Frenchman near Paranaguá, and to the northwards along the coast district. The plan adopted is to fix an equitable rent for the land, and give the tenants option of at any time becoming proprietors on payment of twenty years' purchase. The population has been returned as follows in the years mentioned, viz.: in 1854, 35; in 1855, 64; in 1856, 403; in 1857, 450; in 1858, 496. Of the last-named number, 436 were Brazilians and 60 foreigners. The population are employed in agriculture and fishing, about half their profits arising from the latter occupation. The exports amount to about 2000l. yearly.

Besides the colonies mentioned, there are various small settlements of Germans and others in the Paraná. The Germans in the neighbourhood of the Rio Negro, an ancient settlement, number about 350. The formation of various other colonies is contemplated; the most notable of which is that which the Provincial Government would establish at Assunguy, west of Antonina. The land is stated to be fertile, and is sold at $\frac{32}{1000}$ parts of a penny per 6 square feet. The province devotes 1000/L annually to promote immigration.

XIII.—Notes on Cambodia, the Lao Country, &c. By M. HENRI MOUHOT.

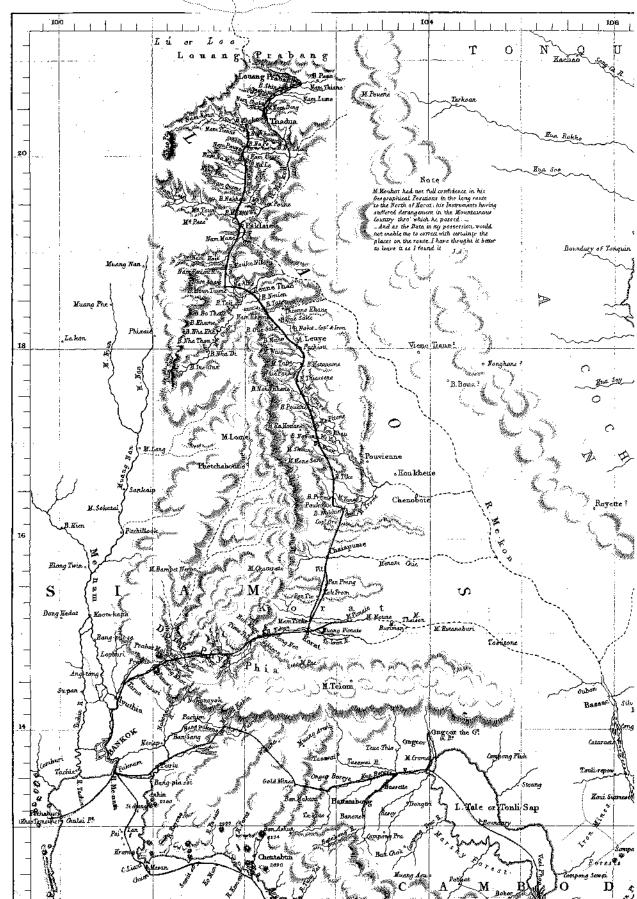
[Translated from the original French, by Dr. Tromas Hodgein, M.D., &c., Foreign Secretary.]

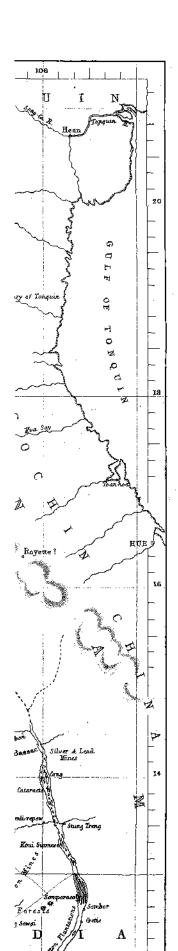
Read, March 10, 1862.

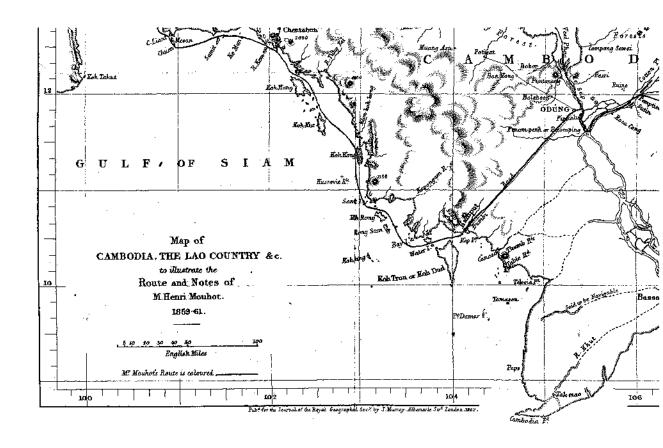
Brelum, among the savages of Stien, N. lat. 11° 58', E. long. 107° 12', 15th Oct., 1859.

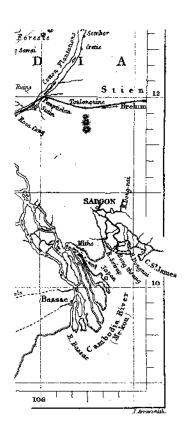
My DEAR MR. STEVENS,

For the last two months I have been in the forests with the uncivilized inhabitants of Stien, in the latitude indicated above, where I remained during the most favourable season for collecting insects and land-shells. Although the King of Cambodia had given me a letter, in which he ordered all the chiefs of the Srokkhner in the Cambodian villages to furnish me with the means of transport on my route, I had much difficulty in arriving here, because we could frequently find neither buffaloes nor carriages in the hamlets through which we had to pass, and because the Cambodians are the worst species of animal on the globe. Like the ass, they are not to be roused from their lethargy, almost approaching stupidity, but by the application of the stick. Thus I accomplished my journey, which lasted nearly a whole month, that is, three times longer than it would have taken me to go on foot. On the 21st of July, after having descended the great branch of the Me-kon from Pinhalu, a village 9 miles from the capital (in N. lat. 11° 46' 30",









