MR. J. F. NEEDHAM'S JOURNEY
ALONG
THE LOHIT BRAHMAPUTRA,
BETWEEN SADIYA IN UPPER ASSAM AND RIMA INSOUTH-EASTERN TIBET.
INTRODUCTION ..... 487
LETTER FROM THE SECRETARY TO THE CHIEF COMMISSIONER OF ASSAM, TO THE SECRETARY TO THE GOVERNMENT OF INDIA ..... 488
EXTRACTS FROM MR. NEEDHAM'S DIARY ..... 507

# MR. J. F. NEEDHAM'S JOURNEY 

ALONG

## THE LOHIT BRAHMAPUTRA,

# BETWEEN SADIYA IN OPPER ASSAM AND RIMA IN SOUTH-EASTERN TIBET. 

Map, p. 556.

## Introduction.

The 'Proceedings of the R.G.S.' for February 1885 contain a paper by General Walker, entitled "Four Years' Journeyings through Great Tibet, by one of the Trans-Himalayan Explorers of the Survey of India." The explorer, Pandit A-k, had, in 1879-82, travelled from Lhasa northwards across the elevated and far-stretching plateau of Tibet which is known as the Chantang, and beyond it to the Chinese town of Saitu, which is situated on the southern confines of the Gobi Desert; he then turned south-eastwards, and proceeded as far as the town of Darchendo (Ta-tsien-lu), on the boundary between Tibet and China; then he travelled westwards, in order to return to India; he made his way to the Zasul district of South-eastern Tibet, with the object of proceeding into Upper Assam through the Mishmi country; but finding it undesirable to travel across that region without protectionplacing himself at the mercy of a barbarous hill-tribe-he turned northwards and followed the route from Zayul to Lhasa, until he reached the town of Giamda, when he turned southwards once more and proceeded viA Chetang and Sikkim back to India. He brought information to the effect that the river of Zayul flows into Upper Assam, and is the principal source of the Lohit Brahmaputra, thus corroborating the information which had been obtained in 1826 by Wilcox, when he ascended the Lohit Brahmaputra for a considerable distance beyond the plains of Assam, but was stopped while still at some distance from the country of the Lamas. This corroboration was of considerable geographical importance, for it showed that the Yaro-tsanpo river of Tibet could not possibly be the source of the Irawadi, as had long been maintained by French geographers, and recently reasserted with great pertinacity by Mr . Robert Gordon, a civil engineer employed on the Lower Irawadi by the Government of India.

The 'Proceedings' for May 1885 contain a paper by Mr. Robert


Gordon, in which he endeavours to prove that the distance of the town of Rima in Zayul, visited by the Pandit, from the easternmost point reached by Wilcox, is very considerably greater than is shown on either Wilcox's map or the Pandit's, and that it leaves room for the Yaro-tsanpo to flow southwards into Burma, taking the Zayul river with it. A few months after the publication of this paper Mr. Needham, a political officer in Upper Assam, determined to test the accuracy of Mr. Gordon's theory by travelling from Assam to Rima through the Mishmi country. Accompanied by Captain Molesworth, three policemen, and a few natives, he performed the double journey to Rima and back in December 1885 and January 1886; he travelled both ways in more or less close vicinity to the Lohit Brahmaputra, and ascertained that the Zayul river is positively identical with the Lohit Brahmaputra.

The 'Proceedings' for June 1887 contain a paper by General Walker on the Lu river of Tibet, showing it to be the only possible Tibetan affluent of the Irawadi ; a Note, No. 3, is added on "Needham's corroboration of Wilcox and the Pandit," in which the distance actually travelled by Needham is compared with the estimated distances which were employed in the construction of Wilcox's map and the Pandit's.

Mr. Needham's diary, and the review of his operations in a letter dated 21st June, 1886, from the Secretary to the Chief Commissioner in Assam to the Secretary to the Government of India in the Foreign Department, contain much interesting information; extracts from the former, and the latter in extenso, are now given in the following pages.

## Letter from the Secretary to the Ohief Commissioner of Assam, to the Secretary to the Government of India.

## Shillong, 21st Jung, 1886.

I am desired to forward, for the information of His Excellency the Governor-General in Council, the doouments containing an account of an expedition made by the Assistant Political Officer at Sadiya, Mr. J. F. Needham, from Sadiya to the Zayul valley of Eastern Tibet, in December 1885 and January 1886. Mr. Needham succeeded in crossing the frontier and advancing twenty-six miles into Tibetan territory; but on approaching the village of Rima, where the Governor of the province is believed to reside, he was met by a demonstration of force, and after having vainly endeavoured to enter into communication with the local authorities, he was obliged to turn back and retrace his steps to Assam. Mr. Needham did not take any armed escort with him, whether of military or police, but only three men of the frontier police as orderlies. He was accompanied by Captain E. H. Molesworth, Commandant of the Lakhimpur frontier police battalion, and these two officers are the only Europeans who have ever penetrated into Tibet by the route of the Brahmaputra, with the
exception of the two French missionaries Messrs. Krick and Boury, who were killed by Mishmis after they had entered the Zayul valley in the year 1854. Mr. Needham's report has been supplemented by a map prepared in this office, on which the course of his route is laid down with approximate accuracy, and an abstract statement is also appended, giving a general view of the number of marches, their length, and the character of the country traversed.

The existence of a route into Tibet by the upper waters of the Brahmaputra has been known to the Indian Government ever since the British occupation of Assam. A list of the stages from Sadiya, numbering twenty altogether, was obtained by Lieut. Neufville in 1825, and published in the 'Asiatic Researches.' In 1826, Captain Wilcox succeeded in advancing three-quarters of the way to Rima, along the southern or left bank of the Brahmaputra, but was then stopped by the refusal of the Miju Mishmis to allow him to pass through their country. Ten years later, in October-November 1836, Dr. Griffith followed the same route to a point about half-way between Sadiya and Rima, and then crossed the Brahmaputra, and visited some Mishmi villages on the northern side; but he, too, was deterred from attempting further progress by the refusal of the easterly Mishmi chiefs to give him a safeconduct. Lieut. E. A. Rowlatt, in November-December 1844, was the first explorer who took the route which Mr. Needham has now followed, along the right or north bank of the Brahmaputra. He got as far as the river Du (or Mdaun), within sixty miles of the Tibetan border, and turned back on being told that the intervening country was destitute of inhabitants, a state of things which does not exist now, whatever may have been the case forty years ago. In 1851, the French missionary M. Krick succeeded in entering Tibet lby the same route, and in returning to Ascam with safety ; and in 1854 he penetrated into the Zayul valley a second time, in the company of M. Boury; but both the travellers. were barbarously murdered by the Mishmi chief Kaîsha, while sojourning in the Zayul valley within a short distance of the frontier. For this offence, Kaîsha's village was attacked in February 1855 by Lieut. Eden, with a party of the 1st Assam Light Infantry, who carried off Kaîsha a prisoner to Dibrugarh, where he was subsequently hanged. In December 1869 and January 1870, Mr. J. T. Cooper attempted the journey towards Tibet by the route along the southern or left bank of the Brahmaputra, but was prevented from proceeding by the refusal of the Miju chiefs to admit him into their country. His furthest point was several marches short of that attained by Wilcox in 1826. In 1879, the Khámti chief Chowsa, who accompanied Mr. Needham on his expedition, got as far as the borders of Zayul by the northerly route (Lieut. Rowlatt's), but was prevented by the Tibetan authorities from entering. the valley.

The route taken by'. Mr. Needham had thus been traversed by

Lientenant Rowlatt in 1844, as far as the Du or Mdaun river, while Captain Wilcox in 1826, travelling along the south bank, had reached a point considerably further eastward. This southern track is frequented by the Mishmis of the left bank in their communications with British territory, but as a route towards Rima it compares disadvantageously with the more direct line along the right or northern bank of the river. The southern road leaves the Brahmaputra soon after passing the Brahmakund, and strikes across the chord of an arc which the river forms by a bend towards the north; for several marches the track climbs up and down, dipping into deep ravines and scaling precipitous ridges, which rise occasionally to elevations of 5000 feet; and upon meeting the river again, !it shortly goes over to the right bank, and thenceforward coincides with the route followed by Mr. Needham. The length of Mr. Needham's route, which lies wholly along the north bank, and keeps close to the Brahmaputra all the way, is estimated by that officer to be 187 miles from Sadiya to Rima, and a good general idea of it can be obtained by dividing it into five sections, according to the natural characteristics of the country traversed.

The first section is one of 46 miles, extending from Sadiya to the mouth of the Táme river (Támemukh), and was traversed by Mr. Needham's party in five marches. This part of the road lies entirely through the plains. The first stage, Sonpura, or Chunpura, 18 miles from Sadiya, is the easternmost outpost held by the frontier police upon the Inner Line, and is connected with Sadiya by a patrol-path cut through the jungle. In the next four marches, the Digáru, Dora, and Táme rivers, affluents of the Brahmaputra from the northern bills, are successively crossed. Here the route passes partly among the boulders in the bed of the Brahmaputra, and partly through the dense jungle of the bank. A good cold-weather track the whole way to Támemukh could probably be cleared without much difficulty. Támemukh is the last stage of travelling in the plain country, and the farthest point which can be reached by elephants. Boats can ascend the Brahmaputra as far as the mouth of the Dora, $\dagger$ but the current beyond that point is too strong for navigation in ordinary circumstances.

The next section is one of 24 miles, from Támemukh to Chose's village, beyond the river Tedeng. This contains the only piece of high mountain marching on the whole route. The country traversed is a lofty spur which runs down to the Brahmaputra from the great mass of the northern mountains, and forms the watershed between the Dora and Táme on the west and the Tedeng on the east. The first

* So called from the lime (chun) which is collected here from boulders rolled down by the stream of the Brahmaputra. The local name of the Brahmaputra above Sadiya is Lohit.
$\dagger$ Lieutenant Rowlatt went up by boat nearly as far ns Doramukh, and Mr. Needliam's party came down the river from that point on their return in a single day, thus saving three marches overland.
march from Támemukh ascends the hills by the gorge of an affluent of that river, and leads to a camping-place at an elevation of 3200 feet. The next march ascends 1300 feet in the first four miles, crosses the ridge at 4500 feet, and descends again to Hai-imsong's village at a height of 1800 feet, overlooking the Tedeng valley. The third march descends to and crosses the Tedeng* at an elevation of 600 feet, and then ascends 1000 feet to Chose's village. This section of the route, therefore, includes the greatest ascents and descents met with in the whole journey, and attains the highest elevation, viz. 4500 feet, at the point where the ridge is crossed. The track was precisely that which was followed by Lieut. Rowlatt in 1844, and Hai-imsong's village appears to have been in the same situation then as it is now. Lieut. Rowlatt calls it Saloomgom, a name which Mr. Needham mentions as the local title of its site. The name of the Gam or headman in 1844 was Abasong. The Tedeng is a considerable river, and its valley is occupied by Mishmi villages to the distance of several days' journey abore Hai-imsong's. After leaving the Tedeng, the route continues in the immediate vicinity of the Brahmaputra, until it ascends to Chose's village. This village, or one near it, seems to have been one of Lieut. Rowlatt's stages also, the name of the chief then being Heasong. He is probably the Kayasong (Keasong) who was one of Lieut. Eden's allies. In 1836 Dr . Griffith found a chief called Premsong living near the site of Chose's present village.

