typhoons, to which Manila is so liable, is about to be treated of in a separate work by Padre FAURA, who, for many years, has been the Director of the Observatory of the Ateneo Municipal.

This Report is especially interesting in the department of ethnography, and much that is new will be found in it. The author gives a very full record of facts, which, as he has no theory of his own to support, appear to be entirely trustworthy. He describes the Negritos or aboriginal mountain tribes in a very full manner. They correspond to our Sakeis in Malaysia, and are quite distinct from the bulk of the native population throughout the island. They are divided into different tribes according to the mountains where they dwell. They have never been civilised in any way, and all attempts to reclaim them have failed. Even on Mariveles, close as these mountains are to the city of Manila, they are to be found, uncontrolled by the Spanish Government and occasionally killing a solitary Chinese or Tagal who strays into their mountain fastnesses.

The great portion of the natives or Indians who inhabit the lowlands of the islands belong to the tribes or races which are distinguished as Tagalocs, Bisayas or Vishayas, and Bicols. They are all branches from the Malay stock, with a somewhat marked approach to the Chinese type.

Though I have said that Dr. MONTANO has no theory of his own to support, of course he has a system which he developes. He follows those who regard the people of Malaysia and all that portion of the great archipelago to the west of Flores, Ceram and Gilolo (the limit of the Papuan race) as belonging to three distinct races, viz.:—the Negritos, the Indonesians, and the Malays. Dr. MONTANO limits the application of this system to the countries which he visited. As he saw very little of the Malay Peninsula, that portion of his work is incomplete.

Making every allowance for the changes and admixtures to which every race is subject, the author gives the following idea of the system. The islands are supposed to be divided into three zones. The Negritos, occupy the internal or mountain region to which they have been driven by the Indonesian invasion. The Indonesians occupy the central zone, where they have been driven in their turn by the Malay races, which almost exclusively occupy the external zone and are spread on all the coasts of the Indian Archipelago as far as Flores.

So far the idea is simple enough, but it soon becomes complicated, even when applied to the Philippine Islands alone. There we have the Negrito in the mountains, but in most of the islands there is not much trace of the Indonesian. We find ourselves in presence of a Malay race divided into three peoples, as we may call them, speaking three different languages, though all of undoubted Malay origin. There are the Bicols, the Tagalocs, and the Bisayas. These form the bulk of the population of the islands. The Negritos are rapidly disappearing and do not number in Luzon and Mindanao more than 500 souls. The Bicols are close on half-a-million; the Tagalocs about twelve hundred thousand; and the Bisayas two million and a half. Dr. MONTANO confines his observations to the Indonesians of Mindanao, and enumerates them as about fifty thousand.

The three great tribes of Malays already described are con-

sidered as having a predominance of Chinese blood, and in the Gulf of Davao (Mindanao) and Sulu he finds Malays with a mixture of Arab and Indonesian blood. These are called Moors by the Spaniards and are all Mohammedans. They number about ten thousand souls.

The author divides the Negritos of Luzon and Mindanao into :—1.—Negritos; 2.—Mamanua; 3.—Negrito Mestizos. In Malacca he enumerates four tribes, namely :—1.—Manthra, 2.—Knabui, 3.—Udai, and 4.—Jakuns. Other Sakeis are not taken into account. Besides these, there are many Negritos in the other large islands of the Philippine group, such as Mindoro, Panay, &c., but of these Dr. MONTANO saw nothing.

There can be no doubt that there are three zones of races to be found in most of the larger islands of the Indian Archipelago. Nay more, we find the same or similar facts far beyond the limits ascribed to them by Dr. MONTANO. There are three zones of races very distinctly marked in Formosa, in Hainan probably, and there are even traces of the same in Japan. But when we come to analyze the constituents of these zones, the difficulty of classifying them under one head becomes manifest. In Borneo, for instance, the coast line is on the west, north and north-east overspread with Malays (Bajows), the central zone may roughly be said to be made up of the various tribes of Dusuns and Dyaks. But the Dusuns are of partly Chinese origin, and there does not seem to be anything in common between them and the Indonesians. In the centre we have wild mountain tribes, of which little is known, but yet sufficient to say that they are not Negritos.

In Formosa the Negritos of the mountains are a fierce savage tribe very like those of Luzon, but more treacherous. The central zone is a mixture of Chinese and possibly a Malay race, while the coast line is entirely Chinese. We have no traces of a distinct Indonesian population in the Malay Peninsula, but any person who pays much attention to the diversities of type amongst the Malays in the various States must see at once that some admixture of races must have taken place. Of course, the recent mestizos of Malay-Chinese and Indo-Malays are taken into account by Dr. MONTANO.

The portion of this work which is devoted to language will

be read with great interest by the student. The author states that all the dialects of the independent tribes which he visited belong to a family of languages which he calls Malayo-Polynesian. This result is the more important as it tends to throw some little light on the approximation which some have found between the Japanese language and the Polynesian. In Japanese, Malay words and a Malay structure are also slightly perceptible. What if the Polynesian races are the ultimate dispersion of a race which once spread over and peopled the east even as far as Japan? In the Philippines Dr. MONTANO takes Tagaloc as the type, comprising under that group the Bicol and Bisaya dialects. They are almost as distinct from each other as they are from the Malay, but yet they are all of Malay origin beyond a doubt.

The author says that in all these languages or dialects there are no such things as parts of speech properly speaking. Theoretically all the words may be considered as roots and by themselves having no more than a vague sense. Their value as subject or object verb or quality is determined by affixes and suffixes less numerous in Malay than in the Tagaloc dialects, where their use is extremely complicated. This renders the language difficult for Europeans. Yet most of the monks speak it fluently, and they have published so many and such excellent grammars and dictionaries of all the dialects that the study of them and the elucidation of their history is much facilitated. The Negritos have no language of their own, at least now in the Philippines. They speak a corrupted Tagaloc. It is a pity that we know so little of the language of our Sakeis. Mr. J. E. DE LA CROIX has published something on the subject (Journal of the Anthropological Institute, August and November, 1882), and we may hope that before long some of the officers of Government in the Malay Peninsula will take the matter up.

Dr. MONTANO gives very full vocabularies of Malay, Tagaloc, Bisaya, Buled-Upih, Negrito, Samal, Manobo, Bagobo, Tagacaolo, Bilan, and Atas. The last five are small tribes in Mindanao with very distinct dialects. Buled-Upih is the language of the natives on the Kinabatangan River in north-east Borneo. The orthography of the Malay given in this book is peculiar, and adds one more to the ways of rendering that language accessible

to Europeans by odd combinations of letters. Dr. MONTANO's mode may be better than its predecessors, but at any rate it differs from them. At present no two books agree, and the student is fairly bewildered. Who will put an end to this confusion?

Connected with the subject of ethnology, there are thirty beautifully executed phototypes by QUINSAC. Their execution leaves nothing to be desired. There is also a plate representing microscopic sections of hair from various tribes. These sections show an oval, or sometimes a triangular and quadrangular outline, but never a cylindrical one.

