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## ROYAL ASIATIC SOCIETY.

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JUNE, 1885.

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## THE

## STRAITS BRANCH

OF THE

## ROYAL ASIATIC SOCIETY.

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| Nos. | Names. | Addresses. |
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| 110 | Syed Muhavife bin Ahned al Sagoff | Singapore. |
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| 126 | Wray, L. | Pêrak. |
| 127 | Wray, L., Jr. | Pêrak. |

## JOURNAL KEPT DURING A JOURNEY AQROSS THE MALAY PENINSULA.

Friday, 10th April, 1885.-Left Taipeng for Port Weld by train at 10.15 p.м., 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, 11 th 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.s., and anchored inside the Bernam River at 6.30 p.м.

Sunday, 12 th April.-Under weigh at 4 a.n., 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 Tělok 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.

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| 125 | Weeatlei, J. J. L. | Johor. |
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Monday, 13 th April.-At daylight $W_{\text {alker }}$ 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., $77^{\circ}$ 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 Gelîting 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, Pěnghûlu 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 Gělîting. The aneroid at 4.15 p.m., Thermometer $88^{\circ} \mathrm{F}$., shewed a height of 296 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 Gělîting 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 coslies 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 Briseh. 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 $85^{\circ}$, 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 $7 \frac{1}{2}$ 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 Gëlîting. 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 Jělûtong 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 $77^{\circ} \mathrm{F}$. Fifteen minutes' walk brought us to Sâpor Buluh at 8.30 A.м., height 2,550 feet above the sea, four miles from camp and eleven and-a-half miles from Kuâla Gěliting. Temperature $75^{\circ} \mathrm{I}$ '. Here a hut had been built for us, but after a halt of 25 minutes to let the baggage ceme 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 Pêrak and Pahang at 9.30 A.m. The aneroid shewed that the gap was 2,854 feet above Kuâla Gělîting and 3,150 fcet above the sea.

In a very tiny rill running West we traced the source of the Briseh, 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 littlelower down, the Sungei Sambilan-the most northerly of the three streams which, united, are called the Lipis; the Lipis in its turn joining the Jělei with a more northerly source, and, together, bccoming the Pahang River. Looking iuto Pahang as one stands on the gap, a lofiy 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 eaeh 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 $2 \frac{1}{2}$ miles from the boundary and a height of 2,160 feet above the sea, we breakfasted by the bank of the Sambílan, road and river bearing $7^{\circ}$ North of East.

At 12.37 p.m. we resumed our jurney, 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 larese island. Height above sea 1,740 feet. Thermometer $82^{\circ} \mathrm{F}$. At 1.35 p.an. 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 Guncong Těmang Bâtak (in which hill the Sungei Gělîting takes its rise and flows westward), and the Těbâlak, rising from a mountain further South, in which the Bernam Rivtr is said to have its source. The Kernor 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 Chunggang 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 3.43 p.м., 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 fect above Kuâla Gellîting 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.

Tof Bakar, the headman of this district, net 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 l'ermâtang Lingei, I noticed the stream went over a bed rock of slate, and all the gold is found further down the river. Ton Bakar had prepared twenty-three small rafts for us, on which we shall have to travel to Jeram 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 beon 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 Тон 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-îkan klahweighing about 6 lbs. each.

Monday, 20th April.-After no little trouble arranging our baggage for the rafts (bamboo, four feet wide and about twentyfive feet long) we left Permâtang Linggi at 8 a.m. We had twenty-four rafts manned by Toi 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 Mĕngâlor. 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.s., 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 Sĕrěbu, 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 Sĕrèbu 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 Sčrěbu 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 а.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 $5 \frac{1}{2}$ 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 Sěmantan at 4.30 r.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 Pěkan, 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 keti.
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 Busn -2 Kĕněri $=2 \mathrm{Saga}=16$ cents.
1 Suku $=1$ Kûpang $=2$ Buso $=33 \frac{1}{3}$ cents.
$3 \mathrm{Kupang}=$ \#1.
$4 \mathrm{Kupang}=4$ suku $=1 \mathrm{Mas}=\$ 1.33 \frac{1}{3}$ cents.
$16 \mathrm{Mas}=1$ 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 Salef 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.p.̣. 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 А.м. stopped at Kuâla Dum fur 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 Pěnjum, 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 Kělantan, also silk sarongs. A good many sarongs are, however, manufactured in Pahang, chiefly at the Pěkan.

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 whaterer 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 Běsu 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 aud Toh Bakar
told ine 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 'Tĕmělin. The Těmčlin, 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 Trěnggânu. 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 Tĕmělin unite and form the Pahang river. At 4 r.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 goodtempered, intelligent old man. Distance travelled eleven miles. Gencral 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 Běsu rapid, and that I must stay here to-morrow whilst he collects them. Ton Bakar told me he would now return with his men. I am sorry to hear that one of them has stayed behind with choleraic s! mptoms. 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 liatilities of the owners of buffalues, a man having been recently killed ly y one of those dangerous animals. 'I'oh Bakar came to tell me he and his people must now return, and Ton Klir would take me down to Pěnjum. He also said he had just heard that a girl he had brought down with him ad left at Batu 'fallam died last night of cholera. lt is very distressing. She was perfectly well until yesterday evening, but was then attarked and dicd in the night. I cainnot understand it. Coming across frem Slim, not a man crmplained, the water we have lad to drink has been excellent, and they have had no cholera in Pahang up to this time. I gave Toh Dakar some medicines with directions how to use them, also a presest if 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 wient 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 Tëmâle, 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 Mermplas,* 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 Běsû 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,

[^0]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 sccond 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 trok its first leap, no accident occurred. A number of rafts were then serit 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 nonwaterproof 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.м., 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. Tон Kli however still accompanied us.

At 2.45 p.m. we met the Orang Kaya Lurpis 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 р.м., and reached Pěnjum 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 Pěnjum ; 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 Adi, 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, 2jth 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 Pěnjum 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 Alr 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 Lipis, 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 Tou 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 Jélei, 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 himin 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 Lipis (where this river falls into the Jělei) 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 Lǐpis and Jělei-immediately after their junction, are about sixty yards wide. The

Jelei carries rather more water than the Lipis. Camped for the night at Pulau Krinan at 5.30 p.m., having passed the following kampongs during the day:-Bandar Lâma, Kampong Pulau, Sěmătong, Jěram Lâna, Kuâla Kêchau.

Distance travelled to-day, ten miles; general direction N.N.E.
Monday, 27 th 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 р.м. we camped for the night at Kûala Termělin, where the waters of that stream join the combined Lipis and Jělei thus forming the Pahang River.*

The Těmĕlin, 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 Lipis and Jelei, 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 Jělei and Těmělin, 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 р.м. 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.

[^1]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 $21 \frac{1}{4}$ miles ; general dirention 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 Kĕnung, Rantau Panjang, Pulau Sa'amas, Sungei Chika, Pulau Tčmbûnga, Changkat Glugor, Bâtu Pâpan.

Tuesday, 23th 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 $93^{\circ}$ and in the water of the river $98^{\circ}$. The thermometer stands at $95^{\circ}$ 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. 'Тон GÂJar, 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 Kělanggi 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 Toi 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 Ton 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 Gâjar 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 Udine in the struggle with Râjı 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 Kělanggi. 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.
'Ton GÀJah'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 Cine 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. |
| :---: | :---: |
|  | 1. The 'Toh Bandar. |
| Orang Běsar | 2. Toh Kâya Chĕno. |
| Ampat, | 3. Toh Kâya Tĕmerloh (at present vacant) |
| Class I. | 4. Maharâja Perba (at present the Ôrang Kâya Jĕlei holds this post). |
|  | 5. Toh Muda Tunggal. |
|  | 6. Toh Jabe. |
|  | 7. Toh Bangau. |
|  | 8. Toh Ômar (held by the Ôrang Kâya Sĕmantan, who is also Orano Kâya |
| dilầpan, | Pahlâwan). |
| Class II. | 9. Toh Pĕnggâwa. |
|  | 10. Toh Lêla. |
|  | 11. Ôrang Kâya Jĕlei. |
|  | (12. Ôrang Kâya Lipis. |

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 Pědas, Kampong Kuâla Sêlan, Kuâla Këdundong.

Wednesday, 29th April.-I think the Tor Gâjar 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 Ton Gàjan 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. $I_{4}^{*}$ should suppose that with this soil and three months rainless weather, cotton might be successfully grown.

The Sungei Těkam 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 Kělanggi, 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 Terkam, 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 rivcr), 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 rast cave lighted mainly from the entrance and completely closed at the further end, but having three subsi-

[^2]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 Sělângor 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 fight 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 Kellanggi at noon and reached our hut at Pulau Tâwer in exactly two hours, after a very smart walk; the heat from Kuâla Tĕlkam to the village was indescribable, and the Ton Givail 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 Tou 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 Séjâra Mălâiu is supposed to be the earliest written record of Malay History.

Thursday, 30 th April.-Did not get away till 7 A.м., Toн 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 sĕladdang (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 gôlok (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 Chěngal at 6.20 p.m., and there camped for the night. Distance travelled, $17 \frac{3}{4}$ miles ; general direction, South.

The following kampongs were passed during the day:Klang, Sungei Kio, Tanjong Antan, Tanjong Tënggoh, Tĕluk Maik, Sungei Sěbul, Pulau Raya.

Friday, 1 st May.-Left at 6 a.m. and passed a Chinese sugar mill at Pěngkâlen Bĕnom at $8.30 \mathrm{~A} . \mathrm{m}$. ; 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 Sŭnyum 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 Těluk Sintang at noon for breakfast. The river here cuts deeply in to 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 Těluk Sintang at 1.30 p.m., passed Kuâla Sěmantan Ilir a little before 5 р.м., and reached Pulau Tĕmerloh at 6 р.м. Camped here for the night. Pulau Těmerloh, 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 :-Jĕněrak, Kuâla Tëkai, Lîpat Kâjang, Dor, Sanggang, Bintang, Tëbing 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 Jělei is undoubtedly the longest, and is properly called by the Malays the parent stream. We left Těmerloh 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. Triang is 88 feet above the sea. At Triang 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.м., reached Kěrtau at 7 p.мr., and camped there for the night. There is a hill called Bûkit Kërtau 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, Lěbak Bĕlĕngu, Jǐlam, Měngkârak, Tambak, Lûbok Pârap, Pâmun, Chěrŭis, Bâtu Pâpan, Bâtu Hanchor, Lûbok Lien, Pulau Kĕnin, Sintang, Lěmûse, Pulau Nyak.

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

Sunday, 3 rd 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 Chěno at 1.30 A.m. Chĕno is celebrated for making the best mats in Pahang. They are made of bleached and dyed Měngkuang leaves and are very pretty.

From Chěno 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 р.м., 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 Chěni, a long irregular triple-peaked mass of hills with a large lake, or series of lakes, at its base.

Gûnong Chěni is seen on the right bank of the river apparently distant about five miles. The lakes are only approachable by a small river-the Chěni (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, Pěsâgi, Tanjong Bâtu, Kuâla Jěmpôl, Pějin, Těmiang, Lamê, Kuâla Měntěnang, Gâlong, Lûbok Paku, Bâtu Râkit, Kuâla Těmělong, 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 Měntîga (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, Měntîga and Pahang Rivers, or vice versa, 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 Lěpa, 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 l p.m. reached Langger, a fine lampong on the left bank, where the whole population turned out to watch us breakfasting. Left again at 2.30 p.ar., and reached Pulan

Klêdi, two miles above the Pěkan, at 4.15 p.м. Here we waited, according to agreement, and in a short time Che Aur returned with Che Gâdor 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 eamped 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, Blukker Acheh, Pulau Ganchong, Tanjong Rĕngas, Aur Gâding, Kampong Těluk, 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 eare to repeat. A Sikh then earried 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 erawl 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 heary dew, and the eurtain simply wringing. Fifteen days in a boat four feat wide
and only high enough to sit up on the floor, where the thermometer registers from $90^{\circ}$ to $95^{\circ}$ for several hours in each day, where rats, scorpions, centipedes, and other ver$\min$ 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 Sěger 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 twen-ty-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 Těměnggong, 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 sse us, invited us to sit down. Whilst we made our way from the landing place and greeted the Bĕndahâra and Těměnggong, a salute was being fired lower down the river.

I carried on a spasmodic conversation with the Běndahâra 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 triffe 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 'Tun'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 riverlife 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 Běndahâra, Těměnggong 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 Pěkan, 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 nosque 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 Pěkan 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.

I'his 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 Pěkan; 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 cos 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 topspinning, and the example is pretty generally followed by all the unemployed male Malays in Pěkan. 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 ncarly 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, Jatitude $3^{\circ} 50^{\prime}$, to Kuâla Pahang in the China Sea, Latitude $3^{\circ} 442^{\prime}$. 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 Gělìting. From Kuâla Gělîting 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 Kědah, 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 Trěnggânu, 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 Pěkan, while Mir. 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 Pěkan than that of the Bra. The shortest crossing of all is said by the Malays to be by the Muar, Rumpin and Měntîga Rivers.

We have crossed the Peninsula by probably the longest route, unless the ascent of the Muda and descent of the Patani Risces 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 Jellei, 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 Jělei, 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 Jělei. 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 Pěkan till the 14th May. In that time we saw something of the country in the immediate neighbourhood of Pěkan, 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 Sth, 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 joget 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 Iam 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.s. We arrived at Singapore at 8 A.m. on the l5th.

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 Pěkan 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 Singa-pore-Kranji Road, to Pěkan. 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 Pabang, 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 Tčměnlin and Pahang rivers, as a centre for the trade of the upper metalliferous country, while the present road from Kuâla Lumpor (the terminus of the Sělàngor 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 Selângor ; 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.

Pahavg, 10th May, 1885.


# THE OBJEGT AND RESULTS OF A DUTCH EXPEDITION INTO THE INTERIOR OF SUMATRA IN THE YEARS <br> 1877, 1878, AND 1879, 

BY

M. A. L. VAN HASSELT.


#### Abstract

[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 A 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 daty 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 whereso 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, butafter 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, $\dagger$ Van der Tuuk, SolomonMüller, 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

[^3]India. Until Marspen'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 submissiun 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, Prisgrave, Court, de Stuerler Pretorius, Gramberg, Tefsman, 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 as sured, 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 ethography, 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 affuents, 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 Tndragiri) 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 letween 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 bis 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.

[^4]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 nilitary 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. Markink, 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 2 nd 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 ımperfect 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 Lejden.
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-Baton 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 molluses.*

[^5]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 monents at least, to the countries visited by my companions and myself at the time that we traversed these uncultivated regious, 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 firstidea 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-gund. 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 succassful, and although uncertain as to being able to reach the highest point, we set out on the 5 th December, 1877, full of ardour and determination. Resides
the coolies, we were accompanied by the two guides who had conducted the exploring parties, and by the Touankou of DourianTaroung, an intelligent chief, with two of his followers. Fach kouli carried 8 chupaks ( $4 \cdot \frac{1}{2}$ 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 loulis 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 lioulis 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 souke 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 coufused 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

[^6]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 bagoage, 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 hat, 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 lioulis 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 conld 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 hat 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 looulis 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 bivonac.

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 elevater, 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 $45^{\circ}$ was composed of such loosely holding shingle, that a single step was sometimes enough to send inmense 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 looulis, 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 sumshine 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 $7^{\circ} 8$. C. On the following day we succeeded in reaching the lighest 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 leare 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 rotin-manau. The kalé rises side by side with the waringin, the sacred tree of the Hindoos, the koubang, the sianouk, or milktree, 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 balunking 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 djambou-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-pudang 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 pakourasam, 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 láwang, 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 regetable 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 smallerbirds with green wings and red heads. Leeches werc only perceived up to a height of 1,300 mètres, while spiders, especially those of the family of Lycooides 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 gring on-a struggle which man is often mable to explain.

What a delightiful feeling it is to reach, at the close of day, an open space where one can give onesalf who'ly over to the repose and comfort of a bironas. Many of these places will remain indelibly in our memories. Thus on the evening of the 5th October, we arrived at Suncei Sapi, a most picturesque spot. Our people were already busy putting up a shelter for us under the river bank. The bonks rose sheer up both sides, leaving only a clear view of the water up apd 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 disuppeared. Not a house whose inhabitants might have told us their story has been leit standing; notling 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 avay is hidden from us by a bend.

On our right hand the scene is very diferent. The water flows impetuously and dashes itself down from a high rock into a deep basin, falling in a boad shect 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 snoke. 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 monntains 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 stiffing 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 curres; sometimes the path is blocked by a fallen tree, which in its heary 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 iufluence 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 spiders web, and white as snow, standing out against a dark background. Indeed one is afraid to make is 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 preserveits vitality.

Before ending this narrative, I wust 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 encbanted 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 ke 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. Rowele, 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 improrements in the sauitary 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 alncst 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

[^7]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 waterworks 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 weaithiest 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 hare 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 7 th 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 Pulice Sergeants in charge of the stations to keep the register.

J. J. L. WHEATLEY.

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

| $\begin{gathered} \text { Mean } \\ \text { annual } \\ \text { rainfall. } \end{gathered}$ | 1869. | 1870. | 1871. | 1872. | 1873. | 1874. | 1875. | 1876. | 1877. | 1878. | 1879. | 1880 | 1881. | 1882. | 1883. | 1884. | $\begin{aligned} & \text { Mean } \\ & \text { annual } \\ & \text { rainfall. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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| 123.24 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 123.24 |
| $116 \cdot 14$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 116.14 |
| 111.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 111.08 |
| $109 \cdot 45$ |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  | 109•45 |
| 103.16 |  |  |  |  |  |  |  |  |  | , |  |  |  |  |  |  | 103.16 |
| 94.00 |  |  |  |  |  |  |  |  |  | , |  |  |  |  |  |  | 94:00 |
| 93.96 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 93.96 |
| $90 \cdot 63$ |  |  |  |  |  |  |  |  |  | ) |  |  |  |  |  |  | 90.63 |
| 89.91 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 89.91 |
| 88.16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 88.16 |
| $87 \cdot 05$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 87.05 |
| 85.60 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 85.60 |
| 80.13 |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  |  | $80 \cdot 13$ |
| 75.30 |  |  |  | $\square$ |  |  |  |  | , |  |  |  |  |  |  |  | 75:30 |
| $70 \cdot 14$ |  |  |  |  |  |  |  |  | $\checkmark$ |  |  |  |  |  | $\checkmark$ |  | $70 \cdot 14$ |
| 58.37 |  |  |  |  |  |  |  |  | $V$ |  |  |  |  |  |  |  |  |
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Chart shewing the increase and decrease of Rainy days during the Years 1869 to 1884，Singapore．

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1884, Singapore.

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| 1869 | 3.93 | 21 | $20 \cdot 66$ | 26 | $90 \cdot 63$ | 180 | 1869 |
| 1870 | $18 \cdot 25$ | 25 | $18 \cdot 13$ | 18 | $123 \cdot 24$ | 209 | 1870 |
| 1871 | $11 \cdot 05$ | 17 | $12 \cdot 56$ | 16 | $109 \cdot 45$ | 195 | 1871 |
| 1872 | 237 | 22 | 6.00 | 15 | $75 \cdot 30$ | 161 | 1872 |
| 1873 | $7 \cdot 16$ | 20 | $5 \cdot 16$ | 17 | $85 \cdot 60$ | 166 | 1873 |
| 1874 | $3 \cdot 88$ | 20 | $7 \cdot 56$ | 17 | $87 \cdot 05$ | 178 | 1874 |
| 1875 | $2 \cdot 91$ | 18 | 6.50 | 15 | 93.96 | 166 | 1875 |
| 1876 | 3.97 | 19 | 10.13 | 21 | 89.91 | 163 | 1876 |
| 1877 | $2 \cdot 89$ | 11 | 8.07 | 17 | 58.37 | 119 | 1877 |
| 1878 | $13 \cdot 57$ | 16 | 9.91 | 20 | $103 \cdot 16$ | 170 | 1878 |
| 1879 | $19 \cdot 18$ | 15 | $10 \cdot 15$ | 18 | $116 \cdot 14$ | 181 | 1879 |
| 1880 | $5 \cdot 17$ | 21 | $8 \cdot 56$ | 16 | 111.08 | 189 | 1880 |
| 1881 | 13.35 | 16 | 13.32 | 16 | $94 \cdot 00$ | 144 | 1881 |
| 1882 | 6.58 | 15 | $7 \cdot 21$ | 15 | $88 \cdot 16$ | 158 | 1882 |
| 1883 | $3 \cdot 18$ | 18 | $7 \cdot 76$ | 19 | 70•14 | 141 | 1883 |
| 1884 | $8 \cdot 81$ | 12 | 12.00 | 11 | $80 \cdot 13$ | 146 | 1884 |
| Means | $7 \cdot 89$ | 18 | 10.23 | 17 | $99 \cdot 27$ | 167 | Means |

Statement shewing the Mean Annual Rain－fall and Mean number of Rainy days，from 1869 to 1884，Singapore．

|  | Jany． |  | Feiby |  | Mar． |  | Ayrif． |  | May． |  | JUNE． |  | July． |  | August． |  | SEjpt． |  | ОСт． |  | Nov． |  | Dec． |  | Total． |  | 会 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underset{~ 4}{4}$ |  | － |  | ¢ |  |  |  | $\begin{gathered} \dot{\infty} \\ \stackrel{y}{8} \\ \stackrel{0}{6} \end{gathered}$ | ¢ ¢ ® ¢ | ¢ | Q U U U | $\begin{gathered} \infty \\ 8 \\ 8 \\ 0 \\ \hline 0 \end{gathered}$ |  | $\begin{gathered} \dot{\infty} \\ \stackrel{0}{8} \\ \underset{\sim}{n} \end{gathered}$ | $\begin{aligned} & \text { g } \\ & \text { - } \\ & \text { en } \\ & \text { ⿷匚 } \end{aligned}$ | 官 | － | ¢ | ® 亗 H |  | 啶 | 家 | － | 家 |  | $\stackrel{\text { ¢ }}{\text { ¢ }}$ |  |
| 1869 | 393 | 12 | $3: 3$ | 12 | $3 \cdot 37$ | 8 | $9-23$ | 16 | $9 \cdot 19$ | 16 | 681 | 11 | $5 \cdot 12$ | 13 | $12 \cdot 31$ | 18 | $3 \cdot 13$ | 19 | $5 \cdot 11$ | 15 | $8 \cdot 24$ | 21 | $20 \cdot 66$ | 26 | 90.63 | 180 | 1869 |
| 1870 | 18．25 | 24 | 7.80 | 21 | $3 \cdot 15$ | 14 | 8.81 | 17 | 5.01 | 10 | 11：51 | 17 | $5 \cdot 11$ | 11 | 11．36 | 17 | 12.62 | 18 | 9.99 | 17 | 11－50 | 25 | $18 \cdot 18$ | 18 | 123.24. | 209 | 1870 |
| $18 \%$ | 11.05 | 19 | 769 | 19 | $12 \cdot 95$ | 21 | $4 \cdot 85$ | 11 | 396 | 12 | 4.59 | 11 | $12 \cdot 12$ | 16 | 6.69 | 18 | 8.97 | 19 | 1236 | 16 | 1136 | 17 | 12.56 | 16 | $109 \cdot 45$ | 195 | 1871 |
| $18: 2$ | $23{ }^{3}$ | 4 | 7.82 | 18 | $3 \cdot 13$ | 8 | $\pm 15$ | 12 | $5 \cdot 12$ | 9 | $4 \cdot 89$ | 14 | 6.43 | 13 | $7 \cdot 12$ | 14 | 10＇79 | 16 | $5 \cdot 74$. | 16 | 11－5 4 | 22 | 6.00 | 15 | $75 \cdot 30$ | 161 | 1872 |
| 18.3 | $7 \cdot 16$ | 14 | 9.57 | 17 | 974 | 16 | 10.54 | 17 | $5 \cdot 50$ | 10 | 481 | 10 | 35.5 | 10 | 6.08 | 11 | 300 | 8 | 7.93 | 16 | 1：56 | 20 | $5 \cdot 16$ | 17 | 85.60 | 166 | 1873 |
| 1874 | 388 | 15 | 2.34 | 10 | 320 | 13 | 6.51 | 14 | 5.78 | 15 | $6 \cdot 37$ | 12 | 632 | 17 | 10： 58 | 16 | 11.02 | 14 | 7.09 | 15 | $16: 37$ | 20 | 7．56 | 17 | 87.05 | 178 | 1874 |
| 1875 | 2.91 | 11 | 702 | 11 | 16.93 | 21 | 6.47 | 13 | $4 \cdot 09$ | 13 | $9 \cdot 53$ | 13 | 4.26 | 10 | $8 \cdot 36$ | 13 | $8 \cdot 2 \cdot 4$ | 12 | 8：29 | 16 | $11 \cdot 37$ | 18 | 6.50 | 15 | 93．96 | 166 | 1875 |
| 1876 | 397 | 11 | 1．84 | f | 460 | 13 | 7.23 | 11 | 786 | 12 | 10.58 | 17 | 4．16 | 10 | 932 | 12 | $7 \cdot 19$ | 14 | $10 \cdot 67$ | 17 | 12.06 | 19 | 10.13 | 21 | 89.91 | 163 | 1876 |
| $15 \%$ | $2 \cdot 89$ | 7 | 5．7 | 12 | $5 \cdot 01$ | 10 | $1 \cdot 37$ | 6 | $4 \cdot 05$ | 10 | $11 \cdot 17$ | 12 | 5.70 | 12 | 4.00 | 8 | 74 | 6 | 2.09 | 8 | $5 \cdot 24$ | 11 | 8.07 | 17 | 58.37 | 119 | 1877 |
| 18.8 | $13 \cdot 57$ | 19 | －20 | 14 | $\cdots 17$ | 5 | $8 \cdot 04$ | 14 | $11 \cdot 59$ | 17 | 407 | 13 | $6: 33$ | 1.3 | 19.33 | 18 | 5.01 | 11 | 7.39 | 10 | $8 \cdot 47$ | 16 | 9.91 | 20 | $103 \cdot 16$ | 170 | 1878 |
| 1879 | $19 \cdot 18$ | 22 | $9 \cdot 14$ | 13 | $9 \cdot 81$ | 17 | 6.61 | 14 | 10.86 | 14 | $5 \cdot 07$ | 10 | 5.51 | 12 | 8.9 .4 | 1．） | $5 \cdot 54$ | 11 | 14：96 | 20 | 8．37 | 15 | $10 \cdot 15$ | 18 | 116．14． | 181 | 1879 |
| 1880 | $5 \cdot 17$ | 17 | 9.39 |  | 8.46 | 16 | $11 \cdot 12$ | 15 | $8 \cdot 96$ | 16 | 6.87 | 13 | 9.83 | 13 | $9 \cdot 75$ | 15 | $7 \cdot 19$ | 18 | $9 \cdot 96$ | 15 | $15 \cdot 82$ | 21 | $8 \cdot 56$ | 16 | 111.08 | 189 | 1880 |
| 1881 | 1335 | 12 | $2 \cdot 01$ | 4 | $9 \cdot 03$ | 16 | 5.21 | 9 | $9 \cdot 40$ | 13 | $4 \cdot 03$ | 10 | 635 | 12 | 5.77 | 11 | $5 \cdot 51$ | 11 | $10 \cdot 5$. | 14 | $9 \cdot 45$ | 16 | 1332 | 16 | 94：00 | 144 | 1881 |
| 1882 | 658 | 15 | $12 \cdot 11$ | 18 | 308 | 7 | 8.80 | 14 | 6．35 | 12 | 4.97 | 11 | 673 | 9 | 6.65 | 14 | 6.70 | 12 | 9.73 | 16 | 8.95 | 15 | $7 \cdot 21$ | 15 | $88 \cdot 16$ | 158 | 1882 |
| 1830 | $3 \cdot 18$ | 7 | 1.98 | 5 | $6 \% 1$ | 10 | 723 | 13 | $7 \cdot 11$ | 10 | $5 \cdot 21$ | 9 | $3 \cdot 12$ | 9 | $3 \cdot 37$ | 11 | $10 \cdot 29$ | 14 | 7.96 | 16 | 6.22 | 18 | $7 \cdot 76$ | 19 | $70 \cdot 14$ | 141 | 1883 |
| 1884 | 8.81 | 18 | $3 \cdot 03$ | 8 | －7．85 | 12 | $3 \cdot 85$ | 9 | $5 \cdot 18$ | 13 | $\therefore 88$ | 15 | 766 | 11 | $5 \cdot 90$ | 12 | 8.07 | 13 | 7.35 | 12 | 456 | 12 | 12.00 | 11 | $80 \cdot 13$ | 146 | 188.1 |
| Means | 7.89 | 14 | $6 \cdot 1.4$ | 13 | 6.81 | 13 | 6.88 | 13 | 6.88 | 13 | 6.79 | 12 | 6.20 | 12 | $8 \cdot 47$ | 14 | $7 \cdot 25$ | 13 | 8.57 | 15 | $10 \cdot 13$ | 18 | 10.23 | 17 | 99：27 | 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 艘卒㙉 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 埕授大（situated only a mile or so to the North of Banca），whose growing importance is owing almost entirely to the establishment there of foreign mercan－ tile 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 abori－ ginal tribes living in the hills in rear of Banca extending in various directions towards Sî－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 for－ merly a Chinese border outpost，as well as of those residing in the mountains at the back of San Ko Yeng 承角三 and to the East also of To Ko Ham 顡科大 extending down to the＂Sylvian and Dodd＂ranges in the vicinity of the ＂Petroleum Wells＂discorered by myself in the spring of the year 1865.

[^8]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 sallow er 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 createl 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 24 th 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 sarage 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 inkabitants 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 piereing, 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 darkcoloured 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 neally 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 monstache 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 tireezers being used for the purpose.

The shape of the heads of savages varies considerably, though the majosity of them appear round and rather small. Their faces are for the most part of a Malayan trpe, 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 Malar, 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 furehead and chin in horizontal lines of about three quarters of an inch in length, and one-sisteenth 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 clin, 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 oi 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, \&e., 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 primingflasks 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, orarrow-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. Tobaceo 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 eren 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 (tûtû 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 líFius 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 cver 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 corer 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 lukis 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 likius. This girdle or belt is called habbock, and is worn next to the skin as a rule, but sometimes outside the coat. The likius 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 clusely fitting cap (mobu), others strut about all day long with only the belt or habbock round their waists, with the laläo 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 horus, de.; 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 variegatel 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 lukis, 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 interworen 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 abore 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 refierred to later on.
(To be continued.)
J. DODD.
$-\cos$

## gENEALOGY OF THE ROYAL FAMILY OF BRUNEI.

[The following translation from a native Manuscript, which has been kindly communicated to the Society by His Excellen: cy, 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.]


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 Lubaf, 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 Tuar, Pangeran Neian, Pangeran Ontong, Pangeran Badarudin, Pangeran Kadir, and Pangeran Apong were all his sons by concubines.

He also had daughters-Raja Bulan, Raja Pütri, Raja Nuralam, Pangeran Bongsu, Pangeran Sri Banum, Pangeman Ratna and Pangeran Tuah, all borne by concubines.

Sultan Muhamad Ala-eddin married Pangeran Sri Banum, a daughter of Pangeran Bandahara Ontong, by whom he had two children, the eldest Pangeran Muda Amir Baiar, who refused to be made Sultan, the other Sultan Omar Ali Saifudin, 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 Lubai made him Sultan because he was of the line of the Sultans.

[^9]On the death of Sultan Muhammad Ala-edin the throne went back again to Marhum di Lubah.

Pangeran Tummonggong Ampah, half brother by a concubine of Marium di Brunei (Sultan Muhammad Alla-eddin) married Raja Bulan.

Sultan Omar Ali Saifuddin married Raja Pưtri and begat Sultan Muhammad Tajudin. On Raja Pětri's death Sultan Omar Ali Saffuddin 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 Salifa, who was the daughter of Pangeran Pamancha Kassim.

Sultan Muhamiad Khan z'ul Alam, whose name was Pangeran Arah, married Pangeran Saliha and begat Rajah Nuralay, the mother of Sultan Omar Ali Saifuddin, who is now reigning, and Pangeran Muda Motalam, who was called Sultan Mumamad Alam. On the death of Pangeran Salima he married Pangeran Nuralam, daughter of Pangeran Sri Rama and begat Pangeran Marian 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 Kifan z’ul Alan married Pảgeran Selamah, also a daughter of Pangeran Sri Rama, and begat Sri Banumi, Pangeran Muda Hassim, $\dagger$ 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 Avak Bahar, who became the son-in-law of Sultan Muhamad Khan z'ul Alam and begat Pangeran Istri Nuralan, Pangeran Anak Besar Muhammad Shman, Pangeran Anak Tengah Ismal, 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.

[^10]
## 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. $\dagger$ 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

[^11]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 landrevenue, 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'Extrôme Orient, July, 1885, p. 27.

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

Part $\quad$ I.-Of the creation of property in land.
Part II.-Division of the State-domain.
Part III.-Ofthe administrationoftife State-domain.
Part IV.-Of occupiers.
Part V.-Of alienation.
Part VI.-Of registration of proprierorship.
Part VII.-Of dispossession.
General provisions.
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.

[^12]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 remoral.
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 ; abore two hundred dollars, they may be concluded by the Resident-

[^13]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 Re-sident-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 Gorernor 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 $22 n d$ August, 1882, relating to the alienations of publicland in CochinChina, 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 pur-chase-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 17 th 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 gardeus 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 eomprised in it, the form of which will be decided upon hereafter.

These registers will be kcpt 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 Resi-dent-General.

In either case, the fact of possession haring 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 Gorernor 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 Orinhatuong 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. FOURES,

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 Malacea with the adjacent islands (the RhioLingga 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 Měnangkabo country of Middle Sumatra, the Rechang or Renchoug 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 natatical 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 $k, g, n g, c h, j,, n$ $t, d, n, p, b, m, y, r, l, x, s, h$. Long vowels can only occur in open syllables. The only possible consmantal 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 reccived 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 b,antang, banting, bentang, buntang, buntung, buntiny, bonteng, lienteng.

Malay is essentially, with few exceptions, a dissyllabic language, and the syllabic accent rests on the penultimate unless that syllable is upen and short ; e, g., dátang, namána, běsáx, diumpatkanáblah. Nothing in the form of a root word indicates the grammatical category to which it belongs ; thus, kūsih, kinduess, 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-güruh, a rumbling noise, gumūruh, to make such a noise; tunjuk, to point, telunjuk, the forefinger ; chūchuk, to pierce, cherūchuk,

[^14]a stockade. The import of the prefixes-mě (měng, měil, měn, měnn), pě (pěng, pěn̆, pěn, pĕm), běr, (běl), pěr, pěl, ka, di, těr,-and affixes-an, kan, i, lah--will best appear from the following examples: root word $\bar{a} j a r$, to teach, to learn; mengūjar, to instruct (expresses an action) ; bĕlājar, to study (state or condition) ; mĕngājari, to instruct (some one, trans.) : mĕngäjarkan, to instruct (insomething, causative); pĕngäjar, the instructor ; pĕläjar, the learner ; pĕngajāran, the lesson taught, also the school; pĕla $j \overline{a r a n}$, the lesson learnt; dicājar, to be learnt tërājar, learnt; tĕrajārkan, taught; tĕrajäri, instructed; [pĕr$\vec{a} j u$; (from $r \bar{a} j a$, prince), to recognize as prince; perajāan, to crown as prince; karajāan, royalty]; äjarkanlah, teach! Examples of reduplication are - $\bar{u} j a r-\bar{a} j a r$, a sainted person ; $\bar{a} j a r-$ bĕräjar, (or bĕlājai'), to be learning and teaching by turns; similarly there are forms like $\bar{a} j u r-m e ̆ n y a ̄ j a r, ~ b \check{e r} r a \bar{j} a r-a j \bar{a} r u n$, äjar-ajäri, mĕmpĕrājar, mĕmpĕrājarkan, mĕmpĕrajāri, tĕ•bĕlājarkan, pĕrbĕıäjarkan, \&cc. 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 rormveranderingen der Maleische taul, 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 say $\bar{a} l a$, all, and $b \bar{a} \tilde{a} k$, many, more rarely by the repetition of the noun, and the indefinite singular by sa or sätu, one, with a class-word. Gender may, if necessary, be distinguished by the words lahi-lāki, male, and përampüan, female, in the case of persons, and of jantan and bĕtina 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 cuefficients with numerals, such as orany (man), when speaking of persons, elior (tail) of animals, kěping (piece) of flat things, bā $i i$ (sced) of roundish things ; e, g., l̄̀ma bīji têlor, 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 rales 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 carly 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 torms connected with social, religious, and administrative matters, that influence is traceable in Malay. See W. E. Maxwell, Manual of the Malay Language, 18*2, pp. 5-31, 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 lansuage. The number of Portuguese, English, Dutch, and Chinese words in Malay is not considerable; their presence is easily accountel for by political or commercial contact.

The Malay lanouage 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 carrving, \&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 $J \bar{u} w \bar{\imath}$ 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 RhioLingga 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 r,f 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 $a l$ and $a r$ into $a$, $i l$ and $i r$ into $i y e, u l$ and $u r$ into $u w e, a s$ and at into $e^{\prime}$, us into uvi ; final a mostly passes into $\bar{o}$, so that for sudāra and sudāgar they say sudĕreō, sudĕgō ; the emphatic -lah is tarned into -malah or malah há; the prefixes bĕr, pĕr, tĕr are changed into $b \breve{a}, p \breve{a}$, t $\breve{a}$, or $b \breve{a} r \vec{a}$, , $\vec{a} r \vec{a}$, tăară. Among other changes in pronunciation may be noted ūrany for orang, mungko for maka, lai for $\bar{a} g \bar{g}$; they use nan for yang, na' for henduk, deh for oleh, $b a^{\prime}$ for $\bar{b} a \overline{g a i}$, pai for pergi, $k o^{\prime}$ for $j i k a l a u$, \&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-Sumatia, 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 Molucea Islands (valuable information on which has been supplied by F. S. A. de Clerce, G. W. W. C. van Hoevell, and A. ran 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 'lliātībīn, by Rāja Ali Hajer of Rhio, which was lithographed in the island of Peñengal in 1857. A. Pigapetta, who accompanied Magelfan in his first voyage round the globe, was the first European whose rocabulary 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. Houtmax's Vocabulary and Concersations, 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. Maxwerl's Maval of the Malay Language, London, 1882 (especially valuable for its full treatment of the idioms): P. Favre, Grammaire de la langue Mlataise, Tiema and Paris, 1876 ; and Dictionnaire Malais-Français, ib., 1875,

2 vols. ; Dictionnaire Francais-Malais, ib., 1880, 2 vols.; J. J. de Hollinder, Hundleiding bij de beoefeniny der Maleische taul en leiterkunde, Breda, 1882; J. Pijnappel, Mateische Spraakkunst, Hague, 1866; and Maleisch-Hollandsch Woordenboek, Amsterdam, 1875. 'The printing of Vor Dewall's Dictionary, edited by H. N. ran der TuUk, is still in progress at Bataria.

Literature.-There are two kinds of Malay popular Iitera-ture-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 -8t. See also J. Habbema on the Menangkabo proverbs, in vols. xxy. and xxri. of the Batavian Tijdschrift, and Farre's Dictionaire IIalais-Francais, passim. The pantuns are improrised 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 ranquished." See T. J. Netrbold, Account of the Eritish Settlements in the Stiaits of Malaco, vol. ii. 346 ; Klinkert in the Bijdragen for 1868, pp 309-70: L. K. Harmsen in the Tijdschrift, rol. xxi. pp. 480-533 (Nenangkabo). 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 endearoured 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 Pcrsian 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 Tambühan, Sha'ir Bidāsāri, Sha'ir Jauhar MĪnikam 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-rā$j a$, and the Bustānu'ssal̄$t \bar{\imath} n$, and a very large number of works of fiction and legendary lore, some of which possess much descriptive power. They all bear the title Hikayat, and the following are the best-known : H. Hang Tūah, H. Hamぇal, $H$. Ismā Yatìm, H. Jumjumah, H. Bakhtiyār (ふādah Bakhtīn, Gholām), H. Simiskin, H. Sultān Ibrāhīm, H. Srī Rāma, H. Pandāua 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, Nieminn, Van der Tuuk, Gra-
shuis, and in Marsden's Malay Grammar. The best recent Malay writer was 'Abdullah ibx 'Abdelkadir Mūnshi 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; Vín 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 222-2053; 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, Handleiaing 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 $s q$.
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.

Ev.]

## A MISSIONARY'S JOURNEY THROUGH LAOS FROM BANGKOK TO UBON.



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 $14^{\circ}$ lat. N. and $106^{\circ}$ 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 Ubon, near $15^{\circ} 20^{\prime} \mathrm{N}$. lat. and $102^{\circ} 30^{\prime} \mathrm{E}$. long. (Paris) on the Seimoun, a tributary of the Mekong. It is the Narrative of a Missionary on his way to Ubon 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 Guggo, 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, tro 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 confieres from Lanos 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 leare 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 adranced 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 buliocks 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 betireen two carts. Large fires, fed with fuel by watchmen who mounted
guard armed with muskets, were a safeguard against wild beasts and robbers.

Thursday, 21st.-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 haltingplace, 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 campeḍ.

Friday, 22nd.-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 customhouse 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 lery a tax on the owners.

Saturday, 23rd.-A short stage. Busy preparing an altar.
Sunday, 2tth.-Mass. We camped in the evening on the banks of a torrent, which is nearly dry in this season.

Monday, 25th.-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 scems 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, 26th.-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.

Wednestay, 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 Ubon, 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 Bangknk). 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 Bangsang 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, $3 r d$.-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 Ubon. 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, rth.-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 $K$ hmers, 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-
swering the purpose of parapets, there are colossal statues of Siva, seated, and with the head turned three-quarters-face towards the traveller as he advances. Nothing is left of these now but the pedestals, the various parts lying on the ground or in the moat. I measured, out of curiosity, a fragment of one of these statues from the lower lip to the top of the head; the measurement was 0 m .60 , with a distance of 0 m .50 from one ear to the other. A few paces further on I found the neck and upper part of the chest of the same statue, this fragment being deeply embedded in the ground. The designs with which the neck and chest are ornamented, are executed with much delicacy, and have resisted the ravages of time. This causeway must be that which they call the bridge, or the gate, of the giants. At the end of it there is a thick wall, in the middle of which is a gateway adorned with sculptures, and grotesque monsters. A little further on is seen a little building which gives one the idea of a chapel.

It is a tolerably broad corridor pierced with windows on the side facing south. These windows are fitted with bars of rounded stone, each being of a different shape or pattern. The vaulted roof, which is somewhat of the ogival shape, is entirely of hewn stones one placed over the other. Looking closely at the structure, no trace of timber, lime, or iron is to be seen in the walls, all the blocks are fitted together, and placed one on the other. The blocks are enormous, ten men could hardly lift one of them. A sculptured ornament occupies the centre of the vault. In the middle of the building, ou a pile of stones, pious visitors have deposited a statue of Buddha seated on snakes, the heads of which spread out like a fan behind him. The whole building is of pyramidal shape.

Between the eastern and southern gates, there is an immense wall about 40 or 50 mètres in length, and 3 or 4 mètres in height, the inner surface of which is entirely covered with bas-reliefs relating probably to the fabulous births of Buddha. These sculptures are still in good preservation. It would seem that this series of sculptures used to be protected by a covered gallery, which has fallen down, and the ruins of which lie about the base of the wall where the explanatory inscription ought to be found. I reached the southern gate;
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
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

[^15]cross the mountain. In two days we shall be there ; the village of Phra Sat Sing, towards which we are advancing, is the last which we shall pass before arriving at the range. We passed the night under some large sheds, built to accommodate a white elephant which is to be brought down from Bassai to Bangkok. I went to look for water, and found a pool; a wolf made off as I approached, leaving the carcase of a deer almost intact. This was at once flayed, and the meat spread out in the sun to be dried and salted. Père Xavier then came in, having obtained the promise of two additional carts.

Not far from Phra Sat Sing is a very ancient ruined pagoda. Local tradition makes it co-eval with the erection of Phuthaisaman, partly because of the similarity of the building materials in the two places, and partly because of certain carvings. This ruin did not seem to me to present any great interest.

Monday, 10th.-A journey under difficulties. The bullocks were vicious, the wheels came to grief, the spare cattle went astray and had to be hunted up, the rice was left behind in one of the carts which was in the rear, etc., etc. Evening saw us at Huai-pha-sai-tia.

Tuesday, 1lth.-A pleasent journey, Père Xavier was lost, but turned up again safely.

Wednesday, 13th.-At 8 o'clock we commenced the ascent. The little range of hills which we had to cross is neither high nor broad, the highest point does not exceed probably 200 mètres, and a good walker could casily get across in four or five hours. But the road is something indescribable, a perfect goat's path; the carts had to follow it, nevertheless. We tackled it accordingly, dragging the carts, one by one, from one boulder to another, by main force. At about 2 o'clock we had got over about 200 mètres of road and had attained an elevation of about 50 mètres. A good meal awaited the labourers, and all did justice to it; the bullocks were sent to graze at the foot of the hills. In the evening, we continued our journey, following a little valley which led to another hill, which may be considered as one of the peaks of the pass over which we crossed. We passed the night at the top of this.

Thursday, 13th.-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, 14th.-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. Abrut 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, 15th.-After great dificulty 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 Clok. We pitched our tent close to that place.

Sunday, 16th.-A day of rest. Splendid pasture.
Monday, 17th.-We left the village of Clok 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 ne of many abandoned villages. Robbers had carried off everything, and had then set fire to it. We reached Ban-naimut and then Ban-khu, making the latter our halting-place.

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

Wednesday, 19th.-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 halfcastes. 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 alarge 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. Thie 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. IV.

Saturlay, 29th.-In the morning, after some search, we hit upon the right road, about six hundred mètres to our left. The mistake was quickly rectificd, and the country being level and free from underwond, 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 befure Obon. We slept in the midst of carts which kad pulled up on the roal.

Sunday, 30th.-This very day we were to be at Ubon! We set off in adrance 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 murning. 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 aeross in boats. Blessed be God for ever.
G. DABIN.
l'bon, 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 il have performed the task of translating from the French the MS. sent to me through the Revd. N. J. Courreur, Procureur des Missions Etrangères at Singapore.

W. E. M.]

[^16]
## VALENTYN'S ACCOUNT OF MALACCA.

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

Learing 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 Maffedus, Quitirius) who had been appointed head of the Moors by Albuquerque, on condition that he slould avenge the death of her husband, son and brother-inlaw, Paticatir having often previously in vain asked for her hand while Isutinutis was still alive.
(1) "Pâti Unus" according to Fania 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 stonc. (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 $3,000\left({ }^{3}\right)$ 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 Joirnal, S.B., R.A.S., No. 13 for June, 1884, and note.
(2) Pâti Unus.
$\left({ }^{3}\right)$ Faria y Solza says ninety sail, which sounds more probable, with 1,200 men (an average of 183 to each ressel ) and a good supply of artillery.
in escaping himself in a small craft, the only one left of the whole flect, 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 Patalin and his Captain Andrado were much praised by Albuquarque for their gallant behaviour.

Once again Malakka ran the risk of being reconquered by the Malay kings. Taehar Madelis (Tuanno 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 dimner 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. $\left(^{2}\right)$
(1) Farta y Souza's account agrees as to the completeness of Pâti Onus'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, argain :-"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) Paria 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 farourite officer named Juan Maxime " to imitate the conduct of Zoprnes at Babylon. Being accord"ingly mutilated, Juax fled with some companions to Malakka, " giving out that he had escaped from the tyrannical cruelty of " his sovereign. Rey 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, haring appointed a partienlar 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 specch to the people.

Abdallaif, 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 Kiug 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 olf, 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. Brimo, who happened to be asleep
" when the alarm was given, immediately collected his mea, 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 Calascak,
" on learning the miscarriage of Juan Maxiliz, pretended that he
"came to the assistance of Brtro, and by that means was permit-
"ted to retire."
(1) Fara y Souza says " Bandara," i.e. "Bĕndahara."
( ${ }^{2}$ ) This is the account given by Faria y Souza, who says that Manomen, the King of Johor, caused it to be noised abroad that Abdullaf, his own son-in-law, had gone to Malacea with his knowledge and consent for the express purpose of getting an opportunity of seizing the fort by a sudden and mexpected attack, which false

George Brit succeeded (1515) George Albuqufrque 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, Didicus 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
report oblained credence from the Portuguese Commander and led to Abdullah's downfall. Thia, 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 Garcla 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. Garclas Hentik 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 gallint 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

[^17]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 Amlair, while the Laksamana had to take the other 4,000 men to blockade the Malakka roadstead.

Amliar 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 Mascarenifas 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.
(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 Atsjien (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 Alawodin Sjah, ("Ala-Ĕddîn 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 Dctober, 1547)( ${ }^{1}$ ) that the Achinese laid siege to Malakka, caubing 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 Dualil Sjaif 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 Alamodoin Sjaii 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 Sjai III) was styled Yangdipertuan, that he resided at Batoe Sabar, $\left({ }^{2}\right)$ 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.
(1) Fapta y Souza makes it in October, 1571, and states that the Achinese raised the seige on Tristran Paz 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 Veqa an attack on Malacca by a fleet sent by the Queen of Japára consisting of eighty large galleons and two huudred 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 Meldo was Portuguese Governor of Malakta in 1598.

I think that probably Admiral Jacob Heemskerk was the first of our people who had any trade with the Kiner of Djohor : he captured a large Portuguese carrack on his return voyage from China, touched at Djohor, and left behind there in 1603 ons Jacoz Buyzen, who would, he was sure, be treatel 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 Warwrck) 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 Rstevan Texeira de Made, a man of great fame: that these vessels were waiting for some ships, which werc 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 her him most earnestly, that our troops might assist him in relieving his city from this siege. Burzen added, besides, that Radja Boxgsoe, 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 Boxgsoe, accompanied by many Malay gentlemen, came again on board of the vessel Ziericzee on the 10 th October; we fought the Portuguese that day, and pat them again of 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 Funtado 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 nt ver 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 ruincl 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 $20 t-$ 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 14 th 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 Furado 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. Sebistranse, had captured off Patani a fine and richly laden Portuguese carrack, called St. Anthony, and the Wissingen (joming the said Admiral's squadron off Patani in February that year) had also captured on the 14 th January, 1605, off Pedra Blanca another carrack coming from Cochin-Orina and consigned to Don Axdrea Furtado.

We found in the first carrack the following goods, viz:$\therefore, 000$ piculs of white powder-sugar and some baskets of sugar-candy ;
4,500 piculs of Tintenaga or Spelter (zine) ;
223 fardels of Chinese camphor;
90 fardels Agelwood ; ( ${ }^{1}$ )
$1 \times$ leaden boxes of musk-balls ;
11 boxes of vermilion ;
2: boxes of Chinese fans:
209 fardels of raw silk, and 7o fordels bad yellow silk; 6,(00) pieces of variegated porcelain ;
10) casks of coarse and fine porcelain ;

[^18]some gilt couches and knick-knacks, one lot radix China, (²) 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 :-
$174 \frac{1}{2}$ piculs of Agelwood;
$33 \frac{1}{2}$ piculs of Benzoin ; ${ }^{( }$)
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 Saudal-wood and 21.2 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. Wibrand tan 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 $1 \frac{1}{2}$ miles from the Wissingen. The vessels Amsterdan and Dordrecht were under his command. Admiral Corvelis Sebastianser's squadron was also lying in the roads here.

The King called in the aid of both these Admirals, which Sebasthanse pledged himself to give, whilst van Warwyck begged to excuse him for this time.
The letters, addressed by H. H. Prince Naurice to the King, were then presented to him, which he received with much respect. Admiral Corvelis Sebastranse presented him at the time with two brass guns, and ran Warwyck gave him four small barrels of gumpowder, 40 shot-cartridges for the said cannon, 12 Japanese swords, four Portuguese muskets with shoulder-belts, some pieces of prepared silk and a shotproof 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 maar shoots an arrow, and if it falls where the "jin seng" is to be found, a flame appears, which guides him to the spot.
( ${ }^{2}$ ) "Kĕměnyan," burnt by Malays and aborigines in most of their charms and spellis.
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 Warwrck's vessels, in order that he should be better able to repel the assaults of the Portuguese.

Admiral van Warwyek left Djohor on the 10 th 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 Sebistiaanse soon followed him with his vessel the Amsterdam and the carrack S't. 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 slorps and ordered them to set fire to four ships, jast aground opposite the town. These were ships of 200,100 , and 80 lasts each. Though the garrison fired five shots, they all misse? 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 assemblel 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 $\left({ }^{1}\right)$ would bring them, and to bombard the town from the fleet.

The vessels neared the coast with neap tide to a depth of 3 II fathoms of water, ( ${ }^{1}$ ) but even at that distance their small can-nons-royal were of no use; though a fer balls did hit some of the houses, they could not reach the fortress.
(1) There is something wrong about the distances and camon range here, perhaps "league" should be read for "mile?"

The artillery of the town answered our fire ; but the Witte Leeux (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 Datch; Albuquerque dedicated it to "Our Lady of the Annunciation," belonging" to the order of the Jesuits.

Matelef in the meantime ordered four boats to survey the North side of the town, and to take soundings, for if possible he intended t.o 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 $2 \pm$ pounders at Ihha 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 ressels 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 som silenced the tiro 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 tbat 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 Jâwn, 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 bigisland about two miles from Malakka, to make ten gabions for each ressel, 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, Sti Râja Negara, $\left({ }^{2}\right)$ 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 17 th 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 Jangdipertochan, 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 Upeh (which is somewhere about $2 \frac{1}{2}$ 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: nafara or nagari, country.
of government to his brother, Radja Sabrivg, 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 Mateifef 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 Matelier would promise to make war upon Atsjien, which Matelidf 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 agrecment 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 peying 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, $\left({ }^{1}\right)$ 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 StatesGeneral 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 ;

[^19]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, $\left({ }^{2}\right)$ 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 ton 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 $1 \%$ pouaders, with which he intended to silence the fire of the enemy on that side of the town.

By this time Mr. Matefter had noticed, that whenever he hod asked Radja Sabrang for the help of his men he indeed promised to send him people, but they never appeared; ant concluding that there was something amiss between Alhe King of Djohor and his brother, he became aware, that he was knocking at a deaf man's door, the more so that they hat 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 Ambou had also been taken by us without the assistance of the natives.

I wish to take this opportunity of correcting an erroncous statement I made in foot-note (5) p. 50 of No. 13 of this Jourual for June, 188 . The arms on the old gaterray there mentioned are not Portuguese, though I was so informed by a Portnguese Consul, but Dutch after all, the Batarian lion is clear.
D. F. A. H.

## NOTICES OF BOOKS.

Rapport ì M. le Ministre de l'Instruction Publique sur une Mission aux Iles Philippines et en Malaisic (I879-I88I), 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 Branco's work, or pursue it through the voluminous pages of A. de Candolle's Prodiomus. 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 Plilippinen (Berlin 1873), a work which has been translated into Spanish, French, and English. There is also an Appendix by J. Roti on the geology of the islands. Baron Richthofen has published some observations on the nummulitic limestones of Binangonan. Finally, M. Vidal has published (Madrid, 18\%4) 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 mhich cannot be too highly praised. His opportunities for observation have been cousiderable. 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 fire chapters, viz.:-1.-Geology ; 2.-Mcteorology ; 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 paleozosic and ferruginous, decomposing into laterite just like what is found in the tin formations at Thaiperg. 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 Facra, 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 attompts 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 Clagal 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. Moxtano 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 risited. 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 bezomes 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. Ther number about ten thousand souls.