The third section of the route comprises the country traversed between Chose's village and the Dalei. This river is the largest affluent which the Brahmaputra receives on its right bank eastwards of the Digáru. This part of the route presents much difficult marching, with sharp ascents and declivities. There is a descent of 900 feet from Chose's to the Paini (a small tributary of the Brahmaputra visited by Griffith on a botanising excursion in November 1836), and a corresponding ascent of 800 feet to Prongsong's village on the other side; the path then descends gradually to the bed of the Brahmaputra, crossing the hill-streams Mum and Talua, and follows the bank of the river to the mouth of a larger stream called Um, which joins the Brahmaputra at an elevation of 950 feet. From this point there is a steep ascent of 650 feet to Tákulong's village at a height of 1600 feet. On leaving Tákulong's, the path taken by Mr. Needham and Captain Molesworth goes along the face of a precipice rising immediately from the bed of the Brahmaputra, but there is a cattle-path higher up, which was followed by the servants and Khámtis of the party. The next step is a descent of 700 feet, succeeded by an ascent to Mísong's village at an altitude of 1300 feet. The

[^0]path then improves until the last part of the descent to the Dalei, which is difficult by reason of its steepness.

Lieutenant Rowlatt seems to have made a single march of this section of the route, from Chose's village, or its vicinity, to Lumling's * village near the Dalei.* He mentions the crossing of the Tálua river, as well as the dangerous piece of road along the.face of the precipice, "from which," he says, "had any one fallen, he would have been precipitated some thousand feet into the boiling stream of the Burhampooter, the noise of whose waters was just audible from the height we were passing." Lumling's village, which consisted of a single house of vast dimensions, is said by Lieutenant Rowlatt to have been situated a short distance westward of the Dalei, and this accords with the locality pointed out to Mr. Needham as the old site of the house. After Lumling's death his son Tákulong moved farther westward to his present village. The causes of this migration were connected with the capture of Kaisha, and will be alluded to again hereafter.
"The Dalei river," says Lieutenant Rowlatt, "is a stream of considerable size, having its rise in the snowy range bordering the Lama country, along whose banks a path to that country exists," emerging at a Tibetan village called Glee. $\dagger$ The Mishmi chief Premsong offered to take Dr. Griffith into Tibet by this route in November 1836. These facts correspond with the information gathered by Mr. Needham. He was told that the Dalei had its source in "the snowy mountains bordering on Tibet," that Mishmi villages are numerous in its valley, and that the most northerly of them are situated within a short distance of the Tibetan border. A list of twenty of these villages is given in Captain Beresford's note on the north-eastern frontier of Assam, printed in 1880. Kaîsha's village was situated on one of the hills upon the eastern side of the valley, and Lieutenant Eden's night-march to surprise it on the 7th8th February, 1855, is described as one continuous ascent of 10 hours after crossing the Dalei. Lieutenant Eden's party had rested during the previous day at Lumling's village, which then occupied its old site on the western bank of that river. They made five marches from Doramukh to this point.

At Tákulong's village, Mr. Needham obtained Mishmi porters, who replaced the Duániya $\ddagger$ coolies he had brought with him from Sadiya, some of whom he had already been obliged to part with at Choke's village on the Dora, as being unequal to the fatigues of the journey. In the next march he again exchanged some of Tákulong's men for Mishmis from adjoining villages. The men thus engaged accompanied

[^1]Mr. Needham to Rima, and back again to Tákulong's, and five of their number went on with the party from Tákulong's to the Dora, where the land route was exchanged for boats.

The fourth section of the route comprises the country traversed between the Dalei and the frontier of Zayul. The first three marches include some considerable ascents and descents, which are generally steep and difficult. The path first ascends 200 feet from the Dalei, and then descends 300 feet to the Mdaun or Du, rising as high again on the opposite side; further on, it descends abruptly to the Brahmapatra, rises 200 feet again, passes a hill-stream called the Tini, and ultimately comes down to a halting-place upon a sandbank in the bed of the Brahmaputra. The next march crosses the Oi river at an elevation of 1250 feet, and continues along a winding and uneven path, sometimes descending into the bed of the Brahmaputra, and rising at one point to 1700 feet. The camping-place was a waste spot above the Brahmaputra, after crossing a hill-stream called Hálong. In the third stage the changes of elevation are considerably greater. After passing along the face of a dangerous precipice, the path descends gradually 700 feet, and rises again 900 feet; then descends 900 feet to the Halai river, which is crossed at an elevation of 1300 feet; the path then climbs 800 feet up a spur, crosses the Namtí, and reaches a camping-place on the hill-side at the height of 1800 feet. In the next two marches the average elevation gradually rises; the Sá rivulet is crossed at 1850 feet, and sulbsequently the Chaá, and the altitude of the bed of the Brahmaputra is now 1700 feet. The second of these two marches was one of two miles only. The camping-places at the end of both marches were level spots above the Brahmaputra. The sixth stage crosses the hill-stream Máti, passes the embouchure of the Lu Tí on the left bank of the Brahmaputra, and subsequently that of the Ghalum or Kálang Ti, crosses the hill-stream Chura, and ends at Lase's house at an elevation of 2200 feet. The seventh stage crosses the hill-streams Kámtí and Chungtí, and ends in Krongdong's village, at 2600 feet. The eighth stage, from Krongdong's to a camping-place in the jungle adjoining the Tibetan border, attains an elevation of 2800 feet at one point, and includes a dangerous piece of road across the face of a precipitous spur. The hill-streams Sáti and Sikkí are crossed in this stage. These last three stages contain no great ascents and declivities, but the road is generally uneven and difficult, and occasionally descends among the boulders of the Brahmaputra at elevations of 1800,2000 , and latterly 2500 feet.

In general, throughout this section of the route, the path traverses steep stony undulations, or passes under overarching jungle, where progress must be made in a stooping posture. Mr. Needham reiterates Dr. Griffith's complaint that "it is one of the characteristics of Meeshmees that they would sooner risk their necks than take the trouble of cutting down underwood." But another feature of this section of the
route is the alternation of these difficult places with level terraces which are under cultivation, or bear recent traces of having been cultivated. Between the Dalei and the Lu Ti, the valley of the Brahmaputra may be said, comparatively speaking, to be pretty thickly settled. Wilcox found well-built villages, with abundance of cattle, covering the open and undulating country upon the southern side of the Brahmapatra, above the embouchure of the Halai. Cooper also mentions the fact that the lower hills on the southern side are "dotted with Mishmi dwellings, surrounded by patches of cultivated land," and Mr. Needham's diary bears witness to the frequency of cultivation on both sides of the river along this part of the route. The valley of the Brahmaputra is here half a mile wide, and the breadth of the stream does not exceed 20 yerds in the narrowest places; it is impetuous and full of rapids, and Mr. Needham found flood-marks 20 feet above its cold-weather level. It is crossed by numerous cane bridges. Another feature of this section of the route is the change in the character of the vegetation which is observed after crossing the Hálai. Pines here bogin to clothe the hillsides, and oak forests also occur. At Luse's village peach trees were found.

These changes in the scenery and vegetation of the valley were remarked by Wilcox in 1826. Beyond the Hálai river, on the north bank of the Brahmaputra, he saw "a new succession of hills of a totally different character. These green grass-covered hills have many firs growing singly, even near the level of the water, and they are striped sometimes from the summit to the base with fir forest." Going further eastwards, the information which Wilcox has left on record about the Ghalum or Kálang Tí also agrees with the particulars collected by Mr. Needham. This river takes its rise in the snowy mountains which give birth to the western sources of the Irawadi, and appears to be the most considerable affluent of the Brahmaputra on its southern side, eastward of the Tengapáni. Its valley, where it joins the Brahmaputra, is nearly as wide as that of the great river itself, and is occupied by Mishmi villages, which carry on a trade with the Bor Khámti country. Beyond the Ghalum Ti, the route along the southern bank of the Brahmaputra comes to an ond, and travellers bound for Tibet have to cross to the right or northern bank. This fact is alluded to by Wilcox, who mentions that if he had insisted on advancing, the hostile Miju chiefs were prepared to attack him upon the division of his party "at the crossing-place of the great river." Wilcox's farthest point was a few miles short of the embouchure of the Lu Ti, and would correspond to a point on Mr. Needham's route about 57 miles short of Rima, and 130 miles from Sadiys along the right bank of the Brahmaputra.

Cooper also seems to have turned back from about the same point. The village which he mentions as that of "Bowsong, the head of the Prun clan," was pointed out to Mr. Needham while he was still to the west-
ward of the embouchure of the Ln Ti, and Bowsong's sons came across the Brahmaputra to visit his camp. The position of this village (Cooper's farthest) is wrongly marked on all the maps, being shown a long way to the eastward of the Ghalum Ti, and much nearer to the frontier of Zayul than it really is. Cooper never crossed the Lu Ti or the Ghalum Tí, and indeed does not mention either of them, though Wilcox does.

Lieut. Rowlatt's farthest point along the right bank of the Brahmaputra was a village which he calls Tuppang, situated on "the Dagoom range of mountains," which form the eastern boundary of the valley of the Mdaun or Du. Lieut. Rowlatt was informed that the Lama country (Tibet) could be reached from Tuppang in three days, and in fact he met some Tibetans there, who "had come across the snowy range for the purpose of trading with the Mishmis for teeta." M. Krick's servant who was carried off by Kaisha, told Lieutenent Eden that the journey from Sámé in Zayul to Kaîsha's village, by the head-waters of the Du, across the snow, occupied five days.