The chapter on pathology is exceedingly interesting, containing as it does notices of all the various diseases amongst the natives which came under the author's notice. He also gives some well-considered observations on the effect of the climate upon Europeans. The subject, however, is too long to be dealt with here, and the same may be said on the chapters devoted to commerce and agriculture. This notice may be concluded by stating that Dr. MONTANO has contributed a most valuable addition to our knowledge of the Philippine Islands, which will hereafter be a standard work of reference on the subject. Scientific men will look forward anxiously to the portions especially devoted to zoology and botany. Even in this report there is a list of native names of plants with their corresponding botanical names and the orders to which they belong, amounting to 190 plants. A similar list is given by VIDAL, which the writer of this notice has found most useful in travelling through the Philippines, but MONTANO's list contains tribal names which are not found elsewhere.

J. E. TENISON-WOODS.

"*Work and Adventure in New Guinea, 1877 to 1885,*" *by Rev.* JAMES CHALMERS, *and Rev.* W. WYATT GILL.—*The Religious Tract Society, 1885.*

JUST a year has elapsed since Commodore EKSKINE proclaimed a British protectorate over a large portion of the southern shores of New Guinea extending from the limit of

the territory claimed by the Government of the Netherlands, about Longitude 141° E., to East Cape including certain adjacent islands. A High Commissioner (Major-General Sir PETER SCRATCHLEY, R.E.) has been appointed, and may perhaps soon be heard of off the coast of the Protectorate. In the meantime the work of Messrs. CHALMERS and GILL, which has been lately published, comes opportunely to afford the most recent information, from those best qualified to give it, of the territory in which Great Britain has acquired new interests and responsibilities, and of the manners and customs of the tribes inhabiting it.

The authors are missionaries of the London Missionary Society, but their book is no mere chronicle of mission work; it contains valuable ethnographical notes about comparatively unknown tribes, and records of exploration in new regions. The mission, which dates only from 1871, seems now to be firmly established; the head-quarters of the missionaries are at Port Moresby, while thirty-two native teachers, most of them South Sea Islanders, but some of them New Guinea converts, are stationed at various villages along the south-eastern coast of the great island between Motu-Motu and East Cape.

The only specimen of the language given consists of the names of the months (thirteen) and the numerals in the Motu dialect, which is used by the natives of Port Moresby. Other dialects are mentioned—Roro, Hula, Koiari, &c.—and the natives of different districts seem to be unintelligible to each other. At Teste Island several Polynesian words were recognised in the conversation of the natives with each other.

The people of Port Moresby speak of themselves as being of the same origin as the natives of the gulf of Papua. "Two men sprung out of the earth—Kerimaikuku and Kerimaikape—but no woman; their only companion was a female dog. Anxious for children, a daughter and a son were born to them. When these were grown up they married, and children being born the inhabitants soon numbered fourteen. They then separated, two going right back to the mountains, and from them sprung the great Koiari tribe; two going not so far inland, and dwelling on the low lands and from them sprung the Koitapuans, a tribe of sorcerers; the remainder all going to Elema, where they remained many generations."

The only account that a mountain tribe in the interior of the Kabadi district could give of their faith was that their great spirit lived on the mountains and was called Oarova; he had a wife named Ooirova and they had a son called Kurorova.

A native of Orokolo, a place at the head of the gulf of Papua, furnished the following particulars as to the beliefs of his tribe:—

"The spirit Kanitu made two men and two women who came out of the earth. The name of the elder brother was Leleva and the younger Vovod; from them have sprung all mankind. This spirit lives in spirit-land on the mountains and when he visits a village he rests on the ridge of the temple. He is represented in the temple in wicker-work; there he is consulted and presents made to him."

In connection with this word *Kanitu*, or *Kanidu*, which by the way seems to have been adopted by the missionaries as a mode of translating the word GOD, it is noticeable that the word *Sinitu*, meaning a malevolent spirit, is found among certain Malayan tribes, *e.g.*, the islanders of Mantawe off the West Coast of Sumatra. See Journl. Ind. Arch., IX, 287.

As is the case with all of the larger eastern islands, the interior of New Guinea seems to be inhabited by aboriginal tribes who have been driven back to the hills by a robuster race now occupying the coast districts. While the latter are described as being in places as fair as South Sea Islanders, the former are said to be black with woolly hair, beards and moustaches, and are all cannibals. The physique of the people is found to improve as one travels eastward from Port Moresby, and Dufaure island is mentioned as the point of meeting of two races—one from the Kerepunu side and the other from the east. Both would seem to differ considerably from the Papuans of the Gulf. At South Cape the people are small and puny and much darker than the Eastern Polynesians.

The houses of the natives are built on piles, and in many places villages are found composed entirely of houses built in this way in shallow water on the sea-shore, communication being maintained between them by horizontal poles supported on perpendicular ones. Mr. GILL describes these as "Swiss-lake-like villages" in allusion, of

course, to discoveries of the remains of houses raised on piles in lacustrine sites in Switzerland and North Italy.

WALLACE long ago stated that the view of an ancient lake-dwellers village, given as the frontispiece of Sir CHARLES LYELL's "Antiquity of Man," is chiefly founded on a sketch of a New Guinea village, viz., Dorey in the North-west of the island.*

The custom of building on piles or bamboo posts at various heights above the ground is very general from the frontiers of Tibet to the islands of the South Sea, and is one of the many points which support the theory of an identity of origin between the Indo-Chinese races and the races of the Indian Archipelago.† Specimens of Malay villages on stilts standing in the sea may be viewed any day in New Harbour, Singapore.

The customs of the people as regards clothing are not such as to encourage a hope of finding a new market for English cotton goods in New Guinea! The married men and women are described as having very little dress; the young men and girls have a little more than their parents. Shell ornaments for the hair, shell necklaces, and nose-ornaments and armlets of the same material are much worn. So are tortoise-shell ear-rings. A grass petticoat is worn by women and is said to be identical with that formerly worn in the Ellice group, the grass being ornamented by alternate red and yellow strips of pandanus leaf; married women have their heads close shaven, while unmarried girls wear their hair "in a complete frizle, four or five inches long and not parted." Young men wear a coloured band of native cloth round the stomach. It is made from the bark of the native mulberry, and is woven tightly on the body, the flesh bulging out above and below. It can be removed only by cutting it. The face is painted in stripes of black, white, red and yellow, and nasal ornaments, often nine inches long and curved, are inserted in the pierced septum. At Murray Island the old men, to conceal their grey hair, take to wigs, "which represent them as having long, flowing, curly hair as in youth!"

Tattooing is common. Women at Port Moresby are described by Mr. GILL as "exquisitely tattooed," while at Hula,

* WALLACE's *Malay Archipelago*, II, 305.

† Colonel YULE, Journ. Anthrop. Instit.

further east, the tattooing is said to be "simply perfect" and to leave upon the mind the effect of clothing. "Married women have a necklace or chain tattooed round the neck; each pattern has a distinct name. It is done to please the future husband, who has to pay liberally for it." At South Cape, says Mr. CHALMERS, the women "tattoo themselves all over their faces and bodies and make themselves look very ugly," shewing either an inferiority in art on the part of the South Cape people, or a diversity of taste between the two authors. Tattoo-marks on the chest and back of a chief indicate severally a life violently taken.