The author divides the Negritos of Luzon and Mindanao into:-1.-Negritos; 2.-Mamanua; 3.-Negrito Mestizos. In Malacea 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 Pbilippine group, such as Mindoro, Panay, \&ec., but of these Dr. Mostano 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 berond the limits ascribed to them by Dr. Moxtano. There are three zones of races rery 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 Jalay Peninsula, but any person who pays much attention to the dirersities of type amongst the Malays in the rarious 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 Crorx has published something on the subject (Journal of the Anthropological Institute, August and Norember, 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, Thagaloc, 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 lauguage 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. Theso sections show an oval, or sometimes a triangular and quadrangular outline, but never a cylindrical onc.

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 Montayo's list contains tribal names which are not found elsewhere.

## J, E. TENISON-WOODS.

"Work and Advcnture in New Guinea, 1877 to 1885," by Rew. James Chalaiers, and Rev. W. Wyatt Gill.-The Religious Tract Socicty, 1885.

Just a ycar 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 $141^{\circ}$ 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 Kerimaikapebut 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 sapported on perpendicular ones. Mr. Gill describes these as ]"Swiss-lake-like villages" in allusion, of
course, to discorerics 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 lakedwellers village, given as the frontispiece of Sir Charles Lyems's "Antiquity of Man," is chiefly founded on a sketch of a New Guinea village, viz., Dorey in the North-west of theisland.*

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. $\dagger$ Specimens of Malay rillages 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 fise 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 remored 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,

[^20]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 tattoved 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 Islarid) 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 obscrver did not fathom.

Cannibalism, though not universal, is general. The Stacy Islunders 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. Chalalers 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 fomales 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 manany 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. Chaliers 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. Gril 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 carth 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.

[^21]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. $\dagger$ The same people suspend dead bodies, folded at the thighs and wrapped in mats, in lofty trees. $\ddagger$

In districts where burial is practised ( $c, g$., 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),

[^22]broken to prevent theft: at the grave of a woman her conking utensils, grass petticoats, \&c., are similarly suspended. This is the baiya of the Dayaks of Borneo* and agrees, as Mr. Grus points ont, with castoms 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. Chalaters 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 somphere 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 crueland unnatural custom, sairl 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 gond 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, yarns, plantains, and sugarcane are produced abundantly. "Sago is cooked with shell fish, boiled with bananas, roasted on stones, baked in the ashes, tied up in leares, \&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 cultirated. A small oyster, described as "capital eating"

[^23]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 Ayila 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 Echidnu, or spiny ant-eater, have been discovered," (Tachyglossus Bruijnii and T. Laucsii). Both forms are oriparous. 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 hear. quarters 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 aceount 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. Thorngeer, with allusions to other outrages. And it is not difficult to gather from Mr. Chaliers' unvamished narrations of his various journeys that dificulties and dangers which he successfully surmounted might, in the case of one not gifted with equal coolness and courage, have given occasiou for bloodshed, and consequently for permaneat hostility with a revengefal 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 $M r$. W. Cameron to $H$. $E$. the Acting Governor (ihe 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 rances but which from the mean elevation of this vortex appear cumparatively 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 ceventually, and this is the Telom-the real Ulu of the Jexlei. 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 Kělantan, further east again behind a lofty range, Pahang, octopus-like, shoots out another arm to the north impinging on Kělantan. The mountain which I ascended was 6,300 feet by aneroid, probably considerably higher real altitude, and stands in somewhere about $4^{\circ} 38^{\prime}$ 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 anale (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 Jellei. 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 musolr (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 Pêrak 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.

Lands under100 acres to be classified.

Leases for 999 years or shorter term.

Applications to be made to Land Office, Governor's sanction requisite.

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.
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.
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.
4. Before proceeding to the disposal of any Lots within the Suburban Town or suburban boundaries, the limits of the said Lots shall be and Town accurately defined and published.
5. The said lands shall from time to time be disposed of by Mode of Sale. the Commissioner of Lands, with the sanction of the Governor, by public auction, and it shall be lawful for the Commissioner of Auction in Lands to dispose of any land which shall have been once so exposed first instance. 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.
6. The Town Lots shall be subject to an annual quit-rent at Rent of Town the rate of one hundred and twenty dollars per acre, such quit- Lots. rents being redeemable at 15 years' purchase.
7. Lands in the suburos shall be disposed of in Lots of Rent and diabout one acre each, and in the country in Lots of less than 100 mensions of 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. Suburban and Country Lots. Quitrents redeemable.
8. It shall be lawful for the Commissioner of Lands to de- Payment of termine at the time of sale whether any or what credit shall be purchase allowed to the Lessees of Lots, and to regulate the terms on which money. 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 purchasemoney be paid at the time of sale.
9. The payment of the quit-rent, reckoning from the date Rent how of sale, shall in every case be made intadrance to the end of the payable and current year upon the execution of the lease or of the permit to penalty in occupy, and the succeeding payments shall be made on the 1st day case of being of January in advance for each succeeding year, and any lands for in arrear. 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 praid on account of such lands shall be forfeited.
10. Country Lots which remain unoccupied and unimproved Unimproved for three years from the date of the lease shall revert and escheat Country Lots to the Government, and all premia, quit-rents, or other monies paid on account of all or any such Lots shall be forfeited.
to revert and. escheat to the Government.

Unimproved Town and Suburbanlots revert to Government.

Building on Town lots governed by Local Building Laws.

Limits defined at Lessees' expenses.

Lease issued on payment of all fees.
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 Goverument shall have the option of reentering 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, quitrents 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.
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. 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
13. Should the Lessees when duly called upon fail at any be defined at time to point out or define their boundaries, or should ther definiLessees' cost. tion 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.
15. It shall be lawful for the Commissioner of Lands, upon The Governthe application of the Lessee or other duly authorised person, to or may subdiaccept 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.
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.
17. It shall be lawful for the Gorernor to grant mining licenses on favourable terms to the Lessees of demised lands.

Mining licenses may be granted by Governor.
18. The Government reserves the right to resume possession Reserves for of such portions of land as may be necessary for public purposes, Public pursuch as police, revenue and telegraph stations, roads, railways, poses. tramways, canals, \&c., upon payment of reasonable compensation for loss and damages actually sustained by the Lessee.
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.
20. The Government reserves all navigable streans, 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.
21. The Government reserves all edible bird's nests and guano, and also the right at all times to enter on the demised

Bird's nests and Guano reserved. 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.

Arrears recoverable at Law.

Registration of Title and assignments.

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.
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.
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 underlease 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.
Registration compulsory.
Survey Fees.
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.

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.
25. Nothing in this Proclamation provided shall be taken to Special Reguaffect the special conditions under which Lots of one hundred acres lation for and upwards in extent are leased in accordance with the special lands of 100 Regulations approved by the Court of Directors of The British acres and upNorth Borneo Company on the 7th day of February, 1833, or such wards not other Special Regulations as may hereafter be in the same manner approved by the said Court of Directors.
26. All dealings in land between European and Chinese and Dealing in other foreigners on the one hand, and the natives of the country land with naon the other hand are hereby expressly forbidden, and no such tives forbiddealings shall be valid or shail be recognised in any Court of Law den. unless such dealings shall hare been entered into and concluded before the 16th day of January, 1883.
27. A foreigner desirous of purchasing land from a native Foreigners shall address his application to the Governor through the Com. may acquire missioner of Lands, and the Governor, if he sees fit to sanction native land such purchase, shall, if the native owner consent, acquire the land on behalf of the Government, and shall fix the premium at which through the Government. 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.

28, This Proclamation may be cited as "The Land Procla- Short Title. mation, 1885."
29. In the Interpretation of this Proclamation the word Interpreta"Governor" shall mean and include the Officer administering the tion Clause. 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.

## ANNANESE 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 bodv, 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 soreerers 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 Strgian 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 rarnished 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 Cocte devotes thiriy 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 inade 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 eren weeks before burial. By its side is erected a small altar, on which are placed three cups of tea, difierent condiments, an incense brazier and tro 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 "frst-class funcral" 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 Amnamese Code. Suffice it to say that there are huge lantems 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 hwmanity, such as the fillet borne on two poles, which is inscribed Thusgtin (faithful) for a man, and Trinh-thtan (pure and ubedient) 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-mon- 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, irwitated 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-mon 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 ensiderate, or more fearful of the wrath of these homeless spirits. They burn regular NHÜT-NHËT-DONG-DONG-" numerous pieces of money." These are strips of paper with coins printed on them, regular pistal 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 dig anywhere out in the midale of the folds belonging to the fumily. The rich usually have a special place for their own relations, and sometimes assign a patch for their prorer neighbours. Otherwise these must be buried by the rudside or in some part of the village common lands. At the grave the coffin is lowered in, a banneret of silk or peper giving in white and yellow characters deceased's name, age, dignities, position in family, and virtues, is thrown upon it, and theil a small pile of the above-mentioned money paper. Lach 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 rery 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 ail sizes aud 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. A.t the same time there is always more or less sacrificing to the Co-hos 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 carrency. 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 That-Binir (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 sapplies, 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 bumning, the head of the family prostrates himself, and afterwards scasters 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 ont, "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 toward. 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-Piap, 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 piogs, and even the lizards in the thatch. All the humar 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 Dinm.

On the determined day, offerings of the usual kind are made, and the wizard, the That-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 That-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 cnjoy 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 urdinary, 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 rient d'être l'objet."

A map shewing the course of the Triang river was to have accompanied Mir. O'Brien's paper on Jělĕbu 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. Brrch, 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.


ABOUNT of fall of RAIN at SINGAPORE

## hourly observations

and Magnetic Observatory
lirection of Caporain Ellmot. VGINEERS.


AMOUNT of fall of RAIN at SIVG.APORE
Noduced by R. C. Woods from the haurly observations
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MDRAS EVGINEERS


HIGHEST, LOHEST aTA MEAN TEMPERATURE at SINGAPORE,
Hoduced by R. C. Woods, from the hourly observations made ne the Meteorologital and Magnetic Oboervosory at Singapura undar the direttion of Cuptain Elliot, Madras Einginecrs.

$\because$ The bacruabory was situated near ths mouth of the Kallang River, about 20 fest above High (Sect) wrter nawk

HIGHEST, LOWEST and MEAN RANGE of the B.AHOMETEH at SINGAPOBE,
Hedwed by R. C. Woods, from the howrly olserentiwns mads at the Mecorobogical and Magnetic Observitory at Singrpure.
under the direction of Ouptain Elliot, Muedras Eunnecrs.

correcked for temperature.

# INDIAN ARCHIPELAGO AND EASTERN ASIA. 

EDITED BY

## J. R. LOGAN

OF PINANG.

SINGAPORE, 1847 T0 1862. TWELVE VOLUMES. $8^{\circ}$. PRICE $£ 20$.

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| 61 | Hose, The Right Revd. Bishop G. F. (Honorary Member) | Sarawak. |
| 62 | Hullett, R. W. | Singapore. |
| 63 | Ibrahim bin Abdullah, Inche | Johor. |
| 64 | Iriing, The Hon'ble C. J., c.if.g. | Penang. |
| 65 | Joaquim, J. P. | Singapore. |
| 66 | Johor, H. H. The Sultan of, g.c.m.g., G.c.s.I., (Honorary Member) | Johor. |
| 67 | Kehding, F. | Labuan, Deli. |
| 68 | Kellarama, E. | Penang. |
| 69 | Ker, T. Rawsor | Johor. |
|  | Kxight, Arthur | Singapore. |
| 71 | Kоek, Edwin | Singapore. |
| 72 | Kron Mun Dewifongse Varoprakar, H. R. H. Prince | Bangkok. |
| 73 | Kinyersley, C. W. S. | Penang. |
| 74 | Lambert, G. R. | Singapore. |
| 75 | Latino, G. | Singapore. |
| 76 | Lawes,The Revd. W.G.(Honorary Member) | New Guinea. |
| 77 | Leech, H. W. C. | Pêrak. |
| 78 | Lempriere, E. T. | Labuan. |
| 79 | Logan, D. | Penang. |
| S0 | Low, Sir Hugh, к.c.m.g. | Pêrak. |
| 81 | Low, H. Brooke: | Sarawak. |

MEMBERS FOR I886,-Continued.

| Nos. | Names. | Addresses. |
| :---: | :---: | :---: |
| 82 | Lavgen Var | Kota Raja, Acheen. |
| 83 84 | Mikleho-Maclat, Baron <br> (Honorary Member) |  |
| 84 | Maxweld, The Hon'ble W. E., c.m.g. | Singapore. |
| 85 | Maxwell, R. W. | Europe. |
| 86 | Miller, James | Singapore. |
| 87 | Mohamed Said | Singapore. |
| 88 | Muhry, O. | Singapore. |
| 89 | Noronha, H. L. | Singapore. |
| 90 | Nur, Peter | Singapore. |
| 91 | O'Sullitas, A. W. | Penang. |
| 92 | Palgrate, F. Gifford, (Honorary Member) | Europe. |
| 93 | Paul, W. F- B. | Sungei Ujong. |
| 95 | Pell, Benvett | Loudon. |
| 96 | Perhatr, Revd. J. (Honorary Member) | Saramak. |
| 97 | Pickering, W. A., c.m.g. | Singapore. |
| 98 | Pooles, Fred. | Singapore. |
| 99 | Rodger, J. P. | Sělângor. |
| 100 | Reav, W. H., c.x.g. | Singapore. |
| 101 | Rickett, C. B. | Penang. |
| 102 | Ritter, E. | Singapore. |
| 103 | Rowell, Dr. T. Irvine: | Singapore. |
| 104 | Satow, E. M., c.m.g. | Bangkok. |
| 105 | Sarawak, H. H. The Raja of, (Honorary Member) | Saramak. |


| Nos. | Names. | Addresses. |
| :---: | :---: | :---: |
| 106 | Schalute, M. | Rhio. |
| 107 | Scott, Dr. Duncan | Pêrak. |
| 108 | Sergel, V. | Singapore. |
| 109 | Shelford, The Hon'ble T. | Singapore. |
| 110 | Skinner, The Hon'ble A. M. | Singapore. |
| 111 | Smith, The Hon'ble C. C., c.m.g. | Colombo. |
| 112 | Sohst, T. | Singapore. |
| 113 | Sourindro Mohux Tagore, Raja. Mus. D. | Calcutta. |
| 114 | Stringer, C. | Singapore. |
| 115 | Swettentiam, F. A. | Europe. |
| 116 | Sted Abubakar bin Omar ai. Junied | Singapore. |
| 117 | Syed Mohamed biy Aimed al Sagofe | Singapore. |
| 118 | Syers, H. C. | Sělầngor. |
| 119 | Tan Kim Ching | Singapore. |
| 120 | Tevison-Woods, Revd. J. E., (Honorary Member) |  |
| 121 | Thompson, A. B. | Deli. |
| 122 | Tolson, G. P. | Acheen. |
| 123 | Trachsler, H. | Europe. |
| 124 | Treacher, The Hon'ble W. H. | North Borneo. |
| 125 | Trebing, Dr. C. | Europe. |
| 126 | Talbot, A. P. | Singapore. |
| 127 | Trübrer \& Co., Messis. | London. |
| 128 | Terjont, The Hon'ble J. M. B. | Province Wellesley. |
| 129 | Walker, Major R. S. F. | Pêrak. |
| 130 | Watson, E. A. | Johor. |
| 131 | Whanipoa, Ho Aif Iip | Singapore. |
| 132 | Wheatley, J. J. L. | Johor. |
| 133 | Wray, L . | Pêrak. |
| 134 | Wray, L., Jr. | Pêrak. |

## PROCEEDINGS

OF THE

## ANNUAL GENERAL ILEETING

OF THE

STRAITS BRANCH

OF THE

## ROYAL ASIATIC SOCIETY,

 HELD AT THEEXCHANGE ROOMS
ON
TUESDAY, 19тн JANUARY, 1886.

## Present :

The Hon'ble J. F. Dickson, c.m.g., The Hon'ble W. E. Maxwell, c.m.g., W.A. Pickerina, Esq., c.m.g., and Messrs. A. Knigut, R. W. Hullett, H. L. Noronha, C. Dunlop, J. Miller, E. Koek, G. Copley, C. B. Buckley, and W. A. Bicknell.

The Vice-President (Mr. Pickering) took the Chair.
The Honorary Secretary (Mr. W. E. Maxweld) stated that the business before the meeting was to receive the Annual Report of the Council and the Honorary Treasurer's accounts, and to elect officers for the year to replace the out-going Council, and to elect two new members.

The Report of the Council for the year 1885 (vide page xV ) was read.

The Honorary Treasurer submitted his accounts for 1885 (vide page xviii), which were passed.

The Honorary Secretary stated that he had, at the request of the last meeting of the Council of the Society, written to Gorernment asking whether the Society would have accommodation in the new Museum when the building was completed; and the reply was that the Asiatic Society would be accommodated in the Reference Library ; and the Room was marked off on the plan (laid on the table for the information of members) as the "Reference Library and Asiatic Society's Library." This would be a great advantage to the Society, and their warmest thanks were due to the Gorernment.

With regard to the two volumes of "Miscellaneous Papers relating to Indo-China and the Malay Peninsula," shortly to be published for the Society by Messrs. Trübner \& Co., and referred to in the Report, the sheets received up to date were laid on the table, and it was stated that the publication would be uniform, in general get-up, binding and finish, with Trübner's "Oriental Series," specimens of which were exhibited.

The following new members were unanimously elected :-
Proposed by Mr. E. Abrahayson, seconded by Mr. S. E. Dalrtmple,-Capt. R. D. Beeston.

Proposed by the Hon'ble J. F. Dickson, seconded by the Hon'ble W. E. Maxwell,-the Hon'ble J. W. Boxser.

The next business being to elect officers for the year to replace the out-going officers, -

The Honorary Secretary said the Society had generally had as its President the Culonial Secretary, but they had never had a Colonial Secretary who had performed any special scientific or literary work for the Society, though all had been willing to further its objects in every way. But to the new Colonial Secretary (the Hon'ble J. F. Dicksur, c.m.g.) he hoped that the Society might look confidently not ouly for the moral support which they had received

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from former Colonial Secretaries, but, (judging from the cordial support which in Ceylon he had given to Oriental research and the active part he had taken in the work of the Branch of the Royal Asiatic Society there) for active co-operation in the work of the Society. He had now the honour to propose him as President for the year.

The election by ballot was then proceeded with, with the following result:-
President, ... .... The Hon'ble J. F. Dickson, c.m.a.
Vice-President, Singapore, ... W. A. Pickerina, Esquire, c.m.g.
Vice-President, Penang, ... D. Logar. Esquire.

| Honorary Secretary, | ... The Hon'ble W. E. Maxweld, c.m.a. |
| :--- | :--- |
| Honorary Tieasurer, | ... E. Koek, Esquire. |

Councillors, $\quad \ldots \quad \ldots \quad\left\{\begin{array}{l}\text { A. Kıight, Esquire. } \\ \text { Dr. N. B. Densys. } \\ \text { H. L. Noronha, Esquire. } \\ \text { R. W. Hullett, Esquire. } \\ \text { J. Milier, Esquire. }\end{array}\right.$

The President said he was rery much obliged to the gentlemen present for the honour they had done him in electing him. He would have been rery glad if they had elected one who had distinguished himself by good services to the Society, but as they had chosen to adhere to the rule of haring the Colonial Secretary as President, he would only say that his serrices would be always willingly placed at their disposal, and he would be glad if in any way he could assist in furthering its ends. His Oriental studies, which Mr. Maxwell had too kindly alluded to, had been in a direction which he feared could not be taken as leading to results which would recommend themselves as interesting to a Branch of the Royal Asiatic Society situated in Singapore. They had been mainly confined to a study of the Buddhist scriptures in the original Pali with a view to arriving at, and properly understanding, the origin and the pure principles of Buddhism; but with the help of the older members of the Singapore Branch he hoped to
take an active interest in the subjects which came before them from time to time, and as he came to a more perfect understanding of them, to take part in the consideration of the same and of such matters of research as might be connected with them. (Applause.)

The meeting closed with a vote of thanks to Mr. Pickering, the Singapore Vice-President.

# ANNUAL REPORT <br> OF THE <br> COUNCIL <br> of the <br> STRAITS BRANCH <br> OF THE <br> <br> ROYAL ASIATIC SOCIETY, 

 <br> <br> ROYAL ASIATIC SOCIETY,}

FOR THE YEAR 1SSõ.

The Council for 1885, on retiring, hare, they believe, a satisfactory Report to lay before the Society.

During the year, the following new members have been elected provisionally by the Council, subject to confirmation at a general meeting :-the Hon'ble J. F. Dickson, c.m.g., J. B. Elcunr, Esq., A. Hale, Esq., Dr. Duncan Scott, M. Clifford, Esq., A. Gentle, Esq., T. L. Gosling, Esq.

The following member has been removed by death during the year 1885-Sir Harry St. George Ord.

The Council are glad to announce the completion and approaching publication of two volumes of Miscellaneous Papers relating to Indo-China and the Malay Peninsula, which have been edited for the Society by Dr. Rost, and which are published by Messrs. Trübrer \& Co. The collection includes forty papers of various degrees of scientific interest, extracted from Dalrymple's Repertory, Asiatic Researches, and the Journal of the Asiatic Society of Bengal. A supply of copies of this work will be sent to the Honorary Secretary as soon as it is published, and may be obtained from him, loy members only, at $\$ 5$ for the tro rolumes. It is proposed to continue the series by the publication of two more volumes in 1886,
and it is hoped in this manner to collect, in a conrenient form for reference, much valuable scientific information relating to the Eastern Archipelago.

The Council have pleasure in acknowledging the liberality of the Government of this Colony, from whom the promise of a grant of $\$ 500$ towards the proposed publication has been received.

In connection with this subject, the Council desire to suggest an undertaking which might, in their opinion, well engage the attentive consideration of the Government and of this Society at some future time. The Colony has no authorised Statistical Gazetteer, to which residents, students, trarellers and men of science may turn for authentic information regarding the Straits Settlements and the Natire States of the Peninsula. Such a work should embody a full account of these regions, their inhabitants and productions, in the departments of Geography, Geology, Ethnologr, Religion, Manners and Customs, History, Arts, Manufactures, Agriculture, Commerce, Zoology, Ornithology, Ichthyo$\log y$, \&e., and should gire a concise account of erery town and rillage of importance within the limits referred to. It would carry ou, in the Far East, the work already performed in British India and Burma.

In the department of Geography, the Society has not been idle. Recent explorations in Pahang and the work of surveyors in the service of the Native States have added greatly to our geographical knowledye during the last few years; and it has been found possible to make great improvements in the map of the Peninsula which was published by Mr. Stanford for the Society in 1870. An entirely new map is now in course of preparation, and will be sent to England for publication in 1886.

While acknowledging with thanks the kindness of the Singapore Exchange, who hare so often permitted the Society the use of their rooms, it is gratifying to be able to announce that the Society will, before long, have a suitable room for its meetings. The Government have set apart a large room in the new Museum for a Reference Library, and the Society will be domiciled there.

One of the members of the Society resident in Singapore, Mr. G. Copler, has obligingly taken orer charge of the books and papers presented from time to time to the Society, and has undertaken to hare them bound, labelled and catalogued.

The publication of a paper deroted to "Notes and Queries" which was proposed in the last Annual Report, has been carried out; and two numbers have appeared. The Council hope that, as this publication becomes better known, the number of contributors and correspondents will increase.

Numbers 14 and 15 of the Jowrnal of the Society were published during the year. They contained the following papers:-
"Ascent of Gunong Bubu," by Rev. J. Tenisor- Woods.
"Sea-Dyak Religion," by Rev. J. Perham.
"History of Pêrak from Native Sources," by W. E. Maxirell.
"British North Borneo," by E. P. Gueritz.
"Jělĕbu," by H. A. O'Brien.
"Journey Across the Peninsula," by F. A. Swettenham.
"Tan Hasselt's Description of the Mid-Sumatra Expedition of 1877.79," translated by R. N. Bland.
"Further Notes on the Rainfall of Singapore," by J. J. I. Wheatley.
" Hill Tribes of North Formosa," by J. Dodd.
"Genealogy of the Royal Family of Brumei," by W. H. Treacher.
"French Land Decree in Cambodia," by W. E. Maxwell.
"Malay Language and Literature," by Dr. Rost.
"A Missionary's Journey in Siam," by Rev. G. Dabin.
"Talentyn's Account of Malacca," contributed by D. I. A. Herter.

The Honorary Treasurer's Accounts, which are annexed, shew a credit balance of $\$ 1,018.90$.

W. E. MAXWELL, Honorary Secretary.

STRAITS BRANCH OF THE ROYAL ASIATIC SOCIETY.
Treasuruers Cash Account for the year 1885.

1885.
Treasurer's Cash Account for the year 1885,-Continued.



# PLAN FOR A VOLUNTEER POLICE iN THE MUDA DISTRICTS, PROVINGE WELLESLEY, SUBMITTED TO GOVERNMENT BY THE LATE J. R. LOGAN IN 1867. 

 HE districts of North Province Wellesley lying along the Muda and the Kreh, comprising the lands held by me and the tracts surrounded by or adjacent to those held by Malays, are without Police stations, and, for the most part, without roads. Over a large portion of this area the population is scattered in small hamlets far apart from each other. The unreclaimed state of the greater part of it affords facilities for gangs of robbers lurking, and they can enter it by stealth either from the Muda or from the sparsely inhabited country beyond our eastern frontier. Crimes are frequently committed within it, and the perpetrators are hardly ever brought to punishment. A few years ago one of the noted panglima panyamun, or robber captains, of Kĕdah crossed it repeatedly in open day at the head of a gang well armed, and the Pěnghûlus took care, while affecting pursuit, to keep at a safe distance from him.Unless Chinese can be induced to settle in these districts, the work of reclamation will be exceedingly slow. I give them all the encouragement I can, but, in the absence of regular Police, or a good system of volunteer police, they have no protection for their lives and property, and are constantly exposed to thefts and often to robbery and murder. A goldsmith opened a shop on the Ikan Mati Road, but was robbed, and the lives of himself and his workmen endangered. He drew back and established himself close to my house at Permatang Bĕrtam. A shopkeeper settled at Paya Kladi, fortified his house by rows of posts all round it, and thick bars to his door. Within two months he was attacked at night by a party of Malays. He and his men defended themselves by throwing billets of fire-wood and crockery from an upper window
at the assailants, and the latter, unable to force an entry, set fire to the house and burned it down, the Chinese escaping behind by making a rush, headed by their buffaloes. Lately, within about one month, three serious crimes were committed on my land towards the boundary pillar. Some Chinese, who had opened a shop on the bank of the river at one of the landing places, were robbed and two of them murdered in a cruel manner by a gang of Malays soon after nightfall. A Chinese hawker, belonging to another shop, was murdered during the day, for some dried fish and other articles of triffing value which he was carrying. When I last risited this district on the 11th instant, I found that one of my Malay tenants had had his house burned down in the previous night. Whilst he was asleep some one had first planted bamboo spikes along the path leading to the house to lame the inmate in escaping, or his neighbours should they come to his assistance, and had then set fire to it.

The Chinese shopkeepers hare lately been disarmed by the Police, although they remained quiet, attending to their own business, during the recent disturbances in Penang, and they are now entirely at the mercy of the bad class of the Malays.

The Dhalays, although in most places sufficiently numerous to defend themselres from gang robbers, are unable to do so from want of concert and guidance. When a house is attacked, the neighbours usually remain aloof, partly in the fear that from want of sufficient support they may be wounded orkilled by the robbers, and partly in the fear that if seen with them they may be suapected of being confederates. The robberi hare, in almost all cases, fire-arms, which very few of the Malays possess; their attacks are sudden, they discharge muskets and use savage threats, and they are let, or beliered to be led, by Pangimas, of whom the villagers stand in great dread, as many of them are noted for their boidness, strength, dexterity and ferocity, and boast of, and are credited with, being invulnerable. Hence it happens that at present a gang of ten or twenty robbers may march througin the most populous villages, plunder houses and retire mith complete impunity.

The Lalays of kerdah, inclading those of the boats and rafts en the river, all cary arms. If our Malays are entirely disarmed they will be more exposed than ever to visits of marauders from beyond the fromtiors.

Most of the so-called Pengluthus have been appointed by the Pünghúhu Dësar, or Police Inspectors, without authority from Govermment. some are men qualified by position and character for the post, others are of bad reputation, or unable to write, or other-
wise disqualified. They have no systematic arrangements among themselres and with the villagers for united action in emergencies.

The effect of this was seen during the recent disturbances in torn, when a requisition by the Lieutenant-Gorernor to the Deputy Commissioner of Police to send 300 Malays to town under the command of one of the Pěnghûla Bĕsar and to hold other 300 in readiness at the coast villages under the other Penghûlu Bĕsar was answered by only about 120 being sent over without the Pĕnghûlu Bĕsar, but with so many Penghthlu MIukims that among the men from my neighbourhood there was a Pĕnghûlu for erery seven, while some Pěnghîlus had only one or two followers. The Pënghûlu Mukims should have been left, as was intended, in their villages to watch them and send in more men to the Penghhûlu Bĕsar. The Malays were ererywhere, so far as I went among them, willing aud ready to obey the order of Goremment, but they were kept back, as they alleged, by orders from the local heads of the paid Police, the Pe̛nghûlu Běsar, who seem to have considered it necessary to keep some 10,000 male adults at their homes, or marching in bands up and down the country, to look after a few hundred Macao coolies.

The Malays on my lands are bound by an article in their leases " to conform to such regulations as the landlord may, from time to time, make, in aid of the obserrance and enforcement of the law and for sanitary purposes within the limits of the estate." These men and the Malays of the villages and Kampongs adjoining hare asked me to arrange with them a plan for their protection against gang robbers and for their more systematic action on the occurrence of disturbances among the Chinese, but I do not think that any such plan could be efficiently carried out without the sanction of Gorernment. If it should be thought that my knowledge of the inhabitants and constant risits to different parts of the districts along the Muda and the Kreh, rould be useful in introducing and bringing into working order such a plan, my services are entirely at the disposal of the Lieutenant-Governor.

I would suggest the following :-

## Plan for the Police Protection of the MLuda Districts.

The experiment of a Volunteer Police to be tried in the Districts along the Muda and the Kreh, which are at present without Police and are with difficulty accessible by the Police from their distance from Police Stations and want of roads.

The experiment to be made gradually and cautiously, beginning with the inland districts, where the societies have no branches or influence, selecting the best men to work it, engaging the villagers heartily in it, and imparting to them, and especially to the headmen, some knowledge of their legal obligations in cases of gang robberies and other crimes attended with violence.

The plan, if successful, could be afterwards extended to other districts, so as to keep down the cost of the paid Police, which already presses heavily on the rate-payers and affords them little protection from ordinary crimes and none from extraordinary ones, such as gang robberies, persecutions by Malay societies and disturbances of the peace caused by the dissensions of Chinese and Malay Societies.

The Malay Penghûlus to be directly responsible to the Lieute-nant-Governor and his Assistant in the Province and not to the Deputy Commissioner of Police, although they will act in aid of the Police. They will maintain a direct communication, as it were, between Government and the population, and be highly useful in influencing and informing the villagers in accordance with the policy of Government. For example, the Lieutenant-Governor might explain to them the mischief done by the societies and engage them to discountenance them.

The system should be totally disconnected with the mukims (parishes), mosques and jumahas, and the Pĕnghûlus of mukims or mosques should not be employed as Pĕnghûlus. There would otherwise be danger of the jumahas and their heads acquiring too much influence and too powerful an organization. The jumahas bring a strong social pressure to bear on the villagers in the interest of a stricter and more fanatical observance of Mahomedanism and a greater submission to their religious leaders.

The two paid Police Inspectors who now have the title of Pĕnghûlu Bĕsar should be called Inspectors if retained, so as to confine the title of Pěnghûlu to the village headmen.

1. The larger villages to be divided into kampongs of 20 to 30 houses each.
2. Each of these kampongs, and every hamlet or group of houses apart from the villages to have a Katua Bĕsar, Katua Kechil and Kiweang (messenger).
3. Such a proportion of the adult males as Government thinks fit (or the whole in particular kampongs) to be enrolled as a volunteer police.
4. A certain number of these to be detailed, every three months, in each kampong to turn out with the Katua Bĕsar when required,
the others to guard the Fampong on such occasions under the Katua Kechil.
5. Groups of adjacent Rampongs to form Dairahs under a Pĕnghûlu Bĕsar and Pĕnghúlu Nluda with their Kweangs.
6. The Pĕnghâlus and Katuas to be farnished with muskets, swords and other arms by Government, and the Pěnghûlus to be licensed to carry swords when they are abroad.
7. The enrolled villagers to be licensed to keep such arms as may be sanctioned, and to carry them when on service.
8. The Pĕnghûlus. to be appointed Constarbles.
9. Every Pĕnghûlu to be furnished with a gong and every Katua and Kweang with a wooden tong-tong such as is used by the Police in Jara, and a system of alarm signals with these to be prescribed.
10. The Pĕnghûlus to receive written appointments under the seal of the Lieutenant-Governor. The Katuas to be annually elected by the enrolled villagers, subject to the confirmation of the Lieutenant-Governor.
11. When gangs of robbers or other disturbers of the peace are abroad, the nearest Pěnghûlus or Katuas to beat a rapid alarm signal, which will be repeated by the adjacent Pĕnghûlus and Katuas and stop as soon as it is so repeated. The presence of the robbers, rioters, \&c. in or near any kampong to be indicated by slow beats continued till they have left, and their ricinity to another kampong is signalled in the same way. When the signal is heard every Pĕnghûlu and every Katua Bĕsar with his men to run to the place where the robbers are. The Katua who is first on the spot to take the general direction of the rolunteers until the arrival of the Pěnghûlu of the Dairah, who is to take the command of the "Hue and Cry" and retain it, unless it is assumed by a Magistrate, Justice of the Peace, Deputy Commissioner, or Inspector of Police.
12. The ordinary duties of the Pĕnghûlus will be to receive from, and furnish to, adjacent Pĕnghûlus and . Police Stations notices of movements of robbers and noted or suspected criminals, to prevent crimes, arrest criminals, \&c. They might also hare other useful duties assigned to them, such as keeping a registry of the inhabitants, births, deaths, marriages, dirorces, \&c.
13. The Pěnghûlus, Katuas and Kweangs to be exempted from rates. If the system be found to work well, the Pěnghûlus might receive a small salary.
14. Cattle stealing, now so common, to be checked by a system of passes.
15. Persons not to be allowed to cross or descend the Muda at night without passes from a Pĕnghûlu.

For the more effectual police of the Muda and protection of our districts adjoining it, it is desirable that arrangements should be come to with the Râja of Këdah with respect to passes for men and cattle; the arrest and detention by his Pĕnghîlus of persons charged by any of our Peynghûlus or Police Officers with a crime committed in our territories when the charge is verified on oath, or a warrant by a Magistrate or Justice of the Peace to arrest such persons is produced; the taking up the Hue and Cry when gangs of robbers escape from the Province across the frontier. Information as to apprehended crimes, movements of robbers, \&cc. should be communicated by the Pěnghûlus on the one side of the river to the Pĕnghûlus on the other side. And the Pĕnghûlu Bĕsar at Kôta, who is the Superintendent of the districts on the Kĕdah side of the river and a Magistrate or a Justice of the Peace on our side should form a standing international Commission for the better preservation of the peace on the river and its borders, the regulation of ferries, the prevention of the passage of criminals and stolen property, the arrest of fugitive criminals, the prevention of smuggling, cattle trespasses, \&c.

The Raja, it is also suggested, should be asked to empower the Pĕnghûlu Bĕsar or a Hakim at Kôta to hold a Court for the recovery of debts by creditors on our side from persons who have fled to, or reside on, the Râja's side.

J. R. LOGAN.

20th August, 1867.
I see no objection to the carrying out of $\mathrm{Mr}_{1}$. Logav's project in part, leaving the rest for future and more mature consideration. Pĕnghûlus, willing to act without salary, might be appointed along the line of the Muda, who might be permitted to carry arms. The Government have none to supply, not having sufficient for the Police. They might be permitted to recommend and appoint, under section 21 of the Police Act, a certain number of men to act as Special Constables, also to be permitted to carry arms, and the Pĕnghûlus theraselves might be appointed under the same Act, the Commissioner of Police having only such authority over them as he should receive from the Lieut.-Governor. Then, people might be appointed on the application of Mr. Logan as required by the Act, and a system of communicating by means of gongs, or otherwise, might very well be adopted for mutual information and protection. I quite agree with Mr. Logan, and had already
adopted his opinion, that the paid Pěnghutlus should be in the position of the Parish Constable in England. If Mr. Logan approres of this, perhaps he will name the Pĕnghûlus to be appointed.

A. E. H. ANSON,<br>Lieut.-Governor.

Lieut.-Gorernor's Office, 30th August, 1867.

To

> Perct Windsor Earl, Esq., Commissioner of Police, $\quad$ Prince of Wales' Island.

Sir,
I have the honour, on behaif of the inhabitants of Muda District liable to be called out as part of the Posse Comitatus and who have signed agreements to act in keeping the peace and in aid of the Police, to request that you will be good enough to appoint the persons whom they have elected for that purpose, and whose names are entered in the Rolls now sent for your inspection, Constables under Section 21 of the Police Act of 1856, to keep the peace within their respective Dairahs and Kampongs, from this date till the end of next year; to which I beg leave to add my own request.

In the erent of the peace being disturbed by gang-robbers or others, the villagers will be called out by these Constables and act under their directions until an officer of Police, or other person having lawful authority in that behalf, arrives at the place of the disturbance and takes the direction.

The Constables hare also undertaken to give immediate information to the nearest Police authority of all crimes or intended crimes that come to their knowledge, and to attend, with as many of the villagers as may be required, whenever their aid is called for by any offcer of Police.

The Constables will serve without pay, but it is hoped that, in consideration of the saving of expense which such a system of supplementary Volunteer Police may enable Government to effect in the regular Police force, the Municipal Commissioners will think it proper to remit some portion of their rates. At present, as you are aware, a large portion of the District is without Police Stations and roads. Without an organization of this kind, the villagers are defenceless against gang robbers, and this is true
even of those portions that are in the vicinity of Police Stations, for it cannot be expected that half a dozen Policemen can beat off or arrest armed bands of 20 to 70 men unless they are aided by the Hue and Cry, which has been proved by the recent gang robberies in the south of the Province as well as by many in former years in the north, to be wholly ineffective when the Posse Comitatus is not thus organized. The mere knowledge that the villagers are everywhere prepared to resist gang robberies will, it may be anticipated, have the effect of making them less frequent. I intended to arrange with the Muda villagers a system of signals by beat of wooden drums such as are used by the Police of Java, but I think it would be better if you were to introduce such a system for general adoption both by the regular and the Volunteer Police.

I have the honour to be
Province Wellesley, 13̆th October, 1867.

Sir, Your most obdt. servant, J. I. LOGAN.

To

> The Hon'ble Colonel Anson, $$
\text { Lieut.- Governor, }
$$ P. W. Island.

Sir,

1. Referring to the Memo. which I submitted to you on 20th August last on the subject of the organization of the Malay villagers of the Muda and Kreh districts, under headmen, for their mutual protection against gang robbers and other purposes, and to your Memo. thereon, dated 30th August, approving of the experiment and requesting that I would name the Pennghîlus to be appointed, I have now the honour to forward lists of Pĕnghîlus and rolls of the volunteers. Acting on your suggestion, the Pěnghûlus and Katuas have been appointed "additional constables" under Section 21 of the Police Act of 1856 on a formal application made by the villagers and myself to the Commissioner of Police.
2. Instead of selecting the headmen myself, I thought the better course, for reasons which I shall presently give, would be to visit the different villages, talk over the matter with the Malays, arrange with them the most convenient division of the groups of population into Kampongs or villages and of these into Dairahs or districts, and then leave it to the villagers to name
their Katuas, * or elders, and the latter to name the Pĕnghûlus, * or heads, for submission to you. $\dagger$ With your approval, I also adopted a form of agreement which is printed in English and Malay at the head of the Rolls, by which the signers agree to aid in keeping the peace, and not to join unlawful societies. Opposite the name of each is a list of the arms kept by him, and for which licenses are requested.
3. It has necessarily taken some time to get the plan carried out thus far amongst so scattered a population. Almost universally it has been received with the greatest favour. In some of the villages towards the west, where there is a Jawi-pakan admixture and where the influence of two of the town jumahas and one of the Province ones was recently great, hesitation was shewn by individuals, who asked if Government, after doubling and trebling the assessed rates on the lands and rating their houses, might not intend to put on new taxes, or make the volunteers keep up the roads and drains, or serve as soldiers? I explained to them that the Municipal Commissioners had simply directed re-assessment at the true or improved valuation, that the proposed system was a purely voluntary one originating with myself and heartily taken up by the Malays in my quarter as the surest means for our mutual protection, but that the Lieutenant-Governor had approved of it, would grant written appointments to the Pĕnghûlus and Katuas, and would, I hoped, give it every encouragement if it worked well. In some instances diffculties have arisen from a difference of opinion in the choice of heads, or from bold and crafty men, of whom their more ignorant and timid neighbours stand in some fear, manœuvering to be named as Pĕnghîlus, but by a little patience and management these difficulties have been overcome.
4. I consider it essential to the success of the plan, and as constituting its distinctive feature, that the village heads as well as those of divisions should owe their position and their retention of it, to the opinion in which they are held by their fellow-villagers. In most cases, the appointment would practically be permanent, but to keep the heads on their good behariour the villagers should have the option of changing them at intervals, and three years appears to be a suitable term. $\ddagger$ Among such a

[^24]population the risk of an office being abused increases with area over which its influence extends. It is necessary, for the convenience of the officers of Government and the marshalling of the Volunteer Police when required to act in large numbers, that there should be Pěnghûlus of divisions orer the Katuas of villages, but although I have, in most cases, limited the numbers under them to from 100 to 150 and trust much to the Katuas to protect their fellow-villagers from malpractices on the part of the Pĕnghûlus, the latter, if retained, will require to be carefully guided and watched. In the course of the selection of the heads I have been more and more impressed with the expediency of regarding the village organization as the basis and safeguard of the system, and confirmed in the distrust I have long entertained of the plan of placing large districts under Malays of leading families. They acquire a degree of influence which is neither safe for the Government nor for the people. They ally themselves with the professing doctors of theology. They strengthen themselves by getting their relatives made heads of Jumahas. * They cultivate an intimacy with members of the Malay royal families on the one side and with the native subordinates in the Gorernment offices on the other. I his is but natural, and the influence they usually succeed in establishing is, on occasions, useful to Government, but I have hardly known one who has not yielded to the immense temptations so powerful a position holds out to ordinary Malays, among whose most prominent failing is a greediness for money, or money's worth, got without toil. Dangerous as it has been found to employ Europeans of the lower ranks as Police Inspectors among a Malay population, I believe that there is a more insidious danger in giving to Malays the position of salaried Inspectors of the re-

[^25]gular Police, having, or credited with having, the ear of the European Authorities, and allowing them, at the same time, to assume the position of chiefs of large districts. In a small village the inhabitants are intimately known to each other and often more or less connected by marriage. They are usually on nearly the same social level, and almost every head of a family is a substantial yeoman who ploughs his own acres. A village Pěnghûlu will seldom try, or be allowed, to dominate over a score or two of fellowvillagers as a district Pĕnghûlu can over some thousands of the more ignorant Malays, whose faith in his pretensions is in inverse proportion to their personal familiarity with him. Of course there is a counterbalancing risk of the village Pĕnghûlu being sometimes found not sufficiently independent of the influence of his relatives and associates, if any of them should happen to be guilty of a crime, but this is a minor risk to that of the wide reaching oppressions and denials of justice which attend the rule of a pleasant mannered District Pẽ̛nghûlu who happens to be greedy of money. I regard the Divisional Pĕnghûlus in my own plan with some distrust, and would prefer to be able to dispense with them for the present. It will be seen that I have made some changes since the Rolls were signed by breaking up a few of the original Divisions containing two to three hundred adults into smaller ones of about a hundred. *
5. In lately returning to me the printed form of appointment which I had prepared by your desire, you substituted six months from its date for the end of 1868 which I had named as the shortest term within which the system and the first nominees could be fairly tried, and you added a note to the effect that expected changes in the law and in the Police Force would probably render the aid of the volunteers unnecessary after that time. Believing that you acquiesced in the reasons which I then offered against so limited a term, the forms both for the certificates as constables and the appointments as Pěnghûlus and Katuas have been printed with the original term, but the Commissioner of Police, on returning the former signed by him, informed me, at the same time, that you still thought a period of six months would be sufficient. No intimation of this kind was contained in your memo. of the 30th August, and I inferred from it that although you wished to proceed

[^26]cautiously you would be prepared, should the experiment be successful, to sanction the wider development of the plan. If I had supposed that it was not to have some degree of permanency, but might be abruptly put an end to in six months, I could not have taken it upon me to ask the Malays to adopt it, nor is it likely that they would have done so at all as a mere temporary expedient, or, if they had, that they would have received it in such a spirit as to ensure its good working. It would, I fear, entirely defeat our object if, at this stage, the intimation were made to them (not of course by me) that the system now introduced is only likely to be maintained for a few months. I would submit, with deference, that the fairest as well as most expedient course would be to defer any discouraging step of the kind until the contemplated changes take place, when Government, if it thought fit, could abolish the system, in such a manner and with such explanation of its reasons as would be calculated to lessen any dissatisfaction on the part of the Malays.
6. I hope you will allow me, however, to add some reasons in support of those that may be gathered from my Memo. of 20th August, for not looking on the measure as a mere make-shift pending the adoption of those improvements in the Police for which the Settlement is to be indebted to you, and I would preface these reasons by saying that, although I brought the plan forward as one that was peculiarly and urgently necessary in the somewhat exceptional condition of that portion of Province Wellesley in which I have resided for the last five years, I, long ago, when living in the south of Penang, earnestly advocated the association and organization, with the sanction and support of Government and for the purpose of maintaining the peace and counteracting the various class and religious influences opposed to it, of the Malays and the well-disposed inhauitants of all other classes, including the many Chinese who disapproved of the secret societies and wanted nothing so much as adequate social protection against being absorbed into or persecuted by them. A. plan on a narrower basis for giving the assessment committee and, as an after-thought, the Police, the aid of divisional Pĕnghûlus* was tried by Mr. Blundelr when Resident Councillor of Penang, and so long as he remained here and took a strong personal interest in the Pĕnghûlus, much benefit was derived from it. It was afterwards extended to the Province, but too hastily to almit of a grod selection of headmen, and it soon fell into neglect. More recently Colonel Mai was impressed with

[^27]the advantages likely to accrue from its revival on a wider basis. It was a subject of frequent conversation between us, and he intended, I believe, to avail himself of my assistance in introducing it in North Province Wellesley, if the Settlement had not passed from under the administration of the Indian Government.
7. No community is exempt from occasional disturbances of the peace on a scale too large to be immediately dealt with by the regular Police or the Military, even if it were desirable to employ the latter, except as a last resource. This Settlement is exposed to these from three sources-the quarrels, originating here or propagated from abroad, of the Chinese societies; those of the Mahomedan jumahas; and the existence of professional banditti in the adjacent Malay states-one of these countries, Pêrak, being at all times and in all places wretchedly misgoverned by a number of Rajas and district chiefs striving with each other who shall excel in habitual rapacity and occasional rapine, and the other, Këdah, having large and thinly populated wilds all along our eastern boundary. The character and habits of large numbers of our own population, especially of the immigrant and shifting classes, make it very susceptible to such disturbances, and a strong and active element of mischief is supplied, in the case of the allied Mahomedan and Chinese societies, by the ambition, craft and rapacity of a colonial class in which the subtlety of the Chinese, the effrontery of the Kling, and the dissimulation and vanity of both are mingled with the boldness and suavity of the Malay. * From these and from other causes now probably only in their seeds, we cannot expect that the time will soon come when occasions will cease to arise, on which Government must avail itself of the temporary assistance of the well-disposed portion of the local population in resisting violence, because the disciplined force in its regular employment is either not on the scene of disturbance or only present in insufficient numbers. The right of availing itself of the legal obligation of every male above 15 years old to aid in keeping the peace must always be kept in reserve, as this alone can enable Government to oppose, in every part of the Settlement, by a superior force always ready to act, bands of rioters or robbers who may suddenly appear. But our population is very imperfectly acquainted with this legal obligation, and is at present incapable of acting in concert against such bands. On each recurring outbreak of the quarrels of societies or systematic attacks on our villages by gang robbers, we have

[^28]seen the rural population paralysed and helpless. It is a principal and the more immediate object of the plan now being introduced, to bring home to the villagers a practical sense of their duty as loyal subjects to aid in keeping the peace of their villages and of the Settlement, and to give them an organization that will, for the first time, make it possible for them to supply such aid, and effectively place them, for that purpose, in the hands of the authorities. The simultaneous disturbances of the peace in many parts of the Settlement by the secret action of societies whose members are found almost everywhere, will be met by an equally ubiquitous and permanent resisting force on the side of order. The existence of such a force can hardly fail to exercise a strong deterring influence on rioters and marauders, and it cannot but strengthen the Government and enable it to use the Police and Military with much greater effect than it can now do, when it must either dissipate their strength and harass the men in the vain attempt to oppose every outbreak, or only succeed in protecting a few places by concentrating its force there and leaving the rest of the country to its fate.
8. The plan will subserve other objects of hardly less importance. The wide difference in manners, religion and education between the higher European Officers of Government and the Native population tends to estrange them almost as much as if the latter were a foreign and conquered nation, and not, as a large proportion are, British subjects born in the Colony. The Malays are very gregarious, and the mass are prone to accept the guidance of those who have any pretention to claim it and will take the trouble to exercise it. At present their personal devotion is chiefly bestowed on their religious leaders and on connections of the royal family of Kĕdah. It is very desirable that the distance between them and the Officers of Government should be lessened, and that the latter should have the means, when opportunities arise, of establishing such a degree of familiar intercourse with them as is practicable.* At present large numbers in the inaccessible or

[^29]less frequented villages have no personal knowledge of the higher officers of Government. Government means to most of them a Native Inspector of Police, a Sub-collector of rates, a native Landsurveyor, an Overseer of Public Works with his convicts, and the Kali, all of whom they look upon as impersonations of power, and all of whom, if so disposed, may find exhaustless profit in this persuasion. They have sometimes seen the Raja Sabrang "the Raja Polis, † and the Rảja Bandwan, $\ddagger$ usually accompanied by some members of the official stratum interposed between them and the higher one to which the powers of the latter are assumed to be delegated. The superior ranks are merged in the vague and mythical idea of "Kampani" (East India Company). The great personages with whom they are more immediately concerned are not the European Räjas, but the Native Datus or chiefs, the power of two of whom, each in his department, the Police and the Land Survey, $\|$ they believe to be unlimited, and to descend, in various measures, on those who are supposed to stand well with them. The recognition of heads of villages named by the villagers themselves will afford a means of mutual access to the higher Officers of Government and to them. It will give all of them a sense of being directly recognised by the Raja Büsar of the Settlement himself as good subjects of the Queen, and of not being merely subjected to the law but of being associated in its maintenance, while the appointments will be objects of a healthy ambition. It will enable Government to inform and influence the population, supplying it, as it were, with an agent and mouth-piece in every kampong. If the system be properly fostered, it will go far to keep the influence of the jumahas and of religious and other leaders within legitimate bounds, and establish a feeling of attachment to and confidence in the superior officers of Government and of loyalty to the Crown.
9. The system will subserve another and most important endthat of gradually educating the Malays. A large proportion of

[^30]the villagers are excessively ignorant, and they suffer seriously from their ignorance. Their want of sanitary knowledge and habits is so great that they may be said to cultivate the diseases that originate in or are fomented by dirt and insufficient ventilation.* The overcrowding of both sexes in small huts incites to immoralities from which their religious scruples are not always strong enough to deter them. Their ignorance of the real character of the Government exposes them to misrepresentations and malpractices, and disables them from using the means of redress which the law provides. While seeing little of educated Europeans, they are sought out by Chinese, Klings and Malays who are finished in the knowledge and craft acquired in that great school of cheating under the guise of honest mercantile thrift, piety or good nature-an Asiatic seaport where traders of all nations congregate. From an experience extending over thirty years in which I have been almost constantly in close and unreserved intercourse with the Natives, much of it professional and confidential, I do not hesitate to say that the more stupid and ignorant are defrauded on all hands by the more knowing and crafty. The more ignorant Malay cannot sell his paddy to a Chinese without being cheated, in the confusion to which the illegal but universal use of measures of different sizes and his narrow powers of calculation expose him. Government in its Acts and Regulations lays careful and elaborate plans to protect him from exactions on the part of its subordinates, but these very plans defeat their end, and become means to fresh exactions. So low in the scale reaches the belief of the Malay rustic in the power of every servant of Government to do him good or harm according as he is treated, that he never thinks of questioning the right of even a convict in the Survey Department to a fee for drawing the measuring chain over his land or serving him with a notice, or that of a convict in the Engineer's Department to take his bamboos and plantains without payment. There are usually so many steps between the issue of an order by the head of a Department and its actual execution, that nothing he can do will secure the more ignorant Natives affected by it from being defrauded either by some of his subordinates, or by other persons acting, or professing to act, for them. I make no doubt, to take one Department, that the Malay holders of small lots have, first and last and in one way and