The fifth and last section of Mr. Needham's route consists of the twenty-six miles marched by the party within Tibetan territory in the space of three days, from the point where they crossed the border to a spot closely adjoining Rima, the village where the Governor of Zayul is believed to reside. Here there were no physical difficulties to encounter, the path being generally good, though steep and slippery in some places, and the altitude gradually rises from 2600 to 3600 feet. The first stage, after passing the border-line on a piece of open grassy country called Má-nekre, crosses the hill-stream Yepuk, and passes the embouchure of a considerable stream called Ding-tí, which comes from the mountains of Bor Khámti, and falls into the Brahmaputra on its left bank. Two villages, one of which is called Tiní, are passed on this stage, as also the deserted sites of two others. One of these latter was the village Wálong, in which M. Krick found shelter in 1851, before its inhabitants fled from Tibetan oppression. The next stage crosses the hill-streams Krupti and Kochu, and passes the villages of Kandé and Kanau. The final stage was one of six miles, past the village of Sámé, across the stream Sá-chu, and through the lands of the village Sang-gu, up to the outskirts of Rima.

The Zayul valley, into which Mr. Needham and Captain Molesworth thus succeeded in penetrating, is known to us by the accounts of M. Krick in 1851, and of the Pandit A-k in 1882. M. Krick is said to describe the valley as a tract cultivated as far as the eye can reach, abounding in herds of oxen, asses, horses, and mules, and in groves of bamboo, laurel, orange, citron, and peach-trees. The Pandit A-k, who lived in Zayul from the 23rd May to the 9th July, 1882, describes the winter crops as rice, millets, and pulses, and the spring crops as wheat, barley, and mustard; the domestic auimals being oxen, half-bred yaks, horses, pigs, and fowls. The lower end of the valley, which was the
part first traversed by Mr. Needham, is less open and cultivated than the portion to which these descriptions refer; but immediately beyond Sámé it expands into a level tract $2 \frac{1}{2}$ miles long, by a mile broad, and largely occupied by terrace cultivation. Mr. Needham saw fields of rice and pobosa (a species of eleusine), and traces of the use of the plough, a circumstance noticed by Lieut. Rowlatt in 1845, who observed marks of the yoke on the necks of cattle brought by the Mishmis from the Lama valley. Some grazing mules were also met with, and a grove of lime trees was passed soon after crossing the border. The village of Sámé, where Mr. Needham halted for a few minutes, is that where Messrs. Krick and Boury were murdered by the Mishmi Kaisha, and it was the farthest point reached by the Pandit $A-k$ on his way down the valley in the direction of Assam. Another village, Sangu or Singu, situated between Sámé and Rima, is mentioned both by the Pandit and Mr. Needham. According to the Pandit's measurements, Sangu is $5 \frac{1}{4}$ miles from Rima, and the distance from Sangu to a small stream, which is evidently Mr. Needham's Sá-chu, is three-quarters of a mile farther in the same direction, while Sámé, again, lies three-quarters of a mile beyond the Sácha, or 63 miles from Rima. The elevation of Rima was calculated by the Pandit, from the boiling-point of water, to be 4650 feet; but the highest point marked by Mr. Needham's aneroid barometer in the Zayul valley was 3600 feet only.

The name which the Pandit assigns to the whole district is Záyul. Mr. Needham was prevented from holding any converse with the inhabitants of the valley, and his only source of information was a native of Sámé whom he had ransomed from durance in Tákulong's village. This man was desirous of accompanying Mr. Needham back to Assam with his whole family, but was detained by the Tibetan authorities. His name for the valley appears to be Zai-wá. Mr. Needham found that the country for some distance on the Tibetan side of the border was known as Wá-long. Zai-wá seems to be a compound of the two first syllables of Za-yul and Wálong.* The second syllable of Za-yul is certainly the Tibetau word yul, signifying "country," and the first syllable may perhaps be the local equivalent of the Tibetan word thsa, meaning "hot." $\dagger$ The Pandit tells us that the Zayul district is regarded by the Tibetans as the warmest place in their country, and is therefore used as a penal settlement for transported prisoners. The name Zayul would thus be analogous in signification to the Garmsir of southern Persia. Bishop Mazure, Vicar Apostolic of Tibet in 1861,

[^2]gives the name of the district as Zain.* His village of "Oua, the last Tibetan village in the direction of the Mishmis," is evidently Wá-long, the last syllable of this word being either a Mishmi suffix, or the Tibetan $\log$ (8), which signifies a district. The Digáru name for the whole valley is simply Láma, i. e. Tibetan territory.

The governing authorities of Zayul are stated by the Pandit to be a Jong Pon and a Shian-u, the former being a military governor, while the latter $\dagger$ is the civil magistrate. The official capital of the district is said by the Pandit to be called Shikha, but the goveinment buildings are situated in the lands of the village of Rima. The only vficial personage whose title was heard by Mr. Needham, was an officer whom the inhabitants of the valley called the Jên. $\ddagger$ The forces at his disposal appear to have consisted of genuine Tibetans, as distinguished from the natives of the district. These latter are said by the Pandit to resemble the Tibetans in dress (a circumstance verified by Mr. Needham), but to have a language of their own, different from the Tibetan, which latter, however, they understand. Tibetan is probably the official language of the district.

It seems to be an open question how far the Tibetan boundary extends towards the Mishmi country. Walong was regarded as a Tibetan village in 1851. But some miles to the east of W.along, Mr. Needham passed a deserted village whose former inhabitants had refused to pay taxes to the Zayul authorities. Little is known of the relations between the Tibetan authorities and the Mishmis in former jears. In 1836, a Tibetan force of 70 men went down the Brahmaputra valley as far as the neighbourhood of the Halai, in response to the invitation of a Miju chief for aid against the Digárus, whom they defeated. A later quarrel between the Digarus and the Tibetans is mentioned in Mr. Needham's diary of the 20th December, and it was perhaps in connection with these hostilities that a rumour of the sack of Rima by the Digarus reached Dibrugarh in November 1879. In the absence of any strongly-marked geographical division, it seems probable that Tibetan authority in the south-western extremity of the Zayul valley

[^3]depends rather on the casual exertion of force than upon any recognised distinction between the natives of Zayul and their Mishmi neighbours. The Pandit was told that the Tibetan boundary was at the hamlet of Zayulmed, 16 miles on the further side of Sámé from Rima. Mr. Needham dces not mention any such village, and it would seem that Zayulmed * is simply the Tibetan name for the place called Wálong in the native dialect. Again, Mr. Needham's ransomed native of Sámé seems to have been but imperfectly acquainted with Tibetan, while he spoke the Digaru language well, a circumstance which suggests some affinity between the Mishmi dialects and the indigenous language of Zayul. $\dagger$ It is much to be regretted that Mr. Needham was unable to make those observations regarding the speech and ethnology of the natives of Zayul which he undoubtedly would have made if he had been permitted to remain a short time in the valley.

The geographical information gathered by Mr. Needham regarding the source of the Brahmaputra corresponds exactly with the report of the Pandit $\mathbf{A}-\mathrm{k}$, who actually visited the head-waters of both its branches, which unite together close to Rima. From the last spot where he halted, Mr. Needham was able to see the gorges of both these streams. The easterly one is called the Zayul Chu by the Pandit and Lá Tí by Mr. Needham's ransomed native of Sámé, and the westerly one is that which the Pandit calls the Rong Thod Chu, and to which Mr. Needham's man gave the name Mi Chu. The source of this latter stream was assigned by Mr. Needham's Mishmis (on Tibetan report) to the same range of snowy mountains whence another river flowing westward takes its rise, and the distance of this spot from Rima was said to be fifteen days' journey. The Pandit's diary records fifteen marches made by him from Rima to the glacier whence both the Rong Thod Chu and the Nagong Chu take their rise. The latter river is that whioh, according to Mr. Needham's Mishmis, "flows away west into the Abor country." It is, in fact, that easterly affluent of the Dihong which is marked as the Nagong Chu on the map accompanying the printed narrative of the Pandit's explorations. The existence of this river was known to Captain Wilcox in 1826, who was told by a Mishmi chief that the Dihong bad two branches, "one from or passing Lhassa, and the other, the smaller of the two, rising near the heads of the Brahmaputra," adding that "the Lhassa people, on their way to the Lama valley" (i.e. Zayul), "go up the lesser Dihong and cross over snowy mountains from its source to that of the Brahmaputra," i.e. the Pandit's Rong Thod Chu. This lesser Dihong was described also by the Pasi Meyong Abors to Captain Beresford in 1879 as "the Kálapání, which falls into the

[^4]Dihong some distance in the interior of the hills," and they also mentioned a route into the Lama country by following up the Kálapání and crossing the snowy ranges. The identity of the Kálapani with the Nagong Chu appears from the fact that the Assamese name is merely a translation of the Tibetan one, Nagong Chu signifying literally "black water." Again, Lumling told Lieutenant Rowlatt in 1845 that the Tibetan village highest up the Brahmaputra was named Lisko (perhaps the Pandit's Lasi and Sugu), "where the Burhampooter is said to be but a mountain rivulet; and on the west side of the same mountain from which this issues likewise procceds the Dehong." We have thus a chain of concurrent testimony to the fact that the main stream of the Brabmaputra takes its rise in a glacier of Tibet, about fifteen days' journey northwards from the Zayul valley; and that the same glacier gives birth also to a large easterly affluent of the Dihong. This geographical fact is evidently familiar to all the hill tribes inhabiting the mountains above the Upper Brahmaputra.

Here it may be remarked that Mr. Needham's expedition has rendered an important service to geographical science, by filling up a gap which was left unexplored by the Pandit A-k. The identity of the Sanpo with the Dihong has hitherto been open to question. A great deal of evidence against it, and in favour of the identity of the Sanpo and the Irawadi, will be found marshalled in the 'Gazetteer of Burma,' Part I., pp. 115-118; and Mr. Robert Gordon has maintained the same view in an ingenious paper recorded in the 'Proceedings of the Royal Geographical Society' for May 1885. If the river of Rima be assumed to be identical with the Brahmaputra, it is obvious that the Sanpo in its suppoeed course from Tibet to Burma must pass round to the north of the head-waters of that river. But if the Sanpo really did pass that way, the Pandit must have crossed it twice on his journey into the Zayul valley from Upper Tibet and back again. In travelling from Bathang to the source of the eastern branch of the Brahmaputra, which he calls the Zayul Chut, he must have crossed from the left bank of the Sanpo to the right; and in returning to Upper Tibet by the sources of the Rongthod Chu or western branch of the Brahmaputra, he must have crossed the Sanpo again from the right bank to the left. The Pandit's diary shows that in these parts of his journey he did not thus cross the Sanpo, and Mr. Gordon does not dispute its correctness. The passage of the Sanpo into Burma round the sources of the Rima river being thus disproved, the only alternative supposition, on the hypothesis of the identity of the Sunpo and the Irawadi, is that the river of Rima is not the Brahmaputra, but itself an affluent of the Sanpo, and that the Sanpo finds its way towards Burma somewhere between the frontier of Assam and the furthest point reached by the Pandit in the Zayul valley, viz. the village of Sámé. This, therefore, was the theory advanced in Mr. Gordon's paper above mentioned, and in his map
illustrating it the river of Rima is shown as turning southwards and falling into the Sanpo on its left bank, while Rima itself, and the whole Zayul valley, are pushed further eastward than the Pandit placed them, thus leaving a broad interval between the western end of the Zayul valley and the limit of exploration from the Assam frontier eastwards; and through this unknown country flows the imaginary Sanpo on its way to Burma. Mr. Needham's expedition has left this theory no ground to stand on. It has vindicated the position assigned to Rima by the Pandit, and has proved conclusively that the Rima river is one and the same with the Brahmaputra, which was followed up by Mr. Needham the whole way from Sadifa to that place. The unexplored country, with its imaginary Sanpo, disappears altogether. The Sanpo being thus denied an outlet towards Burma in any direction, the only alternative is to fall back upon the belief in its identity with the Dihong, for which we have the positive evidence of the Mishmi report which has been quoted above. Mr. Needham has been asked to make further enquiries into Abor and Mishmi traditions upon this subject.