When in mourning for a relative the body is blackened over and besmeared with ashes, and the chest and shoulders, and sometimes the entire person, are enveloped in fine net-work. A widow will sometimes remain in mourning for five years, during which period, it is said, she wears no ornaments and performs no ablutions. A mother in mourning for her daughter will wear round her neck all the ornaments once the property of the deceased, and along with them the jawbone taken from the unburied body. The latter incident must be looked upon, however, as a charm to avert the evil influence of the spirit of the deceased rather than any token of mourning, for in another place Mr. CHALMERS describes one of his guides (at Stacy Island) as wearing, as an armlet, the jawbone of a man whom he had killed and eaten, "while others strutted about with human bones dangling from their hair and about their necks." Similarly, it may be doubted if the "immense necklace," seen by Mr. GILL, slung over the left shoulder of a woman (consisting of the vertebræ of her deceased brother), was really worn "as a mark of affection," and the five widows of one husband who carried about, each of them, a portion of his remains, the eldest carrying the skull in a basket, were probably guided by some superstition which the European observer did not fathom.

Cannibalism, though not universal, is general. The Stacy Islanders boasted of having killed and eaten ten of their enemies from the mainland, and the house of the chief was hung with the skulls of the enemies eaten by himself and his people. Among these people a cannibal feast, to which

Mr. CHALMERS was invited, was held and "some of our friends appeared with pieces of human flesh dangling from their necks and arms." The black tribes of the interior have the reputation of being cannibals, and those with whom the Port Moresby natives trade are said to laugh at the latter for not eating such delicate food as human flesh Instances are given too of cannibalism on the part of natives of the Hayter and Heath Islands, of Teste Island and of South Cape. At the last-named place a friendly chief presented to Mrs. CHALMERS a human breast, "a highly prized and delicate bit." It is not astonishing, therefore, that her husband records that after this he ceased to gratify the natives in this part of New Guinea with exhibitions of his chest, though the free inspection of the feet, boots, arms, and chest of an European seems to peculiarly delight them. "All shout with delight, and every new arrival must have a look."

The gods of the natives of the south-east of New Guinea are Kaevakuku, Semese, and Tauparau, the first being a female and the others male spirits. The district of Elema is supposed to be the place of residence of these gods, and here, as well as at other places along the coast, there are temples containing idols where dances and feasts are held. No females or youths may approach the temples. Singing enters largely into the worship of these people, which would seem to be rather dictated by the fear of evil spirits than belief in beneficent ones. "The centre post in every house is sacred to Kaevakuku and her portion of food in every feast is first offered there. The first fruits belong to her. All planting is useless unless blessed by the gods. The sun belongs to Kaevakuku. Rain, lightning and thunder to Semese and Tauparau." ..... "Kaevakuku is represented by a large frame of wicker-work. Semese and Tauparau are made from blocks of wood and stand outside of some temples, and against all the posts running down the centre." During a thunderstorm the natives beat drums and shout in order to drive away the storm-spirits.

"Spiritists," as Mr. CHALMERS calls them, who profess to make revelations by the aid of spirits who speak through

them, after the manner of the Borneo *manang* and the Malay *pawang*, are much believed in and feared, and, like the latter, adopt a feigned voice and use much singing and chanting in their incantations. They have the reputation of being expert poisoners, and wars are undertaken and murders committed on their representations. It is no wonder that the sorcerer "gets the best of everything—best pig, best food, best tomahawk, best shells." There are sorceresses also. So, among the islanders of Buru, the "Swangi," who has a familiar spirit at his command and is able to cause sickness or disaster, receives presents, not only from those anxious to retain his goodwill, but also from those who wish to use his power to the injury of an enemy.*

Of social customs, or ceremonies at births and marriages, there is no account. It would appear to be the custom for the husband to purchase his wife, one chief having stated to Mr. CHALMERS that he had paid "an enormous sum" for his consort, viz., ten arm shells, three pearl shells, two strings of dogs teeth, several hundreds of cocoa-nuts, a large quantity of yams, and two pigs. But in another district (up the William River) a man pays nothing on marriage for a girl, but has to pay heavily if the object of his choice be a widow!

Accounts of burial customs vary according to the different localities and tribes visited. Of the natives of Suau, or South Cape, Mr. GILL says: "All the members of a family at death occupy the same grave (above which a small house is erected), the earth that thinly covered the last occupant being scooped out to admit the new-comer. These graves are shallow; the dead being buried in a sitting posture, hands folded. The earth is thrown in up to the mouth only. An earthen pot covers the head. After a time the pot is taken off, the perfect skull removed and cleansed—eventually to be hung up in a basket or net inside the dwelling of the deceased over the fire to blacken in the smoke.

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* FORBES, Eastern Archipelago, 404 (Buru), 338 (Timor).

Among the Koiari tribe the bodies of the dead are not buried, but are dried and preserved in the following manner:—*

"A fire is kept burning day and night at the head and feet for months. The entire skin is removed by means of the thumb and forefinger and the juices plastered all over the face and body of the operator (parent, husband, or wife of the deceased). The fire gradually desiccates the flesh, so that little more than the skeleton is left. Their next anxiety is to discover by whose sorceries he or she has died. The mode of proceeding is as follows: the wise man of the tribe places on the body as many bits of dried grass as there are known villages round about, each bit being placed in the correct relative position. The incantation begins; at length a fly or some other insect alights on one of these straws, probably attracted by the smell. It is now evident to the wise man that an inhabitant of the village indicated by the straw occasioned the death of their friend by sorcery, for has not the god spoken? That same night revenge must be obtained! The desiccated body is well wrapped up and fixed in a lofty tree. The ashes of the two fires are rubbed over the faces of the relatives and other watchers, a grand feast and dancing concluding the whole." The resemblance of some of these incidents to the customs of the islanders of Buru and Timor and of the Australian aborigines is worthy of remark. FORBES has noticed that the Timorese, like the Australians, cannot understand why any one should die unless he be killed and seek, after a death, the person whose malevolent influence has caused it.† The same people suspend dead bodies, folded at the thighs and wrapped in mats, in lofty trees.‡

In districts where burial is practised (*e. g.*, Port Moresby) a stake is planted beside the grave to which are tied the spear, club, bow and arrow of the deceased, (if a man),

* Mr. GILL points out that D'ALBERTIS in his work on New Guinea [vol. ii, pp. 133, 134], has furnished evidence of a similar practice obtaining among the natives of the Fly River, 500 miles further west.

† Eastern Archipelago, 404, 438.

‡ Id., p. 434.

broken to prevent theft: at the grave of a woman her cooking utensils, grass petticoats, &c., are similarly suspended. This is the *baiya* of the Dayaks of Borneo* and agrees, as Mr. GILL points ont, with customs which prevail generally among the Polynesians. At a funeral which he witnessed, the widow sat at the head of the grave besmeared with ashes. A lament was sung by the assemblage to the accompaniment of drums which each man carried. The women scratched each others' faces and bosoms until they bled freely: "then the hair of the dead was plucked and shaved off as charms; indescribable phallic scenes followed." It is the custom for relatives to watch by the graves of their deceased friends, and small huts are erected over or near the graves, in which they sleep at night.