[^31]another, paid for the lands bought by them from Government much more than the amount that has actually been received by Government. As an illustration of the difficulty Government has in at once protecting its own rights and those of the more ignorant Natives, I may mention the case of a sale by auction at the Land Office some time ago of a number of lots for non-payment of quitrent. The rule was for the notice of sale to be signed by the Resident Councillor himself, and to be entrusted to the Police to be published, thus attempting to provide against collusion by native subordinates in the Land or Surveyor's Offices with purchasers. A few days after the sale I was told that some lots held on permit, which I had some time previously bought from Malays, had been sold to a Malay, and on making enquiries it turned out that he was almost the only bidder at the auction and had bought up most of the lots at prices absurdly low. For the fruit trees on one of mine I had paid $\$ 25$, and was still liable to Government for the price of the land. This lot was knocked down to the man at about $\$ 4-$ land and trees. The notice had been published by placarding it in a few places and by a Police peon beating a gong and proclaiming that certain lots were to be sold, but no special notices were given to the holders of these lots. So far there was ground for presuming collusion between the purchaser and some of the subordinates of Government. But on pushing my enquiries 1 found that the lot-holders had received notices to take out grants several years previously and had not come forward to do so, not considering the lands to be then worth the Government price, and I was led to infer that some of the more astute were themselves parties to the collusion, which had a double object, the more recondite one being to enable them to get grants at a lower rate than if they had to pay the fixed price as well as rent for these years. A case came before the court a few years ago in which it was proved that a Malay had obtained large sums from the ryots of some districts on the pretext that he was empowered to take a fee from each to get a survey made, and from what Malays have told me from time to time, I believe that such exactions have been common, and that it is seldom that a survey is made, or grant issued, for one of the more ignorant Malays, without some one or other persuading him into making irregular payments of the kind. The general Municipal Act provides an elaborate system of checks to protect the more ignorant rate-payers from wrong. They must have at least 15 days' special notice of all first assessments and every subsequent increase of valuation, to enable them to get a review of over-valuations; a bill must be presented to
them and 5 days given them to pay it; a warrant of distress is then to issue, but no sale is to take place for other 5 days. The fees payable are all fixed by the Act, and there are none until the property has been actually seized as a distress. Nothing would seem better devised to protect the ryots. But, in reality, each fresh shield turns into a weapon of exaction in the hands of an unscrupulous bill collector. Fees have been demanded and taken for the notice, and on the warrants of distress when no distress has been made. It may thus readily come about that a stupid Malay pays many times the actual amount of his bill.
10. The Malays in the Province are exposed to suffer not only from the exactions of unscrupulous persons in or hanging about the Police, Land, Survey, Assessment, Engineer's and Magistrates' Departments, and the offices of the Registrar and Agents of the Court, but, to a very large extent, from those of the Kalis, who claim extensive and undefined powers and exercise a jurisdiction to which they have no title. The large and pernicious power of the Kalis, which poisons domestic life among the Malays, is based on a gross misconception. Originally in all Mahomedan countries, and to this day in several, including the native states in India, the Kali is the supreme judge-ciril, criminal and ecclesiastical. He is required to administer justice in a public place. In a non-Mahomedan country, the Kalis of Mahomedan communities must derive their authority from the Government of the country. By the law of this Settlement, civil, criminal and ecclesiastical jurisdiction is vested exclusively in the Supreme Court, the Courts of Requests, the Magistrates of Police and the Justices of the Peace. No law gives authority to the local Government to appoint Kalis, recognizes the office, or defines its powers. From an early period in the history of the Settlement, the local Government appears to have appointed persons under the title of Kalis, but without affecting to confer judicial authority on them or to point out their functions. Governor Blundell declined to do more than recognize them as persons deriving certain undefined powers from the voluntary election and submission of associations of Mahomedans, declaring that he had no legal authority to appoint them. It may be doubted whether other Governors intended to do more. It is clear that none of them can have assumed to confer on the so-called Kalis any portion of the supreme judicial powers which attach to the office in Mahomedan countries. In practice the Kalis have usurped compulsory jurisdiction over all the Mahomedans inhabiting the district in which they exercise it. Knowing it to be essential to the recognition of their authority,
they have affected to hold their appointments from the Government. They have assumed as much of the powers attaching to the office in Mahomedan countries as they have been able to do in the presence of the regularly constituted Courts and Judges of the Settlement, and considerably more, probably, than they would be able to justify, were the question of their legal position and powers formally brought under judicial consideration. Appointed in so irregular a manner, and, as judges, laxly tolerated rather than recognised, the office has been deprived of those safeguards by which the regular administration of justice is surrounded. The Government from which they profess to derive their appointments does not select them or subject them to any test of fitness in respect of character or learning, and it leaves them without control. No public courts are provided for them, and they exercise their judicial functions in their own houses or in small sheds attached to them, which they dignify with the name of Balai shara. Their jurisdiction having no legal foundation and being only limited by the ignorance or acquiescence of suitors, shifts with the requirements of plantiffs, but is generally understood to be confined to cases between husband and wife, embracing suits by the husband for restitution of conjugal rights, and by the wife for maintenance, dower, co-habitation and divorce. The Kali issues summonses to defendants and witnesses under his seal. For all such process and its service and for his judgments, he charges fees to a considerable amount. Particular Kalis have, from time to time, been notorious among the natives for their corruption and extortion. They have hired themselves to men colluding with wives to obtain divorces and marry them, or with the parents of young married women seeking to free their daughters from the marriage bond in order to marry them to more wealthy suitors. In such cases, the first step is for the woman to go, or be taken, to the Kali, where a complaint of want of sufficient maintenance or other cause of divorce is entered; or a pretended divorce set up, and the husband summoned. Adjournments are made from time to time, and further evidence adduced and in the meantime the Kali receives bribes from both parties and keeps the woman in his own house where she has no protection against his criminal advances. Cases are even said to have occurred in which Kalis have pandered to their own sons and to friends. It must be said that such practices do not excite the universal disgust and indignation which might be expected and which indeed would prevent their being long indulged in. An old lady, the wife of the founder of one of the mosques at Permatang Bertam, who enjoys a high reputation for piety and strict-
ness, on being asked, with reference to a statement made in her presence by a witness in a case to which a relative of theirs was a party, whether such things could be, and how it came that they were tolerated, replied that it was only for a few days and with the Kali. But Malay fathers and husbands, less indulgent to the frailties of her sex and race than this old lady, have frequently spoken to me bitterly of the extent to which the peace of families is disturbed and immorality promoted by Kalis. Some go so far as to say that most of the Malay women who become prostitutes in town have acquired their vicious habits when residing in the houses of Kalis and induced by them to take this infamous means of raising a fee of $\$ 20$ or $\$ 30$ to pay him for the divorce. Eren the more respectable Kalis, who are not accused of debauching their suitors or leading them into debauchery, are, with rare exceptions, said to be accessible to bribes, and none of them has the slighest pretension to the qualifications necessary for the judge of a divorce or any other Court. "I regret to observe," writes Colonel Low, " that, so far as my experience extends, there is not a native at " this Settlement of Pinang who could be safely entrusted with the " power of a Justice of the Peace or even with a lesser judicial " independent authority." * The more cultivated Malays themselves say that the very word Kali is an offence to them, and that

[^32]the temptations to which the office exposes its holders are so great that a good man who takes it soon becomes a bad one. None of the learned Malays of any reputation will accept it. The more ignorant Malays of the interior are exposed to be fleeced by any one who pretends to be a Kali. Lately when at Kamlun I found a Malay going about among his friends in greát anxiety of mind to borrow the large sum, for him and them, of ten dollars. On enquiring into the cause, I learned that his wife had left him a few days before on pretext of visiting a sister at Bagan Jermal. Next day he receired a summons under the chap of a Haji at Bagan Ajam professing to be a Kali, but of whom and his jurisdiction the Kamlun villagers had previously been happily in ignorance. He hastened to the sister, who told him that his wife was with the Kali. He went to the Kali, who would not produce her, but told him that if he wanted to get her back he must pay \$10, "which is as much," said the man plaintively, "as I paid for her twenty years ago when she was a virgin " (meaning her dower).
11. The Malays of the interior are also infested by a class of parasitical Malays, or half Malays, who make it their business to spy out flaws in titles and latent causes of family disputes, incite to litigation, get the partition and sale of lands into their hands, and usually exact a share of the property much beyond what any fair commission or actual costs of suit would amount to. Their own ignorance and carelessness are themselves a fruitful source of trouble and litigation. Wills are seldom brought into Court to be proved, or letters of administration applied for, until many years, sometimes 20 or 30 , after the death of a land-holder and when, owing to intermediate deaths, it is difficult or impossible to prove the will or come to a satisfactory decision on contested facts of marriage, divorce or paternity. A will was brought to me a few days ago which had been acted on, without probate, for about 20 years. The testator had added some extraordinary imprecations at the end of it to prevent any of his family attempting to disregard it, but he had not signed it, neither he nor the writer appearing to have known that this was essential and would have accomplished what his legacy of curses has failed to do. There was a case in Court a few years ago which turned entirely on the question whether the person named as grantee in a Government grant of a piece of land was the father or the grand-father of certain of the claimants, and after hearing much evidence, and giving the parties every opportunity to call additional witnesses, the Recorder was unable to make up his mind on the subject.
12. It appears to me that all these evils in mind, body and
estate, arise from one source, ignorance, and can only be effectually cured by removing it. The system of village organization supplies the means of making a beginning in this work. The attempts hitherto made by Government to educate the Malays of the Province have failed, because the object aimed at was indefinite and too remote from their daily life and business. The Malays have already a large amount of raluable practical knowledge, well fitted to carry them successfully through life in a purely Malay country. The first step should be to add to it that business knowledge which will adapt them to their present position as British subjects. Their first want is that of some plain elementary information about their duties in keeping the peace and suppressing crime, the powers and mode of arresting criminals, the positions and powers of the different officers and servants of Government, the rules relating to sales of Government land and assessment, the fees payable under the land, assessment and other regulations that affect them most closely, the effect of marriage and divorce on rights to property, the mode of making wills, the division of the estates of intestates, the maintenance of wives, the maintenance, custody and guardianship of children, as to what cases must be taken to a Magistrate and what to the civil courts, what are the real powers of a Kali, \&c. They would also learn, what few of them know, that the courts are not shut in the face of those who are too poor to pay the usual fees. Short tracts in Malay, containing information of this kind, placed in the hands of the Katuas, and supplemented by occasional discussions with them and the villagers by the Magistrate when visiting the districts, would, I am certain, be valued by the Malays, and in time, give them a sufficient stock of useful knowledge to protect them from the more gross oppressions and exactions to which their ignorance now exposes them. In most of the villages one or more persons who can read are to be found.

The first step having been taken and time given to make good their footing so far, tracts might follow containing some common sanitary facts, shewing the advantages of good ventilation, of cleanliness in the lampong, house, dress and cooking, of vaccination, of drainage, that the proper place for dirt is not under the house but under the ground at the roots of their trees; and while enlightening them on these homely matters the opportunity might be taken to get the Katuas to set about the adoption of the sanitary provisions of the Conserrancy Act and keeping the common village paths and drains in better order.

The use of the Roman characters instead of the Arabo-Persian for Malay might, in due time, be introduced, as, the Dutch have done so successfully and with such signal practical advantages in Netherlands India. When some progress had been made in establishing village schools on this basis, a new zest and larger scope might be given to their awakening literary appetite by supplying them with copies of some of the best works extant in their own language but of which few of them have ever heard, with translations of some of the Arabian Nights, and the like. Tracts on geography and ethnegraphy, the elementary facts of meteorology, astronomy, botany, \&c., might follow in due time. No attempt would, of course, be made to meddle with their religion. All attempts of the kind have hitherto failed and only tended to excite suspicion and arouse bigotry. We may freely allow to them, with some qualifications at which they will not take umbrage, that the better Mahomedan the better man. *
13. In my memorandum of 20th August I suggested that, in addition to their duties of a Police nature, the Pênghûlus might have others assigned to them, such as keeping a registry of the inhabitants, of births, deaths, marriages, divorces, \&c. Each might be supplied with a blank book in which to write, or get written, a diary of all such events, and others of public importance or interest, such as crimes and offences, accidents to life, floods, droughts, the state of the crops, \&c. This would itself serve as some stimulus to education, and it would furnish a contemporary record valuable in courts of justice and materials for general official registries to be kept by the Magistrates.

The Pĕ̆nghûlus and Katuas mightalso do much good service with little trouble to themselves by assisting in protecting the public rivers, canals, drains, embankments, roads, and landing places from injury and giving immediate notice of injuries which they have been unable to prevent to the nearest resident officer of Public Works. At present water-courses of all kinds are almost constantly being injured or obstructed by buffaloes, fishing stakes and traps, dams, \&c. Roads, paths and canals in course of formation are seriously damaged by cattle. Works like the Muda Bund are liable to be injured during their progress, and after completion require constant watching to prevent careless or malicious damage. The heads of the villages along the course of such works might give good aid in protecting them. Few of the landing places are kept in good order. When the harvest is over herds of hundreds

[^33]of buffaloes are let loose over the plains and public roads, and although a vigorous attempt was made by the Police last year on complaints made by the Assistant Engineer and myself to prevent cattle trespass, it failed, owing to the number of the cattle, the difficulty of catching them or ascertaining the names of the owners and the little time policemen have to spare for the purpose.

I would further venture to recommend that, instead of the elaborate system of protection against over-valuations and exactions, provided by the Assessment Act, an account in Malay of the rates payable by the inhabitants of each village be given to the Pĕnghûlus and by them to the Katuas, about two or three months before the day on which payment is to be made, and explained to the villagers. They would much prefer this to the present system, and the Katuas and Pĕnghûlus are prepared to have the money ready on the day fixed, when the Collector would only have to attend at the nearest Police Station, receive it, and sign the receipt on the account. This would supersede the necessity of making out bills and notices and employing so many bill collectors and their subordinates, and if the commission now allowed for collection were given to the Katuas it would make the office more prized. The Pënghûlus might be allowed a small proportion of it and be exempted, as the old Pĕnghûlus were, from rates on their lands and houses. The collection was at one time entrusted to Pĕnghûlu Mukims on a commission, but cases of default occurred, owing partly to a bad selection of Pĕnghûlus, but chiefly to the sums which each had to collect being too large. The sum for which each Katua will be responsible will be too small to offer a temptation to embezzlement. The plan might be tried without any alteration of the Act. The Katuas and Pĕnghûlus will also be very useful in settling petty disputes and maintaining good feeling among the villagers. When quarrels arise between inhabitants of different kampongs or dairahs, the Katuas and Pěnghûlus might form councils of conciliation.

The Pěnghûlus might also be entrusted, under the controul of the Magistrate, Engineer, or other European Officer, with the regulation of the supply of water from the drains for irrigation in the dry season. At present the Malays dam the drains to flood their fields, without reference to the needs of their neighbours above or below.
14. Along with the Rolls I enclose a table with the names of the dairahs and kampongs, their Pĕnghûlus and Katuas and the number of male adults in each who have signed the Rolls. The total number of the latter is 3,663 , representing a general population, women and children included, which may be estimated at
about 20,000 . As both married and unmarried women hold lands and other property, marriage not affecting the right of the wife in her estate, real or personal, the influence of the Katuas and Pĕnghûlus embraces a much larger number of persons than appears from the Rolls.
15. In conclusion, I venture to remark that while the village organization may with advantage be permanently maintained for some of its purposes, I would contemplate a gradual curtailment of the duties of the heads, as the progress of cultivation and, with it, of the revenue enables Government to make adequate provision for Police, Conservancy, District Courts, and Schools in North Province Wellesley. If we had a sufficient number of intelligent and trained policemen, the regular employment of village constables would be unnecessary and objectionable. At present many of the policemen are not better educated or more intelligent, and are probably less trustworthy, than the least promising of the Malays selected by the villagers as their headmen.

> I have, \&c.,

J. R. LOGAN.

Permatang Bertam,
22nd November, 1867.

## Note to para: 7.

[^34]in the Straits, and might not conveniently be dispensed with." - Dissertation, $\delta \cdot c$.

The class of these men in the public offices are mostly related by blood or marriage. The progenitors were Jawi-pakans of Kĕdah, but while some of the present 1st and 2nd cousins are not distinguishable from Malays, others are hardly distinguishable in person from Klings. The paid Police Pĕnghûlus, the collectors of Government rents and Municipal rates, the land measurers, the shroffs, Malay Writers and Interpreters have always largely belonged to this family alliance, which also includes several of the leading men of the jumahas, many of the principal Malay and Kling (Pinang born) merchants, and maintains a hereditary connection with the Kĕdah Court. Members of it are often employed by the Râja of Kĕdah as Rranis and land-measurers. Captain Light, in a despatch to the Supreme Government of India, dated 12 th September, 1786, gives, in the course of a report on the state of affairs in Kedah, a strong instance of the extent to which the cunning of natives of India and their descendanis sometimes enables them to rule Malays. "Datu Sri Râja (formerly named Ismal, and a common coolie) is now the King's merchant; he is a deep, cunning, villainous Chuliah. By working on the King's pusillanimity and raising jealousies, he reduced the power of the great men and exgrossed the whole of the administration, by prefexring only such as he thought attached to himself. To save the King from pretended assassinations, he built a small brick fort and built him up as in a cage; no one dares presume to go to audience without his knowledge. If he found any of the great men likely to get into favour, he bribed them to his interest. By monopolising every species of commerce, and oppressing the Malays, he found means to supply the King's necessities without his having the trouble to enquire how it [the money] came." "He [the king] receives likewise a deal in presents and fines. Every person who has any demand to make, or suit to prefer, first presents a sium of money which he thinks adequate to the demand; if the King approves of the sum he signs the paper, and his suit is obtained, unless another person comes with greater sums." This would serve as an account of the administration of justice in the Malay States at the present day.

The Colonial Chinese (Babas) by intermarrying among themselves, and the women with pure Chinese, have largely eliminated the original Malay halfblood. They are distinguished by their conceit and forwardness; but have more sofiness and amenity of manner than the Jawi-pakans; retaining, in this respect, the impress of their Malay decent and association. They are intelligent, bold and pushing, and some of the leading men of the Secret Societien, notably the head of the Twa-peh-kong, are drawn from this class. It is through their intimacy with the town Jawi-pakans and the Malay heads of the jumahas that the latter societies have been so easily brought into alliance with the former, notwithstanding the ban placed by Mahomedanism on all friendly association with "infidels." It should be added that there is a considerable class composed of Jawi-pakans, Babas and Malays who are noted for their "fast" lives, and many of whom are led on from gambling and licentiousness to theft and other crimes. Their recklessness and love of mischief and excitement render them a dangerous element in the societies, to which large numbers of them belong.

The Chinese are gradually pushing their way among the Malays of North Province Wellesley, and as they increase in numbers and wealth, the Malays borrow money from them whenever they can, become more dependent on them and more liable to be seduced into joining their societies. At present
these settlers are chiefly Hokkien shop-keepers or hawkers, and Kwang-Tung paddy planters and rice dealers, who have little social connection with the Malays, but this does not prevent their getting wires among the needier Malays and Samsams. The time is not far distant when the babas will have more influence in many parts of the Province than the Jawi-pakans now have.

As the Malays themselves form the great mass of the population of North Province Wellesley and considerable errors are to be found in the published accounts of the character and habits of the race, including even that by Mr. Vacgean in the Journal of the Indian Archipelago, which is, in many respects, just to them and a great adrance on previous delineations of them, I subjoin an extract from some notes on the races of the Settlement and the Malay Peninsula which, at the request of the Local Government, I furnished, about, two years ago, for transmission to the Government of India.* They apply more to the fully cultivated and peopled than to the wilder districts of the Province:-
"The Malay is good-natured, courteous, sociable, gregarions and gossiping, finding unfailing amusement in very small and often very indelicate talk, jokes, and pleasantries. To domestic and social superiors he is extremely deferential, but with no taint of that abject or fawning servility which characterises many Asiatios of higher civilisation. His intellect has little power of abstraction, and delights in a minute acquaintance with the common things around him, a character that reflects itself in his language, which is as rich in distinctions and details in the nomenclature of material cbjects and actions as it is poor in all that relates to the operations of the mind. He is slow and sluggish, and impatient of continuous labour of mind or body. He is greedy and niggardy, and when his interents are involved his promises and professions are not to be trusted.

The Malay treats his children with great affection and with indolent indulgence. Women are not secluded, and the freedom which they enjoy in their paternal home is iittle abridged in after-life. Early marriage is customary and necessary, for if it were long postponed after puberty, it is to be feared that their religion would not always restrain them from the license which the habits of the non-Mahomedan nations of the same race permit to ummarried girls. In the Malay States the law sanctions slarery and subjects the person oif the female slave to the power of her master. In this Settlement the Mralay finds compensation for the deprivation of this right in that of divorce, and the extent to which it is avalled of in practice renders marriage little more than the legalisation of temporary concuioinage. The independence allowed to women and the manner in which their parents and other relatives usually take their part in domestic quarrels, enable them to purchase their divorce, or worry their husbands into granting it, whencerer they wish to take new ones.

The habitual courtesy and reticence of the Malay and the infuence of his religion too often mask the sway of interest and passion to which he may be secretly yielding, and under which he becomes rapacious, deceitful. treacherous and revengeful. It has become customary to protest against the dark colours in which the earlier European royagers painted him, but their error was less in what they wrote than in what they left unwritten. Under bad native governments, leading a wandering life at sea or on thinly peopled borders of rivers-the only highways in lands covered with forest and swamp

[^35]-trusting to the kris and spear for self-defence and holding in traditional respect the prowess of the pirate and robber, the Malays became proverbial for feline treachery and bloodthirstiness. Under the Government to which they have been subjected in Province Wellesley, and which has certainly not erred on the side of paternal interference, for it has given them as much liberty as the English yeoman possesses, they now form a community, on the whole, as settled, contented, peaceable and free from serious crime as any to be found in British India-a result due to the disappearance of forests, the formation of roads, the establishment of a regular Police and the administration of justice by English lawyers."

To complete this brief Note on the various classes entering into the population of North Province Wellesley, a reference must be made to the Samsams, the descendants of rude inland Siamese of Kědah who, some generations back, were converted to Mahomedanism, a religion which still sits loosely on them. They form the majority of the inhabitants of many of the North-eastern villages, in which Siamese is still the current language, although, with few exceptions, they speak Malay also. Many of 1 hem are more stupid and ignorant even than the Malays in the same condition of life, and many are knavish, thievish, and addicted to gambling and opium-smoking. Of both races, indeed, it may be said that while the mass are ruder and simpler than any other class of our composite population, there are among them many men habitually predatory, and dangerous from their treachery or ferocity. Their cunning, however, is without the intelligent fore-thought and subtlety of the more advanced races, and they set about crimes not of blood only but of fraud, such as forgery and false personation, in a careless, bold and straightforward manner, in apparent unconsciousness of the risk of detection to which they lay themselves open, and often, in the latter class of crimes, on the instigation of others and without any clear knowledge of the real character and consequences of their acts.

## Note to Para: 12.

As a religion Mahomedanism is infinitely superior to the native religions of the Archipelago. Its most objectionable feature, in a political point of view, is not the universality and closeness of the brotherhood which it establishes among its professors, but its arrogant exclusiveness. It tolerates other creeds but places their holders under a social ban. Friendly association with unbelievers is a deadly $\sin$ and makes the sinner liable to excommunication. Since the riots of August one of the ulimalu has put in force this doctrine to deteah the Malays from the Chinese Societies, but it is equally applicable to friendly association with Europeans, and might, in certain contingencies, be used to excite hatred to this class and opposition to Government. Hence the impolicy of allowing any of these ulimah, or any so called Kali, to assume jurisdiction, or social or spiritual goverument, over the Mahomedans generally, or large sections of them. Their recognised ass, ciations should be confined to the jumuluts or congregations attuched to each mosque; and the persecutions every now and then made by the leaders, to which those are exposed who will not submit to the attempts at establishing by coercion a fanatically rigorous interference with private liberty, should be discountenanced, and, when they overstep the limits of discipline allowed to other religions societies, punished. The more the influence of the gurus or religious teachers in the Province extends, the more arrogant they become. They entirely lose the courteous and deferential manner of the ordinary Malay, and mark therr sense of their superiority to the European infidel by either ignoring his presence
altogether, or, if saluted by him in the usual mode, returning the courtesy by the least respectful of the several modes of salutations practiced by Mahomedans.

## Minute on Mr. J. R. Logan's Scheme for forming a Volunteer Village Police in Province Wellesley.

The subject of a Volunteer Village Police has frequently engaged my attention, and I have often discussed the question with Mr. Logan, who has long advocated its adoption in the public prints. The plan seems peculiarly well suited to our position in Province Wellesley, which possesses an irregular jungle frontier, where marauders can always find shelter and concealment and can threaten our villages at all points with perfect impunity so far as the Municipal Force is concerned. The whole of the N. E. and E. frontier may be said to be entirely without Police protection, and any scheme that promises to enlist the assistance of the villagers in aid of order and to supply the place of a Police Establishment should, in my opinion, be cordially welcomed and supported by Government.

A village Police will not only be useful against external marauders, but also in the case of internal commotions caused by the Secret Societies, when, sometimes, large gangs roam over the country uncontrolled, until a hasty collection has been made of the rural population, which, if properly organised on the system proposed by Mr. Logan, would certainly prevent any serious collection of rioters, or at any rate be well prepared to cope with them if they should venture to take the field. There is another incidental advantage attending the establishment of a Village Police, which would be of vast benefit in giving a support to numbers of Malay and other inhabitants who are now intimidated into joining the Secret Societies by their isolation. If they could count on the support of the village chiefs and their brethren associated with them in the serrice, they might bid defiance to all threats of the heads of Jumahas or Hoeys who would be afraid to play an open game where they might be speedily brought to account.

If I remember rightly, Mr. Logan had gained the adhesion in the North Division of the Province of about 3,500 Malays and others in favour of his proposed plan. I am surprised and greatly regret that a trial was not made of it. The expense attending it was trivial, while it supplied a palpable mant which has little chance of being otherwise met.

It was my intention to have availed myself of Mr. Logan's assistance in inaugurating such a project when the transfer of the Government took all power out of my hands.

I have perused with much interest the valuable memoir on the population of the Province drawn up by Mr. Lugan for the information of the new Government. It shews what a useful auxiliary to the peace and safety of the community the scheme he advocates would prove, how easily the force could be raised and turned to account, and how consonant its guiding principles are to the habits and ideas of the people. I trust it is not improbable that when the new Officials have become more familiarised with Malay customs and feelings they will consent to give a trial to this force, of which it can, at any rate, be said, that if not found so advantageous as its promoters assert, it can in no way effect the slightest possible harm.

H. MAN, Col. M. S. C.,<br>late R. C. Penang.

February 12th, 1868.
[The foregoing paper was printed, but not published, in Penang in 1868. It contains a vivid and accurate description of the composition of Native Society in Penang and Province Wellesley, written by one of whom Colonel Yule truly said that he 'carried "to his too early tomb a vaster knowledge of the races and regions "of the Indian Archipelago than any one else is likely to accumulate "in our day."-Ed.]


## A

## DESCRIPTION OF THECHINESE LOTTERY

 KNOWN AS
## HUA-HOEY.

 UA-HOEY* or the thirty-six Animals Lottery is so extensively played in the Straits Settlements, Burma, Siam and wherever the Chinese settle, that some description of its origin and of the way in which it is carried on here may prove not altogether uninteresting.

From a small book " On the Interpretation of Dreams with Illustrations of Hua Hoey" we learn that the game was invented in the time of the second Han dynasty. In this book there is a short sketch of the lives of the thirty-six mythical personages (who had previously existed as animals) and directions are given as to staking. The order in which the characters are described is different from that employed in the staking papers of which a specimen is given below.

King Thai Peng, being the most celebrated character, is placed first instead of being No. 26.

[^36]
1.-Thai Peng was, in a former state of existence, a dragon. He served in the Chow Kingdom under King Hooi Lian till it was conquered by the Chinese, when he escaped, and having raised an army under Generals Kun San (No. 9) and Chi Koh (No. 11), he proclaimed himself King, but he afterwards led such a dissolute life that Kun San put an end to his existence. Kun Giok (No. $2 \cdot 2$ ) was his sister.

Thai Peng was born again as Guan Kui. Stake on Thai Peng, Guan Kui, Kong Beng and the 5 dragons when you dream of the coronation of a sovereign, cash, or an execution.

2.-Sam Wei was formerly a monkey. He served Thai Peng as Prime Minister and became very wealthy. He had three sons Hap Hai (No. 7) Guan Kiat (No. 19) and Ban Kim (No. 32.)

Sam Wei was born again as Cheng Li. Stake on Sam Wei, Guan Kui and Cham Khoi when you dream of a wicked man, a man hanging himself, three ghosts, three stars, woods, or a performing monkey.

3.-Kong Beng was formerly a horse. He became a priest and was employed by Thai Peng as a political adviser, being gifted with supernatural powers. He was slain in battle with the Chinese.

Kong Beng was born again as Hong Chun. Stake on Kong Beng, Thai Peng, Hong Chun, Siang Chiow and Hoey Kwan when you dream of bright objects such as flames, brilliant pearls, lamps, or sunshine.

4.-Kiu Kecun was a hawk. He became a Mandarin and was very rich and married a princess of the Han dynasty. He had a younger brother named Hoey Kwan (No. 28.)

Kiu Kwan was born again as Kiat Pin. Stake on Kiu Kwan, Hoey Kwan, Kiat Pin and Cheng Sun when you dream of drinking samsu, riding, sleeping, sitting at leisure, water up to the shoulder, a dog biting a man or a coffin with a dead body.

5.-Pan $K w i$ was formerly a dragon. He took a high literary and military degree and was slain by the Chinese.

Pan Kwi was born again as Mow Lim. Stake on Pan Kwi, Guan Kwi, Mow Lim and the five dragons when you dream of picking flowers, a young man, witnessing a theatrical performance, climbing trees, or adopting a child.

Pan Kwi is usually called "The Shell."

6.-Hong Chun was once a peacock and was the brother of Eng Seng (No. 7). He took the first literary degree. His whole family were massacred by the Chinese. He married Siang Chiow (No. 23).

Hong Chun was born again as Kong Beng. Stake on Hong Chun, Kong Beng, Han Hun and Ban Kim when you dream of a flower, a man ploughing, a bambu shoot, geese or ducks, a marriage ceremony, a girl worshipping idols, or a buffalo.

7.-Eng Seng was originally a goose. His mother was Kun Giok (No. 22). He took the same honours as his brother (No. 6).

Eng Seng was born again as Ban Kim. Stake on Eng Seng, Ban Kim and Hong Chun when you dream of drinking tea, killing poultry, an examination, selling spirits, a flea, a pen, a pair of candles, a water-lily, or giving an animal its life.

8.-Cham Khoi was a white fish. He took the first military and literary degree and became judge of three provinces. He and his whole family, more than 300 in number, were slain by the Chinese.

Cham Khoi was born again as Chi Koh. Stake on Cham Khoi, Sam Wei, Chi Koh and Hong Chun when you dream of a white fish, a buffalo, a gantang of white rice, or 36 pigs.

9.-Kun $S a n$ was originally a tiger. An intimate friend of Chi Koh (No. 11) he became so powerful as the chief of a band of robbers that the Imperial troops dared not attack him. He was afterwards one of Thai Peng's Generals.

Kun San was born again as Cheng Hun. Stake on Kun San, Cheng Hun, Jit San and Hok Sun when you dream of fighting or robbery, the sun rising, a yellow object, or a bill on fire.

10.-Cheny Sun was a pig. He served with Kun San (No. 9) as a General.

Cheng Sun was born again as Hap Hai. Stake on Cheng Sun, Pit Taik, Chit Taik, Siang Chiow and Kun San when you dream of a boat sailing on a river, a man in the water, sending a present, a wedding, a pig, sailing with a favourable wind in the first moon, a boat going with the current, or 300 cash.

11.-Chi Koh was once a lion. He was a native of Tong King and an intimate friend of Kun San (No. 9) and one of Thai Peng's Generals.

Chi Koh was born again as Cham Kboi. Stake on Chi Koh, Kun San, Cham Khoi and Kiat Pin when you dream of ascending a height, a red face, a tall man, a youth, seeing the moon, a cool breeze, ascending a tower or stairs, an examination, or a lion fight.

12.--Pit Taik was a mouse. Although very powerful, he remained a ferryman till Kun San (No. 9) appointed him the sixth General under King Thai Peng.

Pit Taik was born again as Hok San. Stake on Pit Taik, Guat Poh, Hok Sun and Chi Taik when you dream of a blossom, a tiger, people in a boat, a mouse eating rice, demanding money, eating tortoise, finding an article of value on the road, letting go a snake, or two brothers quarrelling.

13.-Guat Poh was formerly a tortoise. His special duty was to guard the Imperial Palace. He had a son Han Hun (No. 14) and a daughter Beng Chu (No. 21).

Guat Poh was born aqain as Beng Chu. Stake on Guat Poh, Beng Chu, Han Hun and Pit Taik when you dream of a man with a hat but no coat, a woman preparing rice, vermicelli, red objects, money, or valuables.

14.-Han Hun was a buffalo. He was afterwards a Mandarin, and while guarding the sea coast was defeated, for which he was sentenced to be torn in pieces hy five horses. His father was Guat Poh (No. 13) and his sister Beng Chu (No. 21).

Han Hun was born again as Cheng Guan. Stake on Han Hun, Cheng Guan, Cheng IIun and Hoey Kwan when you dream of a dead body, a hill on fire, a man killing a horse, or a cow.

15.-Kang Su was a dragon of the Southern Sea. He was a friend of Pit Taik and was killed by the Chinese.

Kang Su was born again as Thian Sin. Stake on Kang Su, Thian sin and the five dragons when you dream of a ferry-boat, a vessel bound for a foreign port, being in the sea, or seeing vessels, ${ }^{5}$ things or persons there.

16.-Hok Sun was a dog. He then kept a medical shop and was killed by a tiger when employed in gathering herbs on the woods.

Hok Sun was born again as Pit Taik. Stake on Hok Sun, Kiu Kwan, Pit Taik and Kun San when you dream of a womau crying or carrying a baby, planting, a tiger's roar, a dog's bite, eating dog's flesh, or a row in a medicine shop.


17．－Cheny Guan was once a spider．He was a great spend－ thrift while at college and became a beggar．He then took to stealing fowls．

Cheng Guan was born again as Han Hun．Stake on Cheng Guan，Han Hun，Cheng Hun and Kong Beng when you dream of literary competition，herbs，a green coat，a green pear，eating fruit，a fish with a horn，a fowl stealer，or a scholar．

18.-Guan Kui was once a prawn. He took to gambling and had a monkey which brought him in money by performing tricks.

Guan Kwi was born again as Thai Peng. Stake on Guan Kwi, Thai P'eng, Sam Wei, Cheng Guan and Guan Kiat when you dream of a man singing about flowers, rice being dear, dear things, a beggar, a scholar in a ragged coat, a dog stcaling rice carving mutton, a flag, a pomegranate, or a lame roman.

19.-Guan Kiat was a sheep. He became a Mandarin and was reduced to beggary by being robbed on his way to see his friend Thian Liang.

Guan Kiat was born again as An Su. Stake on Guan Kiat, An Su, Kiat Pin and Thian Liang when you dream of a reception of a General, a great excitement, a fire, dirt, an offering, a new born child eating, a jar of spirits with fruit, or a clear view.

20.-Kiat Pin was once a deer. He became very rich, but was reduced to poverty by the Chinese.

Kiat Pin was born again as Kiu Kwan. Stake on Kiat Pin, Kiu Kwan, Sam Wei, Ban Kim and Guan Kiat when you dream of three cups of spirit, three men, three eggs, an old man, or three objects.

21.-Berg Chu was once a fish (usually called "The Stone"). She was the daughter of Guat Poh (No. 13) and the wife of Pan Kwi (No. 15) and the mother of Hong Chun (No. 6). She was a lady of the highest rank. The whole family were killed by the Chinese.

Beng Chu was born again as Guat Poh. Stake on Beng Chu, Guat Poh, Kong Beng and Hoey Kwan when you dream of anything red, spectacles, a wrem reading, wearing a gown, coming out of a door, or looking into a glass.

22.-Kun Giok or Gin Giok was a butterfly. She and her brother Thai Peng escaped from the conquering Chinese. When he became King he raised her to the second rank. Eng Seng (No. 7) was her son.

Kun Giok was born again as Hoey Kwan. Stake on Kun Giok, Hoey Kwan, Cheng Guan, Cheng Hun, Thai Peng and Mow Lim when you dream of a man eating meat, a woman combing her hair, a girl of loose character, a woman carrying a child or running.

23.-Siing Chior was a swallow. When she was a girl she picked up on a mountain a book from which she learnt sorcery and was able to raise storms. Kun San (No. 9) regarded her as his sister. She married Hong Chun (No 6).

Siang Chiow was born again as Hap Tong. Stake on Siang Chiow, Kong Beng, Hap Tong and Kun San when you dream of meeting a Magistrate, a marriage ceremony, a woman riding, rain coming down, an amazon, or beating a drum.

24.-Hap Tong was the name of a spirit-shop kept by two sisters-in-law Sit and Kiu. Chi Koh (No. 11) tried to force them to marry him and they jumped into a well and were drowned. They had previously existed as pigeons.

Hap Tong was born again as Siang Chiow. Stake on Hap Tong, Hap Hai, Kiu Kwan and Cheng Li when you dieam of drinking milk and sleeping, an clder brother's wife and his younger sister walking together, a woman selling spirits, two persons under one covering, women drinking together, or two sisters marrying at the same time.

25.-Mow Lim was a bee. He was poor and got his livelihood by charcoal burning.

Mow Lim was born again as Pan Kwi. Stake on Mow Lim Pan Kwi and Hoey Kwan when you dream of heavy rain, branches weighed down, a hill on fire, the sky darkened, a temple, bee's-nest, cutting grass, a priest, charcoal burning, a piece of timber or hail.

26.-Yu I.i was an elephant. He afterwards started a hotel and was a fisherman.

Yu Li was born again as Chit Taik. Stake on Yu Li, Chit Taik, Pit Taik and Cheng Li when you dream of cotton clothes, clearing jungle, making an oven, building a house, putting up beams, digging a grave, rearing ducks, an actor, ducks laying eggs, catching fish, paying money, or eating rice.

27.-Hap Hai was originally a frog. He was the son of Sam Wei (No. 2) and brother to Guan Kiat (No. 19) and Ban Kim (No. 32). He was killed by the Chinese.

Hap Hai was born again as Cheng Sun. Stake on Hap Hai Hap Tong and Pit Taik when you dream of a foreign vessel at sea, a louse, or an inundation.

28.-Hoey Truan was a duck. His elder brother was Kiu Kwan (No. 4). He became a Judge. His whole family were massacred by the Chinese.

Hoey Kwan was born again as Kun Giok. Stake on Hoey Kwan, Kiu Kwan, Kun Giok, Eng Seng and Mow Lim when you dream of a coffu on fire, a house on fire, a Magistrate approaching, a kitchen fire, burning crackers, fighting, a Magistrate seeing blood, the light of a lantern, a burning corpse, or a person dressed in cotton.

29.-Chit Taik was once a dog. He became a pork-butcher and was slain by order of Chen Kwi.

Chit Taik was born again as Yu Li. Stake on Chit Taik, Yu Li, Pit Taik, Kiu Kwan and Cheng Sun when you dream of fortune-telling, murder and blood, a butcher's shop, chess playing, much meat, a pomegranate, pointing to a pork butcher, beating a gong or drum, or a man becoming a pig.

30.-Thian Liang was once an eel. He was a Sin Chei, but seeing he could rise no higher, he shaved his head and became a monk. He was employed by people to supplicate the gods to grant blessings, wealth and children.

Thian Liang was born again as Jit San. Stake on Thian Liang, Jit San, Thian Sin and Cheng Li when you dream of taking medicine, two men in the water, a large and small hat, digging a grave, a monk, rice, or an eel becoming a suake.

31.-Cheng Hun was a stork. Owing to the intrigues of Chen Kwi he retired from Court and became a monk among the mountains.

Cheng Hun was born again as Kun San. Stake on Cheng Hun, Kun San and Cheng Guan when you dream of heavy rain, the death of a relative, meeting parents, smoke without flame, heavy clouds, a river with no means of crossing, acting, or a monk.

32.-Ban Kim was formerly a snake. He was the son of Sam Wei (No. 2) and the youriger brother of Hap Hai (No. 27) and Guan Kiat (No. 19). He led a retired life.

Ban Kim was born again as Eng Seng. Stake on Ban Kim, Eng Seng and the five dragons when you dream of a rich man, much money, collecting rent, a pair of gold flowers, a tortoise, a slave burning a coffin, or putting out a light.

33.-Cheng Li was a turtle. His house of business having been burnt down he turned priest.

Cheng Li was born again as San Wei. Stake on Cheng Li, Sam Wei and Yu Li when you dream of being carried in a chair, a corpse in a well, cutting timber, creatures of the sea, murder and blood, a chair coolic, a marriage, a chair, baling water, a spirit-shop, a fire, or a turtle.

34.-An Su previously existed as a fox. She was the wife of Guan Kwi (No. 18) and as her husband was poor, she shaved her head and became a nun.

An Su was born again as Guan Kiat. Stake on An Su, Kong Beng, Beng Chu, Guan Kiat and Guan Kwi when you dream of a happy nun, an old woman, a woman in man's attire, lighting joss sticks, meeting a raft, or a horse in motion.

35.-Thian Sin was originally a wild cat. Having served under King Siong Ki, he turned monk.

Thian Sin was born again as Kang Su. Stake on Thian Sin, Thian Liang, Kang Su and Hoey Kwan when you dream of something in the sky, a water-pot, thunder, pointing to the sky, a horse running, or a woman without clothing.

36.-Jit San was once a cock. He was extremely wealthy. but having been plundered by the Chinese he turned priest,

Jit San was born again as Thian Liang. Stake on Jit San, Thian Liang, Kun san and Eng Seng when you dream of wood and fire, going to school, the sun rising in the East and setting in the West, a man entering and coming out of a wood, a high hill or sunset.

The accompanying diagram contains the names of all the thirty-six Hua-Hoey characters together with another Im Hoey not included in the ordinary lists. Each character is associated with a particular part of the human frame and this diagram is extensively used in interpreting dreams. Thus if you dream of ears you should stake on Thai Peng or Kun Giok, if of the neck on Jit San, and so on. The characters are here classified as follows :--

Four of the highest degree (Chong Guan), viz. :-
Tan Hong Chun, Tan Eng Seng, Tan Pan Kwi and Gaw Cham Khoi.

Seven Traders, viz.:-
Ang Yu Li, Chu Kong Beng, Chan Hok Sun, Liong Keng Su, Hong Mow Lim, Teh Pit Taik and Loh Chit Taịk.

Four Priests, viz.:-
Low Cheng Li, Teh Thian Liang, Tan Jit San and Tioh Hoey Kwan.

Five Generals, viz. :-
Li Han Hun, Wi Kun San, Song Cheng Sun, Li Guat Poh and Wi Chi Koh.

Four Ladies, viz. :-
Siang Hap Tong, Beh Siang Chiow, Li Beng Chu and Lim Gin Giok.

Four Happy-lot, viz. :-
Lim Thai Peng, Tioh Kiu Kwan, Tioh Hap Hai and Tioh Sam Wei.

One Nun, viz.:-
Tan An Su.
Two Friars, viz. :-
Tioh Tian Sin and Chiu Cheng Hun.

李黄宗季黄谟坤正月志五雲山順賓高虎


隽溤李林合上明良四同抬珠王夫白白王蛈人蛤 燕石蝶

林張張張太九合三四平官海槐好入跔蛤猚命龍腐地子


合
H
鉜
合上明幅珠王
音天青茂必只有光福江漢坤正月志逢；䉘板占
合
其
銀安吉元青萬元井天日火太九合三合上明艮
士品吉元金貴利良山官平官海槐招珠王

Five Beggars, viz. :-
Tan Kiat Pin, Tioh Guan Kiat, So Cheng Guan, Tioh Ban Kim and Chi Guan Kwi.

The Lottery is thus conducted in the Straits:-A person wishing to open it, issues a notice that on a certain date he will open Hua-Hoey under a certain chop and that he will be responsible to all winners who stake up to such and such an amount either with him or his agents.

These Agents go round, and, according to agreement, are allowed to receive stakes up to a certain limit, say $\$ 2$, but on their own account they may receive larger stakes. They carry what are usually termed hongs, $i$. e., papers on which the stakes are entered. In case the staker is well known to the agent, no acknowledgment is given, but the staker may receive a ticket or scrap of paper, or else he writes down on a slip of paper, which he hands to the agent, the names of the animals he wishes to stake on and the amount. The accompanying is a specimen of the staking papers used in Hua-Hoey.

| 1 | White fish-Cham Khoi |
| :--- | :--- |
| 2 | Shell or Dragon-Man Kwi |
| 3 | Goose (White)-Eng Seng |
| 4 | Pcacock-Hong Chun |
| 5 | Lion or Earth-worm-Chi Koh |
| 6 | Rabbit or Tortoise-Guat Poh |
| 7 | Pig-Cheng Sun |
| 8 | Tiger-Kun San |
| 9 | Buffalo-Han Hun |
| 10 | Alligator or Dragon-Kang Su |
| 11 | White Dog-Hok Sun |
| 12 | White Horse-Kong Beng |
| 13 | Elephant-Yu Li |
| 14 | White Cat or 13og-Chi Taik |
| 15 | Mouse-Pit Taik |
| 16 | Wasp or Bee-Mow Tim |
| 17 | Stork-Cheng ITun |
| 18 | Cat-Thian Sin |


| 19 | Butterfly-Kun Giok |
| :--- | :--- |
| 20 | Stone or Cricket-Beng Chu |
| 21 | Swallow-Siang Chiow |
| 22 | Pigeon-Hap Tong |
| 23 | Monkey-Sam Wei |
| $2 t$ | Frog-Hap Hai |
| 25 | Sea Hawk-Kim Kwan |
| 26 | Dragon-Thai Peng |
| 27 | Tortoise or Duck-Hoey Kwan |
| 28 | Coek-Jit San |
| 29 | Eel-Thian Liang |
| 30 | Turtle or Carp-Cheng Li |
| 31 | Lobster-Guan Kwi |
| 32 | Snake-Ban Kim |
| 33 | Spider-Cheng Guan |
| 34 | Sheep or Deer-Guan Kiat |
| 35 | Deer or Goat-Kiat Hin |
| 36 | Ghost or Fox--An Su |

There are, it will be seen, thirty-six columns, at the head of each of whieh is the sign of one of the Hua-Hoey characters. The marks* (which have a conventional meaning) and figures (Chineze) represent the amount either cents or dollars staked on each animal and the last eolumn is the total of stakes received. A person wishing to stake a large amount, say $\$ 5$ or $\$ 10$, on an animal will sometimes write the name on a piece of paper and seal it up, delivering it with the stake to the manager of the Hua-Hoey or an agent.

The lottery is opened twice a day, usually at noon and 6. P.m., and at the appornted hour the winning number (animal) is exhilited, and the result deelared in the streets. Previously to this, the agents have brought in their staking papers. If the lottery is worked fairly, of course the manager who declares the winning number should be ignorant as to the amounts staked on the different animals. In China, the papers on which the stakes are entered are folded up in a packet and are not inspected till the winner has been declared, when the winning tickets are chopped and the owners of them are paid.

[^37]In the Straits, these lotteries are not fairly worked, and the animal least favoured by the public is often the winner. Stakers receive thirty times their stake, less a small commission paid to the agent, from whom they receive their winnings, and this leaves a gond margin of profit for the bank. A manager, for the sake of gain, or out of spite, has been known to stake by dcputy a large amount with one of his agents on the animal which he means to declare as the winner. The agent is "broke" and those who have staked on the winning animal are defrauded of their gains. This is only one of the many wars of swindling practised in regard to these lotteries in the Straits.

It must not be supposed that it is only the Chinese who gamble at Hua-Hoey. The wealthy Baba, born in the Straits, the respectable trader, their wives and danghters, the petty shopkeeper and the coolie who works by the day, Klings and Malays, women and children, all alike are mable to resist the temptation to gamble. The Manila lottery is only drawn once a month. Manila is a long way off, and the chance of winning a prize is very remote, still it has its faseinations for the practical Englishman and even the cautious Scotchman has been known to invest his money in this speculation year after year. The Hua-Hoey lottery is drawn twice every day in different parts of the town and the excitement is ever fresh. An outlay of 10 cents, which is within the means of any eoolie, may bring in \$3.

Women are largely employed in the Hua-Hoey business, whike their husbands are at the shop or sailing (as they appear to be rery often). They spend their idle time in colleeting stakes and staking themselves. They have diamonds and gold ornaments in profusion, and while any of these remain, they can gamble to their heart's content.* Those lower in the soeial seale, unblessed with diamonds or ready money, beg, borrow or steal in order that they may gamble.

Dreams play a great part in Hua-Hoey and the confirmed Hua-Hoey player gets to think of nothing else but the ehanee of his winning on the morrow. According to his dreams, he stakes.

[^38]It is no exaggeration to say that Hua-Hoey gambling corrupts and brings to ruin thousands of people-men, women and children but how to eheck it and minimise the evil is a very difficult question.

The common gaming houses in town are well known to the Police They are defended by strong irou barred doors, have ladders, trap-foors and eseapes and are always ready for a raid by the Police. Premises have to be hired and fitted $0_{1}$ ) for the purpose, and there is a certain amount of risk in the undertaking, but a Hua-Hoey luttery can be opened anywhere, in a shop, a private house or a Kampong. The result is not often declared at the same place and without a warrant the Police camot entir a building. All kinds of artifices are practised when the winning number is exhibited in order to escape detection by the Police. Sometimes the character is marked on a piece of yam or swect potato and swallowed if the Police appear: or it is written on the palm of the hand or on the sand and quickly rubbed out. Instead of the well known Hua-Hocy characters the numbers corresponding with them on the lottery papers are now frequently used and it is extremely difficult for the Police to procure satisfactory evidence against the principals engaged in the business.

The agents with their lottery papers, pencil and stakes collorted are sometimes anrested and fined, bat it has been held by a leaned Judge that the possession of these "tickets," as they are called, is no offence. In Burma it was held by one high judicial functionary that the thirty-six animals game was not gambling within the meaning of the Act in force there.

The more respectable Chimese are fully alive to the widespread mischief caused by these Hua-Hoey lotteries and a memorial, printed as an Appendix to this paper, has been recentJy addressed to the Legislative Council by certain Chinese inhabitants of Penang praying that most stringent measures should be adopted for their suppression.

## C. WT. SNEYD KYNNERSLEX.

## His Excellency,

## CECIL C. SUIITH,

## Acting Governor, and Others

the Honourable the Members of the Legislatire Council of the Straits Settlements,

The Memorial of the undersigned Residents of Penang and Province Wellesley and others requiring the aid and recognisance of the Government.

Respectfully shereth as follows:-

1. That for a considerable period there has been a system of ruinous gambling carried on with impunity in and about Penang and Province Wellesley called " Wha Hoey " which has brought distress and in some cases dire destitution to whole families, men, married and ummarried women, minors, servants, as well as persons holding responsible positions in mercantile services, such as clerks, cashiers, bill-collectors, \&c., whose only mode of living is to be gained through their honesty to their employers, and an upright rendering of a just account.

2 . That the clerks employed in the mercantile services are seduced to try and make a fortune by "Wha Hoey." After trying times after times with mercantile money, which they may have in charge and continually losing, at last they find themselves indicted before a Court of a Criminal jurisdiction and thereby convicted and imprisoned for embezzlement causing disgrace to their friends who may have stood surety for them and giving shame and sorrow to their families.
3. That this class of gambling is considered in China as well as in Penang and Province Wellesley above-mentioned to be the worse kind, and the most infamous species of gambling known; it is an enchantment to Chinese, Malays, Klings, Burmese, Siamese, Tavancec, Eurasians, Bengalees, and all others the natives of this Settlement, causing andety: pain, sorrow and in many instances
placing the unsuccessful gamblers in a position amounting to suicide. Parents, husbands, wives, sisters, brothers, and not seldom, employers also, undergo great affliction, bringing through its consequence the greatest distress to the community at large.
4. That this method of gambling contains 37 signs or numbers, namely :-Unn Soo; Thye Peng; Kong Beng; Cheng Soon, Jit-San; Moh Lim; Seang Cheow; Hoay Kuan; Che Koe; Cheng Hoon; Cheam Khoay; Eng Seing; Sam Hoey; Kew Kuan; Guat Poh; Ban Kim; Khoon San; Kin Geok; Hup Hie; Beng Choo; Kung Soo ; Kong Choon, Cheng Lee; Hock Soone; Eive Lee; Pit Tek; Han Hoon; Théan Siu; Thean Liang ; Cheng Guan; Guan Kwei ; Gnan Keat; Keat Pin; Phan Kwei; Im Hoey; Hup Tong; and Chee Tek.
5. That your Memorialists would beg to call attention that "Wha Hoey" gambling is a game of fraud and imposition, it is not managed as other gambling games, with the "Wha Hoey" keepers it is always "Heads I win anl Tails you lose." By other games the person wishing to go in for a chance does so personally, but in "Wha Hoey" agents are procured to act for him or her. "Wha Hoey " is in fact carried on by way of proxy; for example, a lady will send her servant or servants to stake for her, or the keeper sends his orderly secretly to the parties' house to collect the monies and numbers of tickets that the party may choose to hazard on. The parents, husbands, or employers being unaware of what is being done, and, if there is not ready cash, the party he or she secretly pawns jewels, and other paraphernalia and the proceeds therefrom with the hazard tickets are deposited to the keeper's urderly, if the party loses he or she never see any part of their stake again.
6. That most of the Chinese servants employed by Europeans and Chinese families cause their employers any amount of anxiety and annoyance, for, when they receive money to purchase things, for domestic purposes they squander it away upon "Wha Hoey", then, supply their employers with inferior and detrimental victuals.
7. That this fraudulent system of "Wha Hoey" gambling is not in any way discouraged by the authorities in Penang, because as far as your Memorialists know they have no pewer by Law to do so. It is carried on in Institutions got up for the purpose, but here exist places where certain parties who cannot well attend the Institutions meet at some private place which is secured for the purpose, and the gambling gone on clandestinely undisturbed by the proper Officials. Whereas in Perak, Selangore, the Dutch and

French Colonies your Memorialists are informed that even in the Licensed Gambling Farms such a mode of gambling is entirely disallowed by the Government, and is suppressed immediately on discovery.
8. That the keepers of these "Wha Hoey" establishments open them twice each day, and as is generally the case the person who may be a child or a poor coolie or a blind person, trying his or her fortune to gain, will place a stake of say (1) one cent upon the "Wha Hoey " if such person gains he or she will receive (30) thirty cents, but if the choice of signs fail which is generally the case they lose all, in this way thousands of dollars are brought to the "Wha Hoey " manager. The " Wha Hoey " keeper guarantees to be responsible to the lucky players for only say $\$ 1,000$; but supposing the successful players win $\$ 2,000$ or more, the kecper will only divide his guaranteed $\$ 1,000$, amongst them, again if say two thousand persons or more were to put a dollar each and all of them are unsuccessful the "Wha Hoey" keeper pockets the whole $\$ 2,000$ or more. By which means he manages to squceze money fraudulently out of the poor, as well as the rich. The mode by which the frauds are practised by the manager of a "Wha Hoey" may be represented as thus:-The Manager makes it known that the maximum amount of his loss in one forenoon, say is $\$ 2,000$. The Ticket to be produced by him for one stake being as a matter of course known to himself and his partners he clandestinely slips in a ticket or as many as he likes identical with the one to be produced, to win say $\$ 1,200$. Thus his so called maximum loss, if he can ever lose at all, is practically reduced to \& 800 only.
9. So wily are the "Wha-Hoey" Keepers that sometimes they write on the sand the winning number, then rub it out with their feet at other times it is written in the palm of their hands, when there is no chance for the above they shout out. The place of thas proclaiming the character being first made known, a great number of people young and old assemble to hear it, when the time is fixed they take every trouble to mect at the appointed rendezvous to hear the character or successful sign proclaimed, and as soon as the successful sign is given, all the people interested announce the same throughout the town, in crowds as people coming out of a theatre or retiring from a riot.
10. Your Menorialists would like the Honourable Members of the Legislative Council to know that twenty years ago or there-
abouts the gambling game of "Wha Hoey " was carried on in Penang and Province Wellesley and owing to the calamity and suffering caused by this abominable game the Police were then forced to take active measures for its suppression; and owing to the heavy fines (sometimes up to $\$ 3,000$ ) and the rigorous imprisonment imposed on the "Wha Hoey" keepers by the Magistrates caused terror and consternation amongst them, since then it has been discontinued until within the last year or so, when it has reopened and increased with re-doubled vigour.

In consideration of the above-mentioned representation to your Excellency and others the Honourable the Members of the Legislative Council, your Memorialists request, implore and pray for your kind view and deliberation of this subject and beg that you will cause inquiries to be made as to the fact of the present description of "Wha Hoey" and that it may please The Honourable Members of Council to take steps in the meantime to issue such orders as to prevent " Wha Hoey " gambling and gradually to pass an Act or Ordinance for the purpose of totally putting a top to this ruinous gambling game of "Wha Hoey" which is daily sapping the earnings, energy, and comfort of poor coolies, women, well to do men, of good society and in good business and pecuniary circumstances, and children.

And your Memorialists as in duty bound will always pray, \&c.
(Signed) GHO AIK GHO, and others.
Dated at Penang this 30th day of September, 1885.