Another important result of Mr. Needham's expedition is the assurance which it has given us of the friendly disposition of the Mishmi tribes which separate Assam from the Zayul valley. Some of the chiefs mentioned by him are the descendants of chiefs who aided or opposed Wilcox and Griffith in their attempts to penetrate eastwards, or who assisted Lieutenant Eden to capture Kaîsha. The whole country between Sonpura and the Zayul border is divided between two tribes of Mishmis speaking different dialects, viz. the Digarus* and the Mijus. On the northern bank of the river the Digarus occupy as far eastward as the Mdaun or Du , and the Mijus inhabit from that river eastwards to Zonul. A similar line of division is drawn on the south bank also. $\dagger$ The Digarus again are divided into two principal clans, the Tán or Taieng from Sonpura to the Dalei, and the Mánvo between the Dalei and the Mdaun. Each of these clans is subdivided into a number of sections or houses, after the manner common to most of the hill tribes in the sub-Himalayan region of Assam. The Taieng clan have always been well disposed towards us. In Captain Wilcox's time their principal chiefs were three brothers, Krisong, Ghalum, and Krosa. These chiefs showed the utmost friendliness in welcoming Wilcox in 1826 and Griffith ten years later, and if these officers failed to get farther, it was only because the brothers were unable to arrange for their safe passage through the Miju country. Krosa was the sole survivor of the three brothers in 1855, but Krisong left a son Lumling, and it was entirely

[^5]owing to the hearty co-operation of Krosa and Lumling (who placed their families in Sadiya as hostages) that Lieutenant Eden was able to surprise and apprehend Kaîsha, after killing three of his sons. The misfortunes which overtook Lumling in consequence of this action will be noticed subsequently. Lumling had a younger brother, Kánosa, whose son Busong or Poso (deceased) seems to have been the man who entertained Cooper in December 1869, and is described by him as the head of the Tán clan.

Coming down to the date of the present expedition, we find that Krosa also has disappeared, leaving a son Chuno, who accompanied Mr. Needham.* Krosa's brother Hai-imsong accorded a friendly welcome to the party, and supplied them with coolies. Similar treatment was met with from all the Taín chiefs living between the Tedeng and the Dalei. The Dalei, however, was a critical point, for here live Tákulong and Brumsong, the son and the nephew of Lumling, who lost his life in consequence of espousing our cause against Kaisha; and it was doubtful how these chiefs would receive the expedition. In the end they also proved friendly, and Brumsong's son joined Mr. Needham's party. On crossing the river, Mr. Needham was waited upon not only by the chiefs of the Mányo clan (which was Kaîsha's), but also by four of Kaîsha's sons. A practical proof of goodwill was afforded by these people in supplying Mishmi porters to replace Mr . Needham's worn-out Duániya coolies. One of the Mányo chiefs accompanied the party to Rima. The same friendly spirit was shown by the Mijus, who have hitherto refused to let any English officer enter their country. One chief sent his son with Mr. Needham, and another gave him the present of a yak in addition to the customary supplies. This latter was Tongsong, the brother of Bosong, from whose village Cooper had been turned back sixteen years before. Krongdong, who lives next to the Tibetan border, rendered a still more important service in stopping the messengers whom Tongsong had sent to advise the Rima Governor of Mr. Needham's approach. Krongdong thus saved the whole party from being stopped on the border. The same chief took charge of Mr. Needham's sick servant, and sent him safely back to Sadiya after his recovery.

This universal spirit of friendliness, if not of hearty welcome, is the more gratifying because the troubles which followed the capture of Kaisha are still held in lively remembrance. The account given to Mr. Needham of Kaîsha's real and imaginary grievances,-his bringing a Tibetan into Sadiya at Captain Dalton's request, the drowning of his

[^6]son in the Dibru, and the refusal of Messrs. Krick and Boary to bribe him as they passed through the hills,-tallies exactly with the information recorded by Lieutenant Eden in 1855. Krosa and Lumling had helped the missionaries through to Tibet, and subsequently assisted Lieutenant Eden in avenging their murder. Krosa was able to do this with impunity, because he lived far westward of the Mányo country, in the neighbourhood of the Tedeng, where his village was visited by Griffith in 1836.* But Lumling, who lived on the Dalei, was attacked in 1864 by Kaisha's relations, who had called to their aid some of the Chulikátas and of the Dinda clan from the upper Dalei, and he and thirty-three members of his family were killed. His descendants were subsequently compelled to move westwards from the Dalei to the preeent site of Tákulong's village. Lumling and Krosa had been rewarded in 1855 with a present of 150 rupees each, together with cloths and ornaments, but the subsequent sufferings of the family oatweighed these considerations, and it was but natural that Tákulong and Brumsong should profess themselves aggrieved. The feud with Kaisha's people has since been made up by intermarriage, but the quarrel with the Chulikatas and the Dinda clan still continues.

The Chulikata $\dagger$ or crop-haired Mishmis, who speak a dialect differing from those of the Digárus and Mijus, live in the upper basin of the Dibong, i.e. in the mountains to the north of the western part of the Digaru country. The nearest northerly neighbours of the Digarus, however, appear to be the Bebejias, $\ddagger$ whose villages lie two or three days' journey from the Digáru villages on the Dora and Tedeng. This name is used by the Assamese to designate the wild inhabitants of the high mountains surrounding the basin of the upper Dibong, and separating it from Tibet on one side and from the basin of the upper Brahmaputra on the other. Farther east, there is the Gáming country on the upper Dalei, which apparently reaches as far back as the Chulikatas, and is occupied by the Dinda clan, a branch of the Mányo. All these northerly tribes, living at greater altitudes than the Digárus, are fiercer and stronger than they, and occasionally raid upon their southern neighbours. Wilcox found one of the Taieng chiefs engaged in assisting to repel an incursion made against a Taieng village on the Dalei by the Mishmis of the Dibong, i.e. the Chulikatas. The Chulikatas have repeatedly invaded British territory, and are at present

[^7]excluded from trading with the plains, for shooting a man to death with arrows near the Assamese village of Dikrang above Sadiya in May 1884. Mr. Needham points out that the Chulikatas can still get salt (which is their principal necessity) through the medium of the Bebejias trading with the Khámti and Singpho country, and the Chief Commissioner sees no way of preventing this commerce, which does not pass within the Inner Line. The Bebejias have not given any trouble since 1878-79, when they raided upon some villages in the Sadiya circle.

Notwithstanding their internal feuds, the Mishmis find time to do a good deal of trade both with the Zayul valley and with Assam. Wilcox was struck with the mercantile propensity of these people. "Every man among them," he wrote, " is a petty merchant." Lieutenant Rowlatt describes them as divided into two classes, who trade respectively with Assam and Tibet (i.e. the Digárus and Mijus); the latter "have nothing to offer in barter but the Mishmee teeta and poison, which is only to be found on the mountains near the limit of perpetual snow;" being in great request with the people of Tibet, they are enabled to exchange it for cattle, gongs, swords, and copper vessels." He adds that they also do a great deal of barter among themselves. The Pandit A-k tells us that the Zayul valley "is much frequented by traders from the Mishmi or Nahong $\dagger$ tribe," who bring jungle products (grass, bark and dye-stuffs), deerskins, and cloth and money from Assam, and exchange them for salt and horwed cattle. Mr. Needham met several parties of Mijus returning from Zajul with the cattle which they had brought, and he noticed that one of the Tibetans in the party which blocked his way to Rima had on a dress of Assamese muga silk. To the articles enumerated by the Pandit, he adds musk-pods on the part of the Mishmis, and woollen coats, brass and iron vessels, swords, beads, silver amulets, and ammunition, supplied by the Tibetans. Similarly Wilcox says that the Taiieng chiefs"" are seen wrapped in long cloaks of Tibetan woollens, or in handsome jackets of the same," and that their wives wear a profusion of beads of white porcelain, or of colourless glass mixed with oblong pieces of coarse cornelian, and all of Tibetan or Chinese manufacture. Besides the Zayul valley, another rendezvous for trade is the Mdaun river, to which the Tibetans can resort either by way of the Brahmaputra, or by the Mdaun valley route

[^8]which has been mentioned above. The Mijus and the Digáru Mányo clan keep the Tibetan trade in their own hands, while the Digara Taiengs similarly engross the trade with Assam. This monopoly on the part of the Taiengs is felt as a grievance by the eastern section of the Digárus, and the Mányo clan begged Mr. Needham to persuade their westerly kinsmen to admit them also to a share of it.

The Míjus trade likewise with the Khámtis of the Bor Khámti country, beyond the sources of the Dihing. Wilcox heard of this commerce while he was at the Míju chief Jingsh's village, on the south side of the Brahmaputra, not far from Ghalum Ti. He calls the chief trader Lamat Thao, and places his village two days to the south-east of Jingsha's. "This chief," he writes, "is in the habit of trading with the Khamti country on the Irawadi." The route which this commerce follows was ascertained by Wilcox on his visit to Bor Khamti in the following year, when he was shown a bridge over the Námlang by which the Mishmis descend into the Khámti country, the Námlang being an affluent of the western Irawadi, which is the river Bor Khamti. Colonel Woodthorpe, again, while following Wilcox's route towards Bor Khámti in March 1885, met with some Míju settlements near the apper Dihing, and verified the fact of commercial intercourse between the valley of the upper Brahmaputra and that of the western branch of the upper Irawadi. While Cooper was at Bosong's village near the La Ti , he saw two Khámtis who had been plundered by the Lamat clan in coming across the mountains. The length of the journey was said to be fifteen days. Their stock-in-trade consisted of knives * (da0s), which the Mishmis bought in exchange for slaves. The Lamat clan of Mijus are said by Mr. Needham to live in the upper part of the valley of the Ghalum Tí (i.e. in the direction indicated by Wilcox), and to purchase daos and slaves from the Khámtis, in exchange for cloth, musk-pods, and opium. The cloth is brought by the Mijus from Sadiya, and the musk from Tibet, but they grow the opium in their own country, as well as large quantities of cotton for home consumption. The Mijus get to Bor Khámti by ascending the valley of the Ghalum Ti, and crossing the snow-covered mountains of the watershed into the basin of the western Irawadi.