Of a tribe of mountaineers whom he visited, Mr. CHALMERS says: "the natives very seldom bury their dead, leaving the body in a house set apart for it, which they often visit. When a number of deaths take place, they leave the village and settle somewhere else not far off. There is one grave here, near to our house, on which a tobacco plant is growing, a bamboo pipe, the property of the deceased, alongside a few sticks on end with yams on top. When they do bury, the body is placed standing in the grave." A most cruel and unnatural custom, said to prevail in the district of Aroma, is that of burying alive decrepit parents and grandparents. A native teacher saw a man dig a grave for his aged grandmother. With his own strong arms he deposited her in it, despite her tears and feeble resistance. When remonstrated with, he replied: "She cannot live. She is already as good as dead." He then filled up the grave and trod the earth down upon the living victim and went home.

Taro, sago, cocoa-nuts, betel-nuts, yams, plantains, and sugar-cane are produced abundantly. "Sago is cooked with shell fish, boiled with bananas, roasted on stones, baked in the ashes, tied up in leaves, &c., &c." Pork and the meat of the wallaby are much valued as food by the natives, and iguanas are also eaten. The indigenous breed of fowls is inferior. Cucumbers are cultivated. A small oyster, described as "capital eating"

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* See No. 14 of this Journal, p. 291.

is plentiful at Port Moresby. The South Sea Island *kava (piper methysticum)* grows wild. Among the products of one district are enumerated raspberries, strawberries, nutmegs, tobacco, capsicums and indigenous cotton.

Mr. CHALMERS gives the native names of several species of wild animals, but as he did not see them, was unable to identify them. "The *Jakoni*, *Gomina* and *Agila* are very large and fierce. The *Papara* and *Gadana* are small but fierce." In the existence of these Mr. GILL does not appear to believe, for he says that the wild pig *(sus papuensis)* is the largest and, excepting the dingo, almost the only true mammal in New Guinea, all the rest being marsupials. There are two species of wallaby in New Guinea and "two species of the hithertostrictly Australian genus *Echidna*, or spiny ant-eater, have been discovered," *(Tachyglossus Bruijnii* and *T. Lawesii)*. Both forms are oviparous. The *Echidna* produces a single egg at a birth, thus supplying, as Mr. GILL remarks, the connecting link between reptiles and mammalia.

Mr. GILL discusses the relative advantages of three places as the capital of British New Guinea. These are Hall Sound, Port Moresby, and Kerepunu. The first is near a vast extent of fertile land, but swamps make it unhealthy; the second is shut off by hills from the interior; and the third though giving access to a valuable district is so thickly inhabited that to obtain a site would be difficult. The advantages of a safe harbour tell in favour of Port Moresby, but probably the headquarters of the High Commissioner will be the deck of his steamer for some time to come. The density of the population and the attachment of the natives to their holdings will make colonisation in New Guinea a very different undertaking to that which lay before early settlers in Australia. At South Cape Mr. GILL was told that "every acre of soil along this part of New Gninea has its owner. A native desirous of making a plantation on another person's land can do so by asking permission, or by a stipulated payment, but only for once." The cultivation of jute is mentioned as an industry likely to be valuable in the future, a specimen of New Guinea jute, submitted to "a well-known Dundee firm," having been pronounced to be the finest jute in the world.

This book contains an account of the murder of four native teachers and the wives and children of two of them in 1881, and of the murder of Dr. JAMES and Mr. THORNGEEN, with allusions to other outrages. And it is not difficult to gather from Mr. CHALMERS' unvarnished narrations of his various journeys that difficulties and dangers which he successfully surmounted might, in the case of one not gifted with equal coolness and courage, have given occasion for bloodshed, and consequently for permanent hostility with a revengeful people. His knowledge and influence will, no doubt, be most useful to those charged with the administration of the Protectorate, and it is to be hoped that he may, at some future, time be able to give to the world fuller details about New Guinea than those contained in this unpretending volume, which has apparently been compiled in England, in his absence, from some of his journals and papers. Ill-digested as information communicated in this way must necessarily be, it is sufficient to enable the reader to admit, with the author of the introduction, that Mr. CHALMERS has combined the qualities of missionary and explorer in a remarkable degree, and has added enormously to the stock of our geographical knowledge of New Guinea, and to our accurate acquaintance with the ways of thinking, the habits, superstitions, and mode of life of the various tribes of natives.

W. E. M.

OCCASIONAL NOTES.

EXPLORATION OF PAHANG.

Extract from a letter from Mr. W. Cameron to H. E. the Acting Governor (the Hon'ble Cecil C. Smith, C.M.G.*) dated 4th September, 1885.*

I have had a very successful expedition this time, and think it is the most complete and comprehensive piece of exploring I have done yet, as well as one likely to lead to practical results.

I have discovered Pahang to be a much larger territory than even I imagined, and I always knew it to be larger than was generally supposed. It impinges right up to the Ulu of the Kinta and the Raia close into Pêrak just as it does at Ginting Bidei, and there is no intermediate nobody's land, except that this portion is totally unknown even to the Pahangites or to any Malays. There is in this place a sort of central hill country, a sort of vortex in the mountains, where for a wide area we have gentle slopes and *pamah* (plateau) land, with rounded hills shut in all round by loftier ranges but which from the mean elevation of this vortex appear comparatively low, but the mean of the valley for many miles is 4,500 to 4,750 feet above sea level by aneroid. Streams of considerable size glide along easily from all around and go to feed one large stream eventually, and this is the Telom—the real Ulu of the Jĕlei. I ascended one mountain at the N. E. corner

of this central land and looked down on the N. E. side to the real Ulu (upper reaches) of the Kĕlantan, further east again behind a lofty range, Pahang, octopus-like, shoots out another arm to the north impinging on Kĕlantan. The mountain which I ascended was 6,300 feet by aneroid, probably considerably higher real altitude, and stands in somewhere about 4° 38′ North Latitude 10 degrees north of east. Of this a lofty mountain range rises closing in the vortex (to continue the simile) to the East (the vortex being the Telom). This lofty range I estimated to be over 8,000 feet, perhaps considerably more. I dared not ascend it, for, not knowing what stream or system of streams I was on, I was obliged to hold on to the watershed till it brought me right into Pahang known. I had no one who could give me any information, and the Sakeis all fled before us, so that I had to be my own guide, and thus, as I say, was tied to this watershed till I could make sure what it was, as I felt certain it would settle the question of the central watershed about which there have been various conjectures, and it has solved the question, at least up to this point and a good way north of it.

We had rather a trying time of it, owing to the fearful rains. Colds, fevers and rheumatism were our constant companions, and my men suffered very much.

I hope that I may have an opportunity of placing some of the results of this expedition more fully before you, and thanking you for your kind wishes.

I am,

Yours faithfully,

WILLIAM CAMERON.