# ON THE ROOTS IN THE MALAY LANGUAGE. 

FROM THE DUTCH

OF
J. PIJNAPPEL.


In the present flourishing condition of philological study on scientific principles, one can scarcely marvel at the fact that the Indo-Germanic or Aryan family should have appropriated to itself the lion's share of general attention, but, that there should still be any uncertainty regarding its practical relatiouship to the branches descended from other stocks, is quite inexcusable. Although we do not, at the present day, take what may be called a bird's-eye view of these languages as was formerly done, and find that, on the contrary, each one of them now enjoys its own peculiar share of notice bestowed upon it by some one or other, there is, nevertheless, in respect both of the number of students and of their manner of procedure, much still left to be desired, since the subject does not always receive the full justice to which it is entitled. Perhaps there would be no harm done by giving an example to illustrate how other languages, independent of the Indo-Germanic, can be made to supply even more particles towards the building up of our science than have hitherto been collected. To this end we have, as specialists, selected from the particular province of our research " the form of Malay words previous to their extension in meaning through the addition of affixes."

[^39]Competent authorities on the Indo-Germanic, in speaking of the roots in these languages, inform us that they really existed only at that period when the various branches had not yet separated themselves from the parent stock. As to their form at that date, and whether it was monosyllabic or dissyllabic, this has not yet been satisfactorily settled or agreed upon. Now in the Malay languages it is altogether different; here we continually meet with them as significant, current words, for which reason they may be justly classified as "root-words;" but these latter must not be confounded with such as we are accustomed to look upon as primitives or radical words in consideration of the derivatives obtained from them, because these same primitives, when dissyllabic (their usual form), may often be readily recognised as constituting compound words which, on being resolved, prove to be nothing more than the product resulting from the combination of two simple elements or particles not yet entirely lost to the language or obsolete for colloquial purposes ; it is to these simple elements that we have to look for the true roots. As for applying the information obtained to any one branch in particular or comparing the same with any other languages except such as belong to the Malay group, this we leare to further investigation to accomplish, flattering ourselves that some light will presently be cast upon certain points of interest to Philology in general and which may, possibly, be turned to good account.

Too much, however, should not be expected. In entering upon the subject concerning the origin of Malay words, we would, by way of preface, mention that in this discourse we have principally availed ourselves of a certain source which, although exceedingly rich in itself, cannot be said to have entirely excluded the others: we are here referring to " verbal reproductions of sound." The Malay languages are remarkably rich in "tone-imitative-words" and, in accounting for this wealth, it is necessary once more to have recourse to the argument that it is here a question of an aboriginal people who have acquired an ear sensible to the minutest distinctions of sound, such as would lee almost, if not quite, imperceptible to ourselves. The facility and acuteness with which the Malay is capable of distinguishing betwcen slight variations in tone, is indeed ro-
markable. The following will even more than exemplify this. These can be little doubt that mords of this class would furnish us with an admirable insight into the ancient condition of the people by whom they are employed were we but able, not only to make a complete collection of them, but also to discover their original meanings. A nation living by the seashore would observe and mimic sounds different from those which would strike the inhabitants of a plain or a mountainous district. In consequence of the limited space at our disposal we are compelled to confine ourselves, on the present occasion, to the inrestigation of a single tone, not one specially selected because it offers a particularly favourable example-representations of other sounds might have been found which would have served our purpose better-but merely chosen by us because its plain, almost self-erident signification causes it to be easily understood in our own (European) languages also. We allude to the word tik, equivalent to our tick. This word is directly comprehensible to all, irrespective of nationality; the Englishman, Frenchman, German, or Dutchman grasps the full force of its meaning, equally well with the Maldy, besides, the expressions tick and tick-tock are well known to us. The Malay says tak, in imitation of the sound produced by striking a small hammer upon a stone-fiooring. Now it must be here remarked that, in giving this interpretation, we are quoting from Derrall's large dictionary of the Malay language, where the explanations submitted in tracing the meanings of the various words are so comprehensive and lengthy as to speak well for the care bestowed upon the work. Tet they should not always be accepted without caution, since the possibility of error, occasionally apparent from a less happy choice of illustrations, is not always excluded. Well, in the abore instance the Malay employs the work tak, but, when the table is struck with a stick he calls the tone thus produced toek: (N. B.-oe=the English oo in poor in this and all the subsequent instances: the oe is the Dutch equivalent for the German $u$; we catch the difference of tone for it is flatter; hence the use of the oe). The tone in tak (pr:a as in English mar, but somewhat shorter, thus măr) is sharper and clearer than in toek. It is a remarkable fact that tik is necessary to
complete the complement of the tripthong, and causing $a$ to take up its natural position between the sharp $\breve{e}$ and the flat $o e$, * should be wanting, at any rate, it does not appear in the lexicon. This omission, however, does not occur in other cases ; so, for example, they say soer of the rain falling on trees, also of the cable of an anchor as it glides swiftly through the hawse-hole ; again, the word sar stands for water dropping upon hot iron, also for a stream of water forcing its way through an opening, as well as for a mat being drawn along the floor and a spear or javelin flying through a partition consisting of matting ; sir (pr : seer) is the name for a pit of elderwood at the moment of its being extinguished by the water coming into contact with it : again, we have poek expressive of a feeble explosion or report, such as would be occasioned by the bursting of a cocoa-nut falling from a tree, or an empty pail tumbling upside-down into the water; they apply pak to a book falling on its flat side, or to a table struck with the palm of the hand; pik ( $\mathrm{pr}:$ pěek) is significant of a small wooden box falling on the ground ; and so forth. Taking into account the individual effects of $s$ and $p$, the former indicating a hissing, sibilant sound, and the latter, by virtue of its being a labial explodent, expressing the presence of a "pop!" or " bang!" there can be no difficulty in recognising the part played by the vowel in reproducing a tone to coincide with the original sound.

In fact, to become fully aware of this distinction, it is almost unnecessary to call in the assistance of such tones, since he who is acquainted with the Malay languages, has it clearly proved to him by numerous examples how the changes in the word indicate the flat, dull, heavy, thick, coarse, and great as compared with and opposed to the sharp, clear, light, thin, fine, and small. On a first reference to the Javanese grammar of Roor one will immediately meet with numerous illustrations of this. And, although tik is nut found as an independent word in the vocabulary, yet its existence, which is made evident by simple analogy, is clearly established beyond the shadow of a doubt, by its derivatives. From all these

[^40]word-tones new words are formed by the addition of the prefixes lie and lĕ, though these words are described as being entirely synonymous with the roots from which they have come, but, if this were perfectly true, these prefixes would either constitute nothing more than phonetic affixes, or independent representations of tone conveying the idea that a more extended and general meaning should be attached to their primitives. In considering the prefix liě, one would, in such a case, have to assume that it merely suggests the sound $\check{e}$ which, by being aspirated, had become hĕ, and further that this hĕ has been finally hardened offinto kiĕ by aspiration. Now, as a matter of fact, such an $\breve{e}$ was originally an intrusion between two consonants inserted for the sole purpose of simplifying the pronunciation, therefore we also meet with it intervening between the final consonant in which the prefix terminates and the initial consonant with which the root opens; fur this reaso: it is often erroneously looked upon as forming a component portion of the root; hence numbers of words are considered to open with an $\breve{e}$ when such is not the case, and the truth of this assertion becomes apparent when a prefix terminating in a rowel, e.g., di, is substituted for such a one as is closed by a consonant. Presuming we were to accept the above rule for derivation as holding grod in the case of tik, tak, toek, we should then feel ourselves compelled to admit that the verbs, měngĕtik, mĕngĕtak, mĕngĕtoek, were derived from them in the first place and that then, from the further derivative forms of ětik, \&c., such words as kětik, \&c., had been obtained through the working of some unknown phonetic principle. On account of the close relationship between $k$ and $t$ as initial letters, one might likewise be led to imagine that the form kĕtik merely owed its origin to reduplication. In favour of this opinion wrould be the circumstance that ke very frequently precedes syllables opening with a dental and, though it is often prefixed to other letters as, for instance, in kělip and kilap, this might be accounted for by attributing the circumstance to a transition from the liquid $l$ into the dental $d$. Consequently, it would be more advisable to consider the $k$ as having originated through reduplication after another manner, viz., to look upon it as proceeding out of the final consonant;
accordingly, in tik-tik i. e., tik-ĕ-tik it would appear that there has been a suppression of the initial $t i$. But neither the one or the other of these arguments is satisfactory.

The other prefix le is very commonly affixed to tone-words and seems to remind us of the well-known particle lah, but we should certainly experience some trouble in endeavouring to prove them one and the same, even though there were no apparently more correct explanation at our command. At the same time, it cannot be denied that the difficulty, so far as it consists in the fact that la should have lost its fulness of sound, and that, too, in the penultimate, is removed by remembering that the meaning causes the stress to fall on the root, so that la remains unaccented. Yet, notwithstanding this, there is, in our opinion a still better interpretation by which the question may be settled. We have a third form of derivative, the result of a combination of the prefixes kĕ and l$\check{l}$, found in words like kělĕtik and lělĕtoek; these, it is true, are once more described as precisely corresponding in meaning with the other words, but in this instance, at all events, the idea of attributing the construction to the influence of phonetic principles would certainly hare but little weight in its favour. Besides, in this species of combination, one very naturally expects to find an intrusive $l$, in consequence of which kĕtik would become kělëtik. In this, as in other languages, the notion conveyed by the vibration of the tongue, viz., that of 'frequency' (not losing sight of the frequent confusion of an $r$ with an $l$ ) has, it is quite evident, absolutely no effect upon the quality of the tone; the quantity suffers a change but, the quality remains entirely maltered. Assuming this to be the correct version, it would be essential that we should, in considering the form létik, acquiesce in the premises that the first term of the word, $i . e$. the syllable kě, had been suppressed, since it cannot possibly be argued that kě in kělĕtik is probably a prefiguration to the word lĕtik; for this would certainly not have taken place without some purpose (a phonetic reason is out of the question here), and the very nature of the thing only admits of a modification of the quantity, seeing that the quality is expressed by vowel-change.

As a consequence of the necessity of supplying a demand
fir an expression indicatire of frequency, durability and conbination or connection, there was a call for a special form to render the opposite idea of something disconnected, abrupt, sudden, isolated and unerpected, to be obtained by modification of the word, and thus accounting for the antecedent representation of lie which proceeding, as it were, direct from the throat without interference from the other organs of articulation, was more suitable than any other explodent letter for expressing the suddenness and abruptness of a report or explosive sound when such required rendering by a figure of speech. But, even though it might, in after times, hare been possible for $k e$ and lĕ to be assimilated when nature was no longer the sole guide, yet they originally repelled and excluded each other, and lĕ could no more be inserted after liĕ than kĕ could be made to precede lĕ ; besides which, the latter would imply a chronological precedence of lie and such a supposition cannot possibly be entertained or tolerated. The only solution we can, therefore, arrive at is, that we are bound to accept lĕ as being quite as independent a prefix as $k \breve{e}$, and that the position of this term lĕ was assigned to it phonetically after the initial term of the word instead of before it, through metathesis, or transposition. To look upon the prefixes $l_{e}$ e and $l e$ as being nothing more than mere phonetic affixes is incorrect, for they evidently define the meaning of the word, in some respect, by modifying the quantity although not affecting the quality.

There are also instances of $d \breve{e}$ being found as a meaningless prefix, in which light we shall hardly be able to account for it otherwise than by attributing it to a phonetic change from the $l$ into the dental $d$. This is preferable to the argument that we hare here a softened $t$, the consequence of reduplication, for this dĕ is also found occurring before other consonants.

By analysing the meanings of tik, tak, toek, it becomes apparent that the principal idea conveyed by the word is represented by the explodent $t$, in excatly the same way as we already noticed of the $s$ and $p$, while the final $k$, with which the abore words terminate, merely serves the purpose of abruptly breaking off the tone to imply a sudden ending. Accordingly
the chief idea or radical meaning is modified to a degree corresponding with the change the $k$, is made to undergo. We find this letter supplemented by $n g, m$, and $s$, in ting, tany, toeng; tim, tam, toem; tis, tas, toes. Ting signifies the sound produced by a small piece of money falling on a stone, and tang expresses the same thing of a large one, whereas toeny indicates the ringing tone of a bell, or the sound proceeding firom a hollow bamboo-cane when the same is struck with a hard weapon. It is our opinion that the fundamental or leading tone suffers no change, the same initial explodent being employed in each case, but, the ny indicates prolongation, for the tone is not interrupted or brought to sudden conclusion but continues to vibrate through the nostrils; we fancy we can hear a reverberation in ting and tang quite as plainly as in toeng, hence we have ventured to modify the meanings in some measure, through replacing the stone by a body possessing some vibrative power and capable of emitting a tone; it is true that something hard is requisite in these cases, but it should be a resonant body, for in the above examples it is more likely to be the blow on the stone which it is intended to represent than the chinking of the coin. The resonance here implied is, so to say, passive and confined to the object; replacing this nasal by the labial liquid $m$ there is a further call for the idea, not precisely of a puffing, but rather of a humming or blowing sound; it conveys the notion of an expulsion of air in the performance of which the subject itself is engaged, so that tam and toem, besides indicating a resounding tone, have an extra influence in modifying the meaning. The discharge of a cannon is termed toem, doubtless with the intention of showing that it is accompained by a hollow, booming sound; tam names a flat, heavy body descending on the ground from above as, $e$. $g$., the falling down of the component parts of a house tumbl-ing-in, and the $a$ in the word marks the presence of a rumbling, and crashing noise. The letter $s$ is also concurrent with $t$ in such cases: with the word tas we associate the sound of rattling, snapping, rustling, such as would ensue from the exploding of a percussion cap, or a rifle-ball entering a board or plank, also the cutting of paper with a pair of scissors; toes is the name for a smart, sharp pop or bang, such as one hears on
firing a revolver, or when the motion of certain bodies suddenly ceases as, for instance, the surcease of falling drops of water. We fear, however, that these explanations are not quite as correct or as much to the point as might be desired. From the derivatives of $t$ is we find that it principally implies the meaning of a continual dripping or falling down, and this sufficiently explains the use of the component letters of a word in which $s$ is to be taken more in the light of a continuant than sibilant, and is employed for the special purpose of contrasting with the nasal because there is here no necessity for a letter to express resonance; besides $s$ is the only consonant which admits of being used in conjunction with a $t$. Then, again, we know how closely a final $s$ approaches the sound of $l$ in pronunciation, being deprived of much of its property in losing part of its hissing sound through aspiration.

It seems that $r$ does not appear in concert with $t$, but it occurs in words of the same species, e. $g . . g a r$ and sar, where the adoption of $r$ is permissible because of the nature of the tone to the meaning of which it adds the impression that the sound of rattling is to be heard ; still, considering the various significations of these words, it would not be easy to comprehend them under one common category.

From several of these little words new ones are formed by again affixing the self-same prefixes kĕ and l$\breve{e}$ when it often happens that a nasal has been introduced before the $t$, and that liĕlĕ also occurs as kěrě. Neither of these two modifications is uncommon. It is not necessary to draw the line when one has stated that $l$ is confused with $r$, for we so frequently discover a phonetically intrusive $n$ in the penultimate of primitive words that, as a rule, the fact of having found the one affords sufficient evidence for assuming the existence of the other.

Until now, we have merely occupied ourselves with the preliminary or first changes of the root, and have not paid attention to any except the original meanings ; a further advance should then be our next stej. The dictionary supplies us with active forms for a fers of these words, like toek, tas, toes, tom, which respectively signify the producing of these radical tones. But there is no reason why verbs from all such words may not
be used. It would, moreover, be strange if other derivative forms of these words were not actually in colloquial use. For, correctly speaking, the possible existence of no derivative can be denied, while there is a real demand for the expression of a certain meaning the idea underlying which has an independent form in use, even though present custom may be unacquainted with it, or may have neglected to preserve it, a thing of frequent occurrence. However, such forms did not, at first, come into existence at the same time and together with the roots; it was once considered sufficient, and this sometimes happens even now, simply to mention the word marking the thing which is or does this or that, or the action itself of being or doing, in order to call attention to the subject. By saying tick-tick or tick-tock every one will be reminded of the ticking of a watch or clock. But the man who does not know these articles will think of something else giving forth a similar sound. So it comes that from tik we get the derivative tiktik a drop, and from tis we have mĕnĕtis to drip, while liětik is the Malay for the ticking, or rather the tick of a clock. After the same manner mĕnĕtak, transitive, means to hew or chop; mĕnĕtas, transitive, signifies cutting open, or breaking through for the purpose of disuniting, as in ripping a seam, while the same word, intransitively used, expresses the bursting open of a hatched egg. Then mĕnĕtoek names the action of giving a soft or, better still, a muffled knock; mĕnĕtis is to drip beside anything, also to descend from (with reference to origin); meॅnĕtik, to flatten by blows, \&cc. Also mĕnyĕtis, which means to fillip off, as in removing an insect from the hand by a sudden jerk from the tip of the finger, but, it is also used to express the showing of a ring one wears by pushing forward one's finger and thereby performing an action somewhat similar to filiping. The same meaning is ascribed to mĕngĕtik but this word also means the act of jumping in insects, when it is executed by the stretching out of their hind legs after the manner of a grasshopper, whence the primitive word kétik receives an additional meaning by being used to express a leg of this sort, which is, again, figuratively employed for the hammer of a rifle because a grasshopper's leg more or less resembles it. Allied to kětik is the word kéting, the name for that posterior portion of the leg
situated between the calf and the heel, while oerat kěting is the term by which the tendon achilles is known, and mĕngĕting is only used in the sense of severing or cutting through that particular tendon of a man called the tendon achilles. Mengatok, with $a$ as its first vowel, signifies tapping on a person's head or striking a flint with a piece of steel; by inserting an $n$ in $k \check{c}-$ tang and repeating the word, thus, kĕntang, we get a wooden block struck with a cudgel by the night-watchman as a signal. To these words the following are probably akin in point of origin, kělontang, a scare-crow ; kĕlontong, a pedlar ; kĕlinting, a Chinese pagoda! we fancy this word is also traced as proceeding from a Chinese source); kělĕntingan and kěrĕntingan, ear-rings. Many more examples of this kind could be easily found.

Were it our intention to exhaust the subject to which we have been able to do little more than call attention, we should now, without further delay, have to speak of the new change of tone, obvious from the above examples, viz., the contraction of a dissyllable into a monosyllable in the first term of the word, and also the phonetic variation of the consonants which, as in all other languages, is, doubtless, also here originally due to merely dialectic differences, but may, nevertheless, at one time have defined the meaning of the word to some extent. Besides, at the very outset and taking precedence of every other question, the direction of our discourse should now tend towards an enquiry into the laws regulating such tone-words as, in contradistinction to these already considered, we are obliged to term arbitrary in default of being able to think of a more suitable and descriptive expression, one that would define the class better. For, although we have seen that there are words whose origin is traced to involuntary verbal imitation of sound, a still greater number probably owe their existence to caprice, a fact continually remarked in the case of children who habitually render the thing they see, or what they see occurring, by self-coined tones, doubtless very arbitrary, but due to clearly indicated natural causes nevertheless, and for this reason agreeing, now and then, with the equally arbitrary utterances of other children.

Even previous to making the above enquiries we should proceed to give a more ample description, entering into the details of the antithesis existing between these two great divisions of woids. Arbitrary tone-words are, it is quite evident, diametrically opposed to the involuntary, rerbal representations of sounds, therefore, when we include the tone-imitative words in the latter class we do so for the express purpose of contrasting. them with the arbitrary tone-words, and to show that we look upon them in the light of words with a reflective tendency, not only answering to the sounds themselves but to something more besides, for they recall the very motions and gestures necessary for the accomplishment of the action itself, between which and the sound consequently ensuing there is an intimate relationship: at the period when speech had not reached such a high state of perfection as at present, the language of mimicry and gesticulation must certainly have been of great importance, and that it has not yet taken its final leave of the world we learn from the interesting article by Professor Gerland of Strasburg published in the Deutsche Rundschau for May last (1883), and treating on the language of sigus employed by the Indians. In the infant stages of our race, speech was full of motion, the movements of mimicry going hand in hand with the utterance of involuntary expressions for original tones. This is the reason why pronominal roots and radical prepositions have as much right to be considered involuntary, verbal sounds as the tone-imitative words. It is clear that in this instance psychology and grammar do not fulfil precisely the same office. The psyche supplied the material out of which the language was constructed by the nous not in conformity with any logical rules but, starting with the roots of nouns, verbs, pronouns, and prepositions, it developed the language while per fecting itself.

Then, too, we should not be able to avoid a careful investigation of the fundamental meanings belonging to the numerous affixes with which the Malay abounds for, so far, we have only gone into $k e \breve{e}$ and $l \breve{e}$, and our discourse on these two prefixes has not been by any means complete.

Eridently there is ample material for a prolonged cnquiry on untrodden ground.

In conclusion we submit the following hypotheses:
The stocks were derived from imitative and other inroluntary sounds, sometimes even preserving, after the first and most prolonged period of their development, traces in their roots of the original primitive wording. Besides, foreign languages have done much to bring about a state of perfection.

It is not necessary for the roots to have been exclusively monosyllabic. The tone-imitative monosyllables consist, for the most part, of three elements, a consonant, a vowel and a final consonant. When, in compliance with some system, a word becomes deprived of its terminal consonant, it can no longer be considered a true root, all that is left being an abstract tone. If we remove the $s$ from the Malay word $t i s$, we obtain a curtailed form which canuot justly be deemed a real root.

That diferences of surroundings originally gave rise to a corresponding variation in the roots cannot be questioned, yet, considering the uniformity of the psyche and the fact that the ancient races had still always some points in common, these must often have met in their utterances. Hence, to found the assertion that there is a family relationship existing between various branches, on the mere fact of a resemblance in sound between certain roots, would not suffice to place it beyond the pale of dispute.

But these tone-imitative sounds coupled with those others, whose mutual agreement is a circumstance of far less frequent occurrence, and further combining with them to supply, by means of a portion of every imaginable determinative affix, the entire grammatical and lexicographical store in the word-structure of the language, we say, these two classes of tones, modified after the manner already stated, must certianly have produced an indefinite number of unconnected, independent languages which have, in some measure, long since disappeared.

We beg leave to conclude this discourse with the abore suggestions, and we trust that, provided always they are found to rest upon a sound basis of actual fact, they may be considered to have established a fair claim on the student's attention.

## KLIENG'S WAR-RAID TO THE SKIES.

## A DYAK MYTH.

The Sea Dyaks possess numberless stories, legends and fables handed down by tradition from ancient times. Some are related in plain prose, whilst others are set in a peculiar rhythmical measure, and sung to a monotonous chant, but none are written ; all are transmitted by word of mouth from generation to generation. A story plainly told is an "Ensera," and a story sung is a "Kana." One large collection of ensera is similar in character to the stories of Reynard the Fox, whose place in Dyak tale is occupied by the Pelandok and the Kekura (the mouse-deer and the tortoise), who are always represented as acting in concert, and whose united cunning is more than a match for the strength and ferocity of all other animals. Intrigue and stratagem, so abundantly illus. trated in these fables are qualities upon which Dyaks love to dwell, and they have an analogous series of stories of the adventures of Apai Samumang and Apai Saloi, two men who are always plotting against each other, the latter however always being outwitted by the former, and then, when occasions serve, not ashamed to practice deceptions upon his own family. Other tales relate the history of Rajas and their dependents in various circumstances, but it may be that these have been borrowed in more recent times from Malay sources. Others describe the exploits of mythical Dyak heroes, and these perhaps constitute the most genuine specimens of the oral literature of the Dyak race. Of this class the following is one, and being generally sung is called a "Kana."

The greatest hero of Dyak mythical story is Klieng, of whom many exploits are recorded-good and bad, warlike and peaceful. He is supposed to belong to this world of ours, but is not now visible to human eyes as in the good times of yore to which Dyaks look back as the golden age. He is without pedigree. Tradition makes him out to have been found in the
hard knot of a tree by Ngelai who brought him up as his brother. When of age, he developed a tendency to a wandering life, and never applied himself to any regular pursuit, except those of pleasure and war. He was wayward and capricious, yet handsome and brave; he would often disappear for months and even years at a time, and be given up as dead, and then would re-appear at his mythical home, coming from where no one knew, and no one dared to ask. He had a wonderful power of metamorphosis, and could transform himself into anything, and become monkey or man, tiger or orrang-utan ; could be ugly or handsome ; dirty and diseased, or clean and healthylooking just as he pleased. On one occasion, it is said, he turned himself into a fragment of a broken water-gourd, and in that disguise was carried by Ngelai in a basket to the battle, when, being set on the ground, he revealed himself in his true character and routed the enemy. In the following adventure, he figures as a man whom we should call a chimney sweep, and is named the "Smutty One, the Blackened Bambu," and it is not until the end of the story that his appearance changes, and he is recognised as Klieng.

He married Kumang, the Venus of the Dyaks, but in his many wanderings and metamorphoses he became the husband of many others, yet always returned to Kumang in the intervals. And she, following his example, allowed herself the same wide license, and the varying incidents of their constantly securing separations and re-unions make up many a chapter of Dyak story, amusing perhaps, but not very wholesome.

Klieng is not, so far as I know, called Petara; but in Dyak estimation he holds the position of a tutelary spirit, and is sometimes presented with offerings, and often invoked as a helper of men.

The story of the Ancient Traveller whose coming is unknowu.
The grey-haired Traveller whose way is hidden.
His name is "Bungkok Arok Papong Engkiyong Bujang * "Pengema Ribis Basong." $\dagger$
(*) Literally : "The Sooty Crooked One, the Charred end of Bambu."
$(\dagger)$ Literally: "Young Slanting Moon." The story represents Klieng as appearing suddenly in his own house; but in disguise, so he is not recognised.

He is between Ngelai and Bujang Bulan Nenyimbang.
He is the Traveller whose cleverness is great.
When he eats rice, at his toueh it tastes like chestnut.
The remains of his drink tastes like honey of the bee.
Ngelai asks him,-
"What, friend, is the object of your visit to our country ?"
"What news have you to tell ?"
Klieng-None, friend, exeept that I am weary of pounding rice and fetching water.
Ngelai-0 you want to get married.
Klieng-Even so: I wish you to go with me to ask Kumang to marry me.
Ngelai-How can you marry whose country is unknown?
Irlieng-My country is the highland of light soil, which touched becomes sago,
The Lake Barai, where bathe floeks of birds.
So they began to eut the knotty branehes, as the evening was far enough advaneed to begin diseussion.
Ngelai arranged his armlets of shell with distinctly eut grooves-
Arranged his plumes of hair like shoots of the young fermArranged his turban like the coil of the black cobra.
Bungkok also arrayed himself : his waist-cloth was of bark,
His turban a bit of dried telialong* bark,
His armlets were a twist of rotan.
They went to the other end of the woven-walled house,
Walking after each other keeping step;
And came to the room of Tutong.
Tulony-Sit down, frierds, on the rotan mat woven by Lemantan of the land of Entigelam.
Sit on the mat woren in sprigs by Lemok called the starlike Lulong.
Eat the pinang just coming into ripeness.
Eat the little pinang gathered from the midst of the fruit trees ;

* Owing to my ignorance of lotany, I can only, as a rule, give the natire names of plants.

With spoon-leaf sirile spreading in septiform branches; And tangled tobaeco mossing like the hairy kelindang fern.
And they fell to talking till the morning hours, speaking of many things.

Tutony-What report, cousin, what news?
What is talked of in the land?
Negelai-We wish to cut into the top of the wide spreading beetree.
We wish to tie the feet of the great wood pigeon,
And net the adong fish at the head of the stream.
We ask for Kumang to wed our cousin the Traveller here. Tutong-My sister does not marry anybody.

I require a man who has found a mosquito's probosis big. enough for a stanchion of a boat's bow.
I require one who has found a pangolin's tooth fit for a band of the nyabor* sheath.
But my speech is that of joke and laugh,
Talk spoken without thought.
But truly I require a man who ean lead me to rescue my father and mother from Tedai in the halved deep heavens;
One who can lead me to wage war where the dim red sky is seen :
This is the man whom I seck, whom I search for, to borrow as a debt.
Flieng-I am the man, cousin Tutong: if to night we split a bunch of ripe pinangs, $\dagger$ to-morrow we earry war to the halsed deep heavens.
If we split the red-spathed pinang, I ean lead you to wage war to the zenith of the roomy heavens.

So they agreed to split the pinang; but the elder brother of Thutong refused eonsent ; and Ngelai's company returned carrying faces of shame unable to meet the gaze of others; with faces red like a lump of dragon's blood. Coming to his own room, Ngelai went to his sleeping place carved like the lumi-

[^41]nous sparks of the milky way. Great was the shame of Ngelai Bujang Pedar Umbang.* Then spoke Bungkok Arok Papong Engkiyong:-
Klieng-Let us three Ngelai and Bulan Menyimbang get birdlime. $\dagger$
Ngelai-To-day? Shall we return in a day?
Klieng-Nay, we spend nights away, and take as provision three pasus of rice.
Ngelai-Where shall we collect the birdlime?
Klieng-Say nothing : let us start and fell the pempan tree of Ngelai of the Rain Chestnut, where we can arrange our weapons:
Arrange the plumes of hair like shoots of the lemiding fern ; Put on the ancient war cap, the well fitting one;
Take the war charms to gird the loins ;
Take the shield cut in slanting curves ;
Gird on the horn-hafted weapons ;
Take the plumes of hair thickly studding the sheaths ;
Carry the sumpitan of tapang wood. $\ddagger$
And away they marched with feathers of the hornbill tossing in the sheaths.
A way down the ladder of evenly notched steps,
Holding the long rails converging at the bottom.
So started the three setting forth from thence.
In the day time they pushed on following the sun.
By night they used flaming torches of light.
But weak was Bulan Menyimbang, weaker than a scorched leaf;
The strength was gone from the midst of his loins.
He fell to the right, but was caught by the horn-hafted sword.
He fell to the left, but was held up by the barbed spear handle.

[^42]Spirit of the Winds-O dead is our friend, beloved of heart!
O dead is our husband, beloved of body !
And uprose Bunsu Entayang from the spout of the leaping waterfall.
Uprose Bunsu Rembia from the top of the bee-trees ;
And touched him with the knuckles of the fingers of the hands,
And dropped upon him oil sweetly perfumed;
And there was a twitching in the soles of his feet,
A throbbing of the pulse in the region of the heart:
And Bulan Menyimbang stood up.
He smelled an odour like the scented gharu of the hills;
He inhaled a perfume as of pressed cardamom flowers.
And lo! there was cooked rice, a bambu-full,
And dried fish a basket full.
"Whether for life or for death I will eat this rice," says he.
And he ate to his satisfaction.
He smoked, holding the fumes in his mouth,
IIe ate pinany, throwing the refuse away,
And Bulan Menyimbang started to walk.
He walked slowly holding on to the wing feathers of the swallow.
He marched on holding to the beak of the hornbill.
And there was heard a booming sound like the roar of the tidal bore,
A rushing and crushing as of pelting rain.
Aud Ngelai Bujang Pedar Umbang looked behind.
N'gelai-O you are alive, friend ! our friend lives !
And the three went forward, and came to the highway like the breast of the land turtle,
A path already made clear and good.
Looking they saw a long house which a bird could only just fly through in a day.
A short house through which a little tajak flies in a day.
Ajelai-"O that is an enemy's house friend."
And he donned his coat of hair woven by a woman of Sempok with deformed shoulder.

He put on his war-cap of jungle fowl feathers.
And girded on his sword tufted with hair, as big as an empty paddy bin.
And set on his shoulder a sumpitan.
And grasping the shield with slanting ends Ngelai started to advance.
"Stop, friend," says Bungkok Arok Papong Engkiyong Bujang Pengema Ribis Basong,
" That is not an enemy's house, it is my farm lodge,"
"My house the worth of a rusa jar.""
The three advanced, and saw a house of one door, a single row of posts,
A beautiful house in the midst of a wilderness.
Bulan-Whose sleeping place is this?
Klieng-That is the sleeping place of Laja, brother of Dara Lantang Sakumbang.
This belongs to Ngelai Bujang Pedar Umbang.
That to Tutong Bujang Lemandau Gendang.
Bulan-And where is mine?
Klieng-Yon have none, Bulan Menyimbang.
Bulan-You who have sleeping places are not more brave than I.
In fighting with spears never did I run awar.
In fighting with swords never did I fear death.
Klieng-Don't talk so, Bulan Menyimbang
Let us sit down here on this mat of well crossed warp ;
This Java mat with over-lapping ends.
[And Bungkok muttered growlings like thumpings of a Melanau building a boat,
And talked like a Sebaru man upside down.]
Klieng_† Where are you, ye Spirits of Contending Winds?
Strike the house of Sanggul Labong at the lair of the kendawang snake.

[^43]Call them to the war to the zenith of the deep heavens.
Tell them of Batu Jawa's house on the hill of the feathery tufted lemba.
Tell them of 'Tutong's house at Batang Gelong Nyundong.
[And the Wind Spirit arose and blew a strong blast,
A violent tempest furiously raging.
Broken were the struts and posts of the houses. Uplifted were the shingles of split wood.]
"What wind is this blowing with such strength?
"What rain is this beating without stint?"
The Wind-We are not wind without object, not natural wind: We are wind inviting to the war on the skies following Bungkok who rescues the father and mother of Tutong at the zenith of the roomy hearens.
Chorus-This is the debt to be incurred, this is to be wished and sought for.
Cut down the pempan tree, the rain chestnut: time it is we should be up and make ready.
Sanggul Lalong descended from the cave covering the kendawang's lair
Tutong came from his country of encircling rocks.
And many were their numbers, numeruns as the dawn:
Their heads as a myriad of spots.
And there was a rustling of the cardamom bushes as the army rushed by and was gone.
They came to the river Tapang Betenong at the foot of the Riong Waringin.
"O many are our numbers, more than sprats and minnows,"
"More than the layers of the plantain buds."
"Try and search the companies, whetherall be come or not"
And Kumpang Pali arose and looked around,
He looked to the left, they stretched beyond the range of his sight:
He looked to the right, the sound of the rear was not to be heard.
"We are more in number then sprats and minnows,
"More numerous than the layers in the plantain bud,
"Thicker than the stringed hawkbells of iron.
"Is Sampurei here? Him I have not seen.
"If so, untimely will be our advance like the merunjan fruit of the uplands."
"Slow our march and fruitless too!
" Not so, let us onward!
"Nay if they come not, we do not proceed."

And Bungkok began to growl like a Melanau building a boat.*
And to talk like a Sebaru man upside down.

Klieng-Where are you, ye tempests? I charge you to strike the house of Tinting Lalang Kuning,
The land where Linsing Kuning spat out the refuse of pinany.
Where are you, ye contending winds? Strike the house of Tuchong Panggau Dulang.

And the wind began to blow a violent storm,
And struck the fruit trees unstintingly.
Bent were the struts of medang wood;
Sent flying were the shingles of red jurng.

The Wind-" What wind is this that will not cease?
"What rain is this that will not slacken?
"TVe are not wind without object, natural wind:
"We invite you to follow Bungkok to the war
"Against Tedai in the circle of the roomy heavens ;
"To visit Chendan at the half moon."
Chorus-"That is the thing to be bought and borrowed;
"That is the debt to be incurred."
"Cut down the mutun tree, time for us to start.
"The army is within hearing we can take a rest."

[^44]Sampurei-* "What about the army, eousin Laja? Shall we try its mettle?
Laja-Try it, cousin, that we may know whose hearts are brave and fearless.

And Sampurei donned his plumes of hair like shoots of the limiding fern,
Donned his purple coat like the black plumage of the erow,
And grasped his slantingly eut shield.
And he rose up and shouted like the roaring of the eave tiger.
"The enemy," said Bulan Menyimbang. "Who are you?"
We are not to be asked about."
"We are the army of Tedai from the cirele of the roomy heavens,"
"The army of Chendan from the rising shining moon."
And they fought with spears sounding like thumping blows of the boat-builders.
They struck with swords, as if cutting through the pandan bushes.
And Neelai was beaten by the company of Sampurei.
" Let us stop the juke, Sampurei, enough to have tested cur friends."
And they ceased the play.
And called back the great mass of the army,
Numerous as the unknown spirits.
And the army went forward.
The foremost were not within hearing of a calling voice, As the hindmost were just bending to rise and advance. The middle sounded like the pounding of the gurah fruit when seeking the tuba. $\dagger$

[^45]And they came to the slack water lake Tekalong;
Where flapping the water they bathed and dived.
A pond was passed by the army in a panic.
Lo! Sampurei became weaker than a toasted leaf ;
Slacker than the current met by the flood tide.
The sweat of his body was as the streaming of a wet day.
In the sweat of his side could be dipped an eight-length bambu water bottle;
And his body floated in his perspiration.
And Nawai Gundai wept with heary sighing of the breast, And shed tears with tender grief.
After a time, lo! Sampurei emerged, seized the betel-nut and ate it.
And he smoked holding the fumes in his mouth.
"O Sampurei cannot die." So said the army.
"Cut down the mutun and simun with leafy branches."
" Sufficiently strong are we in numbers to take counsel." Tlieng-Hear, all ye of the army;

Whoever first gets to the hill of Perugan Bulan,
He shall be the possessor of Kumang.
Daylight came and the army ran a race.
At midday Bungkok arrived first at the hill.
And lo! a spirit with long loose hair over the shoulders,
Foaming at the mouth to devour some one.
And he fought with Bungkok.
Now the spirit was worsted, now he :
But the spirit was beaten, being dashed to the left and flung to the right.
And whining, the spirit beseeched him to cease, and let him go free.
Spirit-I will give you a charm, as big as a hearth-stone to make you invulnerable.
Klieng-I refuse.
Spirit-I will give you courage and never shall you wage war without taking spoil.
Klieng-I refuse.
Spirit-I will present you with a tooth of mine which will become a ladder reaching to the flock of clouds.

I will give a tooth with which you may ascend to the house of grandmother Manang.**
Klieng-If so, I will let you go.
So Bungkok let the spirit go free.
And the main army began to arrive at the hill Perugan Bulan;
Close to the precincts of grandmother Manang.
And came to the rising shining moon.
"Rest all ye of the army ; said Sampurei ;
" May be we are vainly following the paths and tracks of wild beasts."
Klieng-We shall not return without gain and without spoil. Sampurei-How so?
Klieng-Whenever I have gone to inflict fines, never did I return empty-handed :
Every day did I bring a string of knobbed gongs.
Whenerer I have gone on the war-path, never did I return unsuccessful.
Every month did I get a seed of nibong palm $\dagger$
Here let us test the skill of the woman, the stimulant of the bones.
Whose hands are those which can work skilfully?
And Sampurei arose, and threw up a ball of dressed thread; And it became a clump of bambus.
Sapungga arose, and tossed a ball of raw thread;
And it became a plant of rotan.
And the Chief set in the ground the spirit's tooth, And he arrived at the falling, setting sun.
He planted the spirit's tooth, and it reached to the rising shining moon:
It became a ladder of ironwood, perfect with eighteen steps.
And Ngelai stood up, and tossed a ball of red dyed thread to the sloping heavens;

[^46]And it became a flower snake whose tail twirled round the Three Stars,
Whose head caught Sembai Lantang Embuyang.
And Tutong arose, and flung a ball of blue dyed thread;
And it became a cobra whose tail caught the star of midheaven,
And with staring eyes it seized the loins of Buyu Igang.
There was a single bambu on the highland of jingan wood lighted upon by flocks of white storks.
And the main army marched on, and ascended to the circle of the roomy heavens.
The vanguard came to the house of Manang Kedindang Arang of speckled skin-
Of Manang Gensarai of sweet smelling cardamom. Sampurei-Is your house free of entrance, grandmother?

She did not reply (as much as) a grain of rice
She did not answer (as much as) a bit of bran.
The Army - O why does not grandmother answer us?
Sampurei arose, and clutched a log of wood,
Threw it at her, and hit the hole of her ear.
And lo! out came bees and dragon flies,
Out rushed pythons and black cobras.
The Army-No wonder grandmuther does not hear, so many things are in her ear.

Again they inquire: Is your house free of entrance, grandmother?
I. Manang-My long house, children, is never tabooed;

My short house has no forbidding laws.
Sampurei-How can that house be large enough for us-
A house of only one door, one family,
A house of only one row of medang posts?
I. Manang-Come up, grandson, this my house is large enough for you all.

Up they went, and not before the army was all inside was the house filled.
And the army rested there.
"Let us of the army fetch wood and seek for meat:" so said they.
I. Manang-No, no, grandchildren; at all costs, I will give you a meal.
And she filled with rice a pot the size of a chestnut ;
And a pot of meat the size of a birds egg.
Said Sampurei: "I will go in, and see grandmother cooking."
Sampurei-Where is the rice which has been cooked, grandmother?
I. Manany-That is it, grandson, only that.

Sampurei-Let me swallow it all up and no man know it.
I. Manang-Not so, grandson, let each one fairly have his share : do you go and get leaves.*
Away went Sampurei and fetched some blades of lalang grass.
I. Manang - "Why bring that-for a pig's litter?
sampurei-No, friend, to eat rice with.
I. Manang-How can a man eat with lalang leaves?

Sampurei-Don't you know how much a grain of rice is?
I. Manang-Go again and fetch some plantain leares.

Sampurei-I will not weary myself to no purpose:
Were they required I know how to get ataps:
As for rice there is none to be put into the leaves.
And grandmother Manang arose, and took rice and meat;
She served it out sitting, piling it in heaps as high as herself was sitting.
She serred it out standing, piling it in heaps as high as herself was standing.

[^47]I. Manang-Sampurei, you divide the food; long have men praised your skill in dividing portions.
Sampurei-Yes, grandmother. Get ready, all ye of the army.
And he took the rice and meat, and tossed it to the left ;
He tossed it to the right and behind, and sprinkled it about:
And yet not a grain was lost.
Astonished was grandmother Manang.
I. ILanang-In truth you are clever, grandson, skilful with the tips of your fingers.
But why do not you eat, Sampurei?
Sampurei-Full is the bag made by my mother, the pouch made by my grandmother.

And the remainder of the rice left by the army was a matful;
The fragments of meat five plates full.
But it was all devoured by Lualimban :
Yet still he wanted to eat, wide open was his mouth.
They fetched ten pasus of rice, and upset them into his mouth ; yet still he wanted more.
They got a chest of paddy, and poured it into his mouth, rammed it down with a rod; but yet he was not satisficd.
And he procceded to eat the gongs big and small and the jars.
And all the goods of grandmother Manang were consumed, and the old lady wept.
Irlieng-You have also shown your power, grandmother: so have we:
But do not be rexed at heart ;
Your things shall all be restored as before.
After their jokes were ended, grandmother Manang departed.
The solitary bambu on the highland, the army marched by and was gone.
The vanguard came to the hill of "Jengku Lengan" like a liembayan fruit in red-ripe bloom,

The ridge of trickling rain like the flow of burnt resin.
It is the country of young Sabit Bekait Selong Lanchong.
His people go with the army, two of them claiming the foremost place :
Tebingkar* Langit Luar, Bujang Bintang Ensaiar,
And Kariring Tambak Aping, Bujang Bintang Betating :
These with Sampurei and Sapungga marched at the head of the army.
They came to the rock of a thousand heights, the land of the cave tiger,
The hill of Sandar Simpit, the land of Ukit Peketan Payang.
Klieng-Which is our way, cousin?
I know not: hitherto when on the war-path, I have only come as far as this.

And Bungkok went forward, and growled like a Melanau building a boat,
Nuttered like a Sebaru men upside down.
And lo! the way at once was clear and straight,
A highway like the breast of the land turtle.
Then began a rustling of the cardamom bushes, as the army marched by and was gone.
They came to the highland of kelampai copse ;
Where Tedai hung out to dry the tufted war-plumes ;
To the level lowland where Chendan shaped the tenyalang† posts.
And the army stopped there and rested.
Cut down the libas tree in the jungle: who of us will form a company to spy out the land?
"I for one," said Sampurei Manok Tawei of the manany hawkbells.

[^48]"I for another," said Sapungga Bujang Medang.
Kariring was another, Young Aping, the star-cluster youth.
These three went forward walking in single file;
And arrived at the house of Pintik Sabang, watcher of the spirits which cannot see.
"O that is Sampurei." Up they started and flung spears, missing on either side.
They fought with swords reaching far over the shoulder.
"This is the enemy," shouted Sampurei.
And they fought with spears like the thumping of the boat-builders.
They struck with swords as if cutting through the pandan bushes.
All day they strove; at night they returned.
The Army-Well what news bring ye, ye who spy out the land ?
"We could not find the way;" they reply.
Army-In vain we trust to you:
Talk no more of the clever-speaking maidens.
Cease to think of the pretty girls, as they totter going over the tree-stems.
Klieng-Since it is thus, let me be the spy.
You go with me, Laja, brother of the virgin Lantan Sakumbang.
You also, Ngelai, Bujang Pedar Umbang.
Let us three go alone.
"I go with you," said Sampurei, the youth who never flags.
And Bungkok rose up, and donned his coat of black hair all glistening,
Orer it a cotton padded coat, woren by Bunsu Rembia who rides the flood-tide wave.
Slowly be walked holding to the wings of the swallow.*
Swiftly he ran, quicker than the speed of the gazelle.*

[^49]And arrived at the house of Pintik.
Pintik-O that is Sampurei.
Klieng-Will you fight with me?
Pintil-Nay, I simply chose to have a bit of play with Sampurei.

And they came to the place where people bathe like tumbling prawns.
And as the day was now dim, they rested.
Lo ! there was heard a rattling gigoling talk of argus pheasants with shamls red as fire which burns the dry jungle.*
They came to bathe splashing the water about like showers of falling rain.
"I smell an odour of Sampurei ;" so said Bunsu Tedai.
Klienc-How can they recognise us?
Tedai-If Sampurei be really here, his head shall be cut off on this tree-trunk.
[And Sampurei rise up, and thrust at him a spear.]
Tedai-There are gadflies about, the day is closing in.
Sampurei-0 my mother! the blow of my spear he thought but the sting of a fly!

And they came forth and ascended the house when the feasting was at its height.
" Welcome, cousins ; come and sit down."
And they were given to eat, and were afterwards asked to sing the Pandoner song. $\dagger$
They were willing ; so ran the word.
Klieng-How goes the song ? [Whatever your skill "snggests;" said they. $\mid$
If so, here it is.
"Fell the nibong palm to be suspended (in other trees);

[^50]"Let it fall to the earth in the middle of the road.
"Tear and squeeze the heart of Tedai.
"Fell the nibong palm to be suspended;
" Let it fall to the ground at the end of the bridge.
"Tear and squeeze the heart of Chendan."
Tedai-Why sing you so, cursing our herts?
Klieng-We are confused, cousin; our heads are giddy; we will stop.

And getting up they climbed to the upper room when they heard weeping and wailing.*
" $O$ the sorrow of my conception of Indai Mendong, half " of the full moon.
"I thought she would have won a husband.
"Who would shout like a pasun† in the attacking " army.
"All unripe her father and I shall be used by Tedai (as " a sacrifice) to raise the Pandony of the rhinoceros " hornbill.
" O the vanity of giving birth to Kuning Jawa:
"I thought she would have married a man,
"Even a dragon-fly, accustomed to rush and strike and sting the ribs (of the enemy).
"They cannot rescue her father and me who are to be " killed by Tedai to make the war plums."
And liungkok seized the iron cage.
They cried out, thinking death was near.
" It is I;" said Klieng Bujang Ranggong Tunggang.
"It is I ;" said Laja, brother of the virgin Lantan Sakumbang.
And they rejoiced in spirit.
Klieng pressed them into a lump the size of a squirrel:
Held in his hand they became as small as a pinang.
He stowed them in his quiver, and only when arrived at home did he take them out.

[^51]They descended below.
The army had come up, and Chendan knew.
"This is the enemy," said Tedai ; and fled carrying off his wife and children.
Then they fought with swords and spears, and the fullowers of Tedai were beaten.
And all who lived there were kilied.
It was midday, and the army rested.
Sampurei looked round, and lo! half heaven was darkened.
Army-O what is this?
Klieng-That is Tedai's army : now shall we have an enemy to fight with.

Of the followers of Tedai were fifty who could fly.
And they fought hand to hand with Sampurei, as if chopping mango fruit.
They hurled their spears, as if pounding on the loudsounding mortars.
And their strength was all spent.
In their mouth was the sensation of the poisonous tubu. Sampurei-More deadly are these enemies, friend, than freshlydug tuba.
More fatal than the parasite-covered upas.
Never did I fight with foes like these.
For'ward came one of Tedai's men, Bigul by name:
Big was the end of his nose ; a chempak fruit grew upon it.
By breathing against any one, he blew him to the distance of a hill ;
At each inhalation a man was drawn under his chin.
But there was one of the followers of Klieng who could kill him,
Pantak Seragatak his name, who by burrowing could walk underground:
Out he came and smote Bigul, who died by his hand.
Then Sampurei came face to face with Tedai.
And was struck by Tedai from the shoulder even to the loins.

Forward rushed Laja, and met the like fate. And many were slain by Tedai.
Then for the first time Tedai met Bungkok face to face. Iflieng-What is your title, cousin, when you strike the snake?

What is your title, cousin, when you smite the boa?
Tedai-My title, cousin, is the Big Bambu, overshadowing the houses:
Melanjan, cousin, is another with a branch of red-ripe fruit.
Klieng-If you are Big Bambu, cousin, overshadowing the houses, I am Short Sword to cut the Bambu.
If you are Melanjan, cousin, I am Growling Bear, making my nest on the Melanjan tree, making it cease to bear red-ripe fruit.

And Tedai rushed forward and threw at him a spear, the beak of the white kingfisher ;
And hurled at him a lance with double-barbed head.
And pierced was Bungkok in the apron of his waist cloth, Grazed were the ribs of his side :
When off dropped the disguise covering his body ;
Away fell the sweat-preventing coat.
Then it was they recognised him to be Klieng, secing he was handsomer than before.
And Klieng paid back: he aimed at him a spear newly hilted with horn.
And Tedai was struck and fell ; and was seized by Tatau Ading.
He fell leaning against the palm tree of Bungai Nuying.

Klieng-Tedai's head do not strike off, Sampurei, lest we have no more enemies to fight with.

And the great army drew back to return.
Rushing and rustling they marched along the highway.
They filed through the gloomy jungles, sounding like an army of woodmen :
Through solitudes uninbabited, full of weird sounds.

Those in front arrived at the house of Manang Kedindang Arang.
There they stopped a night to inquire the way of grandmother Manang.
I. JKanang-The road, grandsons, lies straight ahead from my house.
Sampurei-You are only teasing us, grandmother; we shall kill you.
I. Manang-Hold, grandsons; I am simply joking and laughing, talking fun with you.
Then the Manang brought a tub three fathoms long.
Army-What is that for, grandmother?
I. Manang-This, my sons, is to lower you down to the earth.

Sampurei-How can that be large enough ?
I. Janany-Large enough, my sons; settle into it all of you.

And the army rose up, and arranged themselves into it.
And the tub was not full till the army had all got in.
And they were lowered by grandmother Manang to the earth.
It was the country of Ngelai where the army found footing.
Klieng and his company returned to Tinting Panggan Dulang.

This is somewhat curtailed in length; but to give it in extenso would weary the reader. Dyaks have a strong tendency to prolixity and circumlocutions, both in their ordinary conrersation and in their folk-lore ; and delight to use a dozen similes where one would do; and to repeat over and over again the same thing in different words, apparently with the double object of showing the extent of their learning, and to fill up time. This song of Klieng's exploit, if given in full, would take nearly a whole night to sing, especially by a good Dyak rhymist who would amplify it with extemporal additions of his own as he proceeded. Sufficient is here re-produced to show the main points of the stury; and to unveil the region of ideas with which Dyaks will amuse themselves in the vacant hours of the night. The singer lies on a mat in the very dim
light of the verandah of the house and rehearses the myth in a slow monotonous chant; whilst his audience are sitting or lying around, listening to his periods, and commenting or laughing as the mood suits them.

These songs of native lore would be more interesting if they contained references throwing light on the former history and condition of the Dyaks; but I have found little of this kind to reward a search through many pages of verbiage, This legend of Klieng's, putting aside the prodigies of it. describes the life and habits of the Dyaks as we now see them : and the only gleam into a different past which it gives is the reference to the sacrifice of human victims, which probably formed a not uncommon element of their religious rites in remoter ages.

I must add that the translation is as literal as I can make it ; but I am conscious of how much the peculiar characteristics of the original have been lost in the process. A perpetual play of alliteration and rhyme, and an easy rythmical flow of the lines are of the essence of all Dyak folk-lore: but I have not been able to re-produce these in the English.

## J. PERHAM.

[^52]The tempest striking the fruit trees and houses is thus put:-
Ribut muput angin kenchang,
Buah mangka uda betagang.
Nyau chundong di sukong lamba medang,
Nyau ngensiat di atap jaung jerenang.
Ribuh apa tu bangat nda badu,
Ujan apa tu lalu uda leju?
Klieng curses his enemies in a fell werds half metaphorical half literal:-
Tebang uibong begantong surong,
Rebah ka tonah arong jalai;
Kebok kerok enggo atau Tedai.
Tebang nibong begantong surong,
Rebah ka tanah puting jamban;
Kebok kerok enggo atau Chendan.

## VALENTYN'S ACCOUNT OF MALACCA.

(Resumed from p. I38 of Fournal No. 15 of Fune, 1885.)

Upon hearing this, Mr. Matelief, growled not a little at the Bandahara, and threatene to mention it to the King, who, he was sure, would order more troops at once. The King having promised him some 1,200 men, Matelief once more landed with 300 men of his awn troops and 800 Malays, fortified a brick house, built a bridge over the river, and took the convent; but a short time afterwards requiring some more Malay troops. and the King having sent him only 200 men, he could not do anything else but try and starve out the town ; he landed some more guns to enable his troops, covered by some rough wooden intrenchments, to approach the town gradnally, though they were still very much exposed to the fire of the Portuguese Forts St. Domingo, Madre de Dens, St. Jago, and to that of the convent of St. Paclo. In the meantime, the Governor, Andrea Furtado, had been fortunate enough to introduce secretly into the place some people from the neighbourhood, whilst, a short time before our troops had landed, two galleys coming from Pahang, had smuggled into the place a small detachment of 60 European soldiers. Un the other hand, many of our troops got sick, partly from overwork and partly from excess in drinking arrack and eating fruit ; finally two vessels called the United Countries and the Erasmus coming from the Masas and arriving off Malacea on the 14th July, brought relief to our troops. He now had eleven vessels with him, viz., the Orange, the Middelburg, the Mauritius, the Black Lion, the White Lion, the Great Sun, the Nassuu, the Amsterdam, the Small Sun, and the two vesst ls mentioned as coming from the Maas, and besides these he had seren small vessels. Now and then were sorties made, some from the town, but without any result, neither did our troops make much progress, and there were daily many sick people among them. This lasted till the month of August,
when Mr. Matelief got the news that a strong Portuguese fleet was approaching.

No sooner had Matelief received that intelligence than he gave orders to move the artillery back again from Campo Klin and to re-embark all the baggage. Five or six days before, having made a general inspection of his troops, he found they still numbered 1,200 men, among whom were some 32 wounded and 162 sick. Yet, he sailed with these troops on the 17 th August, and about noon fell in with the Portuguese fleet, which he fired upon until nightfall. He found that the fleet consisted of 16 heary galleons, 4 galleys, 1 caravel, and 14 other craft, manned by 3,754 Europeans and about twice as many natives, with which it was intended to conquer Atjeh, Malakka, Djohor, Pahang, Patani, Bantam and Amboina.