These extonsive trading enterprises suggest the possibility of encouraging the commercial intercourse of the Mishmis of the Brahmaputra with Assam. Mr. Needham is of opinion that if the Digárus were not so jealous in guarding their monopoly, large numbers of Mijus, and likewise Tibetans, would come into Sadiya yearly to trade. The Tibetans, however (or the inhabitants of Zayul), are hindered also by

[^9]the exclusiveness of their own Guvernment, which has hitherto prevented them from entering British territory. The two Tibetans whom Lieutenant Rowlatt met at Tuppang on the Mdaua told him that they were not allowed to visit the plains of Assam. Cooper was assured by the Miju chiefs that all intercourse with Assam was forbidden by the Lamas on pain of death. The only native of the Zayul valley whom we know to have entered Sadiya seems to have been the man whom Kaîsha brought to Captain Dalton in 1852, on the ill-omened expedition out of which his quarrel with the white men arose.

Abstract Statement of the Rodte from Sadiya to Rima.

| Date. | From | To | Elevation in Feet. | Distance. | Remarks. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ottwar | Jocrmey. |  |  |  |
| 1885. <br> Dec. 12 | Sadiya | Sonpura .. .. .. | . | $\begin{aligned} & \text { Miles. } \\ & 18 \end{aligned}$ | The going was very difficult |
|  |  |  |  |  | (for elephants especially), |
| " 13 | Sonpura ... .. | Spot on Brahmaputra | -• | 9 | boulders, and on account |
| , 14 | Spot on Brahmaputra. | Sum Kam on Brahmaputra. | . | 7 | $\left\{\begin{array}{l}\text { of ol.e's haring to push } \\ \text { one's way through dense }\end{array}\right.$ |
| " 15 | Sam Kam . . . . | Spot on Dorâ river. |  | 7 | jungle on the banks of |
| $\cdots 16$ | Spot on Dora . . | 'I'àmêmukh .. .. | 450 | 5 | - Brahmaputra, and cross |
| ,. 17 | Tâmêmukh .. | Hârêling. . .. .. | 3,200 | 5 | Steep climb, but path on the whole good. |
| $\cdots 18$ | Hârêling .. .. | Hai-imsong (Digâru) Mishmi village. | 1,800 | 10 | Another steep climb, and then a steep descent; path good. |
| , 19 | Hai-imsong's rillage. <br> Halted at | Chôsês (Digâru) village. <br> Cousse's village. | 1,600 | 9 | Crossed Tedêng, fairly large river coming down from north-east; path rough and stony, and in places difficult. |
| , 21 | Chôsè's village. . | Narâ (a beautiful miniature bay alongside of Brahmaputra). | . | 8 | Very difficult march. |
| $\begin{array}{ll} \because & 22 \\ ״ & 23 \end{array}$ | Nara . . . Hulled at Tâ | Túkûlong's (Digaru) along's village. | 1,600 | 4 | Last part of march difficult, and climb up to village from Um very steep. |
| " 24 | Tâkùlong's village. | Spot in jungle close to left bank of Dalei river, a short distance above Brahmaputra. | 1,100 | 5 | Path very bad at first, descent to Dalei steep. This river forms boundary between Taieng and Manyô clan of Digarus. |
| " 23 | Spot on left bank of I'alei. | Spot close alongside of Brahmaputra, called Harangí (a nice sandy bay similar to where we camped on December 21.) | 1,250 | 12 | Path on whole good, but difficult in places, and likewise very jungly overhead, often necessitating one's going in a stooping position. Crossed M'daun, large river forming boundary between Manyô clan of Digârus and Mîjus. |

Abgtbaot Statearent of the Route from Sadiya to Rima-(continucd).

| Bate. | From | To | Elevation in Feet. | Dis. tance. | Remarks. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1885. <br> Dec. 26 | Harangi . . . | Spot in jungle below Sambup Hill. | 1,900 | Miles. 8 | Path bad, and very jungly in places. |
| „ 27 | Spot below Sem. bap Hill. | Spot below Gongsha's village. | 1,800 | 10 | Path very bad in places; very stony and jangly; crossed large hill-stream called Halai, running down from north-east. |
| 2 28 | Spot below Gongsha's village. | Phing, close to Brahmaputra and a little to eastward of Tónsóng'e (Mija) village. | 1,850 | 12 | Path very bad in places, croseed two large hillstreams called sa and Chua, both running down from northeeast. This is Cooper's farthest. |
| " 29 | Phing .. .. | A recently cultivated fleld, some 2 miles east of Phing. | 1,850 | 2 |  |
| „ 30 | Old field to eastward of Phing. | $\begin{aligned} & \text { Lüsé's (Miju) vil- } \\ & \text { lage. } \end{aligned}$ | 2,200 | 10 | Crossed a fairly large hillstream, called the Mati, coming down from north-north-east; path often very rough, nneven and jungly. Passed the embouchure of the Lu Ti and Kalang Ti on the left bank. |
| $\geqslant 31$ <br> 1886. | Lüsé's village . . | Krondong's (Miju) village. | 2,600 | 12 | Path ofton very stony, up and down, and jungly; crosed large hill-stram called Kamti, coming down from west-northwest, and another called the Chnngti, coming down from westward. |
| Jan. 1 | Krondong's village. | Spot alongside Brahmaputra close to Tibetan border. | 2,600 | 8 | Crossed a large hill-stream, called the Seti, coming down from weatward. Path rough and jungly in places, also very slippery on account of pine needles lying about. Croseed two other hill-streams, called Sikki and Monggla, coming down from north and north-north-west. |
| $n \quad 2$ | Spot close to Tibetan border. | Spot in jungle .. | 2,900 | 11 | Path very good during greater portion of distence. |
|  | Spot in jungle . . | Spot in jungle .. | 3,100 | 9 | Crossed two large hillstreams, one called the Krupti, coming down from the westward, and the other the Kochu, coming down from the north-weet. Path on whole very good. |
| " 4 | Ditto .. .. | Spot in sight of, but one mile south of, Rima. | 3,600 | 6 |  |

Abstbact Statement of tei Route from Sadiya to Riya-continued.

| Date. | From | To | Elevation in Feet. | Distance. | Remarka. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1386. | Return | Jotrney. |  | Miles. |  |
| Jaj. 5 | Spot in sight of Rima. | Spot on right bank of Koclu. | 3,000 | 7 |  |
| „ 6 | Spot close to right bank of Kochu. | Tibetan hamlet of Walong. | 3,200 | 16 |  |
| $\cdots 7$ | Tibetan hamlet of Walong. | Krondong's village . | 2,600 | 11 |  |
| - 8 | Krondong's village. | Spot in jungle close to Lasi Míja house. | 2,300 | 11 |  |
| 》 9 | Spot in jungle close to Lúsê's house. | Spot 2 miles east of Tonsong's village. | 1,850 | 11 |  |
| " 10 | Spot 2 miles east of Tonsong's village. | Phing .. .. .. | 1,850 | 2 |  |
| \% 11 | Pbing .. .. | Spot below Gongsha's village. | 1,800 | 12 |  |
| > 12 | Spot below Gongsha's village. | Grassy flat apot close to a little spring called Dâkânú. | 2,000 | 12 |  |
| " 13 | Dakâna .. .. | Sandy spot ulongside Brahmaputra, a little to southeast of where we camped on Dec. 24, 1885. | 1,100 | 11 |  |
| " 14 | Sandy spot alongside of Brahmaputra. | Spot in jungle a little east of Dalei river. | 1,300 | 4 |  |
| - 15 | Spot in jungle a little east of Dalei. | Takulong's house .. | 1,600 | 6 |  |
| \% 10 | Takalong's house | Spot in jungle southwest of Chôsés village. | 900 | 11 |  |
| " 17 | Spot in jungle south-west of Chose's village. | Hai-imsong's villuge | 1,800 | 10 |  |
| " 15 | Hai-imsong's village. | Tâmêmukh .. .. | 450 | 15 |  |
| $\Rightarrow \quad 19$ | Tâmêmukh .. | Sandy spot alongside Dora river. | Not taken. | 5 |  |
| " 20 | Sandy spot alongside Dora river. | Sadiya . . . . | . | 41 |  |

## Extracts from Mr. Needham's Diary.

Saturday, December 12th, 1885.-My party is composed as follows:-Sixteen Dowanyas, under charge of a chowkidar, as porters; three frontier police Sepoys as orderlies; two servants; Chows\& Khamti Gohain (who accompanies me as interpreter), with eleven men from his village.

I reached Sonpura in the afternoon with Captain Molesworth, and pitched camp close to the stockade. I was met there by Sonirang Khamti Gohain, whosedvillage is about a quarter of a mile to the east of the stockade.

Sunday, December 13th.-Had everything packed by 7.30 and left Sonpura a few minutes afterwards. Our path led us constantly over boulders, which made the
going very difficult for elephants. Sometimes we were travelling close to the brink of the main stream of the Brahmaputra, at others up "sutis" of it, and when not so going we had to force our way through the dense jungle growing along its bank or were crossing rapids, some deep, others shallow, but one and all full of slippery boulders, in order to avoid making long detours. It came on to rain too at 11 a.m., and continued so all the remainder of the day, which made the going for elephants even worse than it would otherwise have been, besides wetting us all through and through.

I pitched camp at 4 p.m., close alongside the Brahmaputra. Although we were marching for some seven hours, exclusive of halts, I do not think we did more than nine miles. The rain ceased about 6 p.m., and the night was a fine one.

Monday, December 14th.-Lovely morning. Left camp at 8 a.m. and proceeded over country similar to yesterday, except that we had more jungle to push through. This delayed the elephants terribly, for the mahouts (aided by the Dowanyas) had to back their way through the greater portion of it. I pitched camp at 4 p.m., at a spot (called Sâmkam) on the Brahmaputra, and calculate the distance marched today 7 miles only.