P.S.—I was fortunate enough to obtain particularly interesting geological data, of which I have brought many specimens and made copious notes. I should have stated generally that my route was up the Raia which I explored, the Ulu

(upper reaches) being unknown, as well as the Penoh which is an *anak* (tributary) of the Kinta. I crossed a mountain by a pass 5,300 feet by aneroid lying exactly at the Ulu of the Kinta, Penoh and Telom. This I have called Gunho Pass. I took the elephants over with me, explored this new country and followed the Telom till I got to within a day's sail of the place where it joins the Jĕlei. Long ere this all our stores but rice had been exhausted, so for the purpose of obtaining supplies, and also because a rumour had got abroad in Pahang that I was a *musoh* (enemy) with forty elephants and four hundred men come down to harry and to raid, I had to reassure the authorities: I went down to the Toh Kaya's and to Pĕnjum by sampan, then back again and then crossed southerly all the rivers of Upper Pahang, keeping close to the foot of the main ranges, and coming out over mountains 5,000 feet high at the Ulu of a tributary of the Slim, and thence on to Bernam.

I have reason to thank the Great Master that I was enabled under his protection to bring my men back alive, although I cannot say well, for I on several occasions had great reason to be alarmed and feared some would succumb; there are several of them now under treatment, and one I left in the hospital at Penang.

The elephants, I am happy to say, notwithstanding the unprecedented fatigue, are well and in fair condiiton. By this time they will be pretty strong, for I left them at the Ulu of Sungkei to feed and rest eight days ago, and they will soon be in good condition. I am starting the relief party back again to-day by way of the Pĉrak river and Batu Gâjah and I propose taking a run down to Singapore for a day to get some outfit which cannot be procured here, when I shall do myself the honour of calling on you, but I must start my party first and I will meet them at the Bernam almost as soon as they can get there, as we are taking an additional elephant.

W. C.

LAND REGULATIONS, NORTH BORNEO.

Special Regulations for the Leasing of Uncultivated Lands in Lots of less than 100 *acres in extent.*

The following Proclamation appears in the Official Gazette, North Borneo, of October 1st, 1885 :—

Preamble. WHEREAS it is expedient to repeal that portion of the Proclamation of the 23rd day of December, 1881, by which the provisions of the Labuan Land Ordinance, numbered 2 of 1863, were adopted as Law in the Territory of British North Borneo, and to make other provision in lieu thereof.

Repeals portion of Proclamation of 23rd Dec., 1881, as regards Land Law. 1. It is hereby enacted and proclaimed that the aforesaid portion of the proclamation of the 23rd day of December, 1881, by which the provisions of the Labuan Land Ordinance, numbered 2 of 1863, were adopted as Law in the Territory of British North Borneo, shall be and is hereby repealed from the date of the coming into operation of this Proclamation, save and except as touching rights which shall have accrued, liabilities which shall have been incurred, acts which shall have been done, and all proceedings on matters which shall have taken place before this Proclamation shall come into force.

Lands under 100 acres to be classified. 2. All Government Lands under 100 acres in extent within the said territory shall be distinguished into Town Lots, Suburban Lots, and Country Lots and be disposed of in leases for the term of 999 years, unless at the time of sale of any Lot or Lots, any shorter term of lease shall have been notified in the advertisements or conditions of sale with the approval of the Governor, or if any Lot or Lots shall be disposed of under Section 5 hereof, for such term as the Commissioner of Lands, with the sanction of the Governor, shall think fit.

Leases for 999 years or shorter term.

Applications to be made to Land Office, Governor's sanction requisite. 3. Applications for lands shall be made to the Commissioner of Lands or to the duly appointed officer at out-stations, but no sale or transfer shall be valid unless approved under the hand of the Governor.

Suburban and Town Lots to be surveyed before sale.

4. Before proceeding to the disposal of any Lots within the Town or suburban boundaries, the limits of the said Lots shall be accurately defined and published.

Mode of Sale. Auction in first instance.

5. The said lands shall from time to time be disposed of by the Commissioner of Lands, with the sanction of the Governor, by public auction, and it shall be lawful for the Commissioner of Lands to dispose of any land which shall have been once so exposed for sale without being sold, to applicants by private contract within four months from the date of such auction on terms sanctioned by the Governor.

Rent of Town Lots. Rents redeemable.

6. The Town Lots shall be subject to an annual quit-rent at the rate of one hundred and twenty dollars per acre, such quit-rents being redeemable at 15 years' purchase.

Rent and dimensions of Suburban and Country Lots. Quit-rents redeemable.

7. Lands in the suburbs shall be disposed of in Lots of about one acre each, and in the country in Lots of less than 100 acres each. Such lands shall be subject to such annual quit-rent as shall be fixed by the Commissioner of Lands, with the sanction of the Governor, from time to time, and publicly notified; the said quit-rents being redeemable at 15 years' purchase.

Payment of purchase money.

8. It shall be lawful for the Commissioner of Lands to determine at the time of sale whether any or what credit shall be allowed to the Lessees of Lots, and to regulate the terms on which the whole or any portion of the purchase-money paid down shall be forfeited, but in no case shall less than one-tenth of the purchase-money be paid at the time of sale.

Rent how payable and penalty in case of being in arrear.

9. The payment of the quit-rent, reckoning from the date of sale, shall in every case be made in advance to the end of the current year upon the execution of the lease or of the permit to occupy, and the succeeding payments shall be made on the 1st day of January in advance for each succeeding year, and any lands for which the quit-rents may be more than one year in arrear and unpaid shall revert and escheat to the Government, and all premia or other monies paid on account of such lands shall be forfeited.

Unimproved Country Lots to revert and escheat to the Government.

10. Country Lots which remain unoccupied and unimproved for three years from the date of the lease shall revert and escheat to the Government, and all premia, quit-rents, or other monies paid on account of all or any such Lots shall be forfeited.

Unimproved Town and Suburban lots revert to Government.

11. In the case of the Town Lots and Suburban Lots which shall remain unoccupied and unimproved for one year from the date of the lease, the Government shall have the option of re-entering upon and reselling the same at public auction paying to the original Lessee the whole or such portion of the premium obtained on resale as the Commissioner of Lands, with the sanction of the Government, shall think fit, not exceeding the amount of the premium originally paid to the Government for such Land, any excess being retained by the Government, but all premia, quit-rents or other monies paid on account of all or any such Lots shall be forfeited. In the case of Town Lots it is hereby enacted that any buildings erected thereon must be built in conformity with the Local Building Law for the time being in force.

Building on Town lots governed by Local Building Laws.

Limits defined at Lessees' expenses.

12. All Lots shall be surveyed and boundary stones or other land-marks be set up by the Government at the expense of the Lessees; and all boundary stones or land-marks shall be kept in repair by and at the expense of the Lessees, who, when called upon by the Commissioner of Lands, shall point out their boundaries.

Lease issued on payment of all fees.

And no lease shall be executed or issued by the Commissioner of Lands until the whole of the premium, the quit-rent in advance for the year, and all expenses of survey, and the cost of such boundary stones or land-marks, and of setting up the same, and all fees for registration or transfer, and all expenses of conveyancing shall have been paid by the Lessees.