On the 18th the Nassau, before she could weigh anchor, was boarded by one of the enemy's vessels, whereupon the ships Orange and Middelburg hastened to relieve her ; but in their hurry these two very awkwardly contrived to get entangled with each other. Alvaro Carvalho, the Portuguese ViceAdmiral, perceiving this, at once boarded the Middelburg, at the same time Don Enrique de Norinha's galleon boarded the Orange on one side whilst Don Duarte de Guerra's galleon attacked it right forward on the bows.

The Mauritius, seeing this, went immediately for Don Duarte, whereupon a fierce battle ensued, in which the Portuguese, as well as our men, fought valiantly.

At last the Mauritius, set fire to Don Duarte's galleon and thus freed itself, but the Middelburg remaining entangled with Alvaro Carvalho's and Don Duarte's galleons, all these three vessels were destroyed by fire, though most of the crew of the Middelburg were rescued. Alvaro Carvalio and 40 or 50 of his crew, who tried to save themselves in one of the boats of the Middelburg, were all killed by the crew of the Orange ; even Carvalho was not spared, though Matelief did his utmost to rescue him. Matelief, who with his vessel the Orange had boarded Don Enrique de Norinha's galleon and had possessed himself of her two flags, summoned him to haul down and to surrender. Norinha, lowering his last flag, conveyed the impression that he was about to surrender, and
by dint of this stratagem, escaped out of the hands of his enemies. Howerer, his galleon had been riddled by cannon-balls and he had lost the greater part of his crew.

The Nassau was set on fire by her two Portuguese assailants, but her whole crew were rescued, save sis men who had been killed in the action. We lost in this engagement off Cabo Rachado, 2 ressels, 24 men killed, and a great many wounded.

The Portuguese too lost 2 ressels, but they had about fire or six hundred men killed, amongst whom were the following nobles, heads and captains of the nary, viz. :-Vice-Admiral Alvaro Carvalho and Fervando da Silfa, his relation; Duarte de Guerra, captain of a galleon; Diego Ortez da Fatorra, Don Manuel Mascarenias, Manuet D’Albukerke, Sebastian di Mirandi, Antonio di Silteira, Don Enrique de Castro, Mavtel de Mello and also two Spanish Dons on board of the Viceroy's ressel. But for the rowing galleys, their loss would have been heavier still, for, assisted by those ressels, they were able to more about eren in a dead calm. Matelief resolved on the 19th to attack the fleet again; weighed anchor on the 20th and got engaged on the 22nd with almost all his ressels, riz., the Orange, Mauritius, Witte Leeuw ( White Lion), Zwarte Leeuw (Black Lion ), Erasmus and the Groote Son (Great Sun).

But as the enemy continually retreated, our ressels were unable to do them much damage.

During the night of the 24th the Portuguese fleet changing its tactics, made for ours very suddenly. This produced a panic amongst our people at first, the more so as it was night more or less and thus our ressels got rery much separated from each other. Soon after, howerer, they joined company again, and all running before the wind, the enemy had to give up the pursuit, and returned to Malacca. With regard to the Portuguese commanders and captains of the nary and the size of their vessels, I have found a record of the following, viz. :-

Don Pauto de Portugal's ship of 1000 tons. [ral's vessel.)
Don Martin d'Alphonso $\quad$ " $1100 \quad$ (The Tice-Admi-
Don Pedro Marenam

| Sebastiaan Soairez | $"$ | 700 | ,$"$ |
| :--- | :--- | :--- | :--- |
| Don Francisco de Norinha | $"$ | 700 | $"$ |
| Don Franciscode Notomajor ", | 700 | $"$ |  |
| Antonio de Souza Fulcon | $"$ | 500 | , |

Besides 3 galleys and 12 barges.
The names and tonnage of those of our vessels which were still left are the following, viz. :-


With these vessels, Mr. Matelife sailed to Djohor on the 24th of August, and the next day he lost sight of the Portuguese fleet, whieh returned to Malacca. On the 13th of September, he entered the river of Djohor where the King came to meet him and welcomed him.

Mr. Matedief sailed on the 18th ditto to Batu Sawar to settle several urgent matters, among which the chief was to hurry on the King to fortify his town (whieh could easily be done, if the Malays would but work) ; scondly to supply his fleet with provisions; in the third place to bind the King to send some prahus to Atsjien and Malakka, to inquire whether Duteh ressels had arrived there, and finally to try whether gunpowder could be got somewhere. But the Malays wanted us to fortify their town, and gunpowder (even of the worst quality) was not to be had for love or money. So Mr. Matelief discovered, that it was simply a waste of time to have any more dealings with this King and the Malays.

Batu Sawar is a town situated or or miles up the river of Djohor, which is at that place very beautiful, broad and deep. and has therefore a supply of fresh water. The greater
part of the country is low, and the houses are built on piles along the river. There are two fortresses-one called Butu Sıra; one Kota di Sabrang.

Batu Samar is about 1,30 ) paces in circumferense, almost square, and is fortified with palissades 40 feet higi, standing cluse together ; it is further providel with some inferior outworks. It is built on level ground, close to the rirer, a quarter of an hour's walk from the nearest hills, and the river could easily be conducted to the place. Insile, it is thickly inhabited and filled with attap houses; but those of the King and some of the courtiers are built of wood. Kota Sabrang is about four or fire hundred paces in circum. ference and also is almost square. There are about three or four thousand men able to bear arms within Batu Sawar and Kota Sabrang, thoush most of the people lire outside the fortress. The whole of the land belongs to the King but that does not matter muoh, for if people apply for it, ther can get as much as they like; it looks rery fertile and abounding in trees. Admiral Matelief gave the King several plans and good suggestions for the fortification of the place, but the Malays were too indolent to work. Hence, perceiring that it was beyond his means to conquer Malacca just then, and that thereby the first clause of the recently concluded treaty became roid, Matelief begged the King to grant the Dutch a place for their residence. The King gave him permission to choose any place in the country that he liked, provided, howerer, that he should be bound to fulfil the other articles of the treatr.

The King on the other haud solicited of Matelief a piece oz land in Malacca when it should have been taken, which was granted to him on proper terms. This however looked rery much like selling the skin of the bear, before it had been caught. The prince furthermore asked for the loan of some hundreds of rix dollars, nay eren one thousand, which sum he would repay in such goods as we might wish, promising at the same time that be would not ask for any more moner, until the first loar Was repaid. Secondly he demanded that the Ministers of the States should assist him against all his enemies, either on the offensive or the defensive, anc. finally that, on his recuest,
they should assist him also with ships, troops, guns, etc., and that Matelief should remain there with his fleet until the arrival from Holland of the other vessels. Mr. Matelief replied to the King that a thousand rix dollars did not matter much to the Dutch, and that, as he (Mr. Matelief) did not care to have that amount mentioned in a treaty which he had to conclude for the Winisters of the States he would give it to him from his own private funds provided that the prince would allow him and his countrymen to trade in the country. So the prince withdrew this first clause. As for the second clause, Matelief said that, the Ministers of the States nct being in the habit of declaring war unrighteously, they could only promise to defend him against his enemies, but, as for acting on the offensive, they would never join him against any other power than the Portuguesc. And with regard to the third clause, he said that our vessels, etc., should always be at his service. The King then pointed out to our people a piece of land 30 fathoms square. Mr. Matelief was very much astonished at this, and told him, that though it would do for the present, we should by and by require a much larger place for our trade in his country.

When the King requested him to remain there until the arrival of other vessels, Matelief convinced him that it was not in his power, as two vessels had to go to Holland in December, but that he would certainly remain there till December, so as to protect him as long as possible.

Thereupon this second and subsequent treaty was signed in Batu Sawar on the 23rd of September. It seems that about this time Don Andrea Furtado de Mendoza was succeeded as Governor of Malakka by one Don Antonio de Menesez, a son of Don Duarte de Menesez, late Viceroy of India, but he did not feel inclined to accept the Governorship unless the Viceroy first made peace with the king of Djohor.

Our Admiral having received the news that several storeships, sailing under convoy of some Portuguese men-of-war, were on their way to Malakka, left Djohor on 17th October with the intention of attacking this convoy.

Arriving near Malakka he counted 7 vessels, viz., the Vice-
roy's vessel, called La Conception, the best armed of all the vessels and commanded by Captain Don Manuel de Mascarenhas; the galleon St. Nicolas, with 19 brass and 5 iron guns, under the command of Don Fervando di Mascarenhas, who had his brother Don Pedro with him ; the St. Simoan, Captain Andree Pesoa; the Todos os Santos, Captain Don Francisco de Norinha; the Santa Cruz, under the command of Vice-Admiral Sebastian Soarez; then another one, the largest of all the vessels, with Don Paulo de Portugal as Captain and one more, much smaller, the St. Antonio, Captain Antonio de Souza Falcaon.

By order of our Admiral, the vessels Orange, Groote Son and Vereenigde Landen were to attack jointly one of the Portuguese vessels; whilst our other vessels had to prevent the enemy from coming near. They thereupon resolved to attack in the night of the 21st the Portuguese Vice-Admiral's vessel, but a calm compelled them to postpone it till the next day.

On the morning of the $2 \cdot 2$ nd he attacked the enemy in the roads, and captured the $S t$. Nicolas, which could not be prevented by the Viceroy; but by the carelessness of our people this ship got free again, though Mr. Matelief had already given orders to set fire to her.

In the meantime, the Groote Son, Swarte Leew and Mauritius had boarded the St. Simoan and after having captured her they burnt her with her whole crew. The Erasmus attacked the Santa Cruz, but was at first beaten back; the Mauritius then coming to her assistance, they jointly captured the said vessel, a fine galleon of 11 brass and 4 iron guns.

Among the many Portuguese nobles who fell in this battle, were Don Fernando de Mascarenhas, Captain of the St. Nicolas, and his brother Don Pedro; Don Francisco de Norinha, Captain of the Todos os Santos; Bartholome de Fonseca, Jorge Galvan and Don Pedro de Mascarenhas son of Don Geronimo de Mascarenhas. Altogether they lost 521 Europeans, and on the 23rd our people captured another galleon, the St. Simoan, in which they seized 14 brass and 2 iron guns, $3,000 \mathrm{lbs}$ of gunpowder, and a great quantity of wine and provisions.

We took in this battle 4 galleons, almost without a loss worth mentioning ; the only deplorable casualty that happened being, that 75 men of our people (among whom were Klaas Janssoon Melinap, skipper of the Witte Leenw, the supercargo Jaques de Colenatr, and the subfactor Hans van Hagen) who went on board the Santa ('ruz with the intention of plundering, were blown up in her and perished miserably.

Three more ships of the enemy which ran aground were destroyed by fire.

The whole fleet of this Viceroy Don Martin Alfonso de Castro (youngest son of Don Antonio de Cascais) which had arrived unly the year before, consisted of 18 galleons, 4 galleys, 1 caravel and 23 barges, manned by 3,i00 Europeans, of whom $2.95 \pm$ were soldiers and 730 sailors, besides the black crews who numbered many more; and it was with this fleet and these troops that he intended to conquer the whole of Southern India and to punish all the refractory princes and States.

The following are the names and particulars of the ressels of the said fleet :-

1st-The Nossa Senhora de Conception of 1,000 tons, Captain Manuel de Mascarenhas, with 24 guns and 180 European soldiers, besides a number of European and black sailors. On the 29th of October this galleon was destroyed by fire off Malakka, either by Matelief or by the Viceroy himself for fear that we should do it.
2nd-The Sun Salrador of 900 tons, Captain Alvaro de (iarvalho, with 18 guns and 180 European soldiers, besides the European and black sailors. Mr. Mateliff burnt this galleon on the 18th of August off Cabo Rachado.
3rd-The san Nicolas of 800 tons, Captain Don Fernando de Mascarenias, with 19 brass and 3 iron guns and 180 suldiers; Mr. Matelibf defeated this galleon off Malakka on 22nd October, iu which engagement all
the crew excepting 8 men were killed. The Viceroy himself ordered her to be destroyed by fire on 29 th October.
4th-The galleon of Don Enrique de Norinha, of 900 tons, 14 brass guns and 160 soldiers, captured by Matelief off Cabo Rachado on the 18th of August.
5th-The Santa Cruz of 600 tons, Captain Sebastian Soarez, with 10 brass guns and 80 European soldiers, it was plundered and burnt by Matelief off Malakka on 22nd October.
6th-The San Simnan of 900 tons, Captain Don Francisco de Sotomajor, with 16 brass and 2 iron guns and 160 European soldiers. This was taken, plundered and destroyed by fire off Malakka on 23rd of October.
7th-The Todos os Santos of 800 tons, Captain Don Francisco de Norinha with 130 soldiers, this vessel was sunk with her whole crew.
8th-I Ion Duarte de Guerra's galleon, of 1,000 tons, with 15 brass guns and 108 European soldiers, destroyed by fire off Cabo Rachado on the 16th of August.
9 th-The Nossa Nenhora de Soccoro of 800 tons, Captain Gutierre de Monroy, with 15 brass guns and 140 European soldiers.
10 th-The Don Antonio of 240 tons, Captain Antonio de Souza Falcaon, with 10 brass guns and 47 European soldiers ; she caught fire off Malakka on 29th October.

11th-TThe Nossa Senhora das Mercês of 800 tons, Captain Don Alvaro de Menesez, with 14 guns and 120 European soldiers.

12th-The galleon of Jacomo de Marais Sarmento of 800 tons, 14 brass guns and 80 European soldiers.
13 th-Jan Pinto de Morais' galleon of 800 tons, with 15 brass pieces and 140 European soldiers.
14th-Jeronimo Botelho's galleon of 300 tons, with 12 brass guns and 100 European soldiers.

15th-Manuel Baretto's galleon of 300 tons, with 12 brass guns and 100 European soldiers.
16th-The San Martinho of 800 tons, Captain Don Luis Lobo, with 22 brass guns and 150 European Soldiers. This was lost off Manaar in Ceylon.
17th-Captain Don Paulo de Purtugal's galleon, of 1,200 tons with 1,200 guns. This had no soldiers but many merchants and passengers bound for China. The Viceroy destroyed this vessel off Malakka on 29th October.
18th-The galleon of Captain Don Antonio de Menesez (now Governor of Malakka). This ressel too had no soldiers but many merchants and passengers also bound for China but was lost off Cape Comorin.

One of the four great royal galleys was very badly damaged off Cabo Rachado; 854 European soldiers, besides a great number of sailors and rowers were on board of the said four galleys and twenty-three barges.

In short nine out of these eighteen galleons were lost, a very heavy loss indeed for the Portuguese, who had had the presumption to think of subduing the whole of India, with that fleet, whereas this siege of Malakka by Matelief cost them about 6,000 men.

Matelief sent word to the Viceroy offering to set at liberty all Portuguese prisoners in exchange for all Dutch prisoners.

He merely requested a ransom for the Portuguese of noble extraction, to which the Viceroy made objections; upon which Mr. Matelief sent him word, that, if the Hollanders (numbering but four or five) were not set at liberty that very night, he, would early next morning, issue an order to throw overboard about two hundred Portuguese prisoners, adding at the same time, that probably Don Andrea Furtado had given him (the Viceroy) such unreasonable advice, so as to make him despised by the whole world.

It was decided by our people that a ransom of 6,000 ducats should be paid for the following prisoners, viz. :-Andrea Pes-
soa and Sebastiaan Soarez (both captains of galleons), then two cousins of coarez, then Joan Bravo who commanded the galleon of Don Antonio de Mevesez, the Governor of Malakka, then one Don Pernando del Mercado, a merchant and finally a priest.

Admiral Matelief was not pleased with this decision, for he did not like to introduce the practice of ransoming men into India, but it was carried by a majority of votes, under pretext, that this ranson, when distributed among the sailors, would make them in the future more willing to fight.

When up to the 23th of October not one Hollander had yet come back, Matalief convoked an extraordinary meeting of the Council to reconsider the question of throwing the Portuguese overboard; but whilst they were still deliberating, two prahus approached our vessels containing three Dutchmen, who declared that there were really no more Hollanders here in Malakka, but that there were still four or five more in the fleet off the Nicobar islands. Whereupun the Portuguese were liberated and landed on the lst of November. One Don Rodrigo D'A costa having agreed to take a letter to the Viceroy of India in which he was requested to set at liberty and to send to Djohor all the Hollanders who were still prisoners in India, our Admiral gave him a passport for a whole year.

About this time (the 12 th November) Mr. Matelief ordered the ship Kleine Son to take back the ambassador whom the Prince of Keidah had sent to him to invoke his assistance against the Portuguese, whilst he (the Prince) should attack them by land. Though Matelief knew that this same Prince had welcomed the Portuguese when they passed his country and that he only came because he (Matelief) had beaten the Portuguese, still he promised him his assistance.

He first despatched thither the Amsterdam with the supercargo Jasper Jansoon, arriving himself on the 19 th before Keidah. The King having warned him on the 24 th that there were two buats in the river filled with Portuguese and black soldiers, Matelief despatched thither one galley and one barge under the orders of Pieter van der Dussen who soon returned with only five Portuguese, who had left Malacca thirteen days
before and had been chased by Malay pirates.
Matelief finding that this little King was deadly afraid of the Portuguese and that his help would not be of any value, left the place again on the 27 th . Super-cargo Cornelis Francx, who was factor at Djohor in 1607, behaved so ill in September of that year, that Fiscaal Apins was at a loss what to do. When Matelief, on his arrival off the river of Pahang on 11th November, 1607, heard from the King that both the Viceroy of India and the Governor of Malakka had died, he decided not to stop long and sailed from there on 16 th.

Fiscaal Martines Apins left Djohor that year and informed Matedief that if no vessels came for the relief of Djohor, the King would certainly make peace with the Portuguese.

In December, he had also heard at Bantam that the Portuguese had destroyed Djohor by fire and that Rajah Sabrang, who lived at Lingga, was strengthening himself at that place. Abraham van den Broek was super-cargo of our Company at Djohor in December, 1608 ; a month previously our people had captured, off Malakka, a Portuguese carrack. When in January, 1609, Admiral Pieter Willemssoon Verhoeven was at Djohor, he thought proper to give Van den Broek the command of the vessel De Roode Leeur and to put in his place super-cargo Jacques Obelaar, together with the secunde or sub-factor Abraham Willemssoon de Ryk, the connoisseur in diamonds Hector Roos, with three assistants and some other people; at the same time he ordered the Roode Leeuи and the yacht Griffioen to anchor at the mouth of the river until the lst of July, in order to protect the King against the Portuguese. Such was the course of things here in the reign of king Alawaddin IIJ, who died in 1610.

He was succeeded in the same year by Sulthan Abdullah Sjah, who was the 17 th Malay king, the 5th of Djohor, and the 11th Mohamedan king. This king reigned eleven years over this people, from 1610 to 1621 , and but very few events of imtporance happened during his Government.

In 1616 he was reputed for being attached to us more than any other Indian Prince, for which reason he and his country had to suffer very much from our mutual enemy.

He was succeeded in 1621 by Sulthan Mahmood Sjah, the

18th Malay king, 6th of Johor and 12th Mohamedan king. He reigned but three years, and was then succeeded in 1624 by Sulthan Abduljalil Sjaf II, who sent the princes Rajah Indra Lellah and Magat Manchur as ambassadors to Holland.

He was the 19 th Malay king, the 7 th of Djohor and the 13 th Mohamedan king, and reigned 47 years, viz., from 1624 to 1671.

It appears that during his reign the Empire of. Maningcabo was subject to his authority. Our Company tried over and over again to build a fortress there (Admiral Terhoeren being the first one who did so), but they never would allow it.

Though our first attempt to conquer Malakka (made under Admiral Matelief in 1606) had proved unsuccesful, our Company, still hoping to be some day the rulers at that place, constantly gave their thoughts to it. The seventeen Directors* had previously given orders in 1623, to besiege Malakka again, but nothing could then be done.

[^53]
## ON MINES AND MINERS IN KINTA, PERAK.



HE valley of the Kinta is, and has been for a very long time essentially a mining country. There are in the district nearly five hundred registered mines, of which three are workel by European Companies, the rest being either private mines, i.e., mines, claimed by Malays, which have been worked by them and their ancestors for an indefinite period, or new mines, in other words new concessions given indifferently on application to Malays and Chinese. There are about three hundred and fifty private Malay mines, and it is with these principally that the following paper will deal.

So far, no lodes have been discovered in Kinta; it is, however, probable that, as the country is opened up and prospectors get up amongst the spurs of the main range, the sources of the stream tin will come to light.

Mining in Kinta, like mining in Lârut, is for stream tin, and this is found literally everywhere in Kinta ; it is washed out of the sand in the river beds-a very farourite employment with Mandheling women; Kinta natives do not affect it much, although there is more than one stream where a good worker can earn a dollar per day; it is mined for in the valley, and sluiced for on the sides of hills; and lastly, a very suggestive fact to a geologist, it has been found on the tops of isolated limestone bluffs and in the caves * which some of them contain.

This stream tin has probably been worked for several centuries in Kinta; local tradition says that a very long time ago Siamese were the principal miners and there is evidence that

[^54]very extensive work has been done here by somebody at a time when the method was different from that which is commonly adopted by Kinta Malays at the present day. There are at least fifty deep well-like pits on the Lahat hill, averaging about eight feet in diameter and perhaps twenty feet deep.

Further up country, I have seen a large pit which the natives called a Siamese mine ; this is about fifty feet in diameter and over twenty feet deep and its age may be conjectured from the virgin forest in which it is situated. Besides these, at many places extensive workings are continually brought to light as the country is opened up, and these appear to have been left undisturbed for at least a hundred years. Further evidence of old work is furnished by slabs of tin of a shape, unlike that which has been used in Pêrak in the memory of living persons; and only a few weeks ago two very perfect "curry stones" of an unusual shape and particularly sharp grit, were found at a depth of eight feet in natural drift. These may, perhaps, have been used to grind grain.

So peculiarly is Kinta a mining district, that even the Sakais of the hills do a little mining to get some tin sand wherewith to buy the choppers and sarongs which the Malays sell to them at an exorbitant price.

The Malay puwang or medicine-man is probably the inheritor of various remnants and traditions of the religion which preceded Muhammadanism, and in the olden time this class of persons derived a very fair revenue from the exercise of their profession, in propitiating and scaring those spirits who have to do with mines and miners ; even now, although the Malay pawang may squeeze a hundred or perhaps two hundred dollars out of the Chinese towkay who comes to mine for tin in Malaya, the money is not perhaps badly invested, for the Chinaman is no prospector, whereas a good Malay pawang has a wonderful 'nose' for tin, and it may be assumed that the Chinese towkay and, before his time, the Malay miner, would not pay a tax to the pawang, unless they had some ground for believing that, by employing him and working under his advice, there would be more chance of success than if they worked only on their own responsibility.

The pawang being a person who claims to have powers of divination and other imperfectly understond attributes, endeavours to shroud his whole profession in more or less of mystery. In his vocabulary, as in that of the gutta-hunters, special terms are used to signify particular objects, the use of the ordinary words being dropped; this is called "bahâsa pantang."

The following are some of the special terms alluded to:-
Ber-olak tinggi, instead of gajah-elephant. The elephant is not allowed on the mine, or must not be brought on to the actual works, for fear of damage to the numerous races and dams ; to name him, therefore, would displease the spirits (hantu).

Ber-olak dappor, instead of kuching-cat. Cats are not allowed on mines, nor may the name be mentioned.

A tiger of enormous size called Ber-olak is said to haunt Kinta. The legend about him is as follows :-A long time ago, in the pre-Muhammadan days, a man caught a tiger kitten and took it home; it grew up quite tame and lived with the man until he died, when it returned to the jungle and grew to an enormous size, nine cubits (hasta) long, it is still there, though nobody ever sees it, it does no harm, but sometimes very large tracks are seen and men hear its roar, which is so loud that it can be heard from Chĕmor to Bâtu Gajah ; when heard in the dry season, it is a sure prognostication of rain in fifteen days' time.

Sial, instead of kerbau-water-buffalo. The buffalo is not allowed on the mine for the same reason as the elephant.

Salah nama, instead of limau nipis-lime (fruit). If limes are brought on to a mine, the hantu (spirits) are said to be offended, the particular feature of the fruit which is distasteful appears to be its acidity. It is peculiar that Chinese have this superstition concerning limes as well as Malays; not very long ago a Chinese towkay of a mine complained that the men of a rival kongsi had brought limes and squeezed the juice into his head race, and furthermore had rubbed their bodies with the juice mixed with water out of his head race, and he said they had committed a very grave offence, and asked that they might be punished for it.

With Malays this appears to be one of the most important "pantany" rules, and to such a length is it carried that "bĕlachan" (shrimp-paste) is not allowed to be brought on to a mine for fear it should induce people to bring limes as well, lime juice being a necessary adjunct to bĕlachan when prepared for eating.

Euah rumput or lunga rumput, instead of biji-tin sand.
Akar or Akar hidop, instead of ular-snake.
Kunyit instead of lipan-centipede.
Batu puteh instead of timah.-metallic tin.
It is important that the 'Pawany' should be a marked man as to personal appearance; for this reason there are certain positions of the body which may be assumed by him only when on the mine ; these attitudes are,-first, standing with the hands clasped behind the back, and secondly with the hands resting on the hips ; this second position is assumed when he is engaged in invocating the "spirits" of a mine; the pawang takes his station in front of the genggulang, having a long piece of white cloth in his right hand, which he waves backwards and forwards over his shoulder three times, each time calling the special hantu whom he wishes to propitiate, by name; whilst engaged in this invocation his left hand rests on his hip. During the performance of any professional duty he is also invariably dressed in a black coat, this nobody but the pawang is allowed to wear on a mine. These attitudes and the black coat comprise what is technically termed the pakei pawang.

The professional duty of the pawang of a mine consists in carrying out certain ceremonies, for which he is entitled to collect the customary fees, and in enforcing certain rules for the breach of which he levies the customary fines. *

* About 1878 , the principal pawang of the Lârut district, one Pa'Itam Dam, applied to me as Assistant-Resident to reinstate him in the duties and privileges which he had enjoyed under the Orang Kaya Mantri and, before him, under Che Long J'affar. He described the customary ceremonies and dues to be as fol-

At the time of the opening of a mine he has to erect a geng-yulang and to call upon the tutelary hantu of the locality to assist in the enterprise. The fee for this is one bag (karong; of tin sand.
At the request of the miners, instead of a geng-yulang, a kapala nasi may be erected, as cheaper and more expeditious. The fee is one gantang of tin sand.

He also assists in the ceremony of hanging the ancha in the smelting house, his principal associate in this is the "Panglima Klian," who draws the ancha up to its proper position close under the attaps.

1. Raw cotton must not be brought on to a mine in any shape, either in its native state or as stuffing of bolsters or
lows :-He had to visit all the mines from time to time especially those from which tin ore was being removed; if the daily out-put of tin suddenly decreased on any mine it was his business at once to repeat certain invocations ( $p u j a$ ) to induce the tin-ore to remain (handak di-pulih balik sapaya jangan mengorang biji). Once in every two or three years it was necessary to carry out an im. portant ceremony (puja besar) which involved the slaying of three buffaloes and a great feast, the expense of which had to be borne by the pawang. On the day of the puja besar strict abstinence from work was enjoined on every one in the district, no one might break ground or even pull up weeds or cut wood in the whole province. Further, no stranger whose home was three days' journey away, might enter one of the mines under a penalty of twenty-five dollars.

The pawang was entitled to exact from the owners of mines a customary payment of one slab of tin (or $\$ 6.25$ in cash) per annum for every sluice-box (palong) in work during the year.

In any mine from which the tin-ore had not yet been removed it was strictly forbidden to wear shoes or to carry an umbrella; no Malay might wear a sarong.

The Chinese miners, always superstitiously disposed, used (under Malay rule) to adhere to these rules and submit to these exactions but since 1875 the pawang has found his occupation and income, in Lârut at all events, gone.
mattresses. The fine (hukum pawang) is $\$ 12.50$; the ordinary pillow used by a miner is made of some soft wood.
2. Black coats and the attitudes designated pakei puwang may not be assumed by any one on the mine with the exception of the pawang. (Hukum pawang, \$12.50.)
3. The gourd used as a water vessel by Malays, all descriptions of earthenware, glass and all sorts of limes and lemons and the outer husk of the cocoa-nut are prohibited articles on mines. (Hukum pawang, \$12.50.)

Note.-All eating and drinking vessels should be made of cocoa-nut shell or of wood, the noise made by earthenware and glass is said to be offensive to the hantu. But in the case of a breach of this regulation the pawang would warn the offenders two or three times before he claimed the fine.
4. Gambling and quarrelling are strictly forbidden on mines, the fine is claimed for the first offence. (Hukum pawang, \$12.50.)
5. Wooden aqueducts (palong) must be prepared in the jungle a long way from the mine. (Hukum pawany, \$12.50.)

The noise of the chopping is said to be offensive to the luantu.
6. Any breach of the bahasa pantang is an offence. (Hukum pawang, \$12.5̌0.)
7. Charcoal must not be allowed to fall into the races. (Hukum pawang, \$12.50.)
8. A miner must not wear, and go to work on the mine in, another man's trowsers. (Hukum pawang, one karong of tin sand.)

Note.-This applies only to the sĕnar sěluar basah, or working dress. It is also an offence to work in the garment called surong.
9. If the chupak (measure) of the mine is broken, it must be renewed within three days. (Hukum pawang, one bhara of tin.)
10. No weapon may be brought within the four posts of the smelting house which immediately surround the furnace. (Hukum pawang, \$1.25.)
11. Coats may not be worn within this space. (Hukum pawang, §1.25.)
12. These posts may not be cut or hacked. (Hukum pawang, one slab of tin.)
13. If a miner returns from work, bringing back with him some tin sand, and discovers that somebody has eaten the cold rice which he had left at home, he may claim from the delinquent one karong of tin sand. The pawang adjudicates in the matter.
14. An earthenware pot (priok) which is broken must be replaced within three days. (Hukum pawang, one karong of tin sand.)
15. No one may cross a race in which a miner is sluicing without going some distance above him, up stream ; if he does he incurs a penalty of as much tin sand as the race contains at the moment, payable to the owner of the race. The pawang adjudicates.
16. A kris, or spear, at a mine, if without a sheath, must be carefully wrapped in leaves, even the metal setting (simpei) must be hidden. Spears may only be carried at the "trail." (Hukum pawang, uncertain.)
17. On the death of any miner, each of his comrades on that mine pays to the pawang one chupak (penjuru) of tin sand.

It will be noticed that the amount of the majority of these fines is $\$ 12.50$; this is half of the amount of the fine which, under the Malay customary land, a chief could impose on a ra'iyat for minor offences. It is also the amount of the customary dowry in the case of a marriage with a slave or with the widow or divorced wife of a ra'iyat.

The Malay miner has peculiar ideas about tin and its properties; in the first instance he believes that it is under the protection and command of certain spirits whom he considers it necessary to propitiate; next he considers that the tin itself
is alive and has many of the properties of living matter, that of its own volition it can move from place to place, that it can reproduce itself, and that it has special likes-or perhaps affinities-for certain people and things and vice-versáa. Hence it is advisable to treat tin-ore with a certain amount of respect, to consult its convenience, and what is, perhaps, more curious, to conduct the business of mining in such a way that the tin ore may, as it were, be obtained without its own knowledge!

I append a vocabulary consisting of a few Malay words which are more particularly connected with mines and miners. The language is so susceptible of change that, unless a record is kept of such terms, they may, perhaps as the method of working alter, be entirely lost. As it is, I imagine that the majority of these words and expressions (being technical) have never as yet found their way into any dictionary.

Ambil, or Tanah Ambil.-The ore-bearing drift, which Chinese miners call karang.
Ambil gunong. - The upper beds of drift.
Ambil gabor.-The middle beds of drift.
Ambil besar.-The lower beds of drift.
Ambil biji.-The process of sluicing after the tin-bearing drift has been thrown into the races. (See isi parit.)
The following is the order of the respective processes included under this term. 1. Mengumbei. 2. Melongga parit. 3. Meraga batu. 4. Bertunda. 5. Ber-panggul. 6. MIalong. 7 Pandei (for explanation see these words).
Ampang.-A dam.
Anak Kĕlian.-Malay miners who are liable to pay a tax to the mine-owner.
Ancha.-A square frame $1^{\prime} 6^{\prime \prime} \times 1^{\prime} 6^{\prime \prime}$, composed of strips of split bamboo for the floor and four pieces
of peeled wood for the sides,-the proper wood is $k$ yu sungke $i^{*}$ because it has flat even twigs and leaves which lie flat and symmeti-cally-these must be bound together with a creeper; rattan may not be used; it is hung to the tulang bumbong just under the attaps of the smelting shed: it is used as an altar, the offerings made by the miners to the spirits being placed on it.
Ayer atas.-The system of using water-power to throw down the earth into the sluicing races.

Ayer minggang.-Where water-power is not available at the top, but can only be brought half way up, bark shoots being used.
Ayer kuak.-The system of throwing down the earth into the head-race by manual labour.
Bêbas.-Free of tax, thus the pawang and penglulu kĕlian each have one water-race bêbas.
Batang hari kellian.-The tail race of the mine into which all the races (parit) flow; all the tin sand which reaches the batang hari kĕlian is the property of the mine-owner. (See parit).
Batu adang.-Great wall-like masses of rock, generally limestone, which stick up and may alter the level of the bottom by a precipitous drop of many feet.
Batu ampar.-The bed-rock. (See tangloh).
Batu kachau.-Small stones placed in a parit on the right and left alternately so as to create a ripple.

[^55]Batu menungyal.-Nodules of limestone rock appearing through the surface of the ground.*
Batu sawar. $\dagger$-A line or row of rocks.
Benting.-An embaukment.
Ber-kait.-The process of lifting water or drift by means of the kait. (See kait).
Ber-panggul.-The state of a race which is fitted with the dams called panggul.
Bertunda - To drive the tin-bearing drift sand-after the stones have been thrown out-down the races ; it is done by pushing and lifting it down stream with a pengayuh memblah. (See ambil biji).
Biji.-Tin sand.
Biji anak.-Small bright crystals of cassiterite.
Biji hanget or hangus. - Fine slag aud drops of metallic tin from the furnace.
Bïi ilu.-Masses of tin ore especially if mixed intimately with matrix.
Biji mati.-Black dull-looking ores.
Biji tahi.-Light ores, wolfram, tourmaline, \&c.
Buku.-A slab of tin.
Chapak.-A wooden plate for rice. $\ddagger$

* Also called batu renong, because the miuers meeting such an obstacle cannot remove it, but can only stop and stare at it (renong, to stare).

Fo.
$\dagger$ Butu sawar. - There is a legend about a hunting party in the forest. All the men were arranged in a row beating the jungle for game when Sang Kalembei hailed them and they were turned into stone.

Ed.
$\ddagger$ The ordinary chapali in domestic use is smaller than the dulang, but in the mines the larger platter is called chapak and the smaller one dulang.

Chukei sĕnduk.-The duty or rent due to the owner of a furnace for the use of it. The customary duty was, if the owner of the furnace was the owner of the mine that produced the tin to be smelted, two lati of tin for every karong of tin sand smelted; if the owner of the furnace was not also the owner of the mine, one kati of tin fur every karong.
Dagul.-A covered drinking-vessel made from a cocoa-nut shell. It has a small aperture and is fitted with a rattan cord for carrying it. (See sikul.)
Dasur.-A drinking vessel made out of a section of a cocoanut shell; used as a food or water-vessel.
Dulang.-A round slightly concare wooden tray from $1^{\prime} 6^{\prime \prime}$ to $2^{\prime} 6^{\prime \prime}$ in diameter used for washing ore in the process called mĕlanda or mĕriau.
Dendulang* or pĕraup.-A small nearly oval wooden tray measuring about $1^{\prime} 6^{\prime \prime}$ long and 9 inches to 1 foot broad used for lifting the partially cleaned drift and ores in to the palong during the processes called malong and pandei.
Entah or tanah entah.-The flat surface left after the top layers have been sluiced away by hill mining and ground sluicing. It may contain tin or not.

It is still workable by the methods called tĕbok and ludang.
Gabin.-Pipe clay.
Genggulang.-The platform or altar erected by the pawang at the opening of a mine. It should be built

[^56]entirely of ' kuyu sungkei'. The wood is peeled, except the four branches which serve as posts, these are only peeled up to the twigs and leaves which are left on, about 4 feet 6 inches from the ground. At 3 feet 3 inches from the ground a square platform of round peeled sticks about 1 foot 3 each way, is arranged; one foot above the level of the platform a sort of railing is fixed round three sides of the square and from the open side a ladder with four steps reaches down to the ground; the railing is carried down to the ground on each side of the ladder and supports a fringe of cocoa-nut leaves i.jari-lipun). The whole erection must be tied together with creepers, rattan must not be used.
(iëlok.-A cocoa-nut-shell drinking vessel. (Patani dialect.) Giundei.-'The tally sticks by which the feeding of the furnace is reckoned ( see mengumbus) made of bamboo, about six inches long.
Hasil Kělian.--'I he duty payable to the owner of the mine. The customary rate was one-sixth of the output for excavations (tĕbok and luclang) and one-third of the output for hill mining (lêris.)
Isi parit.-The act of throwing down the drift into the races, ( see ambil biji).
Jari lipan.-A fringe made of the young white leaflets of the cocoa-nut palm plaited together.*
Jampi.-The incantation of the parang.
Kayu kachau.-Small sticks stuck into the races answering the same purpose as batu kachau.

* Forbes mentions a "palm-leaf fringe " used in certain rites by the Kalangs of Java. (A Naturalist's Wanderings, p. 101.)

Kĕdan tangan.-A small flat piece of wood about $5^{\prime \prime} \times 3^{\prime \prime}$ and half an inch thick, used to scrape the the drift out of holes in rocks and into the dulang.
Kat.-An application of the old fashioned balance pole for lifting water or drift from an excavation.
Fuit ayer.-The pole used for lifting water only, in this there is only one movement, a straight lift.
Kait raga.-The description applied to lifting drift only, in this there are two movements, the first whereby the basket is lifted straight up from the hole and the second whereby it is carried round a part of the circumference of a circle and deposited at some distance.
Kapala nasi.-A stake of peeled mood (kayu sungkei) stuck in the ground, the top of this is split into four so as to support a platform similar to that of the geng-gulang. Offerings are made upon it. *
Karang.-A term used by Chinese to express the principal tin-bearing drift (ambil besar).
Karang gantang.-A term used by Chinese to express the upper and inferior beds of tin bearing drift ( ambil gunong ).
Karong.-A measure of tin sand. The measure of capacity whereby tin sand is reckoned in Kinta is as follows :-
Custom below Ipoh.

| 2 chupak piah | $=1$ chupak ampat. |
| :--- | :--- |
| 2 chupak ampat | $=1$ penjuru. |
| 6 penjuru | $=1$ karong anam. |

* "It is quite a common thing in Java to encounter by the wayside near a village, or in a rice-field, or below the shade of a great, dark tree, a little platform with an offering of rice and prepared fruits to keep disease and blight at a distance and propitiate the spirits." (A Naturalist's Tranderings, Forbes, p. 103.)


## Custon below Ipoh.

8 penjuru $=1$ liarong delapan.
Kĕping.-A slab of tin; also a customary weight. Metallic tin weights are:-
10 kati of tin $=1$ ringgit timah.
Ampat ringgit (timah) karong suku $\$ 3.75=1$ kĕping.
8 keping $=1$ bhara.
This kati should be equal to the weight of thirty dollaris.
Kĕlian.-A mine. It is noticeable that the Sakais call a mine simply parit.
Kong.-Chinese expression equal to the Malay tangloh.
Kulit akar.-The upper two or three inches of mould immediately above the tanah padi.
Lampan.-A process of getting tin ore by sluicing in the bed of a mountain stream or in situations in the hills where water can be obtained.
Lêris.-To mine on the hills.
Lombong.-A term used of a large excavation, a Chinese mine.
Ludang.-A small shallow excavation. (Malay) which can - be baled with a penimba chuak.

Me-malong.-The process of cleaning the ores in the long palong (sluice-box. )
Mâsak.-To smelt.
Mĕlandu.-To wash drift or sand from a river bed in a dulang. There is in Kinta a saying or proverb connected with this process. It is said of a person who takes his wages every day as he earns it, or sells his produce as quickly as possible. "Rupa orang mĕ-landa, dia handak makan hari itu juga."
Meraga batu.-To lift the stones out of the race with a basket.

Me-longga parit.-Having lifted the stones out of the small race, to drive the sand containing ores downstream.
Me-raup. - The act of lifting the rich dirt into the palong with the dulang pe-raup in the process called memalong.
Mě-riau.-A word meaning the same as me-landa.
Mř-muput.-To smelt tin in the Chinese fashion (the same as puput).
Naik-ka kělian.-(Lit. to go up to a mine). The universal expression, whatever may be the position of a mine, for going to a mine.
Mengumbei.-To stir the dirt in the small race in order to break up lumps and liberate the stones. (In Chinese mining this is called me-lanchut.)
Mengumbus. - To smelt tin in the Malay fashion.
Mengumbus pelantur.-The same, keeping an account of the ladles of tin ores as they are put into the furnace (by this the reliefs at the bellows are reckoned). The account is kept by moving one of the tally sticks along a rattan line.
Palong.-A sluice-box made of a tree split in half and hollowed out. One about eight feet long is used in the process called mer-malong; the other, five feet long, is used in the process called pandei.
Pandei (memandei).-The final washing of the ores in the small palong.
Panchur.- A spout of water falling from a height on to a platform on which is placed lumps of stiff clayey drift which it is desired to reduce; or a cascade falling' over 'large stones amongst which are thrown lumps of clay for the same purpose.
Panggul.-Small dams placed in the races to retain the rich dirt which is afterwards washed up in the long palong.

Pantang burok mata.-The period of mourning observed when a death occurs at a mine.
Mourning consists in abstention from work (in the case of a neighbour or comrade) for three days, or, in the case of the death of the pawang, penghulu kelian or the feudal chief, for seven days. The expression is derived from the supposition that in three days the eyes of a corpse have quite disappeared. Chinese miners have a similar custom ; whoever goes to assist in the burial of a corpse must not only abstain from work, but must not go near the mine or smelting furnace for three days.
Papas.-To lift off the overburthen and get it out of the way.
Papas dengan ayer.-To get rid of the overburthen with the assistance of water.
Parit.-The small races in which the miners work. All the tin sand washed up out of the parit is the property of the anak kélian after they have paid the hasil kellian.
Penakong (takong).-A dam with a valve whereby water may be retained in a reservoir and allowed to accumulate.
Pen-chubak.-A digging-tool made of iron with a wooden handle.
Pen-chubak kayu.-The same but all wood.
Pengayul.-A wooden spade with a handle similar to that of a paddle.
Pengayuh membĕlah.-A large description.
Pengayuh sembat.-A small description.
Pengayuh penyodok or pengikis or sudip.*-A small implement used to clean the spades with.

[^57]Pengayuh batang sendiri.-A spade made entirely of one piece of wood.
Penimba or penimba chuak.-A vessel used for baling, it may be made of bark, the covering of the efflorescence of the pinang tree (upil) or of any old tin box or vessel.
Perasap.-Half a cocoa-nut shell, a cup, or any other vessel, in which votive offerings of sweet smelling woods and gums are burnt.
Pelantar.-The ladle with which the tin is put into the furnace.
Raga.-A basket.
Raga jurong.-A basket shaped like a spoon with a tip cut off; used to take the stones out of the race. It serves the purpose of a sieve, as it lets the sand through.
Raga sidik.-A basket of the same pattern only smaller.
Raga tala.-A flat shallow basket used with the kait to lift dirt out of the mine.
Raya rélau.-A smelting furnace. The Malay furnace is supplied with a blast produced from two upright cylinders the pistons of which are worked by one man, the furnace is built like a truncated cone, on either side there is a hole and supply hopper to feed the slag, the charcoal and ores being put in the top. The hoppers are called palong.
Rělau semut.-The Chinese furnace, without a blast.
Rĕlau tongkah. -The Hokienese furnace built on a stand, the foundation being three or four iron ricepans (kuali). It is iron bound, and supplied with a blast ; it will burn soft wood charcoal.
Sikul.-A cocoa-nut shell water vessel like the dagul.
Suak.-The source of a head-race, e.g., suak gunong or suak rĕdang.

[^58]Sangka.-A receptacle in which to burn offerings of sweet woods and gums; it is made of a stick of bamboo about three feet long, one end being split and opened out to receive the charcoal: it is stuck in the ground near races and heaps of tin sand.*
Surut or meniurut.-The process of getting rid of the sand by driving it down the stream.
Tahi biji.-See biji.
Takong.-A dam.
Tali ayer.-The head-race of a mine.
Tanah ambil.-(See ambil).
Tanah buang.-Drift which is not worth putting through the process of washing overburthen. Equal to tanah papas.
Tanah léris.-High ground which is available for hill mining.
Tanah padi.-Made earth, immediately below the top inch or two of mould called kulit akar. It may contain tin ores or not.
Tanah papas.-( See papas.)
Tatin gulang.-The pawang's fee for the ceremony of erecting a genggulang.
Teka.-Laterite.
Tekong.-Slag from the furnace.
Tebok.-An excavation larger than a ludang, and which cannot be baled with a penimba, a kait must be erected.
Tangloh.-The sub-stratum of earth or clay below the ore.
Tuan tanah or tuan kělian.-A mine-owner.
Tûkang api.-The smelter.

A. HALE, Inspector of Mines, Kinta.

[^59]
## ENGLISH, SULU, AND MALAY VOCABULARY.



R Thomas Henry Haynes has communicated to the society, through Mr. Noel Trotter, a vocabulary of the language spoken in the Sulu Islands. This is printed verbatim in the first and second columns of the following pages. In the hope of adding to the interest of this paper, from the philological point of view, I have appended a third column, in which the Malay origin of certain words which have escaped the author's notice is pointed out, and references are given to the equivalents, in other languages of the archipelago, of certain widely-spread words. The latter are given on the authority of Fayre's Malay Dictionary (Malais-Français). Dr. Montano, who visited Sulu between 1879 and 1881 gives a short account of the language *:
"The Sulu language is only a variety of the Bisaya; the pronunciation and the greater part of the roots are the same ; it includes, however, a larger number of strictly Malay words. The Reverend Father Frederico Vila has been kind enough to shew me a manuscript grammar and vocabulary drawn up by the Reverend Father Batlló during his residence in Sulu. It is from this source that I borrow the following details :-
"There is no special article in Sulu (as there is in the Tagal group of languages) for proper names. In (equivalent to ang in Bisaya) is employed both with proper names and with substantives ; Nom., in : Gen. sina or ni ; Dat., Acc., Ablat., in or $\boldsymbol{s}$.
"The plural is denoted by the particle mha; in kuda, the horse ; in mha kuda, the horses.

[^60]"The substantive and adjective, which are indeclinable, are formed as in Bisaya; ka-tapus-an, end, from tapus; ka-usba-an, inheritance, from usba, heir, pa-mumukut, fisherman, from mumukut ; ma-tigas, from tigas, strong, stout; ma-haggud, from haggud, cold, cool ; ma-manis, from manis, beautiful."
"The comparative and superlative are formed either by the repetition of the positive, or by the word labi, more, or else by the particles deni and sin."
" Examples :-marayao, good ; marayao-marayao, or marayao deni, better ; marayao sin, excellent."
"Ing karut ini asibi, sagua in yatto in labin asibi, in kaimo labi pa asibi tund. This bag is small, but that one is smaller, and yours is the smallest of all."
"The mode of expressing a verbal sense is that of the Bisaya language. The auxiliaries to be and to have, expressed by the particles man, hay, aun, are very often left to be understood; hay is sometimes contracted into $y$, which is used as a suffix. ako-y ma-sakit, I am ill. Ikao miskin na, you are poor. Maraun karabao ako, I have a great many buffaloes. The formation of verbs, as mag-sumpan, to serve, mah-sasat, to counsel, encourage, and the conjugations appear to be in conformity with those found in Bisaya."
"Pronouns and adjectives only differ from those of the Bisaya language in certain trifling peculiarities."
"The panditas and datos of Sulu can all write with ease. Like the Malays, they use the Arabic character with slight modifications. The Malays hardly ever use the vowel signs, whereas the natives of Sulu never leave them out and even those among the latter who know Malay are unable to read works in which these signs are umitted. At least this is what I was assured of by the late Sultan of Sulu, who was the most distinguished scholar in his Empire."
"The Sulu dialect is spoken by all the Malays, or Moros, of Mindanao, Palawan, Balabac, Basilan, the archipelagoes of Sulu and Tawi-Tawi and of the North of Borneo."

W. E. M.

## PRONUNCIATION.



Abbreviations :-Jav. signifies Javanese ; Kw., Kawi; Sund., Sundanese ; Bat., Battak; Mak., Makassar ; Bug., Bugis ; Day., Dayak; Tag., Tagala; Bis., Bisaya ; and Malag., Malagasi.

Ed.

## ENGLISH, SULU, AND MALAY VOCABULARY.

English.
A
Ability
Abjure, to
Able, to be
Above
Abscess
Abscond, to
Absent
Abundant
Abuse, to
Accept, to
Accompany, to
According to
Abeam
Account
Accurate
Accuse, to
Accustomed
Ache
Ache, to
Acid
Acquaint, to
Acquainted, to be
Across
Act, to (do)
Act, to (play)
Active
Admit, to (to a place)
Adorn, to
Adrift
Advice

A
Sulu.
hâmbûk

* kăpândǐan
* taubăt
mâkăjeddĭ; mâkăjerrí
* âtâs; hâtâs atas
bautut
mâgwĭ
wâllâ di
mătaud; mătaut
măningât
taimă trima
âgăt; mâkibân-ibân
bihaiăn
bilokân biluk-kan, to tack
itongăn hitong-an
bûntûl
mâ’bitâk
hâdăt; bûâksă
sâkǐt
ma'sâkǐt
măâslam
baită
kǐlâhăn
bâbâk
hinâng
pănaiăm-naiăm main. Bat.mayam
'adat (Ar.); biasa
sakit, ill, in pain
ber-sakit
bǐskai
sûûd
daijauinn
ânûd
hĭndă
English. Sulu. Malay.

Advice, to ask
Advise, to
Advocate, to
Affair
Affectionate
Affiance, to
Affirm, to
Afraid
Aft
After (place)
After (time)
Afterwards
Afternoon
Again
Age
Agent
Agree, to (engage)mâksûrût
Agree, to (to be \{pâktaimănghûd; pâkfriends)
Agreeable
Agreement
Aground
Ague
Ahead
Aim, to
Ajar
Alas
All
Ally, to
Alike
Alligator
Alive
Almost
Alone
Also
Always
bagai
măraiyau

* perjânjûân per-janji-an
sumâgnăt
hĭnglau
hâúnăhân
mâktûju
mâkiput
* âdoì; ârûĭ adui
kătǎân
mâkiwăn
sâlĭ
bûaiyă
bohé
âpìt
ǐsă ǐsă
ǐsâb
hâwă
mângaiyok nâsǐhăt nasihat ( $A r_{\text {r }}$ ), advice dûmîhêl nâsĭhăt tâbăng bĭchărâkăn
* hâl
mâ'kâsǐh
* bătûnâng
mâmbităk
măbûgâ
hâbûlî
mâhûlĭ
\}obus yeto.
măhâpûn
măkbâlĭk kembali
* omôr 'umur ( $A r$.)
* 
* wâkĭl
hal ( $A r$.)
ber-kasih
\{ menunang-kan ;
ber-tunang, affianced

| English. | Sulu. | Malay. |
| :---: | :---: | :---: |
| Amazed | * hêrăn | heiran (Ar.) |
| Ambush, to lie in | homâpă; tâpokăn |  |
| Amongst | hămângâ |  |
| Amok, to run | sǎbil | $\left\{\begin{array}{c}\text { sabil }(A r .) \text {, road; prang } \\ \text { sabil Allah, holy war }\end{array}\right.$ |
| Amuse, to | mâksûkă sûkă | ber-suka-suka |
| Ancestor | mǎâs |  |
| Anchor | sauh; băhûjĭ | sauh |
| Anchor, to | mâkbăhûjĭ |  |
| Anchorage | * lâbuhân | labuh-an |
| Ancient | mogei; mǎâs |  |
| And | ibân |  |
| Angry | măgâmă; măbûngĭs | bengis, cruel |
| Angle, to (fish) | bĭngit |  |
| Animal | haiup |  |
| Ancle | bûku | $\left\{\begin{array}{l}\text { buku, knot, lump; bu- } \\ \text { ku kaki, ancle }\end{array}\right.$ |
| Annoy, to | usǐbâhăn |  |
| Another | dugeign |  |
| Answer | dâwă | $\left\{\begin{array}{l} \mathrm{d}^{\prime} \text { awa }(A r .) \text { plaint, } \\ \text { suit } \end{array}\right.$ |
| Ant | senâm |  |
| Antidote | obât | ubat, medicine |
| Anvil | * lăndâsăn | landas; landas-an |
| Anxiety; anxious | sûsăh âtei | susah hati |
| Any $\{$ | $\left\{\begin{array}{c}\text { ono-ono ; kaibânăn } \\ \text { quôn-quôu }\end{array}\right.$ |  |
| Appearance; <br> face ; colour | \}dâgbus |  |
| Appoint, to | bûtâng |  |
| Apostle | * râsûl | rasul ( $A r$. ) |
| Argue, to | mâk bǐchâră | ber-bichara |
| Arise; wake, to | bângûn | bangun |
| Arm | buktûn |  |
| Arms, Fire- | sǐnjâta | senjăta, weapon |
| Arms, Side- | tâkus |  |
| Arms, to bear side | e mâktâkus |  |

English.
Sulu.
Malay.
\{pandei. Jav., Sund. and Bat. pandé
păndei
êlok
mâklibut
pûkăt
hauit
bâwăng

* elmu
ûgăt

Articles (goods) ârtă
As biă
As much as bhhâtutaut
$\left.\begin{array}{c}\text { As quickly as } \\ \text { possible }\end{array}\right\}$ sumut tuúd
As well as you can biă raiyau
As yet, not dípă
Ascend, to (a river) sumâkă
Ashamed ; modest măsipuk
Ashes âbû
Ask, to
Ask, to for
Assemble, to
Assist, to
Astern
Astonished
At
At first
At last
Attack
Attempt, to
âssûwu
môngaiok
mâktipan

* tûlông
hâbulĭ
herân
hâ
tâgnă
mâhhulĭ
tumĭgbâs
sûlai
$\left\{\begin{array}{c}\text { habu. Jav., Mak. and } \\ \text { Bug. azu ; Bat.habu; } \\ \text { Tag. and Bis.abo. }\end{array}\right.$
tulong
heiran ( $A r$.)

| English. | Sulu. | Malay. |
| :---: | :---: | :---: |
| Attendant | ibân |  |
|  |  | (saksi, witness. Found |
| Attest, to | sâksĭ | $\{$ also in Jav., Sund., |
| Audience(at court) | mějělis | (Day., Tag. and Bis. mejlis (Ar.) |
| Aunt | bâbu; ĭnâhân |  |
| Authority | quâsǎ | $\left\{\begin{array}{l} \text { kwasa. (Sansk. vaça). } \\ \text { Kw. wasasa; Jav. kwa- } \\ \text { sa; Mak. kuwasa. } \\ \text { Day. kwasa; Bis. } \\ \text { kosog. } \end{array}\right.$ |
| Avenge, to | mâus |  |
| Awake, to | jâgă; bâttǐk | $\left\{\begin{array}{l} \text { jaga. Found alsoin Jav. } \\ \text { Sund., Mak. Bug. } \\ \text { and Day. } \end{array}\right.$ |
| Away (direction) | mâtu |  |
| Axe | kămpâk | $\left\{\begin{array}{c}\text { kapak. Jav. and Sund. } \\ \text { kampak; Day. kapak }\end{array}\right.$ |
|  | B |  |
| Baby ; child | bâtă bâtă |  |
| Back, the | taikut |  |
| Bad ; wicked | mânǧ ; măngĭ |  |
| Bad ; decomposed | hâlok |  |
| Bag, a | kârut | karong |
| Baggage | ârtă | (See Articles.) |
| Bail | tângăn |  |
| Bait (fish) | ûmpân | $\left\{\begin{array}{c}\text { umpan. Bat. and Day. } \\ \text { also }\end{array}\right.$ |
| Bake ; broil, to | dâng-dâng | dendeng, dried meat |
| Balance; remainder | kâpĭn |  |
| Bald | bâgûng |  |
| Bale out, to | limăs |  |
| Ball ( wickerwork) | sipâ | $\left\{\begin{array}{c}\text { sepak, to kick; sepak } \\ \text { raga, to play foot-ball }\end{array}\right.$ |


English: Sulu. Malay.