E. long. 103° 3', mer. of Paris), as far as Palomping, a town of great commerce, inhabited by Chinese and situated at the junction of the two streams, I ascended the great river of Cambodia. The water was still low, for throughout the country the rainy season was two months later than usual. The Me-kon is covered with islands, some of which are 8 or 9 miles in length, and more than a mile in breadth. Such is the large and beautiful Isle of Kö-Sutin, where I arrived after a march of 5 days. You may imagine the size of the river, which I estimate at nearly 3 miles broad. Pelicans roam about the waters in flocks of 50 or more. The shores, especially where they are sandy, are covered with thousands of storks, sea-swallows, and other aquatic birds. The general aspect of this river, however, is rather melancholy than gay. This mass of water flowing with the rapidity of a torrent is, doubtless, a very imposing sight; but that is all: only a few canoes are seen upon it, and its shores are almost deserted (the Me-nam is much more cheerful and lively). Thirty or forty leagues to the north of the Kö-Sutin, on the confines of Lao, the rapids and cataracts commence. It is then necessary to leave the larger crafts to take to canoes, which, as well as the baggage, have often to be conveyed by men. The current is so strong that, at some seasons, one can scarcely travel more than a single league a day, and occasionally (such are the windings of the river) the boatmen go in the evening to fetch their fire from the very spot at which they had cooked their rice in the morning. had a small boat and 3 rowers; but at every turn we could scarcely struggle against the current, and it required the greatest efforts and pulling by the rushes to prevent our being carried back. Eight days after leaving Pinhalu we arrived at Pemptielan, a large Cambodian village, whence I had to continue the journey by land. There still remained 150 miles to travel by carriage, constantly in an easterly direction. The mandarin whom I found in the village, and who has been entrusted by the Government with the charge of all this part of the country, received me very kindly; and after two days I was prepared to proceed on my journey. On the first day our carriages were overturned, and it seemed as if it would be impossible to proceed. This happened in the midst of frightful bogs, and the carriages sank up to the axletrees, and the buffaloes up to their loins. Fortunately the following day the roads improved, but for 3 weeks together we saw only a few small rice-fields scattered in the neighbourhood of the tents, as we were constantly travelling through a swampy plain covered with a thick shady forest, which reminded me of the enchanted forests of Tasso. One could almost imagine that from each tree some fairy being might issue, and easily conceive how the imagination of a pagan people, when greatly excited, might convert these retreats of huge and ferocious wild beasts into the abodes of evil genii. Twenty times an hour the men who accompanied us, in addition to the drivers, were obliged to cut the branches or remove the trunks of trees which obstructed our passage, or to open up a new track. All the way since our leaving Pinhalu, the Cambodians were in a state of astonishment at seeing us directing our course to the Stien, and that, too, in the worst part of the year; for the rains had commenced, and even those who reside the nearest to the Stiens dare not run the risk of going: and if I had not brought with me from Siam the two young men whom I had in my service, I should not have been able at any price to have induced a single person to accompany me. It was with very great reluctance that my men advanced, for, at Siam, Cambodia has a terrible character for its unhealthfulness. Unhappily for my servants, as well as for myself, both of them were attacked with fever in the midst of these woods. so that until now, instead of having assistance, I have had two patients on my hands. In passing through a village, of which two-thirds of the inhabitants were Annamites, a villanous set of people, I was in danger of being taken prisoner by them, and of finishing my explorations in their dungeons, where the only entomological specimens for me to collect are certain 6-footed animals; but they are so large and so fat that they are a treat to the The previous year the waggons belonging to the French missionaries had been completely stripped, and the men who accompanied the caravans were bound hand and foot, and sent to Cochin China. I showed a bold front, dared them to attack me, and loaded all my firearms in their sight. This exasperated them much; and for the two following days I was so apprehensive of falling into an ambuscade, that I proceeded pistol in hand, and my finger on the trigger. My assurance had the desired effect, and I was neither stopped nor molested anywhere.

Notwithstanding the fatigue, heat, and privations inseparable from such a journey, I was myself in very good health. When I arrived on the 20th of August amongst the Stiens, at a place called Brelum, I found an outpost of Catholic missionaries attached to the Cochin China mission, and a few miles from the southern frontier of that country. To have proceeded farther would have been impossible, for we should not have found the necessary means of carriage, or a farther supply of provisions. At this season of the year these poor savages have invariably consumed their stock of rice; and all they have to subsist upon are herbs, a small quantity of maize, and the scanty produce of the chace. I therefore accepted the hospitality offered to me of a kind priest, whose house was fortunately well supplied. In a week or two from this time the rainy season will be over, cold nights immediately follow,

and for many months nothing can be done with insects; but the birds will then have their turn, and I shall devote myself almost exclusively to them. My departure from this place will depend upon circumstances. I may, perhaps, be the bearer of this letter to Pinhalu; perhaps I may be detained here for some mouths, in consequence of the bad state of the roads, and the impossibility of procuring a carriage during the rice-harvest. I were asked what are these strange people who live secluded upon the mountains and plains of Cambodia, which they seem never to have quitted, and who in their manners, language, and features differ altogether from the Annamite Cambodians and the Laos tribes, I would say I incline to the belief that they are the aboriginal inhabitants of that country; and that they have been driven into the position which they now occupy by repeated migrations of the Thibetans, from whom the Siamese and the people whom I have just mentioned are evidently descended, and who no doubt have one common origin, as shown by their features, religion, manners, &c.

All the country from the eastern slope of the mountains of Cochin China as far as 105° of longitude (east of Paris), and from the 11th degree of latitude as far as Loo, is inhabited by savage tribes, who are known by a name which signifies Inhabitants of the Highlands. They are not attached to the soil, but are continually moving about. The villages are, for the most part, in hostility with each other: they do not fight in troops openly, but rather seek to make attacks by surprise. The prisoners whom they take are sold as slaves to the Laos. Their only weapon is the arbalet (or cross-bow). It is of extraordinary strength, and they use it with great dexterity; but seldom at a longer distance than 20 paces. They do not use poisoned arrevs, except in hunting large animals, such as the elephant, rhinoceros, buffalo, and wild ox. The smallest puncture is sufficient to cause death, and it seldom happens, if the poison be fresh, that the strongest animal after receiving the wound has power to go more than 50 paces before it falls. They then cut out the poisoned part, and slightly roast the animal without skinning or cutting it up, that it may keep the better. After this is done, all the inhabitants of the village are called by the blowing of a trumpet, which may be neard to a great distance, to receive their share. The most perfect equality and fraternity exist in these little communities, and those who advocate all things in common would be surprised to find all their theoretical doctrines carried into practice, and productive of nothing but misery, here at least.

The strongest European could not bend the bow which one of the weakest of the Stiens would draw without effort; such is the result of habit. The Stiens are not altogether without agriculture. They cultivate rice, water-melons, gourds, bananas, and a

few fruit-trees. Their rice-plantations are kept in the nicest order. but the greater part of the work is done by the women. During the rainy season the men seldom go out, on account of the leeches, which multiply to such an extent in the woods as to render them inaccessible. They keep to their fields, in which they build huts of bamboo; but when the harvest is over, and the healthy season returned, they give themselves wholly to fishing and hunting. They never go out without a basket at their back, and in their hands their bow and a bamboo stick with a large blade of a knife fixed at the end of it. They forge nearly all their instruments from iron ore, which they procure from Annam or Cambodia. Although they know how to mould and burn earthen vessels, they generally cook their rice, their vegetables, and even their meat, in bamboos. All the clothing which the Stiens wear is a piece of cloth a hand-breadth wide, which is applied as a bandage, and more or less hides their nakedness: these bandages are woven by the women. They are of considerable length, and are worth as much as an ox a-piece, when fine.

The Stiens are very fond of ornaments, and the women especially always have rings made of thick brass wire on their legs, arms, and fingers, and wear collars of glass beads round their necks. They have enormous holes made in their ears, in which they put a bone of some animal, which is often more than 3 inches in circumference. They wear their hair long, like the Annamites, and they keep it twisted and in form by means of a bamboo comb. They likewise wear in their hair an arrow made of brass wire, and ornamented with a pheasant's crest. The Stiens have handsome and sometimes regular features; many of them have beards, or rather good moustaches and imperials. Being quite isolated and independent in the midst of these forests, they scarcely recognise any other authority than that of the chief of their village, whose power is generally hereditary. Within the last year or two the King of Cambodia has occasionally sent the mandarin who lives the nearest to the Stiens as far as their first village, and he has given to some of their chiefs seals and titles of honour, hoping by these means to bring them gradually to subjection, and to be enabled at some future time to obtain slaves and ivory. there are some few who pay a small tribute to him every three years. Nevertheless, his emissaries scarcely dare to pass beyond the boundary, fearing the arrows of the savages and the fevers which prevail in their forests. The Stiens have not the roughness of the stupid yet proud Cambodians, nor the refined cruelty and corruption of the Annamites. They are the goodnatured children of the forest, simple, and even generous: their faults are such as are common to all Asiatics, namely, cunning, extraordinary power of dissimulation, and idleness. Their passion is hunting, and the

more laborious work is left to the females. There is, moreover. another difference between them and the Cambodiaus, inasmuch as theft is of excessively rare occurrence among them. They believe in a Supreme Being, but they only pray to the Evil Spirit that he may leave them in peace. They bury their dead near their dwellings, and cover the grave with a little roof of leaves, that the spirit of the departed may come and rest there, and eat the rice and drink the wine which they take care to place in small tubes of bamboo. They likewise place similar offerings beside the paths which were frequented by their relatives, as well as in their rice-fields. This custom reminds one of similar practices among the Chinese: "Come, poor soul," they say, "and visit us often. Here is rice to feed thee, water for thee to drink, a place for thee to rest, and arrows to shoot with." They do not believe in the transmigration of souls, but they think that beasts have likewise souls, which continue to live after their death, and which wander about the places which they frequented when alive; therefore, when they kill an animal, they offer a little sacrifice lest its soul should come and torment them, and they beg its pardon for having deprived it of its body. In the case of some large and formidable animal, such as an elephant, the ceremony becomes important, and all the village take a part in it; and for several days songs and the beating of the tamtam are made to resound in order to appeare the soul of his Majesty.

The Stiens have many superstitions. The cry of an owl at night, the sight of a raven when they are starting for a journey, are bad omens, and sufficient to make them change their plans. When any one is ill, they say that the Evil Spirit torments him; and to deliver him they set up about the patient a dreadful din of noise, which does not cease night or day until some one among the bystanders falls down, as if in a syncope, crying out, "I have him-he is in me-he is strangling me." Then they question the person who has thus become possessed. They ask him what remedies will save the patient. What does the Evil Spirit require. that he may give up his prey? Sometimes it is an ox or a pig; but too often it is a human victim also, in which case a poor slave is seized without mercy and sacrificed to the demon. These miserable savages believe that the whites live in small corners of the earth in the midst of the sea; and such is their simplicity, that they often ask if there are any women in our country. If in joke we tell them that there are not any, and that if a man wishes for offspring he pulls out a few hairs and plants them, and that by the help of the sun they come up marmots,* they would be ready to make the trial if they were not undeceived.

^{* &}quot;Marmot" is the French nursery name for a child.

That of which, in consequence of the difficulty of communication and of the dread which the petty Cambodian and Annaman traders have of entering their country, they are most in need, is salt. It is probably to this cause that the great number of cutaneous diseases which occur among them must be attributed. It is not without reason that their forests are considered unhealthy; the Stiens themselves often suffer from fever. Two French missionaries, who like sentries occupy this distant station, have frequently been attacked with illness; and of the 15 Annamites in their company, two-thirds have been constantly on the sick-list. Nevertheless, notwithstanding my toils and wanderings, my health continues excellent, and I have been at work with the hatchet as well as with the net. We are surrounded by tigers, rhinoceroses, buffaloes, and wild oxen; but these formidable neighbours cause more fear than harm. If they leave their inaccessible retreats during the night, the sight of the most timid man makes them flee at daybreak, and to come at them it is necessary to pursue them for a long time, or to lie on the watch for them at the pools.

The fauna of this country differs but little from that of Siam and of Cochin China. I have found many things, both good and new, and I shall probably find them again at a future time, in the first-mentioned country. The bamboo-woods, which I had long neglected, have especially afforded me an abundant harvest of long-horned coleoptera, of which I was deficient. We may prepare the day before for collecting them: all that is necessary for this purpose is to fell some of these trees by the sides of the paths, and leave them in an oblique position, their tops being supported by those of the neighbouring bamboos. On coming again at the hottest part of the next day, you are sure to find these beautiful insects either hid near to the joints of the trees, or at work making

holes in their trunks.

You will be much pleased, my dear Mr. Stevens, to learn that some very beautiful shells are to be found, and that I have endea-

voured to obtain as many of them as possible.

When, and more especially how, I may be able to return to Cambodia, I know not yet; and I dare not think of the difficulties which I shall have to encounter with the villanous Cambodians in the conveyance of my treasures. My insect-boxes will have a terrible jolting, enough to break my heart. I entreat you to join your prayers to mine that the beautiful collection which I have already made, but which I hope still to increase, may reach you safely; or that, at least, a portion of it may be in a state to render some service to Natural History. These are the trophies which we poor soldiers of science obtain, and when we lose them, the pain is the greater because they have cost so much labour in gaining them.

If the war with Annam cease, I may visit a corner of that country, and return by water to Pinhalu; but I have not much expectation of doing so. Those who may live will see.

Commending myself to your kind remembrance, I bid you adieu; and from the midst of our Etat Major I wish you as much

pleasure as I enjoy in the forest of the Stiens.

May God preserve you from their arrows !---Yours, &c.,

Н. Моинот.

[This enterprising, courageous, and industrious traveller returned in good health to Pinhalu in the evening of the 19th of December, 1859, and the next day added a short postscript to the foregoing letter, stating his plans for the future, describing the numerous packages in which his valuable collection was about to be forwarded, and the various difficulties, dangers, and losses which it had sustained.

He was then on the point of proceeding northward to visit some celebrated ruins and return to Ban-kok.

To Dr. NORTON SHAW, Secretary to the Royal Geog. Soc., etc.

Khao Tamoune, Province of Pechaburi, Siam, lat. N. 1304', long. E. of Greenwick 100°, 15th June, 1860.

SIR,—IN a letter which I addressed to you in March, 1859, I had the honour of informing you of my having discovered two active volcanoes in the Gulf of Siam—one in the little island of Ko-Mun, lat. N. 12° 34′ 29″, long. E. of Greenwich 101° 41′ 2″; the other submarine, in lat. 11° 49′, long. 102° 31′—and of the probable existence of many others, of slow and latent action.

Since that time I have continued my researches and passed through Cambodia, from east to west and from south to north, up the Me-kon, near to the frontier of Laos. I visited one of the savage and independent tribes which live between these two countries and Cochin China; then, having crossed the Lake of Tonli-Sap, and explored the provinces of Ongcor and Battambong, where there are superb ruins and a monument, the Temple of Ongcor the Great, almost perfect, and such that the like is probably not to be found in any part of the world, I passed from the basin of the Me-kon into that of Menam, setting out from Battambong, and crossing to the west as far as Ban-kok.

A slightly elevated plain, of which the inclination is so small that during a march of a week to reach the summit it is quite imperceptible, separates these two basins. A mountain chain, of which the principal summit at the south is 6274 English feet above the level of the sea, extends s.w., and then s.s.w., joins the ranges of Chantabun, of Pursut, and of Tung Yai, which are also 4000 or 5000 feet, and reaches almost to Kamput and Haticune; whilst towards the north, another chain, given off from the

great chain of Korat, 4000 feet in height, runs from the west E. by S., and gives some branches to the provinces of Battambong and Ongcor Boreye, 40 miles to the north of Battambong, and turns round the province of Ongcor, where it bears the name of Mountain of the Somarais.

I lately sent to my family, after my return to Ban-kok, a long description of my journey, several drawings, maps, and plans, to be communicated to Mr. Arrowsmith, and which I hope you will also see.

I am induced to call your attention to these wonderful remains of the civilization of a great people which has doubtless ceased to exist, and also to the whole of this basin, which is rich in woods and mines, and, although thinly inhabited, produces cotton in sufficient quantity for the entire consumption of Cochin China; whilst the Great Lake is so immensely rich in fish, that it supplies them in large quantities to Cochin China, and also to China itself.

The iron which abounds in this country is really of a superior quality; and the Kouis, an ancient tribe, of a primitive race, who live to the west of the Me-kon, and who speak the same language as the Stiens—savages to the east—are industrious in working it. There are also many other mines rich in gold, argentiferous lead, and in copper, in the mountain chains to the east and west. The Pursut range produces the beautiful cardamom, which, when transplanted, furnishes very fine stems, but, unfortunately, no fruit. Unhappily the greater part of these mountains are dreadfully unhealthy, and none but the natives, and those who have worked there from their childhood, can remain even for a few days without suffering.

Were Lower Cochin China opened up, and presenting easy means of communication, Cambodia would probably equal it in productions, and would surpass Siam, so soon as an enlightened administration should direct its certain advancement; and when, as is most to be desired, Chinese planters and active and industrious Annamites would emigrate thither.

In two or three years one might completely change the face of the country; and I would have you observe that it appears to me that nothing would be easier than to assume the protectorate, if not to gain the possession, of this country. I cannot now say more on this subject; but you know, Dr. Shaw, that I am, and always shall be, at your disposal, to give you all the further particulars which you may desire.

The motive which now prompts me to write to you is, first, to announce that in the island of Phu-Quoc, or Koh-Tron, belonging to Cochin China, and near to Komput, there are rich mines of coal. I have not been able to go there, as the war has made the people hostile and cruel to all whites; but, my attention

having been taken by some objects of ornament made out of this mineral by the islanders. I succeeded in obtaining two specimens. which I sent, with other collections, to Mr. Stevens, of London. I wished likewise to tell you of several extinct volcanoes in the province of Pechaburi, which I am beginning to explore; four of which I have ascertained to form a part of the numerous detached conical mountains, which are probably ancient craters of the great chain of Kaho-Deng, or Deng Mountains, which occupy all the centre of the northern part of the Malay peninsula, and are inbabited by the Kariens, a primitive and independent race, which, like the Stiens and other mountaineers of this region, have doubtless been driven into the mountains by the invasion of the Siamese, and are protected, by the inclemency of the climate, against all the attempts which their neighbours may make to subjugate them. The mountains of this range which stand most in advance are known in the country by the names of Makaow Khao, Panam Knot, Khao Tamoune, and Khao Samroun. The last two are 1700 feet and 1900 feet above the level of the sea, and only a few leagues distant from each other. All these craters appear to have been originally upheaved, or craters of elevation, as Leopold Von Buch styles them, and to have risen from the bottom of the water, at a period when all this part of the country, so far as the great chain, which I have not yet been able to visit, was under the sea. Besides an immense volcanic cone, in part fallen in, and where the ground sounds under one's feet, each of the mounts has several lateral mouths and an immense number of fissures and chimneys, or passages, in which the traces of subterranean fires are very evident. They are entirely composed of trachytic rocks, scoria, lava, felspar, &c. The Siamese have made temples of the largest of these caverns, which are of great depth and breadth, and very picturesque. One of the caverns of Mount Samroun is guite inaccessible. Having descended to the depth of 20 feet, by a chimney 2 feet wide at its mouth, and shut in between the rocks, I found myself at the entrance of a deep cavern, but there all my attempts to proceed farther were defeated. At two paces from the entrance my torch suddenly went out, my breathing was checked, and I in vain fired several guns, in order to introduce air fit for respiration.

I intend, towards October or November, to continue my explorations and complete my acquaintance with the country, by starting on another tour for a year and a half, to the north-east of the Lao, that is to say, of Ban-kok, in the basin of the Me-kon, towards the frontier of China. Unless prevented by the inadequacy of my resources, I hope to carry out this design, simply from the desire of rendering some further service to science.

Н. Моинот.

Western Lao, State of Louang Prabang, lat. 200 531,* long, 1020 35' 3", 1st August, 1861.

In January last I quitted the Siamese province of Saraburi, where, during four months, I had been making active exertions to enable me to penetrate into Western Lao, so as to explore the basin of the Me-kon. Unhappily I was obliged to return to Ban-kok in March, after having proceeded 350 miles, and with great trouble and expense, to claim more protection than had hitherto been accorded me, and a passport, to prevent the difficulties which the mandarins, no less greedy and jealous here than in China, continually throw in my way. In October, 1860, a letter of recommendation was given to me by the Krome Loucong Wongsa, who is considered to be the prince most favourably disposed towards Europeans, having the superintendence of all the country through which I proposed passing: this letter, however, proved to be anything but useful. Notwithstanding my entreaties and valuable presents, I could obtain nothing better; nevertheless I set out, determined to fight my way (if fighting were necessary) to attain

my ends.

I had scarcely arrived at Saraburi when, seeing the inefficacy of my papers, I was obliged to change my tone of simplicity and moderation for one of discontent and threatening, alone understood here by those invested with a little authority. However, after a long delay I at last obtained means of transport, and again reached There the same difficulties were about to recommence which before had caused me to return to Ban-kok; but I now profited so well by the lessons which had been given to the Chinese by our cannon, that I drew from the governor of the province a letter, no longer in emphatic, though insignificant terms, but so well written, notwithstanding its laconism, that it was sufficient to enable me to traverse, not only without difficulty, but almost without expense, all the western part of Lao, from Korat to Louang Prabang. Thus all the ministers united could not obtain for me sufficient protection so as to oblige their subordinates to grant me the means of transport for payment; and now a governor of a province obtains it for me gratuitously. Several diplomatists have pictured these men as being enlightened and full of benevolence—to them, it is possible, either from fear or the hope of gain: but, believe me, they are only a set of slaves; and, as slaves, they possess all the vices which their fearful despotism can produce—an extraordinary cunning, villany, jealousy, and sordid avarice-not to mention the still greater vices common to the whole race, beyond and on this side of the Ganges and the Me-kon. As for the people, they are good, because they suffer.

^{*} In M. Mouhot's original drawing, Louang Prabang is laid down in lat. 20° 44' 30" E.: it is so retained in his map.

I have found great errors in the best maps which have been

published of all this part of the country.

I have traversed three times "the Forest of the King of Fire" — Dong Phya Phai — which separates Korat from the ancient Siamese provinces. This thick jungle covers a space of 30 miles in length; that is to say, the chain of mountains which separates the basin of the Me-kon from that of the Menam, and which serves as an epaulement to the plateau plain which extends beyond to the north and north-east.

After passing the mountains you come to a sandy, and generally barren plain, producing nothing but resinous trees of stunted growth, bamboos, underwood, and grass. Where the soil is richer, you generally find rice-fields and banana-trees. I discovered magnetic iron and oligiste. In the bed of a torrent I also discovered gold and copper in two different points. This district is rich and abundant in precious minerals, but neglected or unknown until now, except by a small tribe of 400 or 500 Kariens -without doubt a remnant of the aborigines, who a short time ago, to preserve their independence, retired into parts almost inaccessible, 30 or 40 miles to the east of the parts traversed by the caravans. Panthers, elephants, and other wild beasts, are the only inhabitants of this mountain, which the natives consider to be the sojourn of death, on account of its insalubrity. Korat Ongcor Aithe of the Cambodians was formerly the bulwark of Cambodia on the north and west. A solid rampart, supported by a large enaulement-the work of Khmer Dome (ancient Cambodians)—still surrounds the town. It is at present governed by a Siamese mandarin of the first class, a kind of viceroy. ancient inhabitants have nearly disappeared, and it now contains only about 300 descendants of Chinese, small resident merchants; 300 other individuals, who traffic about the country; besides 1500 or 2000 Laotians, Cambodians, and Siamese, who, like wolves or jackals which follow the armies or caravans, have come there from all parts of the kingdom, or probably have remained there after the wars of Lao and Cambodia, to lead a life more in harmony with their inclinations, in attacking travellers and Chinese merchants—a den of miscreants, void of all good feeling, with the exception of a small number.

Two temples are found in the environs—which do honour to the founders of the Cambodian edifices—one of which is in a pretty good state of preservation. Style, architecture, workmanship, all are alike; one would say that the same artists and workmen had made the plans and put them into execution. Again you see those immense blocks, exquisitely cut, and joined together without cement, covered with chiselling and relievos. One of these temples

is situated at about 30 miles from the town, to the east, and is said to have been founded by a queen; the other, only 9 miles to the east, is said to have been founded by the king, her husband. Much farther to the east they say others are to be found, but I have not been able to visit them. Want of means for the easy and advantageous removal of merchandise upon the Me-kon causes Korat to be the central market for all the eastern part of the country. There they bring all the silk of Lao (Langoutis), robes, skins, horns of ivory, peacocks' tails, &c., which the active Chinese merchants sell again with a good profit at Ban-kok (notwithstanding the numerous taxes they have to pay); having brought from thence cotton and other useful articles of Chinese and European manufacture for the use of the natives. There generally passes daily through the Forest of the King of Fire a caravan of from 100 to 150 buffaloes. With protective, instead of aggressive laws, an enlightening, civilizing, and honest administration, this commerce would increase threefold in a very short space of time.

Notwithstanding the small population of the town of Korat, it is the chief town of an extensive state, containing eleven towns or boroughs, chief towns of districts, and a great number of villages, more or less populated. Fifteen days' march conducts you from Korat to Bassar, on the borders of the Me-kon, under the same

degree of latitude.

My intention was to proceed to the north, so long as I could find means of communication, only stopping in the province of Louang Prabang; then to proceed down the river as far as Cambodia. hired elephants, and five days after-having passed through several villages peopled by the descendants of a Siamese colony which had taken refuge there in time of war, passing continually through forests of resin-trees thinly scattered—I arrived at Ban Prang, a village, where I discovered a tower in ruins; also the remains of an ancient I then arrived at Chaiapume, the principal Laotian temple. town to the north, being the chief town of the district. Here, again, I found more ruins, but inconsiderable, and which appeared to be rather a Laotian imitation than the work of Khmer Dome. The inscriptions of the temples in the province of Korat resemble those of Ongcor. Here I found, upon a block of broken slate stone, an inscription in Laotian characters, though inexplicable to the inhabitants of the country.* Here were, again, with some other remains of idols and towers, at the foot of a mountain in the same district, the only remaining vestiges of that ancient civilization which I discovered in the north. All led me to suppose that here also were the limits which separate Cambodia from Vienge Thiane,

^{*} Sent home.

destroyed during the last war which the Siamese raised against the

Western Laotians, or White-bellies, twenty years ago.

It was in this borough that I was stopped in my travels by the vulgar and insolent chiefs, who refused to give me on hire the means of transport, even after seeing my passport. I found that the people gave me a very different reception, which increased my desire to know more of them, and to traverse all the country of Lao; whilst the mandarin refused to sell me rice for my guides, who were, however, men belonging to the Governor of Korat, all the inhabitants came to accompany me, and showed their regret to see me leave discontented, and in blaming their chief, showing their sympathy by presents of rice, fruit, flowers, &c. had scarcely been a day with them, and I was already more an object of respect than of fear. At Korat it was still better: I had all the population for an escort. As soon as I reappeared. Chinese men, women, and children came out of their huts to accompany me to the same cottage where I had before received their hospitality, and pitying me for having been obliged to sleep in the forests in such fearful weather. During three days it had been so cold that the swallows had dropped down dead in the huts where they sought shelter.

This bad weather had surprised us one evening in our bivouac near a marsh, where we passed a fearful night. The following day we reached a village which we would not leave until the sun At Korat I met with a mandarin of the first class, reappeared. one of the most civilized I had yet met with. He had the charge of a pure white elephant, fattened in the Lao Mountains, for the King of Siam: he offered me two elephants if I would consent to accompany him, one for myself, the other for my servant and baggage. My elephant followed his. The caravan was most imposing. We had for an escort fifty soldiers on foot, beside others on horseback, and followed by as many elephants at every station. I was provided with every comfort; nothing was wanting. every halt the mandarin sent me refreshments; ducks, fish, fruit, preserves, and biscuits; gave me eight guards to watch round my fire at night, and showed me every attention. In return I discovered to him, in the mountains, mines containing an immense quantity of iron, copper, and even gold, which quite enchanted him, as he was delighted to be able to give this information to the King of Siam.

The whole province of Saraburi was in motion to celebrate the arrival of this great animal, called the white elephant, but only his eyes and the tips of his ears are albino. The King of Siam was waiting for this strange divinity on the borders of the Melar, beyond Dong Phya Phai, with his court and more than

1000 elephants. You cannot imagine how this animal (I ask pardon of the King of Siam for the expression) was fondled and feasted. The population of the villages made plain the path, swept it, made bridges to prevent his taking cold from wetting his feet, constructed elegant stables for his reception; and message after message arrived from the king recommending them not to travel too fast, in case of fatiguing him. But, alas! all these attentions were the cause of his death; the animal, still in a wild state, would willingly have exchanged all these honours for a little liberty, and the delicacies with which they regaled him for a few loads of fresh grass. All went on well as far as Saraburi, where, to please his Majesty, they gave him such a quantity of sweetmeats and pastry that he lost his appetite, began to swell, and died before he reached Ayuthia.

I now return again to Chaiapume. As I have already told you, this time I had letters from all the Laotian authorities; the best one cost me a gun, worth 3 or 4 francs. None of them, however, were of any use, except that which I obtained at Korat. The governor was obliged to grant me all I required, and his assistants trembled at my orders. The people, as before, showed me every kindness, and after entertaining me three days I set out with elephants. The same chain of mountains which forms the borders of the Menamlae, in the province of Saraburi, stretches on the one side to the southern extremity of the peninsula, running entirely through it; the other surrounds Cambodia as it were by a girdle on all sides of the gulf, and forms a hundred islands. An accessory chain runs directly north, enlarging and extending to the east its longifications, which form a thousand narrow valleys, emptying their waters into the Me-kon.

On my second entry into Dong Phya Phai the rain had commenced, and I was drenched by a most fearful deluge. The rain continued with occasional intervals of a few days; but this did not stop me, though I had to traverse a region still more feared by the Siamese than the Forest of the King of Fire, and where none of

them willingly consent to go.

In this mountainous country only elephants are used in travelling; every village contains a certain number, several small towns from 50 to 1000. I would willingly call them the frigates of the jungle and the tropical mountains: without them no communication would be possible during seven months of the year; there is no part, however fearful, which you cannot pass by their assistance. It is quite impossible for me to give you an idea of the roads, consisting of ravines, ruts of 2 and 3 feet deep, full of mud, at times causing the elephants, with their feet brought together, to slip upon the soft clayey soil of the steep declivities; then plunged up to their

middle in mire; shortly after upon pointed rocks, where one would imagine only a rope-dancer could disengage himself; going over enormous trunks of trees, breaking down the young trees and bamboos which oppose their passage; lying down so as to aid the cornacs in placing the packsaddles; sounding with their trunks for the depth of the water and the mud, so as to ensure their passage; always stamping and raising themselves without stumbling or making a single false step. One must see the elephant at work in his own country in his savage state, to have an idea of his intelligence, of his strength, his docility, and his activity, and of the admirable manner in which he brings into action all his articulations, of which we have for a long time considered him deficient; and find that he is not what we would consider him—a rough sketch of Nature—an animal created to confound men's imagination, but one of supreme perfection, intelligence, goodness, and foresight. We must not, however, exaggerate his usefulness; the packsaddles of the Siamese are also wanting in perfection: but the load of three small buffaloes, from 250 to 300 lbs., is as much as I have seen the largest elephant transport with ease in the plain, as well as in the mountains, and 18 miles the greatest distance he can travel with ease; with a moderate burden, 9 or 12 miles being the usual day's work. short time ago with 5, 6, and at times 7 elephants, I traversed that sea of mountains, and, from entering the state of Lao until my arrival at Louang Prabang, I have not ceased to climb and to descend a distance of nearly 500 miles.

All this eastern part (with the exception of two or three savage villages and black-bellied Laotians enclosed in this state) is inhabited by the Laos, or Laotian White-bellies, who call themselves Lao, and whom all the Chinese, Siamese, and other surrounding

people, only know by this name.

The Black-bellies, or Western Laos, are called by their brethren of the East by the name which at Siam and Cambodia they give to the Annamites—Juene, Lao-Juéne. The only thing which distinguishes them is that they tattoo the under part of the body, principally the thighs, and frequently wear their hair long, knotted upon the top of their heads. Their language is nearly the same, and differs little from the Siamese and Eastern Laos, except in the pronunciation, and contains expressions no longer in use among the former.

I soon found that, but for the letter I received from the Governor of Korat, I should have had much difficulty with all the chiefs; but it seemed now quite understood that wherever I passed I was to be provided with elephants, and lodged like a prince; and some small presents given to a few, and a small recompence to the cornacs, drew to me quickly the sympathy of the people. Most of

the villages are situated at about a day's journey from each other. You have frequently, however, to travel three or four days without seeing a single habitation. You have, then, no alternative but to sleep in the jungle. During the good season it is charming, but during the rainy season nothing can give you an idea of the suffering which travellers support during the night under a poor shelter of leaves, hastily raised above a bed of branches, assailed on one side by myriads of musquitoes, then the ox-flies (taous). which at sunset, as though mounting upon an animal, attack man as well as elephants; small and almost imperceptible fleas surround you in swarms, the bite of which, being excessively painful, causes enormous blisters; then leeches, which on the smallest wound smell man's blood at the distance of 20 steps, come out of the ground on all sides with wonderful avidity to suck your blood. To cover the legs with a layer of lime is the only means to prevent them from covering your body when travelling; and you cannot go 20 paces into rather a thick forest without having very soon at least 20 upon your feet hard at work.

On the 12th of April I quitted Ban-kok, and on the 16th of May I arrived at Leuve, chief town of a district, rising at once out of two provinces, Phetchaboune and Lome, situated in a narrow valley, like all the towns and villages through which I have passed since I left Chaiapume. This is decidedly the richest district of Siam in minerals; one of its mountains contains immense beds of magnetic iron, of an admirable quality, others antimony, copper, argentifere, and tin. The iron only is explored; and this small population—one half agriculturist, the other artisans-furnish with spades and cutlasses all the surrounding provinces, even beyond Korat. the same time they have neither foundries nor steam chimneys. I have seen a space of more than 150 miles containing iron of choice qualities; but this part only (as one may easily conceive) can be explored by the natives with the simple means they possess. I have seen auriferous sand in several localities, but not in abundance; in some of the villages the inhabitants collect gold, but they informed me that they scarcely gained sufficient to pay them. I have found no zetic anywhere, and lienz is only to be found in the basin of the Me-kon.

During this journey I have passed through more than sixty villages, containing from twenty to fifty fires, and six boroughs called towns, having a population of from 400 to 600 inhabitants. I have made a map of all this part of the country. Unhappily the greater part of my instruments are now useless: thermometer, watch, barometer, and my other instruments, all got broken during the painful journey over the mountains.

Since leaving Korat I have crossed five large rivers which fall

into the Me-kon, the beds of which are more or less filled according to the season of the year. The first is 35 yards wide, called the Menam Chie, lat. 15° 45'; the second, the Menam Leuge, 90 yards, lat. 18° 3'; third, the Menam Ouan at Kenne Thuo, 100 vards wide, lat. 18° 35'; the Nam Pouye, 60 yards wide, lat. 19°; the Nam Houn, 80 or 100 yards wide, lat 20°. The Chie is navigable from the latitude of Korat to its mouth from May to December; the Leuve, the Ouan, and the Houn are only navigable for a very short distance on account of their numerous ranids: neither does there exist any communication by water between the Me-kon and the Menam in Lao, or in Cambodia. The immense heights which separate them are here as it were insurmountable obstacles for cutting canals, so that it is upon false information that some geographers have made their maps. I refrain at present from counting the rivulets or the torrents which I have seen and heard roaring upon the rocks and in the vales which I have crossed; I have the names of about 50 which are never quite dry. The Laotians differ little from the Siamese, taking them all in all: the principal difference is that which distinguishes the people of the mountains from those of the plain, a difference in pronunciation; a slow and country-like accentuation also makes a difference in their language. The women wear their hair long, which when combed (but this does not often happen) makes the young ones look more interesting than those on the borders of the Menam; they also wear a petticoat. The old women, however, with their horrible chignon thrown on in the most negligent manner upon one temple or the other, and with fearfully large wens, appear more like witches than women. looked in vain for that simplicity spoken of, or something more interesting. I have generally found the Siamese more frank, more generous, more confiding, and even more hospitable.

A more enterprising and adventurous spirit, however, characterises the Laotian: a love of gain pushes him on to work, and especially to traffic. The Siamese, bowed down by misery, never seeks to acquire anything, in case of being altogether dispossessed: the Laotian, who, from policy, is governed with more humanity, is ready with his elephant or his pirogue (boat) to go anywhere when he expects a recompence; he is composed of good stuff, and will go with you from the borders of the Me-kon to Nane, Lome, Chiang Mai, and even to Moulmein. Able administrators would derive much from him; whilst from the Siamese they would obtain nothing more than rice without much difficulty.

The commerce of this part of Lao is inconsiderable; the Chinese from Siam being unable to penetrate hither on account of the enormous expense it would cause them to transport their

merchandise on elephants. Once a year a caravan arrives from Yunnan and Quangsee, composed of about 100 inhabitants and some hundreds of mules; some proceed as far as Kenne Thao; others reach Mount Nane and Chiang Mai. They arrive in February, and leave in March or April: for the last two years, however, they have ceased coming; and it is thought here that it is on account of the troubles and massacres which have broken out among the Lu, a Laotian colony, nearly in a savage state, which must be traversed before reaching China. Others suppose that the traders who have been in the habit of coming have been murdered on the way by the plunderers of this tribe. I am inclined to believe all their reports false, and think that the Chinese rebels have either plundered them or prevented their setting out. The mulberry-tree is not found in these mountains; but in some localities, where they raise a quantity of insects producing the laque or Chinese varnish, they cultivate a shrub the leaves of which serve them for food.

All the gum benzoin or benjamin which is sold at Ban-kok is procured from the northern extremity of the principality of Louang Prabang, a district tributary to Cochin China, as well as Siam, inhabited by a people rather Tonquinese than Laotian. The prince who governs the state of Louang Prabang pays his tribute to the King of Siam, principally in gum benzoin; the Annamites in their turn do the same. This is all I can tell you at present of this valuable resin.

On the 24th of June I arrived at Paklaie, lat. 19° 16' 58", the first small town which you reach on coming from the south; it is the most beautiful little town I have yet seen in this country. It is situated on the Me-kon; the houses are beautiful, spacious, showing much more ease and comfort than any I have seen in this locality. The Me-kon is there much wider than the Menam at Ban-kok, and, with a noise similar to that of the sea, and the impetuosity of a torrent, it forces its passage between the high mountains, which seem scarcely able to keep it within its bed. The rapids succeed each other at nearly a mile distance, from Paklaie to Louang Prabang, which you reach after ten or fifteen days' painful journey. I was tired of travelling with elephants, and wished to have a boat; but the chief and the inhabitants of the village, fearing an accident, preferred conducting me by the elephants. I therefore continued my route as far as Thadua, 90 miles farther north; and during eight days I passed as formerly from valley to valley, crossing the mountains, which became higher and higher, and where we were most severely treated by the leeches, but no longer obliged to sleep in the jungle, as every evening brought us to a hamlet or a village, where we found either a caravan or a pagoda.

From the mountains of Dong Phya Phai, until here, I have observed that all the inhabitants who drink the water of the rivulets running from the mountains are disfigured by enormous wens: the men frequently escape, but the women are all disfigured by them; even girls of eight or nine years old have wens as large as an egg. I have passed through only one village where tigers commit great ravages; a female had been killed, but the male still remained in the neighbourhood, and in the space of three months had devoured fifteen buffaloes and three men. The greatest danger one runs in traversing these vast forests and these steep declivities is, that there are usually to be found among the elephants of the caravan one or two females, followed by their young, running about like goats, eating a little here and a little there, and their feet wanting in firmness causes one at times to fall into a ravine; in a moment the whole troop throw themselves over after him, when men, merchandise, and all are precipitated to the bottom and broken in their fall. The only accident which happened to myself was when one of my elephants rolled down upon the rocks with his pack-saddle on his back, and broke in pieces my instruments and other objects, at the same time throwing his cornac a distance of 16 steps; those of others, seized with fear on hearing the trot of a pony behind them, took fright, running with a velocity of which I could have never believed those animals capable, and roaring in the most tremendous manner—shaking me almost to pieces, and breaking a quantity of fragile objects. Since then I have had no other torments, except that of having my two poor men attacked with fever.

The shortest and easiest road to travel to Ban-kok from this state is by Phixaie. After having reached Paklaie, seven or eight days' march brings you to the first of those towns situated upon the Menam. There you take a boat; and, when the waters are large and the current strong at certain epochs, in less than fifteen days they will row you to Ban-kok. I now reached Thadua, where for want of elephants I was obliged to take a boat: there only remained three days' journey, and only four or five rapids to pass, not so dangerous as those farther south, but sufficient to convince me that, far from having exaggerated the difficulties and dangers of the navigation, they had only given me a feeble idea of them. I think I remember, in a letter which I addressed to you on the "Stien savages," from Cambodia, having described this river as imposing but monotonous, and not in the least picturesque: here the difference is very great; in its narrowest parts it is more than 1000 yards wide, everywhere banked up by high mountains, from which torrents fall, and from cascade to cascade bring to it their tribute. I find the spectacle too grand, or, as you may say, too constantly grand. You are also kept in continual emotion on going over the VOL. XXXII.

rapids; one's life seems to hang by a thread. The embarcation is drawn along from the banks by means of a cord, this being the only way to vanquish the extraordinary force of the current: were this cord to break, your boat would in a moment be inevitably broken to pieces; you would be carried away by the current and swallowed up in a vortex. A certain number of accidents happen every year: it is only during the months of August, September, and October, that the rocks are quite covered with water; but this does not prevent those who live on the borders of the river from venturing from one part to another, when their trading

requires it.

The Lactians of this part are cool and resolute: much more so than upon their elephants on the mountain, where a child might lead them. The Laotian is well known upon those untamable waters, which would astonish even an old sailor; he braves them daily with as much calm as though they smiled upon him. the 25th of July I arrived at Louang Prabang, a charming little town, standing on a square mile, containing a population, not of 80,000, as Bishop Pallegoix says in his work on Siam, but of 7000 or 8000 at most. Its situation is one of the most agreeable; the mountains which inclose the Me-kon above and below this town form here a kind of circular valley, a sort of amphitheatre 9 miles wide, which must formerly have been a lake, and contribute to form a delightful view, reminding one of the Lake of Como or Geneva: but for the sun of the torrid zone, or a breeze to diminish the heat of the day, this would be a little paradise. The town itself is constructed on each side of the river, though on the right bank there are but few habitations; the most considerable part of the town surrounds an isolated mount, more than 100 yards high. and which a courageous, intelligent, and energetic people, like the Cochin Chinese, would have converted into a citadel, which would prevent the capital from being attacked by their neighbours. A pagoda is all they have thought of constructing on its summit; so that, but for a little fear on the part of the Siamese, and the mountains covered with jungle to traverse, this principality would soon fall into the hands of the Annamites, who are only at the distance of seven days' journey to the east. A charming river, 100 yards wide, joins the great river, on the north-east of the town; flowing near some Laotian and savage villages, here called Fie. These are no other than the tribes called Penons by the Cambodians, Khu by the Siamese, and Moi by the Annamites: names having no other signification than that of savages. The whole chain of mountains which extends from the north of Tonquin to the south of Cochin China, 100 miles to the mouth of Saigon, is inhabited by this primitive people, quite in a savage state, divided into tribes speaking different dialects, but whose manners and customs are the same. Their habitations are in the thickest parts of the forests, where they only could make a passage, and where they do not allow any path to be observed; their cultivated ground is to be seen on the sides and on the summits of the mountain: in a word, they employ the same means as animals to escape from their enemies and to preserve their liberty and independence, which they consider their supreme good. All the villages near the Me-kon are tributary; those nearest to the town work at the constructions for the King and princes, and have heavy taxes to

pay; others pay their tribute in rice.

Yesterday I was presented to the King, who received me with a great display of pomp and splendour; he was surrounded by mandarins and ill-clad guards. His Majesty sat upon a kind of sofa-throne, chewing the betel-nut, and making all sorts of grimaces. During the space of an hour he uttered about twenty words, which were to ask me a few questions. I could not get off giving him one of my guns; and, after having received a cup of tea from his ruminating Majesty, I took my departure, having obtained, however, the permission to circulate wherever I should think proper. The second prince recommended me not to go out of the town, assuring me that the woods were full of demons: he advised me to make a list of the objects I desired, and to present it to the senate, who would try to procure them for me. The prince also evidently wished to receive a present.

I have collected in some good localities about 2500 insects, which will not fail to please you and rejoice your numerous friends, consisting of magnificent puprests, such as I have sought for in vain in Sam and Cambodia, longicorn, and a quantity of carabi mostly new, and of an extraordinary beauty, and some good landshells; but as yet nothing so fine as the *Helix Manhuti* or the

Bulim of Cambodia.

I wish to be of some service to the Societies more than to myself personally. You may well imagine that it is not the love of gain which urges me on in my researches; it is not for money that I would expose my life in those unhealthy climates, where, at almost every step you take, death stares you in the face, or support patiently misery and trouble of every description.*

I am, dear Sir, &c.

^{*} M. Mouhot died at Louang Prabang on the 10th November, 1861.—Ep.