Boundaries to be defined at Lessees' cost.

13. Should the Lessees when duly called upon fail at any time to point out or define their boundaries, or should ther definition be incorrect, it shall be lawful for the Commissioner of Lands, after one month's notice of his intention so to do has been served upon the Lessees, their Agents or Managers, or has been published in the *Gazette*, to survey and define the said boundaries, and to charge the Lessees with the cost of so doing not exceeding one dollar per linear chain of boundary, and to recover the same in the manner provided in section 22 of this Proclamation.

Governor authorised to issue permits for the occupation of Country Lots which cannot be surveyed.

14. Should it happen in case of Country Lots that immediate measurement of any land to be disposed of under the provisions of this Proclamation be found impracticable, it shall be lawful for the Governor to issue a Permit or written authority to clear and occupy such land subject to the conditions on which a regular grant would have been issued; which Permit shall specify the extent and describe as nearly as may be the relative positions of the land to which it relates; and after the measurement of the land

so occupied, the Permit shall be called in and cancelled, and a regular grant issued in lieu thereof.

The Gover or may sub vide origin grants pro ded that all arrears of rent be firs paid.

15. It shall be lawful for the Commissioner of Lands, upon the application of the Lessee or other duly authorised person, to accept a surrender of any original grant of land, and to grant new leases for sub-divisions of the same, provided that all arrears of rent due under the original grant have been previously paid, and provided that in no case shall the quit-rent for any portion of a Lot so sub-divided be less than one dollar per annum.

The right t work mine rals reserv to the Gov ernment.

16. All coal, minerals, precious stones and mineral oil on, under and within the said lands are absolutely reserved to the Government or its Licensees, together with the right to enter upon the said lands and to search for, get and take away coal, minerals, precious stones and mineral oils in, on, or under the same, and to reserve such portions of land as may be necessary for examining or working any mines, or conveying away the products thereof, upon payment of reasonable compensation to the Lessees for surface damage to such land or any buildings thereon.

Mining lice ses may be granted by Governor.

17. It shall be lawful for the Governor to grant mining licenses on favourable terms to the Lessees of demised lands.

Reserves fo Public pur poses.

18. The Government reserves the right to resume possession of such portions of land as may be necessary for public purposes, such as police, revenue and telegraph stations, roads, railways, tramways, canals, &c., upon payment of reasonable compensation for loss and damages actually sustained by the Lessee.

Governmen reserves for roads, &c.

19. The Government reserves the right at all times to take, or to authorise others to take, timber, stone, clay, sand and other road-making material for the construction and repair of neighbouring roads, bridges, &c., on payment of reasonable compensation for loss and damages actually sustained by the Lessee.

Land re serves.

20. The Government reserves all navigable streams, rivers and creeks and a belt of land 50 yards wide along the banks of the same, and also a similar belt of land from high water mark along the sea-shore; ample provision, free of rent, being made for landing places and other purposes, for the convenience of the neighbouring Lessees.

Bird's nests and Guano reserved.

21. The Government reserves all edible bird's nests and guano, and also the right at all times to enter on the demised land, and to take or authorise others to take such edible birds' nests

and guano on payment of reasonable compensation for actual damage done to crops or roads of the Lessee.

Royalties. The Lessee of any demised land shall be entitled to collect thereon all gums, gutta-percha, india-rubber, and other natural produce (save edible birds' nests and guano), paying any such Royalties in respect of the export of such produce as may for the time being be reserved to the Government, in pursuance of any regulations made or to be made by the Government. Provided that if at any time, the Lessee shall not exercise his right of collecting any kind of such produce, the Government may from time to time, serve on him a notice of its intention to collect such kind of produce, and if within a period of six months from the service of such notice the Lessee does not exercise his right, the Government or its Licensees, agents, or servants may, at any time within three months from the expiration of such period of six months, enter on any forests or uncleared or uncultivated parts of the demised land, and collect therefrom the produce referred to in the notice for the use or benefit of the Government, on payment of reasonable compensation for actual damage sustained by the Lessee.

Arrears recoverable at Law. 22. All arrears of payment due by any Lessee under the provisions of this Proclamation shall be recoverable by summary process in any Court of Law in the Territory of British North Borneo.

Registration of Title and assignments. 23. The Regulations respecting the registration of Titles to land shall be such as shall be provided by the Law or Proclamation in force for the time being, but every Lessee shall deliver to the Commissioner of Lands a copy of every assignment or under-lease of his demised lands or any part thereof, and shall produce or cause to be produced to the Commissioner of Lands the original thereof, for the purpose of registration, and until such registration no such assignment or under-lease shall be valid.

Registration Fee. 24. The fee chargeable for the registration under the provisions of this Proclamation upon the issue of a lease or a permit to occupy, is the sum of two dollars, and such registration shall be compulsory.

Registration compulsory.

Survey Fees. The expenses of survey and the cost of boundary stones or other land-marks, and the expenses of setting up boundary stones or other land-marks shall be such as shall be notified from time to time by the Commissioner of Lands, with the sanction of the Governor, by public notification.

Special Regulation for lands of 100 acres and upwards not affected.

25. Nothing in this Proclamation provided shall be taken to affect the special conditions under which Lots of one hundred acres and upwards in extent are leased in accordance with the Special Regulations approved by the Court of Directors of The British North Borneo Company on the 7th day of February, 1883, or such other Special Regulations as may hereafter be in the same manner approved by the said Court of Directors.

Dealing in land with natives forbidden.

26. All dealings in land between European and Chinese and other foreigners on the one hand, and the natives of the country on the other hand are hereby expressly forbidden, and no such dealings shall be valid or shall be recognised in any Court of Law unless such dealings shall have been entered into and concluded before the 16th day of January, 1883.

Foreigners may acquire native land through the Government.

27. A foreigner desirous of purchasing land from a native shall address his application to the Governor through the Commissioner of Lands, and the Governor, if he sees fit to sanction such purchase, shall, if the native owner consent, acquire the land on behalf of the Government, and shall fix the premium at which the same shall be leased by the Government to the applicant, and the land when so leased shall thenceforward be deemed to be alienated under the provisions of this Proclamation, and shall be subject to all the provisions thereof.

Short Title.

28. This Proclamation may be cited as "The Land Proclamation, 1885."

Interpretation Clause.

29. In the Interpretation of this Proclamation the word "Governor" shall mean and include the Officer administering the Government of the Territory of the time being, and the words "Commissioner of Lands" shall mean and include the Officer in charge of the Land Office for the time being, or his duly appointed deputies, and in Section 11 the term "unoccupied and unimproved" shall, so far as regards Town Lots, mean Lots on which tenantable houses have not been erected and maintained.

Sandakan, 1st August, 1885.

ANNAMESE ANCESTRAL WORSHIP.