Bear on the back, to bâbâ
Bearinthe arms, to piepie
\{bibit, to carry in the \{ hands
$\left.\begin{array}{l}\text { Bear, in the arms, } \\ \text { to (carry) }\end{array}\right\}$ tâhgûng
Bear children, to mâkânăk
Bear fruit, to mâkbûngă
Beard
pôngut
Beat, to (thrash) pung pŭg
Beat, to (overcome) sumaug
$\begin{array}{ll}\text { Beautiful } & \left\{\begin{array}{l}\text { mădaiyau } \\ \text { yau } \\ \text { Because, }\end{array}\right. \\ \begin{array}{l}\text { Bebăb }\end{array} \\ \text { Become, to } & \text { * jâdie }\end{array}$
Before (place) mûnă
Before (time) mâ’kâonâ dang
Before the wind ângǐn 'bûlĭ
Beg, to (ask) pôngais
Behind hâbûlĭ
Believe, to (trust) perchaiyă
Believe, to (think) pikĭl
Bell
Belly
Below ; under hâbâwâh

Belt
kandit
bâktĭng
tiân
bawah
bandit, an ornamental belt. Jav. kendit, a waist-band worn by women; Sund.kendit, a string worn round the waist by women as a charm; Bat. gowndit, a child's ornamental belt of coral


| English: | Sulu. | Malay. |
| :---: | :---: | :---: |
| Blood, of noble | pânkăt | pangkat, rank |
|  |  | $\left\{\begin{array}{l} \text { sunting. Jav. and Day. } \\ \text { sumping; Sund., Bat. } \\ \text { and Tag. sunting; } \end{array}\right.$ |
| Blossom | sûmpĭng | Mak. sunting, a champaka blossom ; Bis. sonting, name of a flower |
| Blossom (bud) | pusud | $\left\{\begin{array}{l} \text { puchuk, shoot. Jav. } \\ \text { and Sund. puchuk; } \\ \text { Bat. pusut; Mak. pu- } \\ \text { chu } \end{array}\right.$ |
| Blow, to (with the month ) | $\} *$ tiûp | $\left\{\begin{array}{l} \text { tiup. Jav. and Sund. } \\ \text { tiup; Tag. hihip; Bis. } \\ \text { hoyop } \end{array}\right.$ |
| Blowpipe | * sûmpǐtân | sumpitan |
| Blue | biru ; bilu | $\left\{\begin{array}{l} \text { biru. Jav. biru; Day. } \\ \text { biro } \end{array}\right.$ |
| Boar ; pig | bâbûil | $\left\{\begin{array}{l} \text { babi. Jav., Sund. and } \\ \text { Bat. babi; Mak. and } \\ \text { Bug. bawi; Day. ba- } \\ \text { boi; Tag. and Bis. ba- } \\ \text { bong } \end{array}\right.$ |
| Board (wood) | dĭgbie |  |
| Boat ; canoe (outrigged) | \}săkaiăn |  |
| Boat (dug out) | gubâng | goba |
| Boat | dâpâng |  |
| Boil, to | tugnâ |  |
| Boiling | bûkăl |  |
| Boil, a | bautut |  |
| Bold ; brave | ma'-isssăk |  |
| Bone | bokuk ; bukoeg |  |
| Book | sûrât | $\left\{\begin{array}{l} \text { surat. Jav.serat; Sund. } \\ \text { Bat. and Day. surat; } \\ \text { Mak. and Bug. sura; } \\ \text { Tag. and Bis. sulator } \\ \text { solat; Malag. surata } \end{array}\right.$ |


| English. | Sulu. | Malay. |
| :---: | :---: | :---: |
| Booty | * rampâsăn | as-an |
| $\left.\begin{array}{l} \text { Booty, to seek ; } \\ \text { to plunder } \end{array}\right\}$ | mâkrâmpăs | $\left\{\begin{array}{l} \text { me-rampas-kan. Jav., } \\ \text { Sund. and Day. ram- } \\ \text { pas } \end{array}\right.$ |
| Border | higât |  |
| Bore, to | bârenâhăn |  |
| Bore the ears, to | tugsûkăn bolăh | bolăh |
| Borrow, to | mous |  |
| Bosom ; breast | dûduk | $\left\{\begin{array}{l} \text { dada. Jav. and Sund. } \\ \text { dada; Tag. dibdib } \end{array}\right.$ |
| Bottle | * kâchă | $\left\{\begin{array}{l} \text { kacha, glass. Occurs } \\ \text { also in Jav., Sund., } \\ \text { Mak.. Bug. and Dav. } \end{array}\right.$ |
| Bottom (of a box) | bûlĭk |  |
| Bow (for arrows) | pânăh | $\left\{\begin{array}{l} \text { panah. Jav., Sund.and } \\ \text { Day., panah; Mak., } \\ \text { pana; Tag. and Bis., } \\ \text { pana, arrow } \end{array}\right.$ |
| Box | belûlâng | $\left\{\begin{array}{l}\text { belulang, a hide. Jav., } \\ \text { walulang }\end{array}\right.$ |
| Boy | anâk ǐssăk ; bâtă |  |
| Bracelet | * glâng | $\left\{\begin{array}{l} \text { gělang. Jav. and Day. } \\ \text { gelang ; Bat., golang ; } \\ \text { Mak., gallang ; Tag., } \\ \text { galang } \end{array}\right.$ |
| Brackish ; salt | măâsĭm | $\left\{\begin{array}{l} \text { asin, masin. Jav., } \\ \text { Sund., Day., Tag. } \\ \text { and Bis., asin; Bat. } \\ \text { ansin } \end{array}\right.$ |
| Brand (mark) | tăndǎ | $\left\{\begin{array}{l} \text { tanda. Jav. tonda; } \\ \text { Sund., Bat., Mak., } \\ \text { Day., Tag. and Bis. } \\ \text { tanda. } \end{array}\right.$ |
| Brand (seal) | châp | $\left\{\begin{array}{c}\text { chap. Occurs in Jav., } \\ \text { Sund. and Day. }\end{array}\right.$ |
| Brass | tŭmbâgâh | $\left\{\begin{array}{c} \text { těmbaga. Occurs in } \\ \text { Jav., Sund., Bat., } \\ \text { Mak., Tag. and Bis. } \end{array}\right.$ |



English.
Sulu.

Brother (ordinarily) kâkă
$\left.\begin{array}{c}\text { Brother (younger, } \\ \text { also relation) }\end{array}\right\}$ taimănghud
Bucket bâldĭ
Buffalo, Water- * kărbau
Bug (bed) bânkĭng
Build, to (a house) hinâng bai

| Bull | sâpie |
| :--- | :--- |
| Bullet | pônglo |
| Bundle | *bungkus |

Burn, to sûnuk; mâksûnuk
Bury, to kuborân
$\left.\begin{array}{c}\text { Burying-place ; } \\ \text { grave; }\end{array}\right\} *$ kûbor ; kûbul
do. (ancient) * krâmăt
Bushes kâtǐăn

Business
krêjă

Malay.
kakak, elder brother or sister. Jav., $k a$ kang ; Kw., Sund., Mak., Bug.and Tag., kaka; Bat., haha;
Day., kaka and aka

Hindustani, baldi
(kerbau. Jav. and Sund., kebo; Bat., horbo; Bis., kalabao.
$\left\{\begin{array}{l}\text { sapi. Occurs also in } \\ \text { Jar., Sund., Mak. and } \\ \text { Day. }\end{array}\right.$ peluru. Port., pelouro. bungkus. Jav., wungkus ; Sund. and Day., bungkus; Mak., bungkusu; Tag., tongkos; Bis.bongkos; Bat., bungkus, handkerchief $\left\{\begin{array}{l}\text { kěramat, sacred, a } \\ \text { sacred place }\end{array}\right.$ $\left\{\begin{array}{l}\text { karja (Sansk. karya). } \\ \text { Kw., karya; Sund.; } \\ \text { karia, festival ; Bat., } \\ \text { horja, festival. }\end{array}\right.$

| English. | Sulu. | Malay. |
| :---: | :---: | :---: |
| But | bŭtmaian |  |
| $\left.\begin{array}{l} \text { Butt, to (like } \\ \text { cattle) } \end{array}\right\}$ | tândok ; mâ'tândok | tandok, menandok. Sund. and Bat., tanduk; Mak. and Bug., tanru. |
| Butterfly | kâba-kâba | kupu-kupu |
| Button | tâmbûku |  |
| Buy | mĭ; bĭ |  |
| By | ivân |  |
| $\begin{aligned} & \text { By, to put (pre- } \\ & \text { serve) } \end{aligned}$ | \} hitau |  |
| By and by | tăgăt-tăgăt |  |
|  | C |  |
| $\left.\begin{array}{l}\text { Cabung palm } \\ \text { (leaf for ciga- } \\ \text { rettes) }\end{array}\right\}$ | $\text { \}daun toâk }$ | $\left\{\begin{array}{l}\text { tuak, palm-toddy. } \\ \text { Bat., tuak; Sund., } \\ \text { tuak, name of a tree }\end{array}\right.$ |
| Cake | bâng-bâng |  |
| Calf (of the leg) | bitǐs | $\left\{\begin{array}{l}\text { betis. Jav., wentis; } \\ \text { the thighs; Sund. and } \\ \text { Bat., bitis; Mak., } \\ \text { bitisi; Bis., bitios; } \\ \text { Malag., witsi }\end{array}\right.$ |
| Calico | găja hĭlau |  |
| Call, to | tâwâk |  |
| Calm; smooth | linau ; mălinau |  |
| Can (able) | mâkăjeddĭ |  |
| Candle | linnsok |  |
| Cane (rattan) | wai |  |
| Cane, Walking- | * tôngkat | Ptongkat. Jav., jungkat; Sund., tektek; Bat., tungkot; Mak. and Bug., takkang; Day., tongket; Tag., tongkor, a stick, songkod, a hooked stick; Bis., tongkod and songkod |

English. Sulu. Malay.

tobu; Mak. and Bug., tabu; Tag., tubo; Bis., tobo
$\left\{\begin{array}{l}\text { (The Malays also use } \\ \text { the English word } \\ \text { corrupted.) }\end{array}\right.$ muat, to load
$\left\{\begin{array}{l}\text { 'akal, (Ar.). Jav., } \\ \text { Sund. and Day., } \\ \text { akal; Mak., akala }\end{array}\right.$
(pohon. Sund., puhun, chief, elder; Mak., paong; Day., upon; Tag., pohonan, capital ; Bis., pohon, to open a business
tawan, tawan-an. Jav., Bat. and Day., tawan
susah. Jav., Sund. and Day., susah; Bat. and Mak., susa $\left\{\begin{array}{c}\text { usaha. (See Indus- } \\ \text { trious) }\end{array}\right.$ jaga. pelihara.
$\left\{\begin{array}{l}\text { per-mêdan-i (from } \\ \text { Pers. or Hind. mê- } \\ \text { dan?) }\end{array}\right.$ (carosse?)
$\left\{\begin{array}{l}\text { tanggong. Jav., tang- } \\ \text { gung, insufficient. } \\ \text { Occurs also in Sund., } \\ \text { Bat, }\end{array}\right.$ Bat., Mak. and Day.
Finglish. Sulu. Malay.

Cartridge kâlauchuchuk
Cartridge-pouch âbă-âbă
$\left\{\begin{array}{l}\text { abah-abah, harness, } \\ \text { yoke. Jav., abahan; } \\ \text { Sund., abah-abah }\end{array}\right.$
Cascade busai
$\left.\begin{array}{c}\text { Case; circum- } \\ \text { stance }\end{array}\right\} *$ hâl; părkâră

Case (for trial) * bĭchâră
$\left\{\begin{array}{l}\text { hal (Ar.) perkara. } \\ \text { Jav.. prakara; } \\ \text { Sund., perkara }\end{array}\right.$
$\left\{\begin{array}{l}\text { bichara. Jav., wicha- } \\ \text { ra, to discuss; Sund., } \\ \text { pichara, a suit ; } \\ \text { Day., bichara }\end{array}\right.$
$\underset{\text { coin) }}{\text { Cash }}$ (Chinese $\}$ kuš̆ng
Cask; barrel tông
Cast off, to (a rope)bugit
Cast away, to bugit
Cat kutĭng
$\left\{\begin{array}{l}\text { kuching. Jav., ku- } \\ \text { ching; Sund., uching; }\end{array}\right.$ Bat., hosing
$\left.\begin{array}{l}\text { Catch hold of, to } \\ \text { (a bough with } \\ \text { a pole) }\end{array}\right\}$ kumâput
Catty ( $\mathrm{I} \frac{1}{3} \mathrm{lbs}$ ) * kătĭ
Caution, to mâkhindok
Cause; reason *sebăb

Cavity * lûbâng
$\int$ sebab (Ar.). Occurs in Jav., Sund. and Day.; saba, in Mak. and Bug.
lobang. Jav., luwang;
Bat., lubang ; Mak., lobang; Day., lowang

| English. | Sulu. | Malay. |
| :---: | :---: | :---: |
| Cede, to | * serâhkăn | $\left\{\begin{array}{l}\text { serah-kan. Jav. and } \\ \text { Sund., srah; Mak., } \\ \text { sarể, Day, sarah }\end{array}\right.$ sarế; Day., sarah |
| Ceiling | lohôr |  |
| Celebrated | * meshur | mashur (Ar.) |
| Centipede | laipǎn | $\left\{\begin{array}{l} \text { lipan. Bat., lipan; } \\ \text { Tag. and Bis., olahi- } \\ \text { pan } \end{array}\right.$ |
|  |  | tengah. Jav. and Sund., tengah ; Bat., tonga; Mak. and Bug., tanga; Day., tengah, |
| Centre | * tengăh | some people; Tag., tang- (in composition, as tang-hali, mid-day ) ; Bis., tonLeg ${ }^{c} a$ |
| Certain; sure | * tǎnto | $\left\{\begin{array}{l}\text { tĕntu. Bat., tontu; } \\ \text { Jav., tamtu; Mak., } \\ \text { Sund. and Day., } \\ \text { tantu; Tag. and } \\ \text { Bis., tanto }\end{array}\right.$ |
| Chaff (of grain) | âpă |  |
| Chagrin | sûsă hâtei | susah hati. |
| Chain | bilângu |  |
| Chair | sêă |  |
| Chalk; lime | bânkĭt |  |
| Change, to | * ûbǎh | $\left\{\begin{array}{l} \text { ubah. Jav., owah; } \\ \text { Sund. and Day., } \\ \text { obah; Bat., uba; } \\ \text { Malag., wi-owa } \end{array}\right.$ |
| Change dress, to | găntĭ tâmungan | $\left\{\begin{array}{l} \text { ganti, change. Jav., } \\ \text { Sund., Day. and Tag., } \\ \text { ganti; Bat., ganti; } \end{array}\right.$ |
| Change one's house, to | * pindăh | $\left\{\begin{array}{l} \text { pindah. Occurs in Jav., } \\ \text { Sund. and Day. } \end{array}\right.$ |
| Chapter | pâshăl | fasal (Ar.) |

English. Sulu. Malay.
Character (letter)
Charcoal ; coal huruf
bûling
huruf ( $A r$.)
(harga. Jav. and Day., rega; Sung. and Bat., harga; Dak., tanga; Tag. and Bis., Malaga
Charity zâkă
Chart; map * pătâ
Chase, to pânhut
Cheap mohei $\dagger$

Cheat, to * tip
Cheerful ; merry * senâng hâtei
Chest; breast dâghâ
Chew, to
mâgmâmăh

Chief, a
Child
Child (first born) * ănâk sûlông

Child (last born) * ănâk bôngsu
$\left\{\begin{array}{l}\text { morah. Jav., Sound., } \\ \text { and Day., murah; }\end{array}\right.$
Bat., mira; Tag., mora
\{ tipu. Sung. and Day., $\{$ tip dada
$\left\{\begin{array}{l}\text { me-mamah. Jav. and } \\ \text { Sud., mamak; Bat. }\end{array}\right.$ and Mak., mama
$\left\{\begin{array}{l}\text { morah. Jav., Sund., } \\ \text { and Day., murah; } \\ \text { Bat., mura; Tag., } \\ \text { mora }\end{array}\right.$ \{ zakat (Ar.). Jav., \{ jakat; Mab., saki f petal. Sund., pera; Bat., pata; Make., Data
\}panglima
anal. Bis., bata
(anal bongsu. Sung., bungsu; Bat., pun$s u$, the lowest part of the back; Mark., bungku; Tag., bong-
so

Child, With (pregnant)
$\dagger$ Dr. Montano gives mura as the Sulu word for "cheap."

English.
Chillies
Chisel
Chopper
Choose, to
Chop, to
Christ
Church
Cigarette
Cinnamon
Circumcise, to
Citron; lemon
Claw, a
Clean, to
Clear; transparent inăsâwă
Clever
Clock
Close
Close-hauled
Cloth
Clothes
Cloud
Coast
Coat băju
Cock
Cock, Jungle-
Cock roach
tiầndog
melâno

* păndei
lilus
tămbul
măsâkâl
kain
tâmungăn $\ddagger$
dempôk
pâš̌sǐr
mânuk ǐssak
lăbûyuk
kok
sânkăp
utâb
puǐk $\dagger$
jŭg-jŭg
* Nâbí Isă
lângâr
sigârellǐo
mână
* barsûnăt
limau

Cocoa-nut husk bunutlâhing
(pilih. Jav. and Sund., pilih; Mak., pılê ; Bug., ilêe; Day., ilih; Tag. and Bis., pili
sonat (Ar.) $\{$ limau. Sund. limo; \{ Mak. and Bug., lemo

* nyôr; lâhĭng
pandei.
kain. Sund., kain
$\{$ pasisir. Jav. and $\{$ Sund., pasisir. \{baju. Occurs in Jav., $\{$ Bat., Mak. and Day.
$\left\{\begin{array}{l}\text { nior. Jav., miut Mak., } \\ \text { anjoro; Tag. and } \\ \text { Bis., niyog }\end{array}\right.$

Malay.
lârăh; ûvi toâd

[^61]English. Sulu. Malay.

| Cocoa-nut oil | lână lâhĭng |
| :--- | :--- |
| Cocoa-nut shell | ugâb |
| Coffee | kâtwă |
| Coil up, to (a rope )loengoenoen |  |
| Cold |  |
| Comb | măhâgud; măhâgut |
| Colei |  |

Come, to
$\left\{\begin{array}{c}\text { mâdŭ; kârı̆ ; dumă- } \\ \text { tăng }\end{array}\left\{\begin{array}{l}\text { mari, (Bat., mari) da- } \\ \text { tang. Jav., dateng; } \\ \text { Sund., datang; Bat., } \\ \text { datang, as long as; } \\ \text { Tag., dating ; Bis., } \\ \text { datong }\end{array}\right.\right.$


Commerce dâgâng

Commit murder, to bûnoh

Commita crime, to dûsâh
Common people * raiăt
Communicate, to baităhun
Companion
titah
$\left\{\begin{array}{c}\text { dagang. Occurs in } \\ \text { lav., Sund., Bat., }\end{array}\right.$ Day. and Tag. In Mak., danggang and Bug., dangkang
「bunoh, kill. Jav., bunuh; Sund., bunuh, to cut open; Bat., bunu; Mak., buno; Bug., uno; Day., puno, to spear; Tag. and Bis., bono, to fight
\{dosa, a sin, crime. Occursin Jav., Sund., Bat., Mak. and Day. ra‘iyat (Ar.)

English.
Sulu.

$\underset{\text { ner's })}{\text { Compass }}($ Mari- $\} *$ pădûmăn $\dagger$
pâksă
măkâto

Complete

* genâp
dâgbus
Complexion dâgb
Comply, to ; obey âgât
Comprehend, to mâkăhàtĭ

Compute, to bilâng

Concubine săhendĭl
Concertina âmbăg-âmbăg
Condemn, to (sentence)

Conduct
Conference
Confess, to
Confront, to
Conquer, to
Cook, to
\}mûtâng
kăsudâhăn
bǐchâră
baită
mâkbaio
sumauk
hinân kaunoen

Malay
paduman and panduman. Jav. and Sund., padoman; Mak., padomang; Day., paduman; Tag., paraluman; Bis., padaloman
genap. Jav. and
$\left\{\begin{array}{l}\text { genap. Jav. and } \\ \text { Day., genep; Sund., } \\ \text { ganap; Bat., gonop; } \\ \text { Mak., gana; Tay., } \\ \text { ganap }\end{array}\right.$
$\left\{\begin{array}{l}\text { genap. Jav. and } \\ \text { Day., genep; Sund., } \\ \text { ganap; Bat., gonop; } \\ \text { Mak., gana; Tay., } \\ \text { ganap }\end{array}\right.$
$\left\{\begin{array}{l}\text { genap. Jav. and } \\ \text { Day., genep; Sund., } \\ \text { ganap; Bat., gonop; } \\ \text { Mak., gana; Tay., } \\ \text { ganap }\end{array}\right.$
\{meng-arti. Jav. and $\{$ Sund., harti. bilang. Jav., wilang; Sund., Bat., Mak., Bug., Day. and Tag.,
bilang
$\left\{\begin{array}{c}\text { ka-sudah-an, end, } \\ \text { accomplishment. }\end{array}\right.$ (See Case)
$\dagger$ Favre derives this word from dom (Javanese), a needle; but it may perhaps be formed from pandu, a guide.

$$
\text { English. } \quad \text { Sulu. } \quad \text { Malay. }
$$

Cooking-place $\quad$ dâpôr; dâpôrăn $\left\{\begin{array}{c}\text { dapor. Sund. and } \\ \text { Day., dapur; Tag. } \\ \text { and Bis., dapog }\end{array}\right.$

Copper * tŭmbâgăh
$\underset{\text { Cribe }}{\text { Copy, to }}$ trans- $\} *$ sâlĭn
Cord ; rope lubĭt
Cork (stopper) tutop

Corn (maize) gândăm
Corner (outward) dugu
Correct ; accurate buntûlăn
Cost
Cost, prime
Costly ; dear

Cotton
hâlgă
pohôn
mâhûnĭt
kâpas
(See Charge) (See Capital)
$\left\{\begin{array}{l}\text { kapas. Jav., Sund. } \\ \text { and Day., kapas; } \\ \text { Bat., hapas; Mak., } \\ \text { kapasa; Bis., gapas }\end{array}\right.$
$\left.\begin{array}{l}\text { Cotton thread } \\ \text { (weaving) }\end{array}\right\}$ tĭnkâl do. (sewing) sâbăn

| Cough <br> Count, to | obu <br> itûngăn |
| :--- | :--- |
| Country | $*$ banûă |

Couple, a (married) dûǎ mâktǐaun
Courtesan

* sûndâl

Cousin (first tûngut kamĭsan
Coverlet

| English. | Sulu. | Malay. |
| :---: | :---: | :---: |
| Cow | A¢ |  |
| Cow | sapi omaga | \{ karang rock, coral, |
| Crab | kâgâng | $\left\{\begin{array}{c}\text { karang, rock, coral, } \\ \text { shells }\end{array}\right.$ |
| Cradle | bohrân |  |
| Cramp | pid-pid |  |
| Crawl, to | kură-kură | kura-kura, a tortoise |
| Creek, a | ănâk sowâh | (See Brook) |
| Crime | dosâ | (See Commit) |
| Crocodile | buaiă | (See Alligator) |
| Crooked | bengkôk | $\left\{\begin{array}{c}\text { bengkok. Id. in Jav. } \\ \text { and Sund. }\end{array}\right.$ |
| Cross ( crucifix) | sălib | salib (Ar.) |
| Crowd, a | măhipûn tau |  |
| Crown | mâhkotă | $\left\{\begin{array}{l}\text { makota. Id. in Jav., }\end{array}\right.$ |
| Cruel | bĭngǐs | bengis |
| Cry, to ; weep | mâktângis | $\left\{\begin{array}{l} \text { tangis, menangis. } \\ \text { Jav., Bat., Day., Tag. } \\ \text { and Bis., tangis } \end{array}\right.$ |
| Cucumber | mârăs |  |
| Cunning | * berâkăl | $\left\{\begin{array}{l} \text { ber-'akal (See Capa- } \\ \text { city) } \end{array}\right.$ |
| Cup | pĭngăn | $\left\{\begin{array}{l} \text { pinggan, plate, saucer. } \\ \text { Id. in Jav., Sund., } \\ \text { Bat. and Day. In } \\ \text { Tag. and Bis., ping- } \\ \text { gan, flat } \end{array}\right.$ |
| Cure, to | kâhûlĭ |  |
| Curious ; strange | hêrân | (Ses Arranged) <br> (harus. Sund., harus; |
| Current | haus | $\left\{\begin{array}{l}\text { Mak. ard Bug., aru- } \\ \text { su; Day., harusan }\end{array}\right.$ |
| Curse, to | manǐngăt |  |
| Curtain | lăngsei |  |
| Cushion | ûăn |  |
| Custom | âdât | (See Accustomed) |
| Customs ; tax ; charge | $\}^{*} \text {. chûkei }$ | $\left\{\begin{array}{l} \text { chukei. Jav. and Sund., } \\ \text { chukê ; Day. sukai } \end{array}\right.$ |



| English. | Sulu. | Malay. |
| :---: | :---: | :---: |
| Darling * kăkâsǐh |  |  |
| $\left.\begin{array}{l} \text { Dash, to ; throw } \\ \text { down } \end{array}\right\} \text { bugit }$ |  |  |
|  |  |  |
| Date (fruit) | * khôrmă | $\left\{\begin{array}{l} \text { khorma (Pers.). Jav., } \\ \text { Sund., and Day. kor- } \\ \text { ma; Mak. and Bug., } \\ \text { koromma } \end{array}\right.$ |
| Daughter ânăk băbai |  |  |
| $\left.\begin{array}{l} \text { Dawn ; break of } \\ \text { day } \end{array}\right\}$ | \}sûbu-sûbu | ('See Break) |
| Day ădlau |  |  |
| $\left.\begin{array}{l} \text { Day after to- } \\ \text { morrow } \end{array}\right\} \text { kunĭsă }$ |  |  |
| Dead | mǎtǐei | $\left\{\begin{array}{l} \text { mati. Jav., pati, dead, } \\ \text { mati, to die; Bat., } \\ \text { Mak. and Bug., ma- } \\ \text { té; Day., matey; } \\ \text { Tag. and Bis., pa- } \\ \text { tay; Malag., mati; } \\ \text { Polynesian, matê } \end{array}\right.$ |
| Dead (of Rajas) | môrhăm | $\left\{\begin{array}{c} \operatorname{marhum}(A r .) \text { "who } \\ \text { has found mercy " } \end{array}\right.$ |
| Deadly | * bisâ | $\left\{\begin{array}{l} \text { bisa, poison, poison- } \\ \text { ous. Jav., wisa, poi- } \\ \text { son. Occurs in Sund. } \\ \text { Bat., Mak. and Tag. } \end{array}\right.$ |
| Dear ; expensive măhûnĭt |  |  |
| Dearth guton |  |  |
| Debate, to; discuss bĭchâră |  | (See Case) <br> hutang. Jav. and |
| Debt | ûtâng | $\left\{\begin{array}{l} \text { Sund., hutang; Bat. } \\ \text { and Day., utang; } \\ \text { Tag. and Bis., otang } \end{array}\right.$ |
| Deceive, to | kărâpătan |  |


| English. | Sulu. | Malay. |
| :---: | :---: | :---: |
|  |  | titah. Jav., titah, |
| Decree | tităh | creature ; nitah, create ; Sund., titah, order |
| Deduct, to | kumâwă |  |
| Deep | mălaum | dalam |
| Deer | ûsâ | rusa |
| Defend, to | mâgsâgăk |  |
| Deficient | kûrâng | korang |
| Deformed | mâpis |  |
| Degrade, to; dis- $\}$ mâghinâng sipuk; grace $\}$ mâgbûkăg |  |  |
| Degree | * pângkat | (See Blood) gila. Jav. and Sund., |
| Delirious ; foolis | h gilă | $\left\{\begin{array}{l} \text { gila, to hold in hor- } \\ \text { ror; Sund., gêlo, } \\ \text { mad; Bat. and Day., } \\ \text { gila } \end{array}\right.$ |
| Deliver, to (release) | $-\}_{\text {- }} * 1 \in p a ̌ s$ | $\left\{\begin{array}{l} \text { lepas. Jav., lepas; } \\ \text { Bat., lopas; Mak., } \\ \text { lappasa; Day. and } \\ \text { Bis, lapas; Tag., } \\ \text { lipas } \end{array}\right.$ |
| $\left.\begin{array}{l}\text { Deliver, to } \\ \text { (hand over) }\end{array}\right\}$ dûmehil |  |  |
| Deluge dunûg |  |  |
| Demand, to | măbaiyăd |  |
| Demon | * hântu | $\left\{\begin{array}{l} \text { hantu (Sansk. hantu, } \\ \text { dead). Jav. antu; Bat. } \\ \text { \& Sund., hantu; Day. } \\ \text { hantu, a corpse } \end{array}\right.$ |
| Deny, to măhûkăn |  |  |
| Depart, to mănau |  |  |
| Depart home, to | m'wĭ; wi |  |
| Depth | mâlaum | dalam. |
| Desire, to măbayăd ; m |  |  |
| Desire, to (long for) | or) bimbâng | bimbang |


| English. | Sulu. | Malay. |
| :---: | :---: | :---: |
| Destiny | * năsîb | nasib (Ar.) |
| Destitute ; poor | mĭskĭn | miskin. Jar., miskin |
| Destroy, to | * binâsâkăn | $\{$ binasa-kan. (Sansk. |
| Detest, to | * bănchǐ | běnchi. Mak., banchi |
| Deril, the | sêtân | $\left\{\begin{array}{l} \text { sětan, sheitan (Ar.) } \\ \text { Jar., Sund., Bat. and } \\ \text { Day., setan; Mak., } \\ \text { setang; Tag., sitan } \end{array}\right.$ |
| Devour, to ; eat Dew | kumaun âlo |  |
| Dialect | * bhâsă | $\left\{\begin{array}{c} \text { bahasa (Sansk. bha- } \\ \text { sha). Jav., Sund., } \\ \text { Mak. and Bug. basa; } \\ \text { Day., basa and baha- } \\ \text { sa } \end{array}\right.$ |
| Diamond | * intân | $\left\{\begin{array}{c} \text { intan. Jav., and Sund., } \\ \text { inten Mak., intang. } \end{array}\right.$ |
| Diarrhœa | sâkǐt mintau |  |
| Die, to | mĭătei | mati. (See Dead) s susah, Jar., Sund. |
| Difficult | mâgsûsǎh | $\left\{\begin{array}{l} \text { susan, Jav., sund. } \\ \text { and Day., susah; } \\ \text { Bat. and Mak., susa } \end{array}\right.$ |
| Dig, to | kâl | gali. Sund., kali |
| Diligent | bǐskai |  |
| Dim | mălâmun | kělam. (malam, night) |
| Dimensions | sukûrân | ukur-an ; sukat-an |
| $\begin{aligned} & \text { Dine, to (of } \\ & \text { Rajas) } \end{aligned}$ | $\} * \text { săntăp }$ | santap. |
| Dip, to ; dye, | mâkhinâng pâlâng |  |
| Direct, to (point | to) tûju | $\left\{\begin{array}{l} \text { tuju. Jav., Sund., and } \\ \text { Mak., tuju; Bis., } \\ \text { todlo. } \end{array}\right.$ |
| Direct ; straight | mâktû1 |  |
| Dirt ; mud | pisâk | bichak. |
| Dirty | mûmí |  |
| Disappear, to | mălâwǎ |  |



English.
Sulu.
Dive for pearl shell, to \} mâksâb
$\left.\begin{array}{c}\text { Divide, to ; a } \\ \text { division }\end{array}\right\}$ bhâǧăn $\quad\left\{\begin{array}{c}\text { bahagi-an. (See Dis- } \\ \text { tribute) }\end{array}\right.$ $\left.\begin{array}{l}\text { Divide, to ; cut } \\ \text { in two; }\end{array}\right\}$ sĭpâk
Divorce, to bugit
Divorced wife Do not,
Dog êdu ; êro

Dollar
pirâk ; pilâk
Done ; finished obûs

Door
Double
Down ; below
Drag, to ; pull ; draw
Drag, to (at anchor)
Drake
lâwâng
kăduă
hăbâwă
\}hêlã
lĭâran
îtêk ǐssak

Draw, to; delineate; tûlĭs

| Drawer, a <br> Drawn (weapon) $)$ | ôngsud <br> lâtu <br> mâktâmungăn |
| :--- | :--- |
| Dress, to | hĭânut |
| Drift, to | * minăm ; minŭm |

Drawer, a ôngsud
Drawn (weapon) lârût
Dress, to măktâmungăn
Drift, to
hîânut
Drink, to

* minăm ; minŭm
English.
Sulu.
Malay.

| Drop, a | hâtó |  |
| :---: | :---: | :---: |
| Drop, to ; fall | mahûlok; mahog | lemas |
| Drown, to ; sink | lûmus |  |
| Drunk | hêlo |  |
| Dry ; dried fish | tăhaĭ |  |
| Dry land | lûpă |  |
| Dry season | musŭn utâră | $\left\{\begin{array}{c} \text { musim utara, } \\ \text { monsoon } \end{array}\right.$ |
| Dry, to | boăt |  |
| Dry in the sun, to ; ubârwăn |  |  |
| Duck | * îtêk | $\left\{\begin{array}{l} \text { itek. Jav., itek; Bat. } \\ \text { and Day., itik; Mak., } \\ \text { kiti; Tag. and Bis., } \\ \text { itik, goose } \end{array}\right.$ |
| Due ; owing | * ûtâng | utang, hutang |
| Dumb | * bĭsu | $\left\{\begin{array}{l} \text { bisu. Jav. and Sund. } \\ \text { bisu } ; \text { Day., biso } \end{array}\right.$ |
| Dumb, (hoarse) | wai tingoerg |  |
| Dunce; fool | dûpâng |  |
| Dust | hâboh | habu, abu. (See Ashes) |

Each
hambûk-hambûk

Ear
taignă

Ear-ring
bâng
(telinga. Jav., talingan; Mak., toli; Day., talingan, to hear; Tag., tainga; Bis., dalonggan; Maori, teringa; Fiji, ndaliga subang. Jav., suweng; Sund., suweng and subeng; Bat. and Mak., sibong; Day., sowang.

Early; morning; mahinaât Earnings
tândâng


English. Sulu. Malay.
Emblem
Embrace, to
Embroider, to Emetic

Emigrate, to
Empty
tândă
mâklûrei
tâhê'
obât sûkă

* pĭndâh
âpă ; wail luăn
Enclosed; a fence âd
Encourage, to deco deio
End ; point tânjông
End; conclusion * kasûdăhân; âkhĭr $\left\{\begin{array}{l}\text { kasudah-an; akhir } \\ (A r .)\end{array}\right.$
Endeavour, to sûlei
Engine; machine mâkină
Enough
Enquire, to
Ensign ; flag
Entangled
Enter, to
Entirely; even $\left.\begin{array}{l}\text { (number) }\end{array}\right\}$ gănăp
Envelope sârông sûrăt
Equal ; alike
Escape to ; run away
Especially ăstemuă
Estate (inherited) pasâkă
$\left.\begin{array}{l}\text { Evening ; after- } \\ \text { noon }\end{array}\right\}$ măhâpun
Ever
Every; all
Exact; accurate;
$\quad$ true
sâlĭ
hâwǎ
kătân ; kătăân
serâng
âssûwu
pânjǐ panji
sâgnăt
mâdĭ
mâ'gwĭ
buntûl ; banâl
\{tanda, mark. (See (Brand)
\{pindah, to remove. $\{$ (See Change )
hampa (Sec Fence )
rtanjong. Sind., tan-
L jong, Bat., manjong
\{ganap. (See Complate)
$\{$ sarong surat, lit. \{ case of letter
istemewa
$\left\{\begin{array}{l}\text { pusaka, inheritance. } \\ \text { Jav. and Sund., pu- } \\ \text { saki }\end{array}\right.$

| English. | Sulu. | Malay. |
| :---: | :---: | :---: |
| Examine, to | * preksâ | preksa |
| Example | * chônto | $\left\{\begin{array}{l} \text { chonto. Jav. and } \\ \text { Sund., chonto } \end{array}\right.$ |
| Exceed, to | lebĭ | $\left\{\begin{array}{l}\text { lebih. Kw., lewih; } \\ \text { Jav., luwih; Sund., } \\ \text { lowih, Bat., lobi; } \\ \text { Mak. and Bis., labi; } \\ \text { Day., labih }\end{array}\right.$ |
| Except | mălainkăn | me-lain-kan |
| Excessive ; too | lândo ; lânduk |  |
| Exchange, to | gântǐ | $\left\{\begin{array}{cl} \text { ganti. } & \text { Jav., } \\ \text { Sund., } \\ \text { Day. and } & \text { Tag. } \\ \text { ganti; } & \text { Bat., gansi } \end{array}\right.$ |
| Excuse, to ; pard | hauirǎn |  |
| Exhausted | hâpus; mǎhâpus |  |
| Exist to ; to be | ăun |  |
| Expend, to | mâkblânjă | mem-bĕlanja bělanja. Jav., belon- |
| Expense | * blânjă | ja; Sund., Bat., Mak. and Day., balanja ; Bug., balancha |
| Explain, to | baitǎ |  |
| Extra ; more | dugeign |  |
| Eye | * mâtă | $\left\{\begin{array}{c} \text { mata. Occurs in Jav., } \\ \text { Sund., Bat., Mak., } \\ \text { Day., Tag. and Bis. } \end{array}\right.$ |
| Eye-ball | * bĭjǐ mâtă |  |

## F

Fable kâtǎ kâtǎ
$\left\{\begin{array}{c}\text { kata-kata, report, } \\ \text { hearsay }\end{array}\right.$
Face, a beihôn; dâgbus
$\left.\begin{array}{l}\text { Face to face, } \\ \text { to bring }\end{array}\right\}$ mâkbeihôn

English. Sulu. Malay.
Fade, to (colours) * barûbâh
Fail in business, to bǎg băg; bŭg-bŭg
Faint, to
nâjăh
Fair; handsome chântěk; mâraiyau; chantik
Fall, to
False; lying; liar putǐng

Family (relations) bângsă
(bangsa, race. Jav., wongsa; Sund., Bat. and Day., bangsa; Mak., bansa
$\left.\begin{array}{ll}\begin{array}{l}\text { Famine } \\ \text { Fan, a } \\ \text { Far }\end{array} & \begin{array}{l}\text { gutôn } \\ \text { kâb-kâb } \\ \text { Fare; passage } \\ \text { money }\end{array}\end{array}\right\}$ meio

Fall ill, to mâksâkît-nâ
$\left.\begin{array}{l}\text { Fashion ; mode; } \\ \text { custom }\end{array}\right\}$
Fast; quick sûmût

Fast ; abstinence * puâsǎ
(chukei, tax. (See Customs), from the Hindustani chauki
'adat (Ar.)
puasa (Sansk.upavasa). Jav., puwasa; Sund. and Day., puasa; Bat., puwaso; Mak., puz'asa; Bis., poasa

Fasten, to
Fat
Fate
Father
Father, grand-
Fa.thom
Fatigued
Fault
Favour
Favourite
Fear
hûkut ; hoekoetoen
mâtâmbôk

* nâsib nasib (Ar.)
âmă
âpo
* dípâ
mâhâpus
dûsǎ
* kâsǐh
* kǎkâsǐh
kâbugâân
děpâ
dosa, $\sin$. (See Crime) kasih
kakasih

| English. | Sulu. | Malay |
| :---: | :---: | :---: |
| Feast, to | mâkdoât |  |
| Feather | bulbul | bulu |
| Feel, to | nânâm |  |
| Feet; leg | sǐgǐ ; sǐkǐ | kaki |
| Fell, to; cut down | 1 pămâtǎ |  |
| Female (human) | băbai |  |
| Female (animal) | omâgǎk |  |
| Fence, a | âd | had (Ar.), limit |
| Fence in, to | mâkâd |  |
| Fern, a | pâkĭs | paku <br> ber-nanah. Jav. and |
| Fester, to | * bărnânăh | $\begin{cases}\text { Sund., nanah. Bat., } \\ \text { Mak., Day., Tag. } \\ \text { and Bis, nana }\end{cases}$ |
| Festival day | âdlau dâkolă |  |
| Fetch, to | kîâwă ; kumâwă |  |
| Fetters | billângă |  |
| Fever | hinglau |  |
| Few; little | tio-tio |  |
| Fiddle, violin | * bĭolă ; violă | biola (Port.) |
| Field ; plain | pântei | pantei, sea-beach |
| Fiend | * sêtân | sêtan ; sheitan (Ar.) |
| Fifteen | hângpo tâg limă |  |
| Fifth, One= | $\left\{\begin{array}{c}\text { hâmbûk bhâgiăn } \\ \text { laum limă }\end{array}\right.$ |  |
| Fifty | kaimân |  |
| Fifth | kâlimă | ka-lima |
| Fight, to | $\left\{\begin{array}{l} \text { bûno ; mâkbûno ; } \\ \text { bântă } \end{array}\right.$ | \}bunoh, to kill |
| File, to | kikis | kikis. Day., ikis |
| Fill, to | lûân |  |
| Final ; last | mâhûlĭ |  |
| Find, to | kâbâki |  |
| Fine (in texture) | * hălus | $\left\{\begin{array}{l} \text { halus. Jav., Sund, } \\ \text { and Day., alus; } \\ \text { Mak., alusu; Bat., } \\ \text { alus, white; Tag., } \\ \text { halos } \end{array}\right.$ |

English.
Finger
Finger, Little
Finish, to
Fire
Fire, to (a gun)
Fire-place
Fire-wood
First
Fish
$\underset{\text { Fish, to (with a }}{\text { hook }}$
gûlămei
kĭn-kĭn
obûsân
kaiyu
tirmbâk
dăpôrân
dûngul
kâ-īsă
ǐstǎ
\}bingit
tembak
\{ dapor, dapor-an
\{ (See Cooking-place)

Fish, to (with a net)măpûkut
pukat, memukat. Bat., puhot; Mak. and Bug., puka; Day., pukat; Tag. and Bis., pokot
Fish-hook
Fishing-line
Fist
Flag
Flag-staff
Flame, to

Flash, to * barkilăt

Flat; level
Flavour
Flesh
Float, to
Flood, a
Flood-tide
Floor
binggit
hâpun
tĭbuûk
pânjǐ
târok pânjŭ
mâlâgă
pântei
mâmûd
ûnut
lântop
dunug
taub

* lântei
tinju
panji
(See Blaze)
ber-kilat. Jav., Day. and Bis., kilat; Tag., kirlat; Sund., kilap; Bat., hilap; Mak., kila
pantei, sea-shore
$\left\{\begin{array}{c}\text { lantei (floor of laths or } \\ \text { planks) }\end{array}\right.$

| Finglish. | Sulu. | Malay. |
| :---: | :---: | :---: |
| Flour | * tapông | tepong. Jav., tepong, to mix, galepung, flour; Mak., tappung, rice-flour; Day., tepong, bread, pastry |
| Flower | sûmping | $\left\{\begin{array}{l} \text { sunting, (See Blos- } \\ \text { som) } \end{array}\right.$ |
| Flute | flaută |  |
| Fly, a | pikût | pikat. |
|  |  | $\begin{aligned} & \text { lompat, to jump. Jav. } \\ & \text { and Bat., lumpat, } \\ & \text { jump; Sund. and } \end{aligned}$ |
| Fly, to | lômpât | Day. lumpat, run; Tag., lumbay, to skip. Bis., lompayag, to jump |
| Foam, to | mâgbûkâl |  |
| Fold, to | lupioen; lipât | $\left\{\begin{array}{l}\text { lipat. Jav., lempit; } \\ \text { Mak., lapa; Day., } \\ \text { lipet })\end{array}\right.$ |
| Follow, to | ûrul ; tĭmûrul |  |
| Follower, a | ibân |  |
| Food | kaunăn ; kaunoen |  |
| Foot-mark | săkâ lĭmpu |  |
| For | kân | akan |
| For ever | hâwă |  |
| Forbid, to | liâng | larang |
| Forbidden | * hărâm | haram (Ar.) |
| Force ; strength | * kwâsă | $\left\{\begin{array}{c} \text { kuasa. (See Autho- } \\ \text { rity) } \end{array}\right.$ |
| Force, by | pâksă |  |
| Forehead | tok tok |  |
| Forest | kâtiân |  |
| Fore-part of a vessel | \}âdûn |  |
| Forfeit, to | mălâwă |  |

Forget, to
kălûpâhân

Forgive, to âmpun
Fork, a; pricker tugsûk Former; formerly mûnă ; tâgnă Forsake, to igân

Fort, a
$\left.\begin{array}{c}\text { Fortune, good ; } \\ \text { profit }\end{array}\right\} *$ untông
kâopătân mûmí

Founder, to
Four
Fowl
Fragrant
Free, to; liberate; emancipate
Freight
Free (sailing)
Fresh
$\left.\begin{array}{l}\text { Fresh (of fish) ; } \\ \text { alive }\end{array}\right\}$
Fresh water tubĭg tâbâng
Friend

Friendship
opăt
mănuk
mâmud măpwâs
luânăn
hâtôrăn
bâgu
bohe
bâgai
mâgsăhâbut

Malay.
$\left\{\begin{array}{c}\text { lupa. ka-lupa-an, for- } \\ \text { getfulness. Jav., lu- }\end{array}\right.$ $p a$, weak; Bat. and Mak., lupa
\{ampun. Occurs in Jav., Sund., Bat., Day. and Tag.
(kota. Jav., kuta; Bat., huta; Sund., Mak., Day., Tag. and Bis., kota untong. Jav., Sund. and Bat., untung; Mak., Day. and Tag. ontong
\{lemas, drowned, suffocated ampat (See Bird )
ber-sahabat ( $A r$. ). Jav., Sund. and Day., sobat; Mak., soba; Tag. and Bis., saobat
English.
Sulu.
Malay.

Frightened
From
Frontier
Fruit
Fry, to
Full
Full moon
Furrow
Further
Futurity
mâbûgât
daing
higât
bûngâ
dâng-dâng ; landâng
măhipu
dumlầk
bâdlĭs
meio pâ

* âkhĭrăt


## G

| Gain; profit ûntông | untong. (See Fortune) |  |
| :--- | :--- | :--- |
| Gale; storm | hûnus; ûnus |  |
| Gallant ; brave ; |  |  |

Gallant ; brave ; $\}$ issak
manly

Gamble, to sûgâl; mâksûgâl
Game
pănaiyăm
\{per-main-nan, (See (Amuse)
Garden
jâmbângǎn
Gambier gâmbĭă
Garlic
Gate
lâwâng
Gather, to
Gaze, to

Gem
pâmâtă

Gentleman; sir tûân
$\left\{\begin{array}{l}\text { gambir. Jav., Sund., } \\ \text { Bat. and Day., gam- } \\ \text { bir; Mak., gambêrê }\end{array}\right.$ bawang puteh
$\left\{\begin{array}{c}\text { lawang, door of a } \\ \text { palace. Jav. and } \\ \text { Sund., lawang }\end{array}\right.$
pûsud
kită

Gently ; slowly înût înût
$\left\{\begin{array}{c}\text { permata (Sansk. pa- } \\ \text { ramata, excellence). }\end{array}\right.$
Kw., pramati, a fine thing
$\left\{\begin{array}{l}\text { tuan, master or mis- } \\ \text { tress }\end{array}\right.$

English.
Genuine ; true Ghost
Gimlet
Girdle ; waist belt
Girl
Give, to
Glad
Glass

Sulu.
buntul ; betûl
hântû
bărină
kăndĭt
ânâk băbai
dêhelĭ; dêhǐl
kĭogǎn

* kâchă
$\underset{\text { mirror }}{\text { Glass (looking) } ;\} \text { chermin }}$
Glean, to
ânĭ
Glittering ; bright * châhîâ
Glorious * mûlîà
Glory
Go, to
Go down, to
Go up, to

| Goat | kâmbĭng | $\left\{\begin{array}{l} \text { kambing. Jav., kam- } \\ \text { bing; Bat., hambing; } \\ \text { Mak. and Bug., bem- } \\ \text { bêe } \end{array}\right.$ |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
| Goblet | châwăn | chawan, cup |
|  |  | (Allah (Ar.), God; Al- |
| God | Allâh tăâlâ | $\{$ lah t'ala, God most <br> \{ high |
| Gold | bûlâwăn |  |
| Gone; disappeared mălâwă |  |  |
| Gong | âgông | (gong. Jav., gong an |
|  |  | egong; Bat., ogung ; Sund., gung; Mak., |
|  |  | gong ; Day., geng; |
|  |  | Tag. and Bis., agong |
| Good | măraiyau; |  |

(See Bright )
mulia. Jav., mulya ka-mulia-an
mănau; mâtû; păkein
lûmud
sekăt
(See Bottle)
chermin; Bat., sormin; Mak., charammeng; Bug., chammeng; Tag. and Bis., salamin
bětul. Bat., botul
hantu, (See Demon)
(See Belt)

English. Sulu. Malay.
Good, to make păraiyauân
$\left.\begin{array}{c}\text { Good bye, (lit., } \\ \text { let us go) }\end{array}\right\}$ mwi-na kami
$\left.\begin{array}{c}\text { Good bye (an- } \\ \text { swer) }\end{array}\right\}$ mwi-na
Good for nothing wal gûnă
Goods ârtă
Gourd; pumpkin * lâbû
Grand
Grand-child
Grapple, to
dâkolă
âpo
lûrei
$\left.\begin{array}{l}\text { Grasp, to (in the } \\ \text { hand) }\end{array}\right\}$ kûmâpût
Grass sâgbût
Grass, Long rank pârâng
Grasshopper âmpăn
Grate, to kogût
Grave kûbôrân
Gravy sâbau
Grease ; fat dâghng
Green (colour) gâdông
Green (unripe) helau
Grey hair bohûk pûtĭ
Grief sûsâhân
Grin, to ; laugh kătâwă
Grind, to măkhâsă
Grindstone hâsǎân
(See Articles)
labu (Sansk. alabu). Sung., lab; Bat. tabu-tabu; Malay. tarn
lalang
parut
kubur. (See Bury)
$\left\{\begin{array}{l}\text { daging, meat. Same in } \\ \text { Jav. and Sung. Bat., } \\ \text { dazing, the body; } \\ \text { Mak., dagêng, meat }\end{array}\right.$ $\left\{\begin{array}{l}\text { ka-susah-an. (See } \\ \text { Care) }\end{array}\right.$
$\left\{\begin{array}{l}\text { tertawa. Bat., tazza; } \\ \text { Tag., tow; Bis., } \\ \text { tao }\end{array}\right.$ $\left\{\begin{array}{l}\text { asah-an; asch, to } \\ \text { grind, sharpen. Jav. } \\ \text { and Sund., asch; } \\ \text { Day., asa }\end{array}\right.$

| English. | Sulu. | Malay. |
| :---: | :---: | :---: |
| Gristle | ugât | urat. (See Artery) |
| Grit | boăhângĭn |  |
| Ground, the | lupă |  |
| Grow, to | tûmubû | $\left\{\begin{array}{l} \text { tumboh. Jav., tuwuh; } \\ \text { Sund., tumbu; Bat., } \\ \text { tubu; Mak., timbo; } \\ \text { Day., tumbo; Tag. } \\ \text { and Bis., tobo } \end{array}\right.$ |
| Grow, to (increase) | e) * tămbăh. | $\left\{\begin{array}{l} \text { tambah. Jav. and } \\ \text { Sund., tambah; Bat. } \\ \text { and Mak., tamba } \end{array}\right.$ |
| Grow, to (become) | ) * menjâdĭ | men-jadi |
| Growl, to | măkâmă |  |
| Gruel ; soup | nı̌stâng ; mĭstâng |  |
| Guard, to | * jâgă | jaga. (See Awake) |
| Guardian ; agent | wâkĭl | wakil (Ar.) |
| Guavas | biăbâs |  |
| Guess, to | tûkût |  |
| $\left.\begin{array}{l} \text { Guide, to } \\ \text { (shew the way) } \end{array}\right\}$ | hĭndo ĭn dâăn |  |
| Guilt | * dosâh | dosa. (See Commit) |
| Guilty | sâh | $\left\{\begin{array}{l} \text { san, certan, corre } \\ \text { (Ar.). Jav. and } \\ \text { Sund., sah } \end{array}\right.$ |
| Gum ; gutta | gătâh | $\left\{\begin{array}{l} \text { gětah. Sund.; getah; } \\ \text { Bat., gota; Mak., } \\ \text { gatta; Day., gita } \\ \text { Tag. and Bis., gata } \end{array}\right.$ |
| Gun | * sĭnâpân | $\left\{\begin{array}{l} \text { snapang. Dutch snap- } \\ \text { haan } \end{array}\right.$ |
| Gun (cannon) | êspir |  |
| Gunpowder | obât timbâk | ubat bědil |
| Gutter | * pănchôrân | panchur-an |
|  | H |  |
| Heak, to | tikbâsăn |  |

## English. <br> Sulu. <br> Malay.

Hail, to (call to) tâwâk $\quad\left\{\begin{array}{c}\text { tawak-tawak, a gong } \\ \text { for summoning peo- } \\ \text { ple }\end{array}\right.$
Hair (human) bohûk

Hair (of beasts) bulbul
fbulu, hair, feathers, wool. Jav., wulu; Sund., Mak. and Day., bulu; Bat., imbulu; Tag. and Bis., polok, cock's
( feathers

| Hairy | măkbu |
| :--- | :--- |
| Half | * teng |
| Half, One- | ănsipâk |
| Halter (horse) | hâkǐma |
|  |  |
| Hammer | tûkôl |

Hammer, to
măktûkôl
Hamper; basket
ămbông
tengah. (See Centre)
Half, Oneansipâk
Halter (horse) hâkĭmă

| Hammer | tûkôl | kul; Tag., pokol, to break a thing by dashing it against another |
| :---: | :---: | :---: |
| Hammer, to | măktûkôl | memukul |
| Hamper; basket | ămbông |  |
| Hand, a | limâh | $\left\{\begin{array}{c}\text { lima, five. Mak. and } \\ \text { Bug., lima, the hand }\end{array}\right.$ |
| Handkerchief, a Handle, a | * sâpûtângen; pŭs pohân | saputangan |
| Happen, to | * menjâdĭ | menjadi |
| Happy | senâng | $\left\{\begin{array}{l}\text { senang. Jav., seneng } \\ \text { Sund., senang; Mak., } \\ \text { sannang ; Day., sa- } \\ \text { nang }\end{array}\right.$ |
| Hard | mâterâs; mâkterâs | $\left\{\begin{array}{l} \text { kěras. Jav. and Sund., } \\ \text { keras; Day., karas ; } \\ \text { Tag., galas } \end{array}\right.$ |
| Harden, to (metal) pătrâsăn |  |  |
| Halyards | hûmbâwăn ; bûbû |  |
| Harm | benâsăh | binasa. (See Destroy) |


| English: | Sulu. | Malay. |
| :---: | :---: | :---: |
| Harmless | di-na ono |  |
| Hat | sârok; châpûyo | $\left\{\begin{array}{l} \text { chapio } \\ \text { chapéo }) \end{array}\right. \text { (Portuguese }$ |
| Hatchet | kâmpâk | kapak. (.See Axe) |
| Hatchet (native) | pâtok |  |
| Hate | benchĭ | binchi. (Sec Detest) |
| $\begin{aligned} & \text { Have to ; to be } \\ & \text { (exist) } \end{aligned}$ | aun |  |
| $\left.\begin{array}{l} \text { He; him ; she; } \\ \text { her } \end{array}\right\}$ |  |  |
| His ; hers | nǔă ; kânı̌ă | $\left\{\begin{array}{l} \text {-nia (inseparable par- } \\ \text { ticle ) } \end{array}\right.$ |
| Head | hoh | hulu |
| Head-wind | ângin habǎi hoh |  |
| $\begin{aligned} & \text { Head (principal); } \\ & \text { old } \end{aligned}$ | \} mââs |  |
| Head-ache | sâkĭt hoh |  |
| Heal, to | kăhûliân |  |
| Heap, a | * tâmbûn | $\left\{\begin{array}{l} \text { tambun and timbun. } \\ \text { Jav. and Bat., tim- } \\ \text { bun; Mak., tam- } \\ \text { bung; Tag., timbon; } \\ \text { Day., tambuan, } \\ \text { above } \end{array}\right.$ |
| Hear, to | dungûk | $\left\{\begin{array}{l} \text { dengar. Jav., dengar, } \\ \text { understand; Sund., } \\ \text { dengề Mak., lan- } \\ \text { gêrêe } \end{array}\right.$ |
| Heart | hâtei | $\left\{\begin{array}{l} \text { hati. Jav., hati; Sund., } \\ \text { hatê, Bat., Mak. and } \\ \text { Bug., atê; Day. atai; } \\ \text { Tag., hati, middle; } \\ \text { Bis., atay, the liver } \end{array}\right.$ |
| Hearty ; sincere | benâl | $\left\{\begin{array}{l} \text { benar. Jav. and } \\ \text { Sund., bener } \end{array}\right.$ |
| Heat | bâssoh |  |

English.