Molesworth arrived in camp about 8.30 p.m. He (as I had done also) missed the path somewhere in the vicinity of the Digâro river, and had marched several miles up a wrong one ere he found the right one again. He has brought a Fakir with him who wishes to visit the Brahmakund, and who even asks to be permitted to accompany me to Rimel!

Tuesday, December 15th.-Up early and left camp a little before 8 a.m. Followed path usually used by Mishmis, a very bad one, and in places scarcely discernible. Going over boulders, lying in the partially dried up "sutis" of the Brahmaputra, nearly three parts of the time we were marching. When not so going, we were wading across rapids or pushing our way, as yesterday, and the day previous, through dense jungle, growing on the bank of the river, and so were constantly getting wet through and then dry again : very unpleasant work. At $11 \mathrm{a} . \mathrm{m}$., met a party of Digâros of the Taieng clan trapping fish. Chünô (Krôsás (deceased) son) was, with them. I sent him off to Chôkê village, which lies about a day's journey from this, bigh up the Dôrâpâni, to inform him that I shall be at Tamémakh tomorrow and shall require a few porters.

I had to pitch camp at 2 p.m. to-day on a spot on the Dôrâ river, as the Mishmis declared that it was too far on to the next camping ground. I reckon we only did about seven miles again to-day, as the going was very difficult, and consequently the elephants went very slowly.

Wednesday, Deceniber 16th.-Commenced marching at 7.30 a.m., and after loitering about en route, looking for deer, reached Tâmêmakh, at $11.30 \mathrm{a} . \mathrm{m}$, distance from last night's camp about $4 \frac{1}{2}$ miles. The elephants and Dowanya porters didn't come in till 1 p.m. The whole distance lay over large boulders, or through dense jungle : hence the slowness of the marching. Our plains journey ends here. I was busy all the afternoon rearranging my loads, as the elephants will return,to Sadiya from this.

The Brahmakund hill can be seen from our camp, and bears about north-east, and lijust above it lie the recently cultivated khets belonging to the Digaro Mishmi villages called Brâhmô and Teton. The former is said to have six, and the latter thirteen houses. Brahmô, by-the-bye, is not the name of a clan, as stated by Cooper (vide Appendix to his book), but the name of the site on which the village stands.

There is a raft made of bamboo at Tâmêmakh by means of which Digaros cross from one side of the river to the other, and I am told that the Chalikatas occasion-
ally come down here, and, orossing the river, go to the Khamti and Singpho villages on the Têngâpâni in quest of salt. There are a few Bêbêjí villages within an easy two days' march of Chôkê (Digâro) village (which, as I have already said, is situated on the Dôrâpani about half a day's journey from this place). It is one of the most westerly Digâro villages in the hills, and Chôkê and his people (as also those belonging to two other Digaro villages in close proximity to it) live on friendly terms with the Bêbêjiâs. Chôke used to reside many miles farthor to the eastward, but removed to his present site a feve gears ago because he was pressed for cultivable land.

Thursday, December 17th.-Chôkê came into camp about $9 \mathrm{a} . \mathrm{m}$. and informed me that a rumour had come from Lâmâ, to the effect that the Rimâ officials, having heard that a party from Bengal (?) was about to proceed to Rimâ in order to attack the place, had sent to Lhassa for reinforcements; that the same had been supplied to them, and that they had remained at Rima for about a month, during which time they had devoured all the procurable grain and cattle, and then, finding that no one from Bengal was coming, they had departed again for Lhassa, greatly incensed at having been sent for when there was no real occasion to do so. By 10 a.m. I had arranged with Cbôkê for one man, ten women, and two boys, as porters, and as this was all he could possibly give me, I had to weed out five of my Dowanya coolies, who had sore feet and were otherwise unfit for bill work.

By $10.30 \mathrm{a} . \mathrm{m}$. I commenced to march. Our path lay up the Tâmê (which is a fairly large hill stream, full of huge boulders and with a fair amount of water in it, even at this time of the year) for about a mile or so in a north-westerly direction, after which we struck a damp and jungly path, full of leeches, on its left bank, and proceeded in a more northerly direction for an hour, and then got out into the dry bed of another hill-stream, and, proceeding up it for a short distance, we commenced to ascend a spur containing numerous ridges, so that we were sometimes on one side of it and sometimes on the other, until at 3 p.m. my aneroid registered 2900 feet. After this we ascended another 500 feet up a steep hill and at 4 p.m. reached a tolerably level spot called Hâreling by the Digaros (elevation 3200 feet), and I pitcher camp there for the night. There is a small spring not far off, and the spot is regularly used as a camping-ground by Mishmis when taking up cattle to their villages from Tâmêmûkh. We were marching from $10.30 \mathrm{a} . \mathrm{m}$. till $4 \mathrm{p} . \mathrm{m}$. with the exception of half an hour's halt for lunch, but the Dowanyas crawled along so slowly up-hill that I do not think we did more than one mile per hour all through, so that the distance travelled from Tamêmakh would be about five miles only. To-day's march, in fact, convinces me that Dowanyas will be useless to me in the hills, and that therefore if I am ever to get to RimA and back I must change them for Mishmis. Our general direction to-day was north. I did not get even a glimpse of the surrounding country on my way up to this spot, owing to the dense tree jungle through which the path lay. I noticed some very fine tree ferns, as also some very fine tree cactuses.

Friday, December 18th.-Commenced at a quarter to 8 a.m., and after proceeding up-hill in an E.S.E. direction (varying occasionally a point or so more or less easterly) for about 40 minutes, we reached the top of a ridge, which my aneroid showed to be 3600 feet high, and after crossing it we ascended another 100 feet or so in a northeasterly direction and came upon a second ridge, or saddle-back, from which we got a glimpse of the hills to the north and north-west and also those to the south-east, as also a portion of the Brahmaputra valley to the southward. This was the first glimpse I had had of the surrounding country since leaving Tamêmukb. After this, continuing to ascend in a north-easterly direction another 500 feet, we reached a rocky ridge called Pupiar (elevation 4200 feet) and got a glorious view of the country from the southward right round to the north-west. We could see the Dihong, and

Dibang, Brahmaputra, Digâru, and Kamlâng rivers; the low range of hills called Bâlia porbôt by the Assamese and Monâbûm by the Singphos; the Brâhmô and Têton Mishmi village cultivation to the south-east across the Brahmaputra; Cboked village cultivation to the westward, and a short bend of the Brahmaputra just above the sacred Kund. It was altogether a beautiful view, undisturbed by fog or low clonds.

After halting here for a quarter of an hour or so, we again ascended our path, cork-screwing round the spur, until by 10.30 a.m. we had reached an elevation of 4500 feet. We had thus ascended about 1300 feet in about four miles, and the last 200 or 300 were very steep, though the path was on the whole a very good one up to this point.

After this we descended and again ascended some 200 feet or so, but by 11.10 a.m. we commenced descending for good. At 12.10 we arrived at a mountain stream called Ahârôkâ, and I halted for 40 minutes to lunch and rest the porters. Elevation 3800 feet. After lunch we again gradually descended along a very good, though occasionally broken, path, and at 4 p.m. reached Hai-imsong Digâro Mishmi's house. Elevation 1800 feet. Our path from Hârêlang was on the whole a good one, though here and there very broken and stony, and with many large fallen trees acrose it, It was also very jungly in places and so tangled overhead as to necessitate one proceeding in a stooping position, which was very tiring, and it was likewise steep and slippery, owing to the fallen leaves and shingle lying about. We were marching for seven hours exclusive of halts, but I do not think we did more than 10 miles We passed through a forest of bamboos to-day something between the Assamese Kakwa and Jati. The Khamtis, as also my Dowanya, porters declare that they have not seen any like them before.

Hai-imsong is a man of about 45 or 46 years. His village has only seven houses, which are scattered and miserable-looking abodes, compared to Abor houses or such Chulikatta houses as I have seen. Hai-imsong's own house is 135 by 12 feet, and it is divided into nine compartments, each of which has its fireplace, as also a door in the side wall for exit in case of fire. The front compartment is generally the largest, and is invariably used as a guest-room. There is a passage up the whole length of the house close to one of the side walls, which has a slope outwards at the top in order to afford space for suspending the heads of all animals killed at feasts, \&cc, by the owner, and thus keep them clear of people passing up and down the passage to the several rooms in the house. The houses are all on "changs," and are built entirely of bamboo, so that there is nothing massive or substantial-looking about them. The banboo mat floor is made wide enough to project a couple of feet or so outside the main walls, and this outside space is used as a receptacle for household goods. Some are thatched with grass, others with the stuff which the Assamese call jênyûprit (Digâro name is lakâ), and as all the houses are protected from the force of the high winds by the surrounding hills the eaves do not come down low. They have a small verandah in front, which is likewise covered in overhead, the roofing of the main building being brought sufficiently forward for this purpoes, and as the front portion is rounded off, the roofing over the verandah is shaped like the front of a Swiss cottage tent. The houses are not uncomfortable places inside, and they are lofty enough to admit of one's standing upright, at any rate near the side walls, where there are no hanging trays or other receptacles for household goods to knock one's head against. The pigs are kept underneath the houses, a wooden fence being erected all round to keep them in.

On arriving at the village, Chowiê and his Khamtis occupied the guest-room in Hai-imsong's houses, while the Dowanyas ensconced themselves underneath an adjoining granary, and Molesworth and myself had our beds spread inside a couple
of similar places, partially filled with grain, and we had tea and dinner underneath one of them, as the ground was very wet and uneven for pitching a tent on. Haiimsong killed a pig in bonour of my visit, and he gave the Khamtis and Dowanyas heaps of Pobosâ liquor besides.