With a race devoted to ancestral worship, as the Annamese are, funerals are necessarily a very solemn matter, conducted with a minute regard for traditional rites, imperative for the future welfare of the deceased. The first thing to be done is to assure one's self that the person is really dead. A film of cotton is suspended before the nostrils by a silken thread, so that the faintest breath would make it move. Death being verified, the face is covered with three sheets of paper, and over these is placed a red cloth, of silk or cotton, according to the family's wealth. One of the commonest forms of abuse in the country is to pray that your enemy may have no one at his death to perform this service for him. The object is of course to prevent evil spirits from entering and carrying off the dead man's spirit. For the same reason a constant guard is kept by the body, to prevent a cat from passing over it. Cats are particularly hateful to disembodied spirits.

Three grains of rice are then put into the corpse's mouth, and if any teeth have been lost they are replaced. The old are particularly careful to preserve whatever teeth may drop out, for this purpose, and lock them up with their most valued treasures. There is a special reason for this care. Teeth are often employed for making medicines, and the sorcerers who wander about the country always have a number in their wallets, and are not at all scrupulous about how they increase the store. Instead of the three grains of rice, wealthy families sometimes put one or more precious stones in the mouth. The resemblance to the Greek *obolos* to pay the Stygian ferry need not be urged.

The body is then laid out, washed with water in which flowers or fragrant leaves have been boiled, the hair combed and done up in a chignon, and a black turban wound round the head. The deceased's finest clothes, very often specially prepared years before for this purpose, are put on, and he is decorated with the tokens of whatever rank he may have held. The finger nails are cut and placed in a little packet by the side of the head. If they grew into the flesh it would bring

disaster to the family. The corpse is then tightly bound up in cotton cerecloths, the every-day clothes being put between the limbs. Then it is ready to be put into the coffin, and care must be taken to turn the head towards the door. The shell is then closed and varnished all over to prevent the attacks of insects, particularly white ants. The varnish is black, and the best comes from Cambojan marsh lands.

In the meantime the women have been making up the mourning garments. They must be white and of linen or cotton. The nearer the relation, the coarser the material must be, and in no case are they hemmed. The Annamese Code devotes thirty pages (in PHILASTRE's French edition) to a description of the different classes of mourning garments. It is evident, therefore, that quite enough has been said here about the matter. As soon as the mourning suits are ready the family assembles and solemnly puts them on. Then sacrifices are made to the ancestors and to the deceased, and each of the celebrants prostrates himself four times before the coffin.

According to common Oriental custom it is usual to keep the coffin in the house for days and even weeks before burial. By its side is erected a small altar, on which are placed three cups of tea, different condiments, an incense brazier and two candles. The delay is of course to permit the assemblage of all the friends of the house, and the arrangement of one of those gorgeous funeral ceremonies which so often ruin families in the East. There is much mummery on such occasions in England, but the garish parade at a "first-class funeral" in Annam far exceeds any foolery we indulge in. Most of the properties are supplied by professional undertakers, and for details about them the curious may refer to the Annamese Code. Suffice it to say that there are huge lanterns of different shapes, pendant gongs to drive away evil spirits, incense tables, the red and gold painted and highly-carved bier, offering tables and a variety of banners in silk and cloth, some of them peculiar to the family, others common to ordinary, vulgar humanity, such as the fillet borne on two poles, which is inscribed TRUNG-TIN (faithful) for a man, and TRINH-THUAN (pure and obedient) for a woman.

The time for the interment is of course fixed by the wise

men, who select a lucky day and hour; at the head march men with wands to scare off prowling devils. Then in the midst of some of the objects mentioned above comes the "dead man's house," a sort of bamboo cage. The children and the nearest relations follow the bier. In passing the threshold of the door the coffin has been carried over their prostrate bodies. In the middle march a body of monks chanting a noisy but rhythmical requiem. Sham gold and silver leaf is scattered all along the road to soothe the Co-HON—the abandoned spirits. These are the souls of people who have died violent deaths, and have had no rites of sepulture. Their relations have not known of their fate, and have been unable or unwilling to perform the ceremonies which custom prescribes for the delivery of their souls. Therefore the Co-HON remain wanderers on the face of the earth, irritated with the living, and tormenting and oppressing them in every way. They trouble the sacrifices, upset the prognostics, and annihilate the efforts of domestic piety. The superstitious, therefore, are driven to all sorts of devices to appease and deceive these evil-minded demons. The Co-HON are attracted by the glitter of the false gold and silver leaf, halt to lay hands on it, and, before they discover the deception, have lost the opportunity of spoiling the funeral ceremony. There are others, however, who are more considerate, or more fearful of the wrath of these homeless spirits. They burn regular NHŬT-NHŬT-DONG-DONG—"numerous pieces of money." These are strips of paper with coins printed on them, regular postal orders on the lower world for the support of indigent devils. Naturally the funerals so protected are the safer for the deceased.

There are no public cemeteries in Annam. The grave is usually dug anywhere out in the middle of the fields belonging to the family. The rich usually have a special place for their own relations, and sometimes assign a patch for their poorer neighbours. Otherwise these must be buried by the roadside or in some part of the village common lands. At the grave the coffin is lowered in, a banneret of silk or paper giving in white and yellow characters deceased's name, age, dignities, position in family, and virtues, is thrown upon it, and then a small pile of the above-mentioned money paper. Each friend

throws in a handful of earth. The sextons fill it up and make a circular mound above. Offerings and prostrations are made before the completed grave, and then there is a general consumption of rice, wine, and betel-nut.

The period of mourning is very protracted. Nominally it lasts for three years for father or mother, but immemorial custom decrees that this means twenty-four months. For a grandparent or brother or sister it lasts one year, and so on in decreasing ratio. Men of rank cannot undertake public duties during this season, and ought not to be present at marriages or feasts of any kind. The son should eat no meat and drink no wine. The people are very proud of these regulations, but they do not keep them. At the end of the first year there are great sacrifices before the grave, at the end of the second the "dead man's house," the bamboo cage, is burnt, and with it the mourning garments. Desecration of the grave is punished with extreme severity.

The richer people erect stone monuments over their ancestors. The plain between Saigon and Cholon, the *Plaine des Tombeaux,* is full of these, of all sizes and in all states of decay, sometimes standing quite alone, sometimes with shrubs and then trees planted by them. There are inscriptions on most of them, usually cut into the stone and painted various colours. They bear the family and individual name and those of the deceased's titles and place of birth, the date of death, and the name of the person who set up the stone. Some of them are almost miniature temples. They are kept up by the head of the house, and there are regularly fixed days for worship before them.

This is in fact the only worship the Annamese have, but some of them carry it on with tolerable regularity. The first and the fifteenth of every month are the regular days set apart for worship at the ancestral shrine. At the same time there is always more or less sacrificing to the Co-HON already spoken of. Nothing is deemed too great to soften their rancour. Besides the silver and gold paper and the "cash notes" above alluded to, there is a much more valuable paper currency. These are sheets of paper covered all over with designs and

written characters; at the top there is a bell with a tongue to it to attract the Co-HON. On either side are invocations to the Buddhas, the good genii, and the priests, preceded occasionally by the well-known formula NAM-MO A-DI-DA PHAT.