Heaven

Heaven ; sky * lângit

Heavy

| Hedge, a; fence | âd |
| :--- | :--- |
| Heed, to | ingât |
| Height | intăâs |
| Hell | $*$ nêrâkă |

Helm

Help, to
Hen; fowl
Henceforth
Here
Hereditary
Hesitating
Hide, to
Hide ; skin
High
Highness ; Excellency
High water
Highwayman
Hill
Hilt

* kămûdĭ
tulông ; tăbâng
mânok
dâgì
dûun
* pasâkă
* bĭmbâng hâtei
tâpok
pais
hâătâs atas, up, upon, upper
\}* tûânkû
tûmaub ; dâgăt dâkolă
sûgârol
bûûd
pohân
Bat.,hamudi; Sund. and Mak., kamudi
tulong. (See Asist)
(See Bird)
deri, from
pusaka
bimbang hati
tuanku Sund., Bat., Day., Tag. and Bis. Mak. and Bug., langi
běrat. Jav., werat;
Sund., wrat, weight of gold; Bat., borat ; Tag., bigat; balat; weight of gold; Bis., bogat
(See Fence)
ingat. (See Recollect)
$\left\{\begin{array}{cl}\text { naraka. } & \text { Same in Jav., } \\ \text { Sund., Mak. and } \\ \text { Day. } & \end{array}\right.$
(kamudi. Jav., mudi;


English.
\(\left.$$
\begin{array}{ll}\begin{array}{ll}\text { Horn, a } \\
\begin{array}{l}\text { Horns, to butt } \\
\text { with the }\end{array} & \text { * tândok } \\
\begin{array}{ll}\text { Horse }\end{array} & \text { mă'tândok } \\
\text { Host, a } \\
\text { Hot }\end{array} & \begin{array}{l}\text { kûrâ ; * kûdâ }\end{array}
$$ <br>

dâk beĭ\end{array}\right\}\)| pâsso : mâpâsso : mĭ- |
| :--- |
| âsso |

Hound ; dog êdoh: êroh
Hour
How

* jâm
bŭădin
$\left.\begin{array}{l}\text { How many: how } \\ \text { much }\end{array}\right\}$ pilâh pilâh
How long pilâh logei

Hundred, a (IOO) ôngkâtûs
$\left\{\begin{array}{l}\text { jam. Jav, Sund. and } \\ \text { Day., jam; Mak., } \\ \text { jang }\end{array}\right.$ tandok. (See Butt) menandok f kuda. Kw. and Sund., kuda

| Hour | * jâm |
| :--- | :--- |
| How <br> How many: how <br> much <br> How long | bŭădin <br> pilâh pilâh <br> pilâh logei |
| Hundred, a (IOO) ôngkâtûs$\quad\left\{\begin{array}{c}\text { jam. Jav, Sund. and } \\ \text { Day., jam; Mak., } \\ \text { jang }\end{array}\right.$ |  |
| $\left\{\begin{array}{c}\text { ratus, sa'ratus. Jav.; } \\ \text { atus; Sund., Bat- } \\ \text { and Day., ratus, } \\ \text { Tag. and Bis., ga. } \\ \text { tos }\end{array}\right.$ |  |

Hundred and \{ôngkâtûs tâg hâng-
twelve, a (II2) \{ po tâg dûă
Hundred, two (200) dûă ôngkâtûs

Hungry
Hunt, to
hâbde
Hurricane: storm hunûs
Hurry ûs-ûs
Hurt; wound pâlĭ
Husband bânâh
Hush! to be silent dûmûhûn
Husk; skin ; rind pais
$\left.\begin{array}{l}\text { Husk of a cocoa- } \\ \text { nut }\end{array}\right\}$ bunût lâhingg
Hut * pôndok
(pondok. Same in Jav., Sund. and Bat. In Mak., pondo

English. Sulu. Malay.

I: me

* âkû

Idiot
Idle: lazy
If
Ignorant
Illegal
Illness
Illuminate, to
Image
tan gilă
mâûstau
bang ; * kâlau

* bebal
* dosă
kăsâkǐtân
măsâwâhăn
petâh

Imagine, to ; think pikǐl

Imitate, to
Immense
Immodest

$\left.\begin{array}{c}\text { Imperfect ; inf:- } \\ \text { nished }\end{array}\right\}$ wâllâ obûs
Implements păňâpăn
Impose upon, to * tịpû
Impost; tax ; duty chûkei
\{dĭ nă mănjâdĭ
\{dǐ nă măkăjâdĭ
hinâng wâkill
măissỉk
Impudent
In; within; inboard hâlaum
In order to
Incense
Incest
Inclination
sowed
mâhmûd

* sûmbâng
kâbăiyăân
(aku. Jav., Sind. and Day., amu; Bat., thu; Dak., $k u$; Tag. and Bis., tko; Malag. $k u$
gila, mad, foolish
kalau
baba
(See Commit)
ka-sakit-an
pěta, map, plan
$\{$ piker. Jav., Sund., Bat.
$\{$ and Day., pikir
\{tipu. Sung. and Day.,
(See Customs)
dalam
$\left\{\begin{array}{c}\substack{\text { sumbang. } \\ \text { bang }}\end{array}\right.$ Bat. sum-
English.

Sulu.
$\underset{\text { in }}{\text { Enclose, to; fence }}$

Indebted * berûtâng
Indigent; poor mǐkǐn Indisposed; averse măhukân
Industrious * ûsăhâ

Infant
Infidel
Inform, to
Information
Inhabit, to
Inherit, to
Ink
Inland
Inner, the

Inquire, to * preksă

Insane
Insect
Insensible ; un- ? conscious
Insolent; arrogant mănĭngăt
Instead
Instruct, to
Instructor
Insufficient
Insult, to
sûblĭ
hĭndoh

* gûru
dĬ̀-nă âbut mănĭngăt
pagar, a fence. Jar. and Sund., pager; Day., pagar and pagar
rber-utang. (Sec
(Debt)
miskin. Jav., miskin
ber-usaha; usaha, energy. Sind. and Day., usaha; Tag., osaka; Madag., asa,
work kafir (Ar.)
pusaka. (See Estate) dawat (Ar.) rimba, forest
(preksa. Jav., priksa; pariksa and riksa; Tag. and Bis., torso gila
¢ guru. Same in Jav., $\{$ Sind., Bat., Mak. $\{$ and Day.

| English. | Sulu. | Malay. |
| :---: | :---: | :---: |
| Intellect | * ăkăl | 'akal. (Sce Capacity) |
| Intelligent | tâgă ăkăl |  |
| Intention | * mâksud | maksud (Ar.) |
| Insupportable | ( dǐ-nă măsindâl (dĭ-nă sûmĭndâl |  |
| Interest (money) | lĭpăt | lipat. to fold, to double |
| Interfere, to | lâmut |  |
| Interpret, to | sâlĭn | salin. (Sce Copy) |
| Interview | băgbaio |  |
| Intimidate, to | hinâng bûgă |  |
| Intoxicated | hiluk |  |
| Intricate | sâgnât |  |
| Intrust, to | * serâhkăn | sěrah-kan. (Sec Cede) |
| iron | * bêsĭ | (bĕsi. Jar. and Sund., besi; Bat., bosi; <br> ( Mak., bassi |
| Island | pu | $\left\{\begin{array}{l} \text { pulau. Jav., Sund. and } \\ \text { Bat., pulo; Tag. and } \\ \text { Bis., polo } \end{array}\right.$ |
| It; this: those | ı̌ăn; y̌aun |  |
| Itch : itchy | * gâtâl | gatal <br> gading.' Occurs in |
| Hory | * gâding | Jar., Sund., Bat., Mak. and Bis. In Tag., galing |
|  | $J$ |  |
| Jack-lriut | * nânçkă | f nangka. Occurs in Jav., Sund., Bat., ( Tag. and Bis. |
| Jacket: coat | * bâju | baju (Sec Coat) |
| Jar, a | pugâ |  |
| Jest | ulau ulau | $\left\{\begin{array}{l} \text { olok-olok; lawak-la- } \\ \text { wak } \end{array}\right.$ |
| Iesus | * Năăıİ Isă | Nabi Isa (Ar.) |
| Jew | * \ăhudí | Yahudi ( $A$ r. ) |

English. Sulu. Malay'.


## $K$



[^62]English.
King
Kiss
Kinks out of a) rope, to take
the putâloen

Kitchen
Kite (of paper) tăgôreh

Knee

Knife lâdǐng
Knife (chopper) ûtâb
Knife (sword) bâdông; bârôngr Knock, to; to strike pŭg pŭg
Knot * bukû
Knot, to hinângăn bukû
$\left.\begin{array}{l}\text { Know, to; un- } \\ \text { derstand }\end{array}\right\}$ mâkăhâtí
$\left.\begin{array}{l}\text { Know, to; be ac- } \\ \text { quainted with }\end{array}\right\}$ mă'ingât
Knowledge
Known, well- * mêshur
Kris $\quad$ kris

Sulu.

* Râjâh
* chǐûm
dăpôrân
tuhûd
el mu

L

Malay.
〔 Raja. Occurs in Jav.,
\{ Sind. and Bat.
f chium. Sund., chium;
< Day., sim
(lutut,knee; telut,kneel. Sind., tower: Bat., tot; Day., utut ; Tag. and Bis., tuhod
lading a kind of sword. Occurs in Jav., Bat., Make. and Day.
pukul (See Hammer) buku (Sec Ancle)
\{meng-arti (See Com( prehend)
f meng-ingat. (See Re( collect)
'ilmu ( $A r$.)
masher (Ar.)
kris (See Dagger)
suduk or sudu inch

Labour, to; work hinâng
subbǎl
Ladder hâgrdân
lûân
sûduk

* inches
tônkǎ
Lad subbǎl

Lade, to ; fill
Ladle
Lady
Lame

English.
Lamp
Lance; spear
Land
Language
Lard
Large; wide
Last (place and ?
$\quad$ time)
Last night
Lately
Laugh, to
pâlĭtâhăn
bûjâk
lûpâh
pomong
dâging bâbûĭ daging babi, pork
(palita. Sund., Mak. and Day., palıtu. Bat., palita, wick
muâk
măhûlĭ
kăhâpun dom
tâgua
kătâwă ; mâkătâwă tertawa (See Grin)
benâl ; * pâtut $\{$ and Sund., patut; Tag., patot, to be
bûtâng ; hitau
Lay eggs, to
Lay hold, to
Lay waste, to
Lazy
Lead (metal)

Leaf, a

Lean; thin
Learn, to
Learn, to (the koran)

Learned Leather; skin
mâkaiyuk
mâkânat
\}mengâjĭ
âlŭm
pais
daun
$\{$ binasa-kan (See Des\{ troy)
mâústau
tengă
daun. Kw., ron; Jav., daon; Sund., daun; Bat., daon, medicine; Mak., raung; Bug., daung ; Tag. and Bis., dahon

English. Sulu. Malay.
Leave, to; sail tumûlăk
Leave, to take (in- mia id ferior to superior)
Lee of, under the hat limbo
Left; port side pălâıvă
Leg' sĭgĭ


Less kolângĭn

Let go, to (a rope) bugit-nâ
Level
pântei
tan pouting
Liar
Liberate, to; enfranchise
\} ma'pwôs

Lid; cover; cork * tûtop
(hikayat (Ar.). Sind., likayat; Mab., hikay sěnang \{ serai. Jav., sêrêh; ¿ Make., sarre

Skurap, itch. Jav., korep; Sind. and Day., kurap; Bat., gurap; Mak., pura
korang. Jav., Sind., Dak., Bug. and Day., kurang; Bat., hurang; Tag., kwlang; Bis., kolang
$\{$ pantei, beach. Id. in $\{$ Day.
cutup and katup, to shut. Jav., katup; Sind. and Bat., tuर tup; Mak., tutu; Day., tatup, cover; Tag. and Bis., totob, ( cover

Lie, a
Lie down, to
Lie upon, to
puling
lĭmpâng
âlı̆-âlı̆; hâlĭ-hâlı̆
English.
Sulu.
Malay.

Life ; alive
bohe
Lift, to
Light ; clear
buât
Light of day ; dawn sûbu sûbu
Light (in weight) măkân
Lightning *kilât
$\left.\begin{array}{l}\text { Like ; alike ; the } \\ \text { same }\end{array}\right\}$ sâlĭ ; * sâmă
(See Break )
kilat. (See Flash) $\left\{\begin{array}{l}\text { sama. Id. in Jav., } \\ \text { Mak., Day., Tag. } \\ \text { and Bis. }\end{array}\right.$
Likeness, a
Lime
pită
bânkǐt
Lime fruit; or- limau (See Citron) dary ; shore $\}$ biă inĭ
Like this ; in this manner $\}$
Lips
Listen, to ; hear
higât simut
Little; few
Live, to ; dwell
Livelihood
dûnguk ; dûngoeg dengar (See Hear)
tio tio
mâhûlă
boheân

Liver, the
$\begin{array}{ll}\text { Lizard (grass) } & \text { pinĭt } \\ \text { Lizard (house) } & \text { * chichâk } \\ \begin{array}{c}\text { Lithodomus; } \\ \text { "water worm", }\end{array} & \text { kâpâng }\end{array}$

Load, a ; freight
Loan ; debt
Lobster
lûânăn

* ûtâng
ûlâng
(See Heart)
$\left\{\begin{array}{l}\text { chichak. Jav., chechak; } \\ \text { Sund., chakchak; } \\ \text { Bat., ansosak }\end{array}\right.$ kapang, teredo navalis. Sund. and Day., kapang; Bat., ha-
pang
(See Debt)
$\left\{\begin{array}{l}\text { hudang, prawn. Jav. } \\ \text { and Sund., hurang; } \\ \text { Bat., udang }\end{array}\right.$
Lobsters, parasite ûlâng ûlâng polâh (in pearl shells) polâh

| English: | Sulu. | Malay. |
| :---: | :---: | :---: |
| Lock, a | kûndâru |  |
| Lock, to | chûchukăn |  |
| Lofty | hââtâs |  |
| Log, a | pohông kâhûĭ |  |
| Long | măhâwă |  |
| Long ago | mogei |  |
| Long time yet, a | mogei pâ |  |
| Long, how | pilâh logei |  |
| Long for, to | bimbâng | (See Desire) |
| Look, to ; see | kitâ |  |
| Let loose, to | bulûĭ |  |
| Lose, to | mălâwă |  |
| Lose, to (incurloss) | )* rûgĭ | $\left\{\begin{array}{l} \text { rugi. } I d . \text { in in Jav., } \\ \text { Sund., Bat., Mak., } \\ \text { and Bug. } \end{array}\right.$ |
| $\left.\begin{array}{l} \text { Lose, to (at gam- } \\ \text { bling) } \end{array}\right\}$ | hiâpusân |  |
| Lost | lawak |  |
| Louse | * kûtu | $\left\{\begin{array}{l} \text { kutu. Jav., kutu, in- } \\ \text { sects in general } \\ \text { Sund. and Mak., } \\ \text { kutu; Bat., hutu; } \\ \text { Bug. utu; Day., } \\ \text { kutoh, numerous; } \\ \text { Tag. and Bis., koto. } \end{array}\right.$ |
| Love | kâsǐh | $\left\{\begin{array}{l} \text { kasih Jav. and Sund., } \\ \text { kasih and asik; } \\ \text { Bat., asi and hasi; } \\ \text { Mak., asi; Day., } \\ \text { kasih; Tag., kasi, } \\ \text { friend } \end{array}\right.$ |
| Low ; below | hâbâwăh | bawah. Mak. rawa |
| Low (in price) | mohei | (See Cheap) |
| Low water | hûnâs ; hûmânâs |  |
| Luck, good | măraiyau sûkut |  |
| Luck, bad | măngĭ sûkut |  |
| Lust | * hâwă nâfsu | hawa nafsu (Ar.) |

## English.

Malay.

## M

| Machine <br> Maggot | mâkinĭ <br> oâd |  |
| :---: | :---: | :---: |
| Magic | * hikmât | $\left\{\begin{array}{l} \text { hikmat } \\ \text { ikmat } \end{array}\right. \text { (Ar.). Jav. }$ |
| Mahomedan | * islâm | islam (Ar.) |
| Maid, a | ânâk dâgâh | $\left\{\begin{array}{l} \text { dara, anak dara. Kw., } \\ \text { dara; Jav., lara; } \\ \text { Sund., dara, a wo- } \\ \text { man who has just } \\ \text { had a child ; Bat., } \\ \text { dara; Mak., rara } \end{array}\right.$ |
| Maid, a ; slave | ipûn bâbai |  |
| Mail, coat of | lầmĭnă |  |
| Maintain, to ; support | \} ipât |  |
| Maintenance | sântâpăn | $\left\{\begin{array}{l} \text { santapan, food (of } \\ \text { Rajas) } \end{array}\right.$ |
| Maize | gândom | (See Corn) |
| Make, to | hinâng |  |
| Make, to ; compose | e hinângkân |  |
| Malady | kăsâkitân | ka-sakit-an (See Ache) |
| Malay, a | tan Malaiyau |  |
| Male | issăk |  |
| Mallet | tûkôl | (See Hammer) |
| Man ; people | tan |  |
| Mandate | * titâh | (See Decree) |
| Manure | lâmûgei |  |
| Many ; much | mătaud ; mătaut |  |
| Many, how | pilâh pilâh |  |
| Many, so | * sâ’kiân | sa'kian. |
| Map | * pêtâ | pěta (See chart) |
| March, to ; walk | pănau |  |
| Mare | kûrâ omâgâ | kuda betina |
| Margin | dohôr |  |



| English. | Sulu. | Malay. |
| :---: | :---: | :---: |
|  |  | t |
| Mattress | * tilâm | sleeping-place; Jav. tilem, to sleep Sund., tilam, anything spread out Day., tilam |
| May ; can | mâkâjedĭ |  |
| Me ; I | * âku | aku (See I ) |
| Meal ; flour | * tăpông | tepong. (See Flour) |
| Mean ; ignoble | * hinâ | $\left\{\begin{array}{l} \text { hina. Jav., hina, fault } \\ \text { Sund., hina } \end{array}\right.$ |
| Mean ; stingy | maikut ; paisǐ |  |
| Mean, to ; intend | kăhândâk | $\left\{\begin{array}{l} \text { ka-handak, wish, in- } \\ \text { tention. } \end{array}\right.$ |
| Meaning | * hărtí | (See Comprehend) |
| Meansoflivelihoo | d kâbuhe kâbuhe |  |
| Measure, to (capacity) | $\} \text { sûkut }$ | sukat |
| $\underset{\text { (length*) }}{\text { Measure, to }}$ | ûkur | $\left\{\begin{array}{l} \text { hukur. Jav. and Sund., } \\ \text { hukur ; Bat., mengu } \\ \text { kur, to consider } \\ \text { Day., ukur } \end{array}\right.$ |
| Meat | ûnut |  |
| Meddle, to | lâmut |  |
| Medicine | obât | $\left\{\begin{array}{l} \text { ubat. Jav., obat; } \\ \text { Sund., obat, gun- } \\ \text { powder, ubar, me } \\ \text { dicine; Mak. and } \\ \text { Bug., uba; Tag., } \\ \text { obak, gunpowder } \end{array}\right.$ |
| Meet, to | mâkbâg |  |
| Meet ; fitting | * pâtut | $\left\{\begin{array}{l} \text { patut. Jav. and Sund., } \\ \text { patut; Tag., patot, } \\ \text { to be useful } \end{array}\right.$ |
| Meet, to | hânchôr | $\left\{\begin{array}{l} \text { hanchur. Jav., anchur, } \\ \text { Mak., anchuru; } \\ \text { Day., anchor } \end{array}\right.$ |



[^63]English. Sulu. Malay.

Misconduct one-
self, to $\begin{gathered}\text { hinângăn bûkun măr- } \\ \text { aiau }\end{gathered}$
Misery ; alas! chaulâkă ; chilâkă

| Mist | gâbông |
| :--- | :--- |
| Mistake | sâk |
| Mistress ; lady | daiâng |

chelaka. Jav. and
Sund., chelaka;
Mak., chilaka; Day.,
chalaka.
\{ kabut, mist; kabong mourning.
\{ shak, suspicion. (See \{ Blame)
dayang, maid of honour, lady in waiting. Sund., dayang; Kw., deyah, young woman of high rank; Tag., dayang, lady

| Mix, toMoat, a ; ditchModelModest ; bashfMoist ; wetMother-of-peashells |
| :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Motive * sebăb

Molest, to
ûsǐbâhăn
Monkey

Month ; moon * bûlân


| English. | Sulu. | Malay. |
| :---: | :---: | :---: |
| Morning | măhinăât |  |
| Morrow | kĭnsûm |  |
| $\left.\begin{array}{l} \text { Mortar(for beat- } \\ \text { ing) } \end{array}\right\}$ | $\text { \}* l'sông }$ | $\left\{\begin{array}{l} \text { lesong. Jav., lesung; } \\ \text { Sund., lisung; Bat., } \\ \text { losung ; Mak., as- } \\ \text { sung; Day., lisong; } \\ \text { Bis., losong } \end{array}\right.$ |
| Mosque | lângâr |  |
| Mosquito | hilâm |  |
| Mother | inâ |  |
| Mount, to ; ascend | d sêkât |  |
| Mountain | bûd; gĭmbă | rimba, forest |
| Mourn, to ; weep | mâktângǐs | $\left\{\begin{array}{l} \text { tangis menangis. Jav., } \\ \text { Bat., Day., Tag. and } \\ \text { Bis., tangis } \end{array}\right.$ |
| Mouse ; rat Nouth | âmbau |  |
|  |  |  |
| Move, to ; remove | pindâhe | $\left\{\begin{array}{c} \text { Pindange } \\ \text { Change } \end{array}\right.$ |
| Much; many <br> Mug ; cup | mătaud ; mătaut pĭngân | pinggan. (See Basin) |
| Murder, to | bŭnoh | $\left\{\begin{array}{c} \text { bunoh. (See Commit } \\ \text { murder) } \end{array}\right.$ |
| Mussels, shell-fish \&c. | * siput | siput. Bat., séput, snail |
| Must | sobei |  |
| Mullet | bânăk | bělanak. Jav., balenak |
| Mutiny | * drâhkă | $\left\{\begin{array}{l} \text { derhaka, treachery. } \\ \text { Jav., duraka; Sund., } \\ \text { doraka } \end{array}\right.$ |
| Mystery ; secret | * râhǐsă | $\left\{\begin{array}{c} \text { rahasia. Kw., rusiya; } \\ \text { Mak., rahasiya } \end{array}\right.$ |

## (To be continued.)

## ERRATUM.

Page 335̃, sub toce Bucket, for" Hindustani, baldi," read "Hindustani, baldi and balti, from the Portuguese balde."

## METEOROLOGICAL REPORT, FOR THE YEAR 1885.

[The following report, being of permanent scientific value, is here reprintcd from the Government Gazette. Ed.]

1. The report for the year 1835 gives the results of the observations taken at Singapore, Penang, Province Wellesley and Malacca, and embraces the following meteorological elements:-
I. Atmospheric Pressure.
II. Temperature of Air.
III. Temperature of Solar Radiation.
IV. Temperature of Grass, Nocturnal Radiation.
V. Humidity.
VI. Wind, Direction and Velocity.
VII. Rainfall.
2. Annual abstracts of the observations, taken at the four recording stations are attached, as are also the annual registers of rainfall.
3. The accompanying charts shew the mean annual pressure, temperature, rainfall, and the number of days on which rain fell at Singapore, from 1870 to 1885 . These tables are interesting, and gain in importance every year.
4. I regret that some of the registers shew a few unavoidable interruptions, but care will be taken in future that these returns be made as complete as possible.

Atmospheric Pressure.

| Stations. | Highest. | Date. | Lowest. | Date. | Range for the year. | Mean for the year. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Inches. |  | Inches. |  | Inches. | Inches. |
| Singapore, | 30.038 | 22nd Jan. | 29.708 | $294 \mathrm{Oct}$. | . 106 | 29.889 |
| Penans, | 30.197 | 7 th Jan. | 29.712 | 17th Dec. | . 102 | 29.972 |
| P. Wellesley, | 29.999 | 21st Jan. | 29.611 | 10th June | . 073 | 29.833 |
| Malacca, | 29.938 | 20 Oh Oct. | 29.702 | 9th June | . 073 | 29.860 |

5. The highest barometrical pressure ( 30.197 inches) was recorded in Penang on the 7th January, and the lowest (29.611) at Province Wellesley on the 10th June. These two Settlements also registered the highest and lowest mean, viz., 29.972 and 29.833 inches, respectively.

Temperature of Air.

| Stations. | High est. | Date. | Lowest. | Date. | Range. | Mean for the year. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{\circ} \mathrm{F}$. |  | ${ }^{\circ} \mathrm{F}$. |  | ${ }^{\circ} \mathrm{F}$. | ${ }^{\circ} \mathrm{F}$. |
| Singapore, | 92.0 | 24th May | 63.4 | 10th Feb. | 14.9 | 81.7 |
| Penang, | 96.5 | 14th June | 70.0 | 10th Jan. | 14.5 | 82.7 |
| P. Wellesley, ... | 98.0 | 9th Jan. | 65.5 | 28th Feb. | 18.9 | 83.5 |
| Malacca, . | 96.0 | 18th June | 69.0 | 15th Jan. | 14.8 | 82.3 |

6. The highest temperature ( $98.0^{\circ} \mathrm{F}$.) was observed at Province Wellesley on the 9th January, and the lowest (63.4 ${ }^{\circ} \mathrm{F}$.) at Singapore on the 10 th February, the lowest mean was also recorded at the latter Settlement, but in all, the mean temperature for 1855 is slightly higher than that for 1884.

Temperature of Solar Radiation.

| Stations. | Highest. | Date. | Lowest. | Date. | Mean for the year. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{\circ} \mathrm{F}$. |  | ${ }^{\circ} \mathrm{F}$. |  | F. |
| Singapore, ... | 161.6 | 25th Mar. | 91.3 | 9th Aug. | 148.: |
| Penang, | 159.0 |  | 90.1 |  | 145.7 |
| Province Wellesley, | 163.0 | 5th Jan. | 90.0 | 76th Aug. | 140.1 |
| Malacca, | 175.0 | 14th Feb. | 125.0 | 16th May | 156.1 |

7. The highest temperature of the sun's rays $\left(175.0^{\circ} \mathrm{F}\right.$.) was observed at Malacca on the 14th February, and the lowest ( $90.0^{\circ}$ F.) was recorded on the 7 th August at Province Wellesley; the lowest mean, viz., 140.1 was registered at the same station.

Temperature of Grass, Nocturnal Radiation.

| Stations. | Highest. | Date. | Lowest. | Date. | Mean for the year. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{\circ} \mathrm{F}$. |  |  |  | ${ }^{\circ} \mathrm{F} .$ |
| Singapore, <br> Penang, |  | 2rth July |  |  |  |
| Province Weilesley, | 76.5 | 12th Aug. | 63.5 | 28th Feb. | 70.9 |
| Malacca ... . | 74.0 | 27th May | 66.0 | 2nd Mar. | 71.7 |

8. The highest temperature on grass ( $76.5^{\circ} \mathrm{F}$.) was observed on the 12th August at Province Wellesley, and the lowest (54.5 ${ }^{\circ}$.) at Singapore on the 10 th February. At this station also was recorded the lowest mean, viz, $69.1^{\circ} \mathrm{F}$. Humidity.

| Stations. | Highest. | Date. | Lowest. | Date. | Mean for the year. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\stackrel{\%}{98}$ |  | \% |  | \% |
| Singapore, Penang, | 98 | 13th Aug. | 4 | ${ }_{\text {26th }}$ 10th Jane | 79 76 |
| Province Wellesley, | 100 | 10th Aug. | 39 | 8th Feb. | 78 |
| Malacca, ... ... | 100 | 28 2h May | 36 | 15th Jan. | 84 |

9. The highest percentage of humidity ( $100 \%$ ) was obserred at Province Wellesley and Malacca, on the loth August and 28th May, respectively. At the latter Settlement, also, the lowest: percentage was recorded, viz., $36 \%$ on the 15 th Jimuary, and the highest mean percentage, viz., 84\%. Wind, Direction and Velocity.
10. From January to March, the wind blew from the N. E. and occasionally from the N. N. E. and N. In the early lart of April, the wind was easterly.
11. The S. W. Monsoon appeared in the latter part of April, and, with but slight variations from S. E., continued steady until October. In November, the winds were variable, sometimes W. and at times W. S. W.
12. December ushered in the N. E. Monsoon with occasional winds from the N. N. W. and N. W.
13. The following table shews a summary of the wind direction at Singapore during the year 1885 :-

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Singapore.
14. The relocity of the wind was registered during nine months of the year only, owing to the anemometer having gone out of repair'; during the other three months no observations were taken. The mean velocity for this period was 113 miles, and the greatest in 24 hours was 263 miles on the 5 th March.

> Penang and Province Wellesley.
15. During the year 1885, no observations of the direction and relocity of the wind were taken. We hope next year to have this omission rectified.

Malacca.
16. The N. E. wind prerailed from January to April, and again from Norember to December. During the other months of the year, the wind was generally S. W.
17. The mean velocity of the wind during the twelve
months was 183 miles, and the greatest velocity in any one day was 470 miles.

## Rainfall.

18. The total number of registering stations in the Straits during the year 1885 was 29 , being 18 over the number in 1884. Eighteen of these, viz., 7 in Singapore, 3 in Penang, 5 in Province Wellesley and 3 in Malacca, supplied complete returns ; the remaining 11 furnishing theirs only incompletely. At Singapore, new stations were started during the year at the Botanic Gardens, Neilpath, Chasseriau's Estate and Bukit Timah, but, owing to the absence of the official in charge of the last-named station, the obserration had to be discontinued in September.
19. At the beginning of the year, the station at the Leper Asylum, Pulau Jerajah, which hitherto furnished returns for Penang, was placed under the supervision of the Colonial Surgeon, Province Wellesley, and the observations there have since been embodied in the returns of that Settlement. A nerv station will shortly be opened at Balik Pulau, Penang, which is much required.
20. At Province Wellesley, no new stations were opened during the Jear, the four registering stations at the District Hospitals and the one at the Leper Island being found to be ample.
21. In Malacca, seven new stations were started in the course of the year 1885, in different situations, and a few more will be opened in 1886. Mr. Hervex, the Resident Councillor, takes a keen interest on the subject of the rainfall at this Settlement, and I am obliged to him for suggestions as too the best lealities for having them.

## Singapore.

22. On the whole, the year 188.5 was a very dry one, it being, learing out 1877 , among the driest on record. The mean fall for the year was 67.32 inches only, and the number of days on which rain fell, 134.
23. The maximum fall ( 16.37 inches) occurred in December at the Sepoy Lines, and on the 20th of the same month, at the same station, was recorded the greatest fall in 24 hours, viz., 6.10 inches. The minimum fall in any one
month was that registered at the Water-Works Reservoir, Thompson Road, viz., 0.63 inches.
24. As already noticed by others, it is interesting to study the Singapore tables of rainfall, and to observe how every few years, varying apparently from 8 to 10 , we have a very large annual fall of rain, and a smaller fall, though still above the average, about every five years. Such seems, at least, to be the more or less general result, if we look at the records from their very commencement until now.
25. What degree of influence the forest denudation happily now checked), which has been going on here for some years, has had on our rainfall, it is difficult to say, but considering the situation of Singapore island relatively to the two monsoons, and the rery few hills we have high enough to affect much the rain-bearing clouds, I do not think it has been very great.
26. That, however, forest desiccation does influence rainfall materially, there can be little doubt. Of this, many proofs now exist, but in further confirmation may be quoted an article which appeared early in this year in an East American paper called the Southern Bivouac upon the forest destruction which has been going on recently in that country The writing is clothed in the tall but quaint and pithy language of a Transatlantic cousin, whose view, though pessimistic, doubtless yet contains much truth. It is headed "Forest Desiccation" and runs thus:-
"If the progress of tree destruction in the Western Alleghanies, should continue at the present rate, the yearly inundations of the Ohio valley will soon assume an appalling aspect, and ere long the scenes of the river suburbs of Louisville and Cincinnati will repeat themselves at Nashville and Chattanooga, while the summers will become hotter and drier. In the Gulf States, the work of desiccation has made alarming advances, brooks and streams shrink from year to year, and warm summers expose the gravel of river beds which fifty years ago could hardly be touched by the keels of heary laden vessels. East America is drying up; even in the paradise of the blue grass region, the failing of springs has driven many stock-raisers with their herds to the mountains."

## Penang.

27. During the first five months of the year, the fall was musually small, but was compensated however by heavy falls during the last seven months consecutively. The mean for the year is 110.81, as compared with 86.02 in 1884, shewing an increase of 2479 inches.
28. The greatest fall in 24 hours was recorded on 12th July, viz., 6.93 inches at Government Hill. At this station there was also recorded the greatest fall in any one month, viz., 28.89 inches in September. The smallest fall on record is 0.27 inches, which was in January, and at the Central Prison.

## Province Wellesley.

29. The rainfall at this Settlement during 1885 was heavy, 106.29 inches was the mean, against 80.60 in the previous year. The greatest fall in 24 hours was 5.60 inches at Bertam on 14th October. The driest month was January. No rain was registered at Butterworth and Pulau Jerajah, and the mean fall recorded at the other stations for the month was only 1.62 inches. October seems to have been the wettest month, the record shewing 21.03 inches.

## Malacca.

30. The mean fall registered at the three stations where the returns were complete was 67.71 inches, being 10 inches less than that for 1884. The driest month was February, when the mean fall was 0.75 inches only. The maximum fall was in October; 14.32 inches of rain fell at Kandang.
31. The greatest fall in 24 hours was 4.29 inches on the 15 th October at the same station.
32. The following brief notes on the general state of the weather in the Straits will be found interesting.
33. The month of January was dry, more so in Province Wellesley. In Singapore, although the days were hot and dry, the nights were cool and refreshing. Those in January were the coldest on record. From the 9 th to the 14.th in particular, the minimum temperature fell from $69.9^{\circ} \mathrm{F}$. to $63.9^{\circ} \mathrm{F}$., with a corresponding fall of the grass radiation thermometer, the lowest recorded on the latter instrument being $59.9^{\circ} \mathrm{F}$. on the 14th January. This low temperature was also observed on reliable independent testimony at Johor,
and at the time formed a subject of common talk among the residents." In February, there was a small amount of rain at Singapore, but the days and nights were cool. The minimum temperature at night was low, 634 being registered on the 10 th. In Penang, Province Wellesley and Malacca, it was a very dry month. In Singapore, March was remarkable for a long drought. No rain fell in the last sixteen days of the month, and the total fall registered was only 1.17 inches at Kampong Kerbau. In Penang, it was very dry, and so also in the other Settlements. There was a fair amount of rainfall in all the Settlements during the months of April and May; June and July were wet months throughout, August was somewhat dry in Singapore, and in Malacca, principally at Kandang, Kessang and Nyalas, but in Penamg and Province Wellesley, rain was abundant. September was a dry month in certain parts of Singapore, but in the districts of Teluk Blangah and Sepoy Lines, rain was heavy, so also in Province Wellesley and Malacca. Octobeir was unsually dry in Singapore, but abundant rain fell in other Settlements. Norember and December were wet months throughout the Straits, there being abundant rain. On the night of the 12 th and one or two nights following, an unusual number of meteors were observed. This phenomenon was also seen in other parts of the globe.
34. I take this opportunity of tendering my thanks, in connection with the registration of rainfall at Singapore, to Messrs. Geiger, Knight, McRitchie, St. Vincent B. Down, and Cantley, for their valuable contributions of monthly returns of rainfall registered at the P. \& O. Co.'s Depôt, Killiney Estate, Water-Works Reservoir, Thompson Road, Neidpath and the Botanic Gardens, respectively.

T. IRVINE ROWELL, m.d.,

Principal Civil Medical Officer, S.S.
Singarore, 30th Jamary, 1886.


Annual Abstract of Motenological Obstrvations taken at the Kampong Keila: Observatory, Singapor, for the year 18S:



Anmul Abstruct of Meteorological Observations, Penang, for the !ear 1585.



Annual Abstract of Metcorological Observations, Province Wellestey, for the year 1885.



Annual Abstract of Meteorological Observations, Malucce, for the year 1SS.



METEOROLOGICAL REPORT, 1SSŏ.
Annual Abstract of Rainfall as observed at Singapore and Penang, during the year 1585.

| Rouths. | SINGAPORE. |  |  |  |  |  |  |  |  |  |  |  | PENANG. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | 㫛 |  |  |  |  |  |  |  |
|  | $1 \mathrm{ns}$. | 1ns. | $1 \mathrm{ns}$. |  | lns. | 1ns. | 1ns. |  | 1ns. | 1ns. | Ins. | 1 n ¢ | $1 \mathrm{ns}$. | 1118. | $1 \mathrm{ns}$. | 1ns. |
| January, | 1.82 |  | 1.99 |  | 0.82 |  | 1.68 | كِّ | - | - |  | 0.85 | 0.31 | 0.27 | 0.12 | 0.24 |
| Febraily, | 6.09 | 6.20 | 6.29 | 6.36 | 4.85 | 5.37 | 3.61 | - | \% | \% |  | 1.57 | 1.5) | 1.4. | 1.93 | 1.23 |
| March. | 2.06 | 1.35 | 1.17 | 0.72 | 0.63 | 1.65 | 2.29 | - | \% | 80 | "苟 | 1.25 | 0.93 | 1.92 | 1.9 | 1.61 |
| April, | 2.05 | 3.32 | 5.40 | 3.10 | 5.30 | 4.99 | 1.92 | 5.03 | 8 | 8 |  | 2.12 | 2.55 | 2.72 | 5.06 | 1.5) |
| May. | 4.73 | 5.68 | 7.22 | 6.14 | 5. 47 | 7.92 | 4.76 | 6.81 | 7.10 | 7.20 | * | 2.23 | 5.51 | 6.87 | 7.33 | 1.63 |
| June, | 7.41 | 9.76 | 10.11 | 8.35 | 10.14 | 9.94 | 7.63 | 11.41 | 10.25 | 8.93 |  | 2.45 | 10.39 | 9.17 | 10.17 | 2.8) |
| July. | 5.76 | 5.81 | 3.82 | 4.25 | 3.83 | 4.22 | 5.26 | 3.72 | $\bigcirc .91$ | 4.97 |  | 3.01 | 9.20 | 11.11 | 16.30 | 6.93 |
| August, | 3.05 | 3.38 | 2.34 | 3.34 | 3.07 | 1.74 | 4.32 | 2.71 | ¢. 60 | 3.24 | 3.54 | 1.80 | 10.71 | 14.29 | 18.61 | 5.06 |
| Septmber, ... | 6.59 | 7.40 | 2.81 | 1.76 | 3.50 | 4.15 | 5.57 | 3.75 | 4.03 | - | 3.87 | 2.30 | 14.21 | 21.67 | 23.89 | 5.15 |
| October: | 2.32 | 6.68 | 3.98 | 4.19 | 3.50 | 2.80 | 3.14 | 1.88 | 3.48 | \% | 4.63 | 1.85 | 18.07 | 21.14 | 27.02 | 5.23 |
| Noveinber, ... | 8.59 | 13.09 | 10.42 | 11.95 | 9.62 | 9.23 | 6.00 | 10.75 | 13.23 | $\stackrel{\sim}{\square}$ | 12.84 | 3.68 | 8.81 | 7.9.3 | 1.2 .25 | 2.10 |
| Decembe: | 14.01 | 16.37 | 15.18 | 14.10 | 10.87 | 13.71 | 13.43 | 12.23 | 13.40 | \% | 13.85 | 6.10 | 4.62 | 8.30 | 8.44 | 2.15 |
| Total, | 64.51 | 80.55 | 71.01 | 66.10 | 61.75 | 67.43 | 59.91 | 58.30 | 57.03 | 24.39 | 38.73 | $\ldots$ | 86.87 | 107.15, | 138.41 | 1 |
| İean, ... |  |  |  | 67.32 |  |  |  |  |  |  |  |  |  | 110. |  |  |



Anmea！Abstrast of Rainfull，as observed at Province Wellestey and Mulucta，during the year 1850.

| MIorths． |  |  | PROVINCE WELLESIEY． |  |  |  |  |  | MALACCA． |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | $\stackrel{\dot{I}}{1}$ <br> 電 <br> 実 <br> 苞 |  |  |  |  |  | $\begin{aligned} & \text { in } \\ & \text { an } \\ & \text { an } \\ & \text { an } \end{aligned}$ |  |  |  |  |  |  |
|  |  |  | Ins． |  | Ins． | Ins． | Ins． | Ins． | Ins． | 1ns． | Ins． | Ins． | Ins． | Ins． | lns． | Ins． | 1us． | Ins． | Ins． |
| J：umary，．．． | $\ldots$ | $\ldots$ |  | .31 | 1.16 | 3.39 |  | $1.0{ }^{3}$ | 1.01 | 1．25 |  | $\pm$ | 0.50 | 号 | $\stackrel{8}{8}$ | 感 |  |  | \％ |
| Felmuary， | ．． | ．．． | 1.23 | 2.55 | 3.14 | 5.67 |  | 1.65 | 0.56 | 0.59 |  | 年 | 0.90 | － | 枈 | 会 | ت | 己 | ． 52 |
| Warch，．．． | ．．． |  | 1.27 | 1.35 | 1.12 | 3.22 | 0.20 | 1.75 | 0.67 | 0.55 | 苞 | 2.13 | 2.82 | ＋ | ＋ | 荌 | \％ | 苞 | 1.00 |
| $\mathrm{A}_{\mathrm{i}} \mathrm{r}, \mathrm{il}$ ， | ．． | ． | 2.81 | 6.20 | 2.67 | 11．25 | 1.53 | 2.10 | 3.61 | 3.45 | 怱 | 2.45 | 4.55 | 3.81 | 4.96 | 6.43 | $\stackrel{\square}{0}$ | 合 | 3.80 |
| Miy，．．． |  |  | 8.11 | 3.81 | 7.40 | 14．43 | 13.88 | 2.85 | 9.41 | 8.99 | $\stackrel{3}{3}$ | 9.70 | 8.00 | 5.32 | 4.51 | 4.26 | 号 | $\stackrel{\circ}{4}$ | 2.86 |
| June， | $\ldots$ | $\ldots$ | 8.63 | 7.69 | 10.24 | 7.89 | 8.61 | 2.65 | 10．22 | 8.66 | z | 12.89 | 8.86 | 9.73 | 6.65 | 6.88 |  |  | 2.37 |
| July， |  | ．． | 9.34 | 6.13 | 9.19 | 7.67 | 10．40 | 3.65 | 4.50 | 5.20 |  | 3.65 | 2.50 | 3.20 | 8.21 | 6.01 | 9.74 | 6．5．5 | 2.71 |
| August， | ．． | $\ldots$ | 10.60 | 9.60 | 9.31 | 10．0t |  | 4.50 | 7.87 | 5.68 | 3.78 | 7.16 | 1.83 | 0.45 | 4.65 | 11.37 | 5.25 | 3.36 | 3.21 |
| September， | ．． | $\ldots$ | 21.52 | 17.63 | 13.96 | 14.28 | 17.25 | 4.91 | 13.51 | 12.28 | 11.24 | 5.65 | 7.47 | $\underline{2} .00$ | 5.48 | 10.61 | 8.8 | 4.21 | 4.00 |
| Octuber，．．． | ．． |  | 21.41 | 15.59 | 18.50 |  | 26.47 | 5.60 | 10.40 | 9.23 |  | 4.50 | 6.99 | 1.88 | 6.56 | S．16 | 8.79 | 12.37 | 4.29 |
| Novenber， | ．． | $\ldots$ | 21.25 | 14.80 | 10.79 |  | 10.00 | 3.25 | 6.16 | 6.32 | 7.81 | 4.65 | 5.99 | 5.03 | 9.80 | 7.40 | 6.02 | 4.59 | 2.20 |
| Decenber． | ． |  | 8．35 | 3.95 | 9.20 | 6.89 | 4.20 | 1.80 | 9．8： | 8.63 | 12.04 | 7.00 | 3.96 | 7.80 | 6.44 | 7.65 | 6.63 | 8.05 | 1.80 |
|  |  | Total， | 114．52 | 87.94 | 96.98 | 118.81 | 112．19 |  | 78.74 | 71.03 | 4．9．21 | 59.78 | 54.37 | 39.22 | 57.27 | 68.80 | 45.21 | 39，16 | ．．． |
| Nifean， | $\cdots$ | ．．． |  |  | 106.0 |  |  |  |  |  |  |  |  | 7.71 |  |  |  |  |  |



Chart shewing the Mean Annual Range of Temperature at Singapore from 1870 to 1885.

| Mean <br> Annual <br> turc. |
| :---: |

407

Mean An-
nual num-
ber of rainy days.

209

195

189

181

178

170

166

133

161

158

146
14.4

141

134

119

Chart shewing the Range of Mean Annual number of rainy days in Singapore from 1870 to 1885.

| $\begin{aligned} & \text { Mom An- } \\ & \text { nal number } \\ & \text { of rainy } \\ & \text { Cays. } \end{aligned}$ | 1870. | 1871. | 187. | 1873. | 1874. | 1875. | 1876. | 1877. | 1878. | 1879. | 1880. | 1881. | 1882. | 1883. | 1884. | 1885. | Mean Annual number of rainy days. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\underline{209}$ | ( ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 209 |
| 195 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 195 |
| 109 |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  | 189 |
| 181 |  | $1$ |  |  |  |  |  |  |  | 8 |  |  |  |  |  |  | 181 |
| 173 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 178 |
| 17.0 |  |  |  |  |  |  |  | - |  |  |  |  |  |  | - |  | 170 |
| 153 |  |  | , |  |  |  |  |  |  |  |  |  |  |  |  |  | 166 |
| 163 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 163 |
| 1.31 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 101 |
| 1.58 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 158 |
| $1 \pm 5$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 146 |
| 14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 144 |
| 141 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 141 |
| 134 |  |  |  |  |  |  |  |  |  | a |  |  |  |  |  |  | 134 |
| 119 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 119 |

Inc| | Mrean |
| ---: |
| Annual |
| Rainfall. |

Chart shewing the Rang; of Mean Annual Rainfull at Singapore from 1870 to 1885.


$$
1
$$

Mean Annual Barometrical
Readings.

Inches.
29.903
.890
.889
.885
.884
.879
.878
.874
.864
.863
.857
.836
.899
.824
.802

Chart shewing the Mean Annual Range of the Barometer at Singapore from 1870 to 1885.


## OGCASIONAL NOTES.

## BOTANY AND MALAY.

The Revd. B. Scortecchini has sent the following Note dated Thaipeng, 26th January, 1886, for publication :-
"Kindly give me leave to set at rest the identity of the plant which Mr. Swettenhan refers to in his journal across the Malay Peninsula, as printed in Journal No. 13 of the Straits Branch of the Royal Asiatic Society, p. 13. In this paper, the plant is called by the native name of Memplas, and in an editorial note an effort is made to identify it with some kind of Michelia. Allow me to say, that most decidedly it cannot be a Michelia. The few known Michelias, and the fewer that are known in the Peninsula, are large trees, with a rather smooth foliage and have solitary fluwers. Those described by Mr. Swettenhan are by no means large trees, the foliage feels exactly like sand-paper, and to this purpose in many places it is used. I am in a position to state that the plant to which MIr. Swettenhani alludes is Delima sarmentosa, L., a very common sarmentose plant, which generally makes its appearance among secondary growth in the low lands."
" I would not have troubled you to set right this point of nomenclature, were it not for the many mistakes which are apt to creep in betwecn Malayan names of plants, and their corresponding scientific names. Lately I had occasion to note an error of this kind in reference to the plant which, among Malays, goes by the name of Ikan tuba. It is well known how Malays and other people make use of a certain part of some plant to stupefy and catch fish by poisoning the water with it. This substance in Tamil is called Walsura, in Malay Ikan tuba. It is not yielded by the same plant. The fruit and
root of Raudia dumetorum, Lamk, which is rather common through India, Java and Sumatra, and which it is well to record now from the Malayan Peninsula, as I have found it growing in the Kinta district, is used as a fish-poison. Walsura piscidia, Roxb, is much used for the same purpose, so is Anamirta cocculus, W. A., commonly called by former botanists Menispermum cocculus; L., to which Malays give the name of Ikan tuba, as ikan tuba would go to signify anything that kills fish. This name being appropriated to Anamirta cocculus in works which speak of Malayan usages, is not so exclusive as to be taken to signify no other plant having the same properties. From the fact, therefore, that a plant is ikan tuba, we cannot legitimately conclude that it is Menispermum cocculus, L., and so it was not Menispermum cocculus or more rightly Anamirta cocculus, the plant which had appended to it the vernacular name of Ikan tuba and the scientific name Menispermum cocculus. Any slight acquaintance with the order of Menispermacer would have persuaded a simple tyro in botanical science that the specimens, although devoid of fruit or flowers, and representing only the foliage, could not belong to any Menispermiad. Pinnated leares as the specimens showed, do not indeed, eren as an exception, occur in any Menispermaceous form. I would be rather inclined to refer the plant in quesion to some Derris among the Leguminose. It is very interesting to know that besides the Anamirta cocculus, there is another Ikan tuba just as effectual as the very Anamirta. It would give me great pleasure, were any person so kind as to communicate some flowering or fruiting specimens, or, better still, both, in order to refer the plant to its natural order and specific position."
[It sometimes happens that the authors of papers published in this Journal use Malay words without translation or explanation. Such a practice, if general, would be found inconvenient by many readers of the Journal who do not understand Malay. It falls to the editor (the Honorary Secretary) to insert translations and, where no English equivalent of a word (e.g., a tree or plant) exists, the botanical name has sometimes been given on the authority of good dictionaries.

No one is likely to disagree with the general proposition that the same native name may be applied to a variety of trees or plants possessed of similar properties, and that, in consequence of this rough classification it is unsafe to decide, from the mere fact of the use of the generic native appellation, which individual, out of several varieties, is intended to be meant. But if Malay scholars in the Straits have much to learn of botany, botanists, on the other hand, have to guard against errors resulting from want of knowledge of the native language. In Mr. Scortecchini's letter a plant is repeatedly described, incorrectly, as ikan tuba. He has evidently been misled by some similarity in sound between ikan, fish, and akar, root. Tuba is the plant, akar tuba, the tuba root, (the portion used by the Malays for stupefying fish), while tuba ikun, or menuba ikan, means to kill fish with tuba. Ikan tuba, if there were such an expression, could only be the designation of a kind of fish " the tuba fish."-Ed.]

## THE DUTCH MID-SUMATRA EXPEDITION.

Mr. Van Hasselt writes from Batavia as follows under date February 150th, 1886 :-
"In reply to the editor's note, which precedes the transaltion of the account I gave at the third International Geographical Congress at Venice, Septem ber, 1881, of the object and the results of a Dutch expedition into the interior of Sumatra in the years $187 \%, 1878$ and 1879 , I have the honour hereby to inform you that not only I do not in the least object to the said translation being published, but, on the contrary, appreciate its being spread; for it is my earnest desire that both object and results of that Dutch expedition, which I am confident did much towards increasing our knowledge of the interior of Sumatra, may become more generally known also © your countrymen."
" In the account given by me at Venice, I had to record
the death of our fellow-explorer, the Naval Officer Mr. Schouw Santroort; in these lines I find occasion to record the death of another of our fellow-travellers, that of my highly esteemed and beloved friend Mr. D. D. Veth, Civil Engineer, who died the 19th of May, 1885, near the Kalahanla River, near Benguella, S. W. Coast of Africa."
"Some time after his return home from Sumatra, he resolved on exploring another part of the world, and he chose the Cunene River as the object for his researches."
"Being a man of great character, who to much learning joined a firm will and the power both mental and physical to execute what he undertook, Mr. Veth, once resolved, had his expedition entirely got up and fully equipped in less than a year's time."
"The 7th of December, 1884, he arrived at Mossamedes, where his travelling companions, Messrs. P. J. van der Kellen and L. J. Godderroi, had arrived some short time previous to himself."
"It has not been permitted to this valiant explorer to achieve what he had begun. The climate was fatal to him, his bodily strength soon gave way, and he died, as a man of his character and of his uncommon zeal might die, in the midst of his labours, engaged in the fulfilment of the task he had undertaken."
"I lost in Mr. Veth a noble and dear friend, Holland an explorer of rare learning and valour, who, had he been spared, might yet have rendered great services to his country."

## NATIONALITIES OF THE INDO-CHINESE REGION.

The following sketch of the distribution of the IndoChinese races and of the nature and extent of Indian influence
in the further East, occurs in an article on "Burma, Past and Present," in the Quarterly Review for January, 1886.-Ed.
"Assuming a descent in remote ages of the nations occupying the Indo-Chinese region from beyond the great plateau, perhaps most of them through China, we must assign to the Malays (if they are to be included) the earliest date. They seem to have left upon the continent as their nearest kin the Tsiams, or people of Champa, in the extreme south-east, if these were not rather a reflux of colonization from the islands. To an early wave of migration southward perhaps belong also the Môns (Talaings, as the Burmese have taught us to style them ), that is, the people of Pegu, whom some have supposed, owing to linguistic indications, to have found their way south through India itself; then the Khmer, or Cambojans, occupying the lower valley and delta of the Mekong ; and the Anam, or people of Cochin China. Then come the Mramma, or Burman race, apparently descending the Irawaddy, pressing before them the Môns into the delta, the Khyens and like tribes into the adjoining mountains. One great branch of the Burman race, by themselves reckoned the elder', passed over the mountains to the shores of the Bay of Bengal, shores which, according to their traditions, they found occupied by Bilus or Rakkas; that is, by cannibal monsters, from whom in after days the country got its name of Rakain or Aracan. Later still, perhaps, succeeded the great family of the Lao, Thai, or Shans, who have still congeners in Southern China, and who occupied the plateau of Yunnan, the middle basin of the Mekong, and the upper part of the Menam. In latter days this race has flowed back upon the Upper Irawaddy, even to the Brahmaputra, and has spread south to the coasts of the Malay Peninsula and of Siam ; the kingdom bearing the latter name having been established by a branch of the race.

As usual, the course of occupation has mainly followed the line of the great rivers, those highways of the early world ; and their valleys and deltas have become the seat of the more civilized monarchies. Thus the Burmese still occupy the Irawaddy basin, and the coast-plains of Aracan. Sixty years ago, the whole race were united under one native monarchy. The latest of an intermittent series of events, since then, has
united them once more under a single sovereign, but this time in the person of Queen Victoria. The Anamites who occupy the eastern shores are claimed also, though with more doubtful realization, to be under the one dominion, whether as sovereignty or protectorate, of the French Republic. Between these two are the great Siam race, whose settlements, spread with intervals from the banks of the Brahmaputra to the coasts of the Malay Peninsula, and down the Mekong, nearly to the delta, are divided under an infinity of petty princes, and claimed as tributaries by a variety of sovereign governments ; everywhere displaying a fair amount of civilization, though in decay, everywhere possessed of letters, everywhere, except in Assam (which they first entered in the thirteenth century), followers of Buddha, and everywhere speaking substantially the same language. Siam is now the only independent State of the race. The Talaings, the Khmer, the Tsiam, have been famous in their day; but they are now shrunken and decayed, and are being gradually absorbed by races of greater vitality.

The chief nationalities that we have named have played in the history of Indo-China the part which England, France, Germany, and Spain, have played on the Continent of Europe. Most of them have stood forth under considerable monarchies for more than a thousand years, some of them much more. All their countries have in turn (some, such as Burma, again and again) been the seat of conquering empires, extending their grasp, in some instances, almost from sea to sea ; and all in turn have been the subjects of vast disaster. But besides these more prominent races, there are many of inferior importance, whom we generally characterize as 'wild tribes.' Some of them are inferior to the 'civilized races,' on whom they border, only in the absence of a written language; whilst others are head-hunters in a low depth of savagery. Some are as elaborate in the culture of their rice-terraces as the Chinese ; others migrate in the forest from site to site, burning down at each remove new areas of jungle, on which to carry out their rude hand-husbandry.

Among these 'uncivilized' tribes, none are more worthy of note and interest than those known conjointly as Karens,
occupying sparse settlements in Pegu (though also far beyond its limits eastward), of whom so many have in our own time become Christians under American teaching. They were notable, even before this closer claim on our interest arose, for their remarkable traditions, both religious and historical. The latter related how, on their migration from the north, they found the Shans in possession of the territory to which they themselves were bound--perhaps the Upper Menam basin. And the Karens cursed them, saying, 'Dwell ye in the dividing of countries ;' the applicability of which is interpreted by what has already been said of the Shans.

We spoke above of the early traces of Hindoo influence. How and when this began we have no real knowledge. But that it was flowing out in pulses eastward from an early date, and apparently long before our era, there can be no question.

Buddhism undoubtedly, with its zealous propaganda, was a most powerful agent in the spread of Indian influence among the Indo-Chinese nations ; but possibly that influence had been felt at a much earlier date. If we go back to the oldest record we possess of geographical detail in this region-the course, as tabulated in Ptolemy, of a coasting-voyage from Argyrê to the Sinæ, that is, from Aracan to the beginning of China-we shall find the continent and islands studded with names of which nearly a score are of manifest or probable Indian origin. Still, it is possible, that these names were given subsequently to the first movement of Buddhism in this direction; for it is recorded, that after the third Buddhist synod, held at the city of Pataliputra (or Palibothra), now Patna, as early as b.c. 241, Sena and Uttara were despatched on a mission to propagate the doctrine in the Suvarna Bhumi, or Golden Land, that is, Thahtun, near Martaban. Probably a later and larger wave of influence, and even of migration, took place in the first centuries of the Christian era; for it is remakable that most of the nations of the further East, that have been tinged by Indian civilization, recognize the Indian era of Salivahana, which begins with the year 78 of our reckoning.

Later still, about the fifth century, we recognize in the coincident traditions of the nations a new efflux of action in
the same direction ; but this time it comes, not from Continental India, but from Ceylon, an island which, though thoroughly Indianized in religion and manners, has yet some remarkable affinities with the further East. This last impulse has never entirely worn out; and as the Western world in general has looked to Rome, and the Russian world to Constantinople, rather than to Jerusalem, as the immediate seats of ecclesiastical sanctity, so these Indo-Chinese nations look still, in a degree, to Ceylon as the metropolis of their faith.

We have spoken of the Indian influence that can be traced largely, not only in religion, but in manners, architecture, and nomenclature ; and indeed the foreign religion necessarily affects all of these. Throughout the hundred principalities and kingdoms of Indo-China we find, in the etiquette of royalty, in the forms of royal palaces and of court ceremonial, an extraordinary identity, pointing to ancient Hindoo usage; the titles of the princes and dignitaries almost universally embrace sonorous terms of Sanskrit, or rather of Pali (bearing to Sanskrit much the same relation that Italian does to Latin), that dialect in which the sacred books are read in Ceylon, in Burma, Siam, and Camboja.*

As regards nomenclature, we hear from the Chinese traveller Hiouen Thsang (c. 640), of the existence in this region of great kingdoms bearing Hindoo designations, such as Draravati, Ramanadripa, and Mahâ-Champa. The last, a name hardly quite extinct yet in the South of Cochin China. was borrowed from a famous Indian State upon the Ganges; Camboja was named from a region beyond the Indus; another region in the same quarter, Gandhâra, the Gandarites of Ptolemy, namely, the country round Pesháwar, lent its name to Yunnan, now a province of China, but still bearing in Burmese state papers the classic Indian title; Ayodhya, the ancient city of Rầma, from which is corrupted our modern Oudh, gave its

[^64]name to great cities both in Siam (Yuthia or Yudhya), and in Java (Djokjo of the Dutch); Irawaddy, the great river of Burma, is but another Airavati, that river-name of the Punjab which the historians of Alexander grecized as Hydraotes; Amarapura ('City of the Immortals'), which was the capital of Burma twenty-five years ago, is equally Indian ; and Mandalay itself, of now familiar sound, properly the name of a conical isolated hill overlooking the city, probably represents Mandara, the sacred hill of Hindoo fable, which served the gods as a churning-staff at the churning of the sea.

But it is in the great architectural remains scattered over this region that we find the most striking testimony to Indian influence. The native races are, none of them, addicted to architecture in solid materials. Yet, in nearly all these countries we find remains of an elaborate and grandiose architecture devoted to religious purposes. Such in Java are the ancient temples of hewn stone, including the extraordinary pyramid of sculptured terraces called Boro Bodor. In Burma we find edifices of fine brickwork, especially in the remains of the great mediæval city of Pagân on the Irawaddy, whose ruins cover many square miles, and still exhibit majestic structures, rising, some of them, to a height of nearly 200 feet. Others, also of brick, exist in the dense jungles which cover the remains of Yudhya on the Menam. And within the last quarter-century we have become acquainted with the countless and vast remains of Cambojan architecture; immense temples, with corridors and enclosures of hewn stone, and furlougs of sculptured bas-relief. Latest of all, we are exploring mediæval remains in Pegu; which have been at our doors, as it were, since 1853. Each series of remains has its own peculiarities, but often there are close resemblances of general design, and in the ornamental detail there is throughout much approximation to identity of character ; and that is Indian."

## ORIENTAL MUSIC.

The following Note has been received by the Society regarding a proposed collection of the Musical Instruments, and Literature of all Oriental and Extra-European nations, to be deposited in the University of Oxford, for the benefit of Musical students, and for the advancement of Science :-

It is proposed to establish at the University of Oxford, a complete and exhaustive collection of all the musical instruments used throughout the world by the Oriental and ExtraEuropean nations, and to accompany this collection by such a mass of information, that the facts regarding the music of these nations may be collected, and laid before the musical student in a concise and intelligible form. A thorough investigation into the Sacred and Secular Music of Oriental nations, forms a subject so rast, that it would be impossible for one man to attempt to undertake it. It is hoped however that with the assistance of the various European musicians, resident in Eastern countries, a collection of information may be made and stored, from which a comprehensive text book, may be afterwards compiled. For that purpose a series of circulars are herewith issued, and a careful reply to each question earnestly solicited.

These questions, were, with a few exceptions drawn up by the late Mr. Carl Engel, for "The British Association for the Advancement of Science," and a study of his works on National Music, would greatly assist the investigator. Excellent specimens of the manner in which Oriental music should be written in European notation will be found on pages 28-32, and 344, of his "Study of National Music."

It is needless for me to point out the many items of interest which occur in such an investigation, nor how useful its results will be to the ethnologist, as well as to the musician, but the following will show how much that investigation is required.

The music of the Burmese (highly spoken of by those who have heard it), is a sealed book to European musicians ; and the music of the Hindus, though somewhat better known through the efforts of $H$. H. the Rajah Sir Sourindro Mohun Tagore, yet affords a great field for research.

Full scores of the Orchestral music of Oriental nations are absolutely wanting.

At Cochin on the Malabar coast, the most interesting results might be deduced from a comparison of the Sacred music of the White and Black Jews resident there.
The Sacred music of the Thibetan Buddhists, with their double choirs and antiphonal method of singing, forms another subject of great importance.

It is a well-known fact, that the more civilised Asiatic nations possess treatises on music. Oriental scholars mention several of the Hindus. Аyrot gives a list of about seventy by Chinese authors ; and it may be supposed that the Japanese are in this subject not behind the Chinese.

Further, an acquaintance with the musical instruments of different nations, is of great importance in the study of National music, since the peculiar construction of the instruments enables us in many instances to ascertain with accuracy the characteristic order of intervals, modulations, embellishments and other such distinctive features prevailing in the music of a nation.

An appeal therefore is made to all musicians, both European and Orientals, to assist in collecting the facts required; and to all those who are not musicians, that they, by their rank, or official position, may afford to the musical collectors, opportunities for access to music they would not ordinarily hear, and to musicians with whom they would not ordinarily meet; and also that by collecting and presenting to the University, treatises on, and manuscripts of, the music: an exhaustive and complete collection of the musical instruments, of the country in which they reside, that may further the adrancement of that branch of learning.

In conclusion, I would add a few cautions to the would-be collector, in addition to those noted on the circulars.

All the music should be written down as gathered from the mouths of the singers, or from the instruments performed on, without any additions, and in any doubtful or peculiar pas-
sage an explanation should accompany the score. The place where each tune is obtained, should be mentioned, with the nationality or tribe of the musician, and the name of the instrument. Deviations in the tunes, or what may be called different readings, preferred in certain places, should be indicated with small notes.

Particular care should be taken in noting where mixed times occur in a piece of music ; if there is any doubt about the time in which the music is written, mark with a dash about the accented notes, making the dash heavier or lighter according to the force of the accent.

In the music of Extra-European nations, ${ }_{4}^{5} \frac{7}{4}$ and other strange times occur, for which a look-out should be kept; but at the same time care should be taken that the observer is not misled into noting them, by pauses, tempo rubato, groups of notes in triplets, \&c., or by rests occurring in ordinary bars.

Florid passages of recitative are best left unbarred, the gradations of time and accent being carefully noted.

In dances accompanied by vocal and instrumental music, it is sometimes found that the rocal music is in one time, while the dance is in another.

Particular attention should be paid to the music of aboriginal or savage tribes, resident in the country.

The notes of birds should be noticed, and enquiry should be made as to whether their songs are used in music, or whether any national airs are derived from their notes.

All contributors are requested to give their names in full and their addresses, legibly written, for future reference.

All communications should be addressed to

> M. V. PortMin, Esq., Mus. Doc.,
> Port Blair,

The Andaman Islands,
Bay of Bengal.

## Vocal Music.

1. Are the people fond of music ?
2. Is their ear acute for discerning small musical intervals?
3. Can they easily hit a tone which is sung or played to them?
4. Is their voice flexible?
5. What is the quality of the roice? Is it loud or soft, clear or rough, steady or tremulous?
6. What is the usual compass of the voice?
7. Which is the prevailing male voice-tenor, barytone, or bass?
8. Which is the prevailing female voice-soprano or alto?
9. Do the people generally sing without instrumental accompaniment?
10. Have they songs performed in chorus by men only, or by women only, or by both sexes together?
11. Have they any professional singers? If so, describe their training and mode of life ?
12. When the people sing together, do they sing in unison or in harmony, or with the occasional introduction of some drone accompaniment of the voice ?
13. Is their singing in regular time, or does it partake of the character of the recitative ?

Note.-In answering these questions, the greatest care should be taken, by frequent investigation from various people, and on the same point; to give the opinion, not of one, but of several competent musicians.

In taking down their song's in musical notation, no attempt should be made to correct any supposed fault on the part of the singer, nor should the music be altered or made conformable to European ideas.

No song should be taken down unless it has been sung on three separate occasions, by three different people, and no extraneous harmony or accompaniment, should be added to it.

Should the people use intervals smaller than semitones, such as $\frac{1}{3}$ or $\frac{1}{4}$ tones, particular care should be taken to note them down, by writing in notation the semitone, next below the tone sung, and writing the fraction above it. The more faithfully the peculiarities of the music are preserved, the more valuable is the notation. Collections of popular tunes (with the words of the airs) are very desirable.

All collectors are requested to write their name and address legibly at the foot of their manuscripts and in answering the questions, to quote the heading, and the number of the question.
14. Have they songs for solo and chorus, or with the air for a single voice, and a burden (or refrain) for a number of voices?
15. Describe the different kinds of songs which they have (such as sacred songs, war songs, love songs, nursery songs, \&c.) with remarks of the poetry.
16. Write down in the language of the country, and give at the same time, a literal English translation of, as many of the songs of all classes as you can collect.
17. Write out, in a similar manner, the libretto of any operas, or plays accompanied by music, which they may have; and take particular care to mark the accent, rythm and metre.
18. Write down in notation, the exact score of their songs, with the instrumental accompaniment, if any.
19. Have they any books or manuscripts, on the art of singing, giving instructions in singing, or any collections of songs, with or without music?
20. If there is anything noteworthy about their vocal music, which has not been noticed in the preceding questions, notice it.

## Musical Instruments.

1. What are their instruments of percussion (such as drums, castanets, rattles, cymbals, gongs, bells, \&c.)?
2. Have they instruments of percussion containing sonorous slabs of wood, glass, stone, metal, \&c., upon which tunes can be played? If so, write down in notation, or in letters, the tones emitted by the slabs.

[^65]3. Have they drums, with cords or some other contrivance, by means of which the parchment can be tightened, or slackened at pleasure?
4. Have they drums with definite tones (like our kettledrums)? ; and if so, what are the tones in which they are tuned, when two or more are played together ?
5. Have they any open hand-drums, with one parchment only, like our tambourine?
6. Are the drums beaten with sticks, or with the hands, and is there anything peculiar or noteworthy in the manner in which they are beaten.
7. What wind-instruments (trumpets, flutes, \&c.) have they?
8. Have they any trumpets with sliding tubes (like the trombone) ?
9. How are the flutes sounded? Is there a plug in the mouth-hole?
10. Have they any nose-flutes?
11. What is the number, and the position of the fingerholes on the flutes?
12. What tones do the flutes yield if the finger-holes are closed in regular succession, upwards, or downwards?
13. If the people have the syrinx (or Pandean pipe), ascertain the series ofmusical intervals yielded by the tubes.
14. Do the people construct wind-instruments, with a vibrating reed, or some similar contrivance, inserted in the mouth-hole?
15. If they have a reed wind-instrument, observe whether the reed is single (like that of the clarionet), or double (like that of the oboe).
16. Have they a kind of bag-pipe ?
17. What musical instruments have they, which are not used by them in musical performances, but merely for conveying signals, and for such like purposes ?
18. Have they stringed instruments, the strings of which are sounded by being twanged with the fingers?
19. Have they any stringed instruments, twanged with a plectrum?
20. Have they any stringed instruments beaten with sticks, or hammers (like the dulcimer) ?
21. Have they any stringed instruments played with a bow?
22. If there are stringed instruments, with frets on the neck (as is the case with our guitar), note down the intervals produced by the frets in regular succession.
23. What are the substances of which the strings are made?

24 . Is there any particular contrivance on some of the instruments in the arrangement, and situation of the strings?
25. Are there stringed instruments with sympathetic strings (i.e., strings placed under those strings which are played upon; the sympathetic strings merely serve to increase the sonorousness) ?
26. What are the musical intervals in which the stringed instruments are tuned ?
27. Do the people possess any musical instrument of a very peculiar construction? If so describe it minutely.
28. Give the name of each instrument in the language of the country.
29. Describe each instrument, and give illustrations if possible, showing the exact way, in which the instruments are held and played.
30. Give some account of the makers of musical instruments ; of the woods, metals, hide, gut, hair, and other materials they use : of their tools, etc.
31. What are the usual adornments and appendages of the musical instruments?
32. If there is anything noteworthy, about their musical instruments, which has not been alluded to in the preceding questions, notice it.
33. Had the nation at any previous period musical instruments, different from those now in use?
34. Have they any books containing descriptions of musical instruments, or directions for their construction?

## Compositions.

1. On what order of intervals is the music of the people founded? Is it the diatonic major scale (like $c, d$, $e, f, g, a, b, c$ ), or the diatonic minor scale (in which the third is flat, thus $c, d, e$ flat, $f, g, a, b, c)$, or the pentatonic scale (in which the fourth and seventh are omitted, thus $(c, d, e, g, a, c)$, or some other order of intervals?
2. Is the seventh used sharp $(c-b)$, or flat $(c-b$ flat $)$ ?
3. Does the superfluous second occur in the scale? (In the example $c$, $d$, e flat, $f$ sharp, $g$, $a$ flat, $b, c$, the steps from the third to the fourth, and from the sixth to the seventh are superfluous seconds.)

Note.-The greatest care should be taken in answering the above questions. The music of every nation has certain characteristics of its own. The progressions of intervals, the modulations, embellishments, rythmical effects, \&c., occurring in the music of extra-European nations are not unfrequently too peculiar, to be accurately indicated by means of our musical notation. Some additional explanation is therefore required with the notation. In writing down the popular tunes of foreign countries on hearing them sung or played by the natives, no attempt should be made to rectify anything which may appear incorrect to the Europenn ear. The more faithfully the apparent defects are preserved, the more valuable is the notation. Attention is called to "The Study of National Music" by Mr. Carl Engel, in which admirable examples of Eastern music committed carefully to European notation will be found; notably those on pages 28 \& 29 "Cannibal Song of the Marquesas Islanders," and on pages 30,31 and 32 "Airs of the Zealanders." A perusal of this work would greatly assist the investigator.
4. Does the music contain progressions in semitones or chromatic intervals?
5. Are there smaller intervals than semitones, such as $\frac{1}{3}$ tones, $\frac{1}{4}$ tones?
6. Are there peculiar progressions in certain intervals, which are of frequent occurrence in the tunes? If so, what are they?
7. Do the tunes usually conclude in the tonic (the key note, or the first interval of the scale)? Or if not, on what other interval?
8. Do the tunes contain modulations from one key into another? If so, describe the usual modulations?
9. Are there certain rythmical peculiarities predominant in the music? If so, what are they?
10. Is the time of the music, generally, common time, triple time, or irregular?
11. Are there phrases, or passages, in the melodies, which are of frequent re-occurrence?
12. Have the airs of the songs re-occurrences of musical phrases which are traceable to the form of the poetry?
13. Have the people musical compositions which they regard as very old? and do these compositions exhibit the same characteristics which are found in the modern ones ?
14. Are the compositions generally lively or grave?
15. Describe the Form of the various kinds of musical compositions. (Form being taken in its musical sense, as Sonata-form, etc.)
16. If there is anything noteworthy about their compositions or manner of composing which has not been alluded to in the preceding questions, notice it.

1. Have the people musical bands, or orchestras ?
2. Which are the instruments generally used in combination?
3. Which are the instruments commonly used singly?
4. What is the number of performers in a properly constituted band?
5. What proportion do the instruments bear to each other in a properly constituted band or orchestra; do they vary according to the purposes for which the band is used ?
6. Is there a leader of the band? How does he direct the performers?
7. Does the band play in unison or in harmony?
8. If vocal music is combined with instrumental music, performed by the band: is the instrumental accompaniment in unison (or in octaves) with the voices, or has it something of its own ?
9. Is the tempo generally fast or slow?
10. Are there sudden changes, or gradual changes in the tempo?
11. Are there changes in the degree of loudness?
12. Do the musicians, on repeating a piece, introduce alterations or variations of the theme?
13. Do they introduce embellishments ad libitum?
14. Mention the occasions (religious ceremonies, social and public amusements, celebrations, processions, etc.) on which musical performances take place.

[^66]15. Are there military bands? And how are they constituted?
16. Is music employed to facilitate manual labour?
17. Are there songs, or instrumental compositions appertaining to particular occupations, or trades?
18. Hare the people a national hymn, or an instrumental composition, which they perform in honour of their sovereign, or in commemoration of some political event?
19. Describe minutely the musical performances in religious worship, if there are any.
20. Have they sacred dances performed in religious ceremonies, at funerals, etc.?
21. Have they any war dances, dances of defiance, etc. ?
22. Have they any dances, in which they imitate the peculiar movements and habits of certain animals, etc.?
23. Are their dances accompanied by musical instruments, by singing, or merely by rythmical sounds, such as clapping of hands, snapping of fingers, reiterated rociferation, de. ?
24. Give a list of all the dances.
25. Endeavour to ascertain whether the rhythm of the music accompanying the dance is suggested by the steps of the dancers, or rice rersâ.
26. Gire if possible illustrations or photographs of the musicians performing on their instruments.
27. Give full scores of their operas, theatrical representations, religious music, etc.
28. Give if possible, illustrations, or photographs of their dancers, in every attitude, and combination.
29. If there is anything noteworthy about their performances, which has not been alluded to in the preceding questions, notice it.

## Cultivation.

1. Do the people easily learn a melody by ear?
2. Hare they a good musical memory?
3. Are the children taught music? And if so, how is it done?
4. Are there professional musicians ?
5. Are there any performers who evince much talent?
6. Are there any minstrels, bards, or reciters of old ballads?
7. Are there any professional improvisators ?
8. Are there professional musicians of different grades?
9. Who composes the music?
10. Do the musicians follow other professions besides music?
11. Are the ministers of religion also musicians, and medical men?
12. Have the people some kind of musical notation?
13. Have they written signs for raising and lowering the voice in singing, for giving emphasis to certain words or phrases, or for similar purposes? If so, describe the signs.
14. Do they possess treatises on the history, theory, etc. of music: instruction books for singing, and for playing musical instruments, \&c. ? If so, give a detailed account of their musical literature.
15. Have they musicalinstitutions? Givean account of them.
16. How do the people appreciate their own music ?
17. What impression does the music of foreign countries produce upon them?
18. Have any particular class (such as sailors) peculiar songs of their own? If so, describe them.
19. If there is anything noteworthy about their music, which has not been alluded to in the preceding questions, notice it.
[^67]
## Traditions.

1. Are there popular traditions respecting the origin of - music?
2. Have they any myths about a musical deity, or some super-human musician?
3. Have they any legends or fairy-tales in which allusion to music is made? If so, what are they?
4. Have they any tradition about the invention of certain favourite musical instruments?
5. Have they any tradition or historical record respecting the antiquity of stringed instruments played with a bow?
6. Have they any records respecting their sacred music?
7. Is music believed to possess the power of curing certain illnesses?
8. Is music believed to possess the power of enticing and taming wild animals?
9. Are there popular tunes, or certain rhythmical figures in the tunes, which according to tradition have been suggested by the songs of birds?
10. If there is anything noteworthy about music which has not been alluded to in the preceding questions, notice it.

Note.-A collection of the national Folk-Lore, would be valuable, in as far as it relates to music.

## SlNGAPORE WEATHER IN 1885.

Dry and wet seasons are, in their effects, even more distinguished by the frequency and infrequency of rain than by the relative quantity of the rainfall. On this account it is my practice, at the close of each year, to make notes of the droughts which have characterised it. The rain-gauge registers hundredths of an inch, and I note as "droughts" all periods of seven consecutive days and upwards without measurable rain, and all periods of longer duration with only trifling rainfall. I was absent during the exceptionally dry year 1877, but, judging from the printed returns for that year, it did not surpass 1885 in this respect. The following are my notes for the latter year :-

From 7th to 15 th January,-9 days,-only 0.01 inch.
From 11th to 30th March,—20 days,—only one fall of 0.06 inch.

From 14th to 29th August,-16 days,-only 0.09 inch in three falls.

From 5th to 15 th September,-11 days,--only one fall of 0.10 inch.

## No measurable Rain.

| From 5th to 12th February, | $\ldots$ | 8 days. |
| :---: | :---: | ---: |
| ", 16th to 30th March, | $\ldots$ | 15 |
| ", 15th to 24th April, | $\ldots$ | 10 |
| ", |  |  |
| ", 26th A pril to 2nd May, | $\ldots$ | 7 |
| ", 3rd to 13th May, 11 days,- |  |  |
| the fall was only 0.36 inch. |  |  |
| ", 26th April to 2nd May, | $\ldots$ | 7 |
| ", 16th to 23rd June, | $\ldots$ | 8 |
| ", |  |  |
| ", 23rd July to 3rd August, | $\ldots$ | 12 |
| ", |  |  |
| ", 1st to 9th October, | $\ldots$ | 9 |
| ", 23rd to 30th December, | $\ldots$ | 8 |

In fact, November was the only month of the year free from drought. It may be added that in January, March, and August the monthly fall was less than 2 inches, and in October less than 3 inches. On the other hand, I registered rain in 1885 on 162 days, while in 1877 the number of days at the Kandang Kerbau Observatory was only 125.

It is remarkable that, while the South-west monsoon of 1885 was exceptionally hot, the nights in January and February were, I think, unprecedentedly cold, December, 1884, having also been remarkably cold, though the rain, after the 12 th of the month, was very scanty.

## A. KNIGHT.

## FEUDAL TENURE IN THE DUTCH EAST INDIES IN THE SEVENTEENTH CENTURY.

The practice followed in Malacca, during the time that that Settlement was a Dutch possession, of obtaining the sanction of the Court of Justice to every transfer or transmission, * was no doubt consequent upon the existence of a charge analogous to that made in Batavia, as to lands in the vicinity of that town, under a Proclamation of April 1st, 1627. It will be seen from the annexed note, translated from the "Plakaatboek" of Mr. Van der Chiss, that the tenure in Batavia was feudal, the Company being the lord, and that holders of fiefs originally had to pay one-quarter of the value of their holdings every time that the property changed hands. This was reduced in 1627 to one-tenth.

## Proclaniation about Landed-Property ani Estates.

lst April, 1627. All lands and estates both within and beyond the jurisdiction of Batavia, already held as fiefs or hereafter to be granted as such, are declared to be "exempt from the name and servitude of fiefs and discharged from feudal services and to be personal, inheritable and allodial properties or lands."

[^68]Blocks of land and estates had frequently been granted to "residents and Company's servants" under the title and in the form of "fiefs" and on the following terms, namely, that with every "licensed alienation" one-quarter of the value of the land had to be paid to the Company.

This clause and another one which provided for "certain special duties and liabilities" were evidently found to be too severe and to retard the derelopment of agriculture round Batavia, and for this reason the Government introduced the provision that as to those occupied lands and estates "both within and beyond the jurisdiction of this city," and also as to those lands, estates and gardens which might thereafter be granted, no greater sum should in future be paid than one-tenth of their value, upon each sale or alienation, for "seignorial rights" (just like the house-property within the town itself), exclusive of the annual tithe of the fruit and crops of such estates and gardens, and that no other duties should be leviable.

The abore decree was promulgated in pursuance of a Resolution of the Supreme Government of lst February, 1627.

Regulations aboct Estates and Landed Properties, within and beyond the Jurisdiction of Batayia.

11th April, 1628. The intention of Government in its Proclamation of lst April, 1627, was to bring about the amelioration and improvement " of landed properties and estates," bu instead of co-operating to obtain that end, many land-owners, " in order to nourish and satisfy their insatiable "coretousness, had been so bold as to aggravate and to "make worse the condition of their lands, by excavating and "exhausting them for brick-kilns and otherwise, so much "so that, after a few years, the said estates would become " waste, unproductive and useless." Thence it was prohibited to do anything tending to the "detriment or prejudice" of the said properties and estates, under penalty of,-
1.-"Loss of the ownership of the said properties and " estates, by depriving their proprietors of the title deeds "granted to them by the Fiscal and the Bailiff.
2.-" An arbitrary fine and other punishment," in such proportion as seemed called for by the damage inflicted. If anybody wanted to dig earth on his property "for making bricks or for anything else," he had to provide himself first with "an order and a regulation of our committee" in order to prevent him from "spoiling" the property.

Land-owners were obliged "to open up their estates and " to keep them clean and in good order lest they should be over" grown with bushes and jungle and become hiding places " not only of robbers and rascals, but also of tigers and other "carnivorous and hurtful animals, under the same penalty " as above stated."

## Re-Introduction of the Sirih and Pinang Farm.

12th February, 1629. This regulation was issued by the Magistrate :-As " the lately finished war" prevented the said farm from being let out, "some reasons move their Honours at present" togrant it for two months (from 14th February to 14 th April, 16.29) to Captain Bartholomeus de Saveda, who alone was allowed to gather and to sell the sirih and pinang "growing on all the imprivileged lands and estates, and also on those which did not belong to anybody."

Transgressors of this order were to be "properly" punished.
Everybody could grow so much sirih and pînang on private land as he liked to do, but he had to sell the whole quantity " at first cost of $\frac{3}{4}$ of a real to de Saveda, who could sell it " again at one real and a quarter, for the same measure."

The farmer had to station watchmen "outside the gates to " take care of the fulfilment of the said conditions and to "serve everybody."

## ASIATIC STUDIES, BY DUTCH SOCIETIES IN 1885.

The Royal Institute of The Hague has, in the past year, done much good work in the large area over which its operations extend. The following articles of its Journal (Bijdragen tot de taal-land-en volkenkunde van Nederlandsch-Indie) are of interest to our Society:-"On the Philippine alphabets," by Professor Kern :-this learned paper was suggested by a publication on the subject entitled "Contribucion para el estudio de los antiguos alfabetos filipinos, por T. H. Pardo de Tavera," and treats of the affinity of these alphabets to those of Sumatra, Jara, Celebes and Kamboja. Dr. G. A. Wilien contributes a valuable article on circumcision as practised by the people of the Indian Archipelago, in which he shews that it has nothing to do with the Moslem rite. Lastly, there is a legend about Prince Sutan Manangiérang, in the dialect of Manangkarbau (transliterated text, translation and explanatory notes), the most interesting and probably the most archaic form of Malay speech. This article, extending over 156 pages, is not the least valuable of the materials for the study of that dialect that have been supplied by Mr. Van der Toorn, of Fort de Kock, in the Padang district. See for his other papers "de Indische Gids," 1882, II, pp.742-76, and 1885, II, pp. 1027-34, 1163-78 ; the Batavian "Tijdschrift," Vol. XXV, pp. 441-59, 466-83, 553-64; Vol. XXVI, pp. 205-33, 514-28; and the " Verhandelingen van het Bataviaasch Genootschap," Vol. XLV, 1, where he has given the text, with translation and glossary, of another Manangkarbau tale called "Manjau Ari." In Vol. XLI of the same serial is given the tale of Princess Balkis in the same dialect (text, transliteration, translation, and notes), edited by Mr. D. Gertir van Wijk. A collection of Manangkarbau conversations, with an introduction and glossary, was brought out by Professor Pijnappel in 1872. Since 1875, collections of riddles, pantuns, proverbs and other specimens of the dialect have been published in the Batavian "Tijdschrift" by L. K. Harmeen, Limburg-Brouwer, and J. Habbema (Vol. XXI, pp. 288-94, 480-533; Vol. XXIII, pp. 258-81; Vol. XXV, pp. 337-61, 417-31, 538-52; Vol. XXVI, pp. 168-81, 234-55, 564-70) : while the fourth series of the Journal of the Institute of The Hague has brought several
gwod contributions to our knowledge of the dialect by W. Hongramer, J. F. L. Schneider, A. L. van Hasselt, and J. Habbema (Vol. I, pp. 213-31; Vol. V, pp. 136-50; Congress Vol., pp. 219-36). Sufficient materials would thus appear to be available from which a conspectus of the language might be worked out.
The first volume of "De Indische Gids" for lastyear (pp. 13-59, 191-24.2) brings to a conclusion a series of valuable articles, by Dr. G. A. Wilken, on spirit worship as practised by the people of Malaysia and Polynesia. It is to be hoped that these papers will be published separately, and thus become accessible to a larger circle of students.

The "Tijdschrift voor Nederlandsch Indie" for 1885 has a series of papers by J. A. B. Wiselins, on prisons and forced labour in British India and the Dutch Indian possessions. Only a few pages (I, 277-80) are given to the Straits Settlements.
R. R.

## FOLK-LORE OF CHINA.

The following circular has been issued by the Local Secretary in Hongkong of the Folk-Lore Society of Great Britain :-

## Hongkong, 7th June, 1886.

$S_{\text {ir, }}$-Haring been appointed to act in this part of the world as local secretary of the Folk-Lore Society of Great Britain, it has appeared to me after reflection that the only possible way of dealing effectively with the vast field of FolkLore in China, which has received but slight cultivation at the hands of western scholars, is to invite the co-operation of all Europeans and Americans resident in China. There can be little doubt that, either by their position or influence, they could materially contribute tomards a thorough investigation of a subject which is daily becoming of greater interest, and which is gradually assuming a place of no small importance among other branches of science.

The Folk-Lore of China is not only a study of great interest in itself, but the mass of materials it contains will, after careful collection and discrimination, be of great scientific value for purposes of comparative Folk-Lore. No attempt has ever been made to deal with this subject as a whole. What little has been written has, with a few notable exceptions, been generally of a local character. What is now proposed is to endeavour to obtain, as faras possible, collections of the lore peculiar to the different parts of China, and its dependencies. Each collection, while in itself highly instructive, will be chiefly important as forming a link in the chain of facts from which a general account of the Folk-Lore of China may be deduced. If willing helpers can be found to assist in the work of collection, the success of the scheme is ensured. Failure can only result from want of co-operation and support. It is, therefore, earnestly hoped that all will be ready to give their aid either by collecting and contributing themselves or by inducing others to do so.

As a first step towards obtaining a collection of Chinese Folk-Lore as complete as possible, and with a view to uniformity of action, I enclose, herewith in English and Chinese an arrangement of the subjects of Folk-Lore under four main divisions, sub-divided into minor groups. This arrangement has been borrowed from the publications of the Folk-Lore Society as appearing to be the one best adapted to China, though no doubt modifications and additions will suggest themselves to individual collectors. It is hoped, however, that it will serve as a useful guide and form a basis on which may be built a substantial structure of facts and generalisations.

The Chinese version is intended for circulation among the Chinese who, experience shows, evince a great interest in the subject when once they comprehend its aims and objects. Under the minor groups, examples have been given in order to facilitate inquiry.

My excuse for addressing you and asking your assistance is that, as you are interested in, as well as well acquainted with, the customs and manners of the Chinese, it seemed not unlikely that you would be willing to co-operate in the fur-
therance of a scheme which cannot fail to throw light on the inner life and thoughts of the Chinese and to form a valuable addition to the Science of Folk-Lore.

Contributions of all kinds will be most welcome and fully acknowledged, and, if contributors wish, can be publisbed in the columns of the China Review or the Folk-Lore Journal, in which case each contributor will be furnished with copies of his contribution in print. With regard to contributions from natives, I shall be most happy to undertake the translation of them, should it be so desired.

All communications should be addressed to the undersigned.

$$
\begin{gathered}
\text { I am, Sir, } \\
\text { Your obedient Servant, } \\
\text { J. H. STEWART-LOCKHAR', } \\
\text { Local Secretary, Folk-Lore Society. }
\end{gathered}
$$

## FOLK-LORE.

## Subjects of Investigation.

1. Traditional Narratives.
(a) Folk Tales.
(b) Hero Tales.
(c) Ballads and Songs.
(d) Place Legends and Traditions.
2. Traditional Customs.
(a) Local Customs.
(b) Festival Customs.
(c) Ceremonial Customs.
(d) Games.
3. Superstition, Beliefs and Practices.
(a) Goblindom.
(b) Witchcraft.
(c) Astrology.
(d) Superstitions connected with Material Things.
4. Folk Sayings.
(a) Proverbs.
(b) Old Saws.
(c) Jingles, Nursery Rhymes.
(d) Nicknames.
(e) Riddles.

## NOTICE.

Copies of the under-mentioned work may be obtained from the Honorary Secretary, Singapore or Penang, price $\$ 5$ to members, or $\$ 5.50$ to purchasers who are not members of the Society :-

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RELATING TO

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Reprinted for the Straits Branch of the Royal Asiatic Society, From Dalrymple's "Oriental Repertory," and the "Asiatic Researches" and "Journal" of the Asiatic Society of Bengal.

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[^0]:    * J'robably a Michelia. The crdinary mempelas is a ficus; (ficus microcarpa, amplas and poditoria). See the description of this and other species of ficus in Java. Forbes' Eastorn Archipelago, 77.-En.

[^1]:    * 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 Tĕmělin is the river
    

    Ifaja-an (code of laws) of Perak, Pahang and Johor. Sce No. 9 of this Journal, p. 101.

    ED.

[^2]:    * See Mr. Cameron's account of his visit to these cares, No. ? of this Journal, p. 1ō3.

[^3]:    * History of Sumatra, London, 1783, 1784, 1811, $4^{\circ}$.
    + 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.

[^4]:    * 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 Duteh 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 110 worse than the Dutch Mid-Sumatra Expedition, which, two years "bcfore, had been advised to turn back at that same place,"-Forbes Eastern Archipelago, 253.-ED.

[^5]:    * The greater part of this collection is now in the Royal Museum of Natural History at Leyden.

[^6]:    * Among Malay races mountain-tops are rosorted to as places oí seclusion and penance, as being the abole of pownin! spinits. Sae (as to Jara), Journ. Int. Arch., IV. p. 119; Fobbes, Mustem Aichipelago, 103; (Sumatra) Id, 193; (Borneo) Iljdisehrift roor Ned. Ind. 4 Jargang, 2 deel, p, 3 ; Prim. Cult. II. 249; (Mradagascar) Ellis' History of Madagascar, I. E4; Sce also Journ. Ind. Arch. IX, 125 ; and Elis' Polynesian Leseurches, I., 397 and IV.. 404.

[^7]:    * It is certainly weil to wait until we have a larger series of amual returns before generalising on such a matter too positively; and this branch of the subject is only touched unon now to invite the attention of all who may keep or study our Meteorological Records. But from the evidence alre ady accumulated the long drought of 1882-S3, which ended hast 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 145 inches only, in 1576-7. An excess of rain may, in the same way, be looked for in the years 1884-5, and still more in 188\%-6 : but not so great an excess, these years morely closing the subsidiary period of excess from 1879-90 (228 inches).-Journal No. 12 of the Straits Branch of the Royal Asiatic Society, pp. 254-5.

[^8]:    ＊Journal No．9，pp．69－84．

[^9]:    * A particular rank or order of nobility in Brunei, a corruption of hshutriya (Sansk.), the military caste of ancient India.-ED.

[^10]:    $\dagger$ Pangeran Muda Hassm married the niece of the late Sultan Mumin and had three daught ry and two sons. One of the latter was cailed Pangeran Muda Chuchu Besar and the other Pangeran Muda Chuchu Damit.

[^11]:    * 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.

[^12]:    4. The State-domain includes, lands assigned as an endowment to the Crown ;
[^13]:    * One lectare=two ac:es one rood thirty-five perches.

[^14]:    No. The Roman character has not yet been adopted in the Straits Settlements, either in the Government Veraacular Schools, or by the Native Press.

[^15]:    * Scma, the sign by which a grave is known; a mound, a barrow.

[^16]:    * Jourual No. 12, p xv.

[^17]:    ( ${ }^{1}$ ) Farta 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.
    ( ${ }^{2}$ ) Farta y Souza describes Bentan as "haring two streng "castles and its rivers staked to prevent the access of ships. so "that it was considered almost impregnable, and though Auec" querque went with 18 vessels and 630 men, he was obliged to " retire."

[^18]:    (1) "Kâyu gaharu."

[^19]:    ${ }^{1}$ ) i.e., Kampong Kling.

[^20]:    * Wallace's Malay Archipelago, II, 305.
    $\dagger$ Colonel Yule, Journ. Anthrop. Instit.

[^21]:    * Forbes: Eastern Archipelago, $40 \pm$ (Buru), 338 (Timor).

[^22]:    * 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.
    $\uparrow$ Eastern Archipelago, 404, 488.
    † ld., p. 434.

[^23]:    * See.No. 14 of this Journal, p. 291.

[^24]:    * Katua from tua, old; Pĕnghûlu from $\hat{\imath l}$ fu, the native Malay name for head, now replaced by the Sanskrit kapala.
    $\dagger$ The Kweangs are accredited messengers of the Katuas and Pěngतûhus named by them with the approval of the villagers.
    $\ddagger$ One year, formerly proposed by me, is, I find, too short a term to render the office acceptable to the Malays and give them a proper training.

[^25]:    * For instance, Haji Ibrahisr, a younger brother of the Pĕnghûlu Bĕsar of Teluk Ayer Tâwar, is the head of one of the three large Jumahas of North Province Wellesley. About two years ago the Pĕnghallu having, very properly, procured the dismissal of the Kali for malpractices, it was at first intended by the family and their friends that Ibrahim should succeed him. But it was thought this would not look well after the part the Pěnghûlu had taken, and it was arranged that an old Kali, who, several years before, had resigned the office, should resume it for a time, until Haji Ibramim could be installed with less risk of provoking invidious remarks. A daughter of the Pĕnghûlu, formerly married to the Province Land Surveyor, AMIN UD DIN (an elder brother of the present Assistant Surveyor SAiboo) and afterwards to a Malay gentleman of Kedah in the Raja's service, about a year ago eloped with Tunku Jusor, a brother of the Raja and Governor of the District behind Province Wellesley, who brought her to Penang. With much difficulty a divorce was arranged, and she is now the wife of the Tunku, thus cementing the intimacy that has always subsisted between the royal family and that of the Penghulu.

[^26]:    * The appointment of a second or deputy head for each division and village primarily intended to meet the case of some of the volunteers of a Division being called away under one of the $h$ jads to act against gang robbers in another Division and the remainder being left under the other head in charge of thevillage, and also as a provision against the sickness or absence of a Pěnghalu or Katua will further lessen the risk of any of the headmen trying to domineer.

[^27]:    * Pengnûlu Mukim. Mukim is the territory or rather the group of families attached to a mosque, a parish.

[^28]:    * See Note at end.

[^29]:    * It takes a long time to gain the confidence of the Malays. When a European Official, or any person of position, with whom they are not well acquainted, puts questions to them, they are doubtful of his motives in proportion to their ignorance, and seek to give such replies as will be at once pleasing to him and not unpleasant in their consequences to themselves or their friends. If there are any native bystanders they are doubly cautious, as they know that every word they say may be reported to those whom it may affect. A Malay seldom speaks out the truth, the whole truth and nothing but the truth, unless to those he trusts and when there are no otber listeners.

[^30]:    * The Police Magistrate.
    $\dagger$ The Deputy Commissioner of Police.
    $\ddagger$ The Assistant Engineer.
    || To the imagination of the ordinary Malay the power and resources of the former are boundless. I once overhead a group of Malays talking about a criminal case, and the conclusion at which they arrived was that "he could make the innocent guilty and the guilty innocent." The native surveyors are supposed to have the power of conferring the right to lots of land by surveying them, and the Datu Sukat Tanah in his visits to the inland districts is received with more distinction than the highest European Officers of Government.

[^31]:    * Hence the frightful extent to which various disgusting cutaneous diseases prevail in every village and almost in every bouse, and the great mortality, effectually checking the natural increase of the population, from fever, small-pox, diarrhæa and cholera.

[^32]:    * One of the present Kalis (not now recognised by Government) makes a living by selling inspection of the notes of marriages kept by, or for, his father, who was the great Kali of Penang in his day. In a case that occurred not long ago he demanded $\$ 1,000$ to search for and produce one of these notes. In this respect he is not worse than any other native would be who had the custody of papers of value. A Pënghûlu Bĕsar, who also acted as a sort of Notary for his district, drew up a will for a Malay who went on the pilgrimage, leaving the will in the Penghtulu's keeping. The persons interested could not get it without paying a fee of \$30. I advised them to take legal proceedings to recover it, but they said that the Pĕnghûlu might deny that he had it, or produce it and give some evidence to invalidate it, and he was so highly reputed by the officers of Government and so much liked and trusted by the Judge that he was sure to be believed. In the former case compulsion would have been equally hazardous, as the opposite party might have made the Kali a present to burn the paper, and he would merely have had to say in Court that no such paper was to be found among his father's records. The Kali's father wos a very gentlemanly and pleasant Arab of Mecca, a universal favourite of the Europeans, including the officials. In one of the first cases in which I was engeged in the Court he was called as a witness on the other side to speak as to some pancr. In cross examination I asked him if he could read and write. He indignantly desired the interpreter to give him a Koran and began to read fluently from it, but unfortunately it turned out that he held it upside down, and I fear he never quite forgave me the discovery. He knew a great deal of it by heart.

[^33]:    * See Note at cnd.

[^34]:    * The late Colonel Low, for so many years Superintendent of Province Wellesley, described this class graphically, and his remarks apply not only to the Jawi-pakans properly so called, but to all descendants of Indians born and brought up in the Settlement. "A Jawi-pakan is the offspring of a man of Hindustan [India] and a Malayan woman [or a descendant of such an union]. He inherits the boldness of the Malay and the subtlety, acuteness and dissimulation of the Hindoo [Indian]. He is indefatigable in the pursuit of wealth and most usurious in the employment of it when gained. Few employments come amiss to him. He cloaks ignorance where it exits, or makes up for it by pretence and zeal. His fingers seem to have a chemical affinity for the precious metals; he avoids downright theft, yet the transit of money or money's worth through the former is at a discount varying in amount according to his calculations of detection. He is cringing to superiors, overbearing, and, where there is no check on his conduct, tyrannical to inferiors; like one of the feline tribe when it has changed its quarters, he carefully obtains a perfect acquaintance with all the trapdoors, outlets and hiding crevices of the portion in which he is placed. Thus secured he makes the most of that position. If he holds a public situation, he tries to balance his peculations or malpractices with the above chances of escape, and generally succeeds, and should this fail he compounds for safety with his defrauded creditors and dupes, and quashes informations. It is not here intended to include a whole class in the above description, yet it is to be feared that exceptions to the picture are fewer than could be wished. When under strict management, the Jawi-pakans are undoubtedly a very ueeful class

[^35]:    * See No. 7 of this Journal p. 88.-Ed.

[^36]:    * Lit. Play Society.

[^37]:    * Generally entered in pencil.

[^38]:    * A few days ago the wife of a trader in Penang having lost at HuaHoey ever $\$ 1,000$ during his absence tried to commit suicide.-(Febuary, 1886.)

[^39]:    * "Over de Wortel woorden in de Maleische taal," a paper read by Dr. J. Pijnappel in Section 5, Polynćsienne, of the Oriental Corgress held at Leyden in September, 1883.

[^40]:    * This tripthong occurs in the English $w h y$ pronounced oo-ah-ce.

[^41]:    * A Dyak sword.
    $\dagger$ "Mëlah Pinang," splitting the betel-nut, is the name given to the marriage ceremony, of which that action forms the central part.

[^42]:    * "Youth of the Pedar (fruit) Skins."
    $\dagger$ A metamorphical way of saying: "Let us go on the war path."
    $\ddagger$ A long wooden blow-pipe used for propelling poisoned arrows.

[^43]:    * The property of Dyaks consists in great part of old earthenware jars, comparatively valueless in themselves; but highly prized by them, and ranging from $\$ 40$ to $\$ 200$ and $\$ 300$ a piece.
    $\dagger$ Klieng commands the winds to collect his army.

[^44]:    * There is notbing peculiar about the boat-building of a Melanan, or talk of a Sebaru Dyak; the names are introduced simply to make rhyme.

[^45]:    * Sampurei and his followers, coming up to Klieng's army, feign themselves to be enemies, and get up a fight with it by way of joking.
    $\dagger$ The juice of the "tuba" (dervis cliptica) rcot is commonly used for poisoning fish, which are thus obtained in great numbers: but other products of the jungle will serve the same purpose, and amongst these is a fruit called " gurah," which may possibly be the cocculus indicus.

[^46]:    * An old medicine woman who is supposed to live in the skies, and to have in her keeping the "door of heaven," through which the rain falls to the earth.
    $\dagger$ Meaning a human head.

[^47]:    * When Dyaks hare to feed a large company, plates are apt to run sbort; so they use the large leares of one or two kinds of trees, as a substitute.

[^48]:    * I have not been able to discover the meaning of "Tebinglar and Kariring." There are many words in these ancient songs, whese signification the present generation of Dyaks has lost. Omitting these two terms, the rest stands thus: "The Wide Heaven, Young Shooting Star, The Aping (kind of palm) Plant, Young Star Constellation."
    $\dagger$ In the festivals to Singalang Burong, high roles are erected in front of the house, having on the tops of them carred figures of the rhincceros hornbill which is called by Dyaks tenyalang.

[^49]:    * A mystifying contradiction, specimens of which are found in other songs, as when Ini Manang gives this puzzling answer to an inquiry about distance. "If you start in the morning, Jou will be a night on the ray; if "you start in the erening you will get there at once." So abore, Klieng spoke of the same house as long and short.

[^50]:    * Klieng and his friends are now supposed to be near Tedai's house; they lie concealed in ambush in the jungle near his bathing place. The "argus pheasants," are women who come for their ablutions.
    $\dagger$ They come out of their concealment, and proceed to Tedai's house as friends. A festival to Singalang Burong is being celebrated. The "Pandong" is a trophy which is erected in the verandah of the house, and upon which are hung shields, spears, war-charms, etc.

[^51]:    * In the upper part of the house they hear the captive father and mother of Tutong wailing and bemoaning their fate, as destined by Tedai for a forthcoming sacrifice. They are confined in an iron cage.
    $\dagger$ An animal something like a dog.

[^52]:    Note.-I append a few quotations from the Dyak to illustrate the sound and measure of the original.

    Duduk di tikai rotan anyam lemantan indu, di Entigelam tanam tunsang.
    Duduk di tikai lelingkok anyam Lemok ti bejulok Lulong Bintang.
    Empa pinang puda ti baru lega nelagu langkang.
    Pakai pinang kunchit ulih ngerepit ruang tebawang.
    Sirih sidok ti betumbok tujoh takang.
    Pium tusot ti ngelumut takang kelingdang.
    When Bulan Menyimbang faints through violent exertions, two guardian spirits come to his assistance:-
    Angkat Bunsu Entanjing ari tengiching wong nunggang.
    Angkat Bunsu Rembia ari puchok tapang undang.
    Lalu di-tegu enggo jengku tunjok jari,
    Di-tata enggo lala minyak angi;
    Nyau kekebut di inggut tapa kaki,
    Nyau kekebak di luak tungkul ati.
    Lalu angkat Bulan Menyimbang.

[^53]:    * The knald rf acimrieratior of the Lutch E I. C'crrrany consisteti of 17 deputies, three of mhich vere cieputed ky Ameterdam.-The Trunclator.

[^54]:    * Report on the geology and physical geography of the State of Pêrak, by Revd. J. E. Tennison-Wood, f.g.s., f.l.s., \&e.

[^55]:    *Seperti sungkei be-rendum "like a soaked sungkei stick."When the sungkei stick has been soaked for a long time, say three months, the peel comes clean away ; proverbial expression used of a person " cleaned out."

[^56]:    * Dendulang.-The buttress of a forest tree out of which a small round or oral tray may be fashioned. Dendulang is also used of a piece of metal inserted between the shaft and blade of a spear.

[^57]:    * Sudip.-A stick or spoon used to stir puddings (mengachau dodul). It has a handle and therefore differs from the stick called kuau.

    When working the tanah padi the pengayuh ber-ubong or spade made of two pieces may be used, but when working the tanah ambil

[^58]:    or tin-bearing stratum the pengayuh batang sendiri and no other may be used.

[^59]:    * See No. 2 of this Journal, page 238. The derivation of the name of this primitive Malay censer from the Sanskrit çankha (conch-shell) has been pointed out (Malay Manual, p. 32). Forbes notes having seen in a sacred grove in Java " the remnants of small torches of sweet gums which had been offered." (A Naturalist's Wanderings, p. 97).

[^60]:    * Rapport à M. le Ministre de l'Instruction publique sur une Mission aux iles Philippines et en Malaisie. Paris, 1885.

[^61]:    + pili, MONTANO.
    +paqcayan, MONTANO.

[^62]:    $\dagger$ Derived from the Arabia bismillahi, the formula pronounced when a Muhammadan kills an animal for food.

[^63]:    $\dagger$ Not to be found in Malay dictionaries, but I have heard it used in Pêrak. An onomatopœic word.

[^64]:    * In Java, where there are all the like traces of Indian influence, only in more ample measure, we find the very title of Arya, i.e., 'Noble or Excellent,' which has been adopted as the distinctive note of our Indo-Germanic races, assumed by every one claiming nobility, among a people in blood and character so diverse from our own.

[^65]:    Note.-Complete collections of the musical instruments of the various Eastern countries, are of the greatest value, and these collections should include the instruments, in their different artistic forms, as used by all classes.

    Photographs of musicians playing, both singly and in orchestras, and of dancers in every attitude, are also of value.

    Care should be taken to describe exactly the materials of which the different parts of the instruments are made, whether any particular value attaches to certain woods, etc.: and the botanical name of the wood, as well as the native name, should be given. Also whether any particular value is attached to certain forms of instrument, and whether there are any makers, of peculiar excellence in their craft.

[^66]:    Note.-The full scores of Oriental orchestral music are much to be desired, as is also all information regarding their methods of orchestration.

[^67]:    Note.-A complete collection of the treatises on the music of Eastern countries, written by Oriental musicians, is much to be desired.

[^68]:    * See Malay Land Tenure-Journal, Straits Branch R. A. S., No. 13, p. 150.