Saturday, December 19th.-It was 10 a.m. before I was able to make a start, and the morning was very rainy-looking. Soon after leaving the village we saw the Brahmaputra flowing from north by west, some distance below us, and we descended a steep zigzag path in a north-westerly direction to the Tedêng, a fairly large river running down into the Brabmaputra from the north-west. It is not fordable even at this time of the year, but we all crossed it easily enough on a very strongly made fishing weir. There are numerous Digâro Mishmi villages on both banks up the gorge of this river, and Chowsa tells me that a Chulikatta and also a Digâro Mishmi informed him that the mountain from which it takes its rise is covered with gold, and that in the hot weather when the sun is shining the whole bill appears like a red-hot furnace. It is covered with snow just now. Chows tells me that he intends paying it a visit later on, in order to test the correctness of his informant's story, and he has promised to communicate the result of his journey to me in due course. Such Digêro villages as lie high up the gorge of this river are within a two days' journey of some of the Chulikatta villages. My aneroid registered the elevation at the weir on which I crossed at 600 feet. A small bend of the Brahmaputra can be seen a few yards lower down, the river apparently ranning down slightly east of north. Just before reaching the Tedêng river we crossed a small hill stream coming down from the westward. The Tedêng has quite a little valley of its own on its right bank close to where we crossed it, and Hai-imsong's people appear to cultivate here regularly. Its left bank (in the ricinity of the weir I crossed on) is precipitous and rocky.
: After leaving the Tedêng we ascended some 200 feet, and crossing the edge of a spur running down into it we descended about the same distance, and then continued in a northerly (sometimes in a north-westerly) direction, along a rough stony path, on the right bank of the Brahmaputra (which is running here from north-west to south-east) some couple of hundred fect, sometimes more, sometimes less above it, for about $1 \frac{1}{}$ miles, when we found the Brahmaputra running from the north-east and from nearly due north a little further ahead. About 3 p.m. it came on to drizzle, and just about this time our path turned to the north-west, and we had a steep and slippery climb of 1000 feet, and arrived at Chôsés village about a quarter to 4 p.m. wet through. We were marching to-day for six hours exclusive of halts, and I reckon that we did about eight or nine miles. General direction north. The path was nowhere what could be called very bad, though in places the going was difficult, as also very stony, and up and down. On reaching the village Chowsa and his Khamtis ensconced themselves in the guest-room of Chôse's house, and my Dowanya porters found shelter in that of another villager living close by, while Molesworth and myself took up our quarters (as at Hai-imsong's village) in two partially full granaries, and my servants and our orderlies found accommodation below a third one.

Sunday, December 20th.-Up at daylight and found it raining slightly, and the morning foggy and very raw. Packed up everything ready for a start, but Chôsé informed me that unless it cleared up he would be unable to get me any porters, as no Mishmis could be got to travel on such a nasty day, especially as we shall bave to camp out in the jungle for a night, the distance to Takalong, the next Digâro village through which we pass, being too great to accomplish it in one day from this. The Digâro tribe call themselves Târoan, and I am informed that in years gone by
von II.
2 L
they occnpied the whole of the country on the right bank, and the Mijus that on the left bank, of the Brahmaputra, and that both tribes were then at war with one another, but that for some years past both tribes having been at peace, villages belonging to either are now to be met with on either bank of the Brahmaputra, though even now there are more Mijus living on the left than there are on the right bank.

The Digâros and Mijùs, who live on the right bank, keep as close as possible to the Brahmaputra, so that, speaking generally, the greater portion of the country to the north of the river is uninhabited, probably because the hills in that direction being steeper, it is more difficult to cultivate or more likely because the population is not yet sufficiently large to require more land than is to be found in the immediate vicinity of the Brahmaputra, where comparatively large tracts of flat country are to be met with here and there. There are also numerous hamlets up the gorges of the chief rivers which run down into the Brahmaputra, so that there also the country is no doubt flatter and easier to cultivate. All the Digâro villages are, I am informed, small ones, the largest scarcely ever having more than twelve or fourteen houses. This is of course owing to the difficulties which any large community would experience in finding sufficient easily cultivable land close by. Such few houses, too, as each so-called village contains, instead of being in a cluster, are generally scattered about here and there, and each is so hidden by dense jungle as not to be seen until one is right up alongside of it.

The staple food grains of both Digaros and Mijus are Pobosa and Indian-corn, though a little rice, of a coarse and not very tasty description, is likewise grown. The Digaros declare, and I believe rightly so, that there is much more stamina in Pohost and Indian-corn than in rice. Their liquor is made principally of Pobord. The process appears to be a very simple one. The Pobosa having been boiled it is put by for several days and allowed to ferment. When sufficiently fermented, it is put into partially warm water, and well stirred about orer a fire, after which it is ladled out in its then saturated state into a sieve, and having been well squeezed about by hand, such liquid (and Pobosâ) as works its way through the sieve is then ready for consumption. The stuff is put back from the sieve into more warm water, along with some fresh fermented Pobosa, and the process of partially boiling and straining goes on time after time, until in fact every one who is drinking has become thoroughly satiated. The Digâros have no cultivating implements of any kind: honce new land or such as has been lying fallow for six or eight years, is required yearly for the production of anything like a good crop. Their system of jhuming is similar to that followed by all the other tribes on this frontier, except that in many instances they do not take the trouble to clear away any portion of such trees as they may have occasion to fell. All jungle, \&c., baving been dried and set fire to, the burning of the fallen trees is left to chance, and the crops are then sown in between any fallen $\operatorname{logs}$ or branches that may be left lying about. Pobos\&, Indian-corn, dben, and cotton are sown about Phalgoon (March), called "taji" by the Digaros, the first broadcast and the last three in holes. The Indian-corn, dhan, and cotton crope have only recently been gathered, and in places there is still a little Pobost (though the majority has been gathored) to be cut. So that the Digatro harvesting time is a long way behind that of the plains in point of time. The Digaros grow a sufficiency of cotton, of an unusually fine description too, for home consumption.

They can make their own dyes, but often get them from Lamal. The women weave all their cluthes and cloths with hand-looms similar to those used by $A$ bors and Miris. They make no warm coverings (such as Pûris, \&cc., of any sort). The
a clan of Digâros is numerically the largest and consequently the most porserful
in these hills at present. The principal Digatro villages, on the right bank of the Brahmaputra, commencing from the westward and proceeding east, are-

| Name of Heedman. |  |  |  | Clan. |  |  |  |  | Name of Place where situated. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chôkè | . | - | - | Taieng | - | .. | . |  | Hâ-ringgom. |
| Hai-imsong | . | .. | . | " | - | - | - |  | Sàlomgom. |
| Á'hangson | .. | .. | .. | Thele | .. | .. | . |  | Tà-jugom. |
| Chôoê | . | . | . | Taieng | . | . | - | . | Kap-puilang. |
| Prônsong.. | . | - | - | " | - | .. | .. | .. | Sa-10gom. |
| Titon | . | .. | - | Taieng | aro | . | - | . | Amleng. |
| Takûlong | . | - | - | Taieng | . | . | - | . | Âkupp. |
| Miskong .. | . | . | - | " | . | . | - | - | M'taleng. |
| Ma-kúson |  |  |  |  |  |  |  |  |  |
| Kajâlü .. | .. | .. | .. | Manyô | . | -• | .. | .. | Hai-yúgom. |
| Ma-brüson | .. | $\cdots$ | .. |  |  |  |  |  |  |
| Sênô | .. | .. | . | Tashi | . | -• | . | - | Hâ-gungleng. |
| Senda | - | . | . | 'T'sei .. | - | .. | .. | .. | Ka-sêleng. |
| Brem | .. | .. | .. | Mali.. | .. | .. | . | .. | " |
| Tagruson | - | . | .. | T'sei.. | . | . | . | . | Pângga. |
| Semsa | .. | .. | - | Mêpa | . | . | . | . | Dakâna. |
| Hai-âcon . | . | . | . | T'sei | - | .. | . | . | Tila. |
| Gongshâ .. | - | . | - | Nali .. | $\cdots$ | - | - | - | Môing. |
| Tàkon .. | - | $\cdots$ | - | Mânyó | . | . | .. | .. | Chéra. |

I tried to get the names of every Disaro village, or cluster of houses, on both banks, but my informant seemed to think I was too inquisitive, for, after having pertinently asked me why I wanted the names of all the hamlets in the hills declared that he could not (I fancy he meant "would not") give them to me.

The Digâro villages have no house set apart especially for bachelors or for the discussion of public business and other matters, such as the Abor "Moshup" fur instance. Here, however, as elsewhere on this frontier, each clan has one or more recognised headmen whose advice is solicited and counsel taken on all momentous occasions, and when such have been "squared" no real difficulties need be apprehended by any stranger visiting their hills.

It would be impossible for me to assess even approximately the number of this tribe, even if I were giving the number of houses in every hamlet, unless I actually visited each house, for it is impossible to assess even approximately the number in each house. In Chôsés house I counted a family party of 15 (adults and children), but in one house in Hai-imson's village which I entered I found a man with his wife and one child only. The impression, however, left in my mind already is that the Digâros are a numerous tribe. One noteworthy point about them is that they appear to bave no system of village defence. The two villages I have as yet seen, and Chowsâ tells me they are all the same, have no artificially made trenches, or palisades anywhere, and no "panjis" fixed in easily accessible places, 80 as to prevent their being rushed, and yet a sudden attack by Chulikattas, or even by Tibetans, is a possible, and not an altogether unknown contingency even as far west as this.

Chôké, also Hai-imsong, and their people, are at peace with the Bêbejiâs, but not so the other Digaros of the Taieng clan. Chôsé informed me that years ago a large party of Bébêjiás came across the hills lying to the corth and north-west to attack a certain Digâro village close to this vicinity, but suffered grievously for their temerity. The journey, it appears, is a very difficult and arduous one, occupying about 20 days, and the story goes that just as the Bêbêjifas had succeeded in getting close to the village they desired to attack an unusually heavy snowstorm occurred, which
made retreat impossible, aud that owing to the excessive cold they were unable to nove, and so ran short of provisions; and, as their presence was discovered by the Digaros, the latter gathered together in large numbers and, proceeding to attack them, slaughtered nearly every soul.

The Bêbêjiâs have not since attempted a raid so far west, though they have attacked Digâro villages lying further east, but the Digaros appear to feel that another visit from them is not an impossible contingency. The whole of the Taieng clan is also at war with the Tibetans, and the origin of their dispute was thus related to me.

Many years ago an influential DigAro of the T'sti clan called Tem was taken suddenly very ill soon after his return home from a trip to Rimâ, and believing that he had been bewitched by some Tibetan, he called his relations and friends around him and told them of his suspicions. He declared also that he was about to die, and exhorted them to avenge his death should his prophecy prove correct, and he specially exhorted some of the head chiefs of the Taieng clan who were present to avenge him, inasmuch as his own people were, he said, numerically too weak to do so satisfactorily. Soon after this Tem died, and in due course a powerful chief of the Taieng clan, called Kâ-no'sal, collected a party of followers and proceeded to attack a certain Tibetan village close to the border of the Miju country. This act exercised the minds of the Rimd officials considerably, for they could not comprehend why Kânôsâ had thus acted, for they were ignorant of his having any grievance against any Tibetans, and they were of course unaware of Tem's dying exhortations to him, and so they sent Kânôsâ a polite message, asking him to go to Rim and discuss any grievance he might consider he had with a view to its being, if possible, amicably settled. On receipt of this message Kânôsd proceeded to Rima, accompanied by 30 followers, and upon his explaining why he had acted as he had done in attacking the Tibetan village, the Rima officials feigned to be greatly distressed about Tem's death and dying exhortation. They expressed a wish to make Tem's relations a handsome present as a peace offering, and they persuaded kadeef to loiter about Rima on the plea that the same would be given in a few days' time. Instead of collecting presente, however, they were maturing a plot for the annihilation of Kânôsâ and his followers, and as soon as everything was ready Kanôsa was suddenly, rudely, and peremptorily ordered to leave Rimâ, and when he had got some distance on his return journey he and his followers were suddenly surrounded by a large body of Tibetans, who were lying in wait for him, and the whole of them were cruelly slaughtered.

After this Bü-son, Kânôsâ's son, determined to avenge his father's death, and accordingly collecting some 70 followers he divided them into two parties, and suddenly attacking simultaneously two villages called Sânggau and Sommén, situated in the border of the Miju country, he burnt them to the ground, and succeeded in killing 70 men, women, and children. Büson died (a natural death) some two years later, and since that time no overt act of any importance has been attempted by either party until some few months ago Buison's (deceased) son Klima seired a Tibetan while he was on his way to some MijQ village to trade, and sold him to Takulon for a gun worth Rs. 30, two swords, three large "tow," one small mithon, and the man is, I am informed, still detained in Takulon's village as a prisoner.

Monday, December 21st.-Proceeding for half an hour in a north-easterly (varying occasionally a little more easterly) direction we descended 900 feet down a steep incline and crossed a good-sized hill stream called the Paint, running down very strongly from the north into the Brahmaputra. After crossing the Painf we ascended some 800 feet up the centre of a spur called Sê-logom, where Pronsong's (the man alluded to in diary of 19th instant) village, consisting of three houses, is situated.

The path from Chosse to the Painf, and up the spur on which Pronsong's village is situated, was very slippery after the late rain. Close to Pronsong's son's house I saw the first Digaro grave (that of a female) I have seen to date. Molesworth made a drawing of it, and, as he has promised me one, there is no occasion for me to deecribe it here. I will merely add that Digaros (and also Mijds) sometimes bury, at others burn, their dead. The latter is, I am informed, the favourite plan. The rule seems to be this. If deceased's relations are well off and have a lot of labour available in the shape of slaves, the body is burnt; if not, it is buried, with the head to the westward. Slaves are generally thrown into the river after death. After a person dies his or her relations send for the N 'gwai (who is equivalent to the Assamese Dêôdai), a sort of Mishmi priest, and get him to say a few words over the corpee, exhorting the soul of the departed to flee away underground to the spot where all others have gone before, and when this has been done and the body has been made away with, a feast in proportion to the wealth of the deceased's relations is given. No ceremonies are performed after this feast. It is considered unlucky, in fact dangerons, to have anything to do with the dead once they have been burnt, or buried, lest their spirits should be disturbed and get offended. Digaros do not appear to believe in the transmigration of the soul, but (notwithstanding that the priest exhorts the soul of the deceased to go away and remain under the "mati," they believe that dead people move about in the air in the shape of invisible spirits.

After reaching the top of Pronsong spur we descended some 200 feet, and then continued along a tolerably good, though very up and down, path, skirting the several spurs coming down from the westward into the Brabmaputra. General direction up to 11.20 a.m. north, slightly east.

At $12.30 \mathrm{p} . \mathrm{m}$. we had a smart shower, which wet us all through (direction for past hour north-east, slightly north), and soon afterwards we came upon a huge mass of rock immediately above the Brahmaputra called Erampo. Between 12.30 and 1 p.m. we were going N.N.W., north-west, and occasionally west, but after that we turned gradually to the north-east, again the path running 100 feet or so above the Brahmaputra. At 1.15 we crossed the Murm, a hill stream running down into the Brahmaputra from the south from afar, and from the south-west nearer us. Just before crossing it we saw a fine waterfall bearing south-west, but our path turning to the north-east soon afterwards, and being very jungly, we lost sight of it almost immediately.

After crossing the Müm I halted for three-quarters of an hour to lunch. Then proceeding again we continued for half an hour in a N.N.W. direction, and after crossing the dry beds of four mountain streams, which, when in flood, run down from the north-west into the Brahmaputra, we turned gradually to the northward and crossed the dry beds of three other mountain streams, which in flood also flow into the Brahmaputra from the north-west, and soon afterwards a path leading to the north-west to the Sa-gam-nâ Digaro village.

When turning a little more easterly we descended at 3.30 p.m. some 250 feet or so, and crossed a large mountain stream, full of hage boulders, called T'alua, running down from the north-west into the Brahmaputra. Elevation, where we crossed, 900 feet. This stream is easily forded at this time of the year. There is an old, and at present, unsafe wooden bridge of the ordinary kind across it. I was struck by the male portion of the Digaro porters helping the women over this river, and, when necessary, relieving them of their loads.

After crossing the Talaa we proceeded in a north-easterly direction, and ascending some 50 feet or so up a steep path ou the edge of a spur falling into the Brahmaputra we found ourselves at $4 \mathrm{p} . \mathrm{m}$. in a recently cultivated knot belonging to Kaiikson of the Talon clan, a couple of hundred feet or so only above the Brahma-
putra, which is running from the north-east, and bends away south of south-west as it passes where we are standing. Then, after crossing several other dry mountain watercourses, we descended at 4.30 p.m. close to the Brahmaputra, and I pitched camp on a beautifully sandy spot known as Nara, a miniature bay, close to it There is an enormous quantity of driftwood about, and as grass and plantain leares are also plentiful and close by, our porters and the Khamtis were soon comfortably housed. The last 100 feet or so down to this place was very steep and difficult for laden coolies. The Brahmaputra, which is running from E.N.E., is roaring and foaming past our camp. It is scarcely 60 yards across in places. Just below our camp it turns suddenly south of south-west. There is a Digaro village of 8 houses on the hill, called $\AA$ mleng, to the north immediately above us, but not in sight. The headman's name is Titon, and he is of the Mârô Taieng clan. We had two or three nasty showers between noon and 4.30 p.m., which wet us through and made the marching, often through dense jungle, very unpleasant, and the path generally very alippery. Rain also fell after we had pitched camp, and continued till 7.30 p.m., after which we had a fine night. We were marching for $5 \frac{1}{2}$ hours to-day, exclusive of halts, and I reckun that we did about eight miles; it was the most difficult march we have had to date.

Tuesday, December 22nd.-Up at daylight and had everything packed by 7.30 a.m., but, as we are only a couple of hours' march from Tâkolong's village, which is on a hill called A-kapâ, our Mishmi porters were in no hurry to be off, and as Chowsa wished me to halt for a while in order to allow old Titon (alluded to above) to come in and pay his respects to me, I amused myself after chotohazri examining a cane bridge (the first I have been close to) across the Brabmaputra, a few hundred yards above where we are camped. The Brahmaputra is very narrow, not more than 50 yards broad, just where the bridge is. The narrowest places are, in fact, chosen for their construction, not so much to economise cane, or through fear that the cane is not sufficiently strong to form a long span, but to facilitate the initial process of manufacture, viz. getting the canes across from one side to the other. This is done by tying a stone to a thin cane, and then slinging the latter across by means of it. Of course, when this has been done the process of dragaing the thick canes over is an easy matter. The bridge has a platform on either side of the river to land on or take off; from and above each of these a strong cross-bar is fixed. The canes (three, four, or five are used) baving been firmly tied to a tree on one side, they are led over the cross-bars alluded to, and then hauled sufficiently tight fron the opposite bank and fastencd to other trees, after which they are guyed down tightly towards the ground, a short distance from the cross-bars, so as to keep them from swinging about too much. Just above either platform several stout cane hoops are to be seen strung on to the canes which run across the river, and it is by meaus of these hoops that the Mishmis cross the river.

A Mishmi wishing to cross adjusts one of them six inches or so above his rump, and having fastened a piece of thin cane, which is to be found attached to each hoop, under the nape of his neck, he cocks his legs in the air, and catching bold of the hoop on either side (below the cane ropes), away he slides towards the centre of the span, where, on arriving, he transfers his hands from the hoop to the cane-rope, and works his way up the other side hand over hand, using his bare feet likewise in a manner which would make many an old sailor stare were he present to see it. S metimes the hoop does not glide far of its own accord, although each one is prcvidel with a piece of jungle stuff called Tâbblê, by the Diçârus, a sort of creeper from which a very slippery sap exudes, so attached that it rests between the hoop and the cane ropes, for the latter have joints in them which often bring the hoops up short, and then hands and feet have to be used all the way across, and the exer-
tion is very severe. If it is desired to cross a load likewise, the basket containing the same is fixed on to the lower portion of the hook below where the owner lies, and it, as also a spear, if necessary, stuck in, so as to balance itself, is taken across with him. This particular bridge is about 120 feet from platform to platform. Molesworth has promised me a drawing of it to go in with my report.

Returning to camp about $8.30 \mathrm{a} . \mathrm{m}$., I found that old Titon had arrived there. IIe is a pleasant-looking, though very old man, with long white hair, very thick eye-brows, and is very weak on his legs. He speaks Assamese. His first question was, "Saheb! what have you come here for, and where are you going to?" I explained that I was on my way to Rim\&, and wished all influential Mishmis to help me through their country. Titon replied, "The Mishmi country is a very difficult one, and the journey to Rimâ a very long one. The Rimâ officials too are brutes, and they will be sure to insult you if you go there with no seposs. As soon as ever they hear of your being in their vicinity they will turn out in force to stop you. If you are desirous of going there, take a large number of sepoys with you." I explained that I had no fear regarding the length of the journey or the difficulties of the road, and that I was prepared to run my chance of being well received or otherwise at RimA, that all I now asked for was that the head Digâro men would favour my presence amongst them, and help me to push on towards Rimd by giving me rations and porters. Leaving the Brahmaputra, and proceeding in an east-south-easterly direction through some recently cultivated fields for a short time, we struck it again a little further on, coming down a little north of east-north-east, and then turning due east, we could see it coming down from a similar direction. After proceeding thus for a few minutes we left the Brahmaputra again, and turned a little to the north of east, but at a quarter to 11 a.m. came out on it again, and our path lay for half a mile or more over the huge boulders lying just above it, which the Dowanyas didn't seem to relish at all. The reach here is long and straight, and the river flows from north-east by east.

Then leaving the Brabmaputra, we got on to a high bauk, and continuing along a jungly path, we crossed a good-sized stream called Um, running down very strongly from the north into the Brahmaputra