Below are representations of fine clothes, different domestic utensils, embroidered robes with PHÜOC inscribed on them, mandarins' boots, strings of different kinds of money with THAI-BINH (eternal peace) on them, and a variety of other combinations—everything, in fact, that an indigent devil could require. The invocations at the top vary. In some of them they run, "Oh, all ye PHAT (Buddhas) who live for aye in the ten places. List, ye spirits, all-powerful." Or again, "Hearken, all ye saints, all-blessed, all-powerful, ye who are like unto fire pure and undefiled, grant, in your mercy, to forsaken spirits who have suffered from the three evils, entrance into the divine abode."

On the first and fifteenth of the month such papers of supplies, pecuniary and personal, are burnt not only at the ancestral altars and on the threshold of the houses, but upon special altars erected in lonely places to the CO-HON. While the papers are burning, the head of the family prostrates himself, and afterwards scatters broadcast on the roof of his cottage somewhat more substantial, but still scanty, offerings of rice and bananas. These are of course to prevent the CO-HON from coming inside, an occurrence which the most hospitable goodman would view with horror.

On the fifteenth day of the first, seventh, and tenth months, more particularly of the seventh, there are almost universal offerings to these troublesome CO-HON. They are called LE PHAT-LÜÖNG—distributions of food.

It is curious to watch the people come out of their houses just after dark. The father of the house calls out, "Spirit who hast a name, but no title; spirits who have titles but no human name; spirits of universal nature, crowd hither and eat my offering."

Then he turns to the four points of the compass, one after the other, commencing with the west, throws towards each of them a handful of salt and rice mixed, and burns a little of

the spirit-money, saying, "I call the laggard spirits; he who comes fastest will eat most. May ten become a hundred; may a hundred become a thousand; a thousand, ten thousand; ten thousand, a hundred thousand; a hundred thousand, a million; a million, a countless multitude." This is, it need hardly be explained, a desire to obtain the multiplication of his offering. The notion is of course borrowed from the Chinese with their regular sacrifices of DIEN. A development of this, found in all parts of the world among uncivilised nations, is the exorcism of evil spirits which are supposed to enter into people and cause illnesses. The method of driving these out in Annam differs little from the process described by dozens of writers on nations in other parts of the earth. The sorcerer is called THAI-PHAP, and he must on no account eat the flesh of buffaloes or dogs.

An analogous superstition is the ceremony of making offerings once every year to the former holders of the soil. No country farmer would think of letting the first three months of the year pass without making offerings of a general kind to the old aboriginal cultivators. Sometimes, however, this is not enough. He loses his dogs and pigs and chickens, his rice gets drowned with too much water or dies of drought; he falls sick himself and sees visions of capering, bloodthirsty savages.

Then he knows what is the matter, and goes straight off to a paper-goods manufacturer and orders a facsimile of his house to be built in paper. This is a most elaborate affair, reproducing not only a general model of the house, but of everything in it—furniture, people, dogs, cats, and pigs, and even the lizards in the thatch. All the human beings, however, are represented twice over, so that the ghost to whom this model is to be given up may not have an exact model of the owner, or of his wife or children. These houses are very dear, costing sometimes as much as £6, which is a large sum for a peasant farmer. If it is the commune that is making the offering, a model is made of the village shrine, the DINH.

On the determined day, offerings of the usual kind are made, and the wizard, the THAI-PHAP, falls into a trance, and is possessed by the deceased owner of the land. He blackens

his face on the bottom of a pot, eats ducks and chickens raw, and drinks wine by the bucketful. This is proof positive that the old savage owner is inside of him and is having a real good time. Then he is requested to make a formal cession of the land in question. If the farmer is a rich man the spirit does not yield for several days, if he is poor it is settled as soon as possible. A sum is fixed upon, a few hundred *ligatures* say, and this is promptly paid, in funeral money of course, which can be bought for a shilling or two. The possessed THAI-PHAP signs for the departed savage, planting a thumb dipped in ink at the bottom of the written conveyance. Then the medium is restored from his mesmerised state, the paper house is burnt, and with it the sum of money formally agreed upon. It is usually also stipulated that a pig shall be sacrificed every three years or oftener for the better comfort of the old land-owner. After this it is hard if the farmer does not enjoy peace o' nights.

The household ancestry, as we have said, are worshipped more or less all the year round: but the especial great season for every one, rich and poor, is the new year, the TÊT, the Annamese new year of course, which corresponds with the Chinese, and falls about the beginning of February. Then every one, down to the poorest, who at other times may not have the means or the leisure to pay proper attention to their forefathers, betakes himself to the last resting-place of his progenitors, and there is much burning of incense and funeral money, much scattering of rice and heaping up of fruit and flowers, during four days. The grass and other vegetable growths round about the tombs are carfully weeded away, and at the head of each a leaf of gold or silver is placed, and on this a stone to prevent it from being carried off by the wind. The belief is that, at a season such as the TÊT, the evil spirits are particularly active and spiteful on account of the general rejoicing and feasting which they see going on upon earth. They are therefore exceptionally likely to do harm to ordinary, easy-going souls, such as those of the rude forefathers of the hamlet. But their cupidity thwarts them. They clutch at the glittering leaf placed at the grave-head, and, while they are doing so, the respectable spirit down below has time to scurry off to a place of safety. The *Plaine des Tombeaux* at

Saigon presents an extraordinary appearance at this season of the year. Ordinarily it is as desolate, if not as big, as the similar place at Cairo; but during the four days of the TÊT both sides of the TAY-NINH road are crowded with pious descendants from all parts of the country, come to secure the tranquillity of their ancestry.—*France and Tongking*, by JAMES G. SCOTT, 1885.

The scientific decoration of officier d'Académie *(les palmes académiques)* has been conferred by the French Government upon MADAME DE LA CROIX, whose husband M. J. ERRINGTON DE LA CROIX is a member of this Society and has done much useful scientific work in this part of the world.

The following extract is taken from the minutes of a meeting of the Société de la Geographie, Paris, held on the 17th July, 1885 :—

"Le Président annonce ensuite la nomination de Mme. ERRINGTON DE LA CROIX comme officier d'Académie. Mme. DE LA CROIX a accompagné son mari en Malaisie où elle vient de faire un séjour de deux années dans la presqu'île de Malacca. Elle a su utiliser ses loisirs en racueillant pour le Muséum d'intéressantes collections de plantes, d'insectes et de papillons dont beaucoup de spécimens étaient entièrement nouveaux. Elle a en outre fourni un concours précieux à son mari dans les travaux scientifiques auxquels il se livrait de son côté. Bel exemple pour les femmes d'explorateurs ou de fonctionnaires qui habitent nos colonies! La vaillante exploratrice a bien mérité la distinction dont elle vient d'être l'objet."

A map shewing the course of the Triang river was to have accompanied Mr. O'BRIEN's paper on Jĕlĕbu published in No. 14 of this Journal. As, however, it was not received in time

for publication with the paper which it illustrates, it will be found at the end of the present number.

Mr. E. W. Birch, of the Straits Settlements Civil Service, has been good enough to present to the Society an Album of Photographic views and portraits taken at the Cocos-Keeling Islands.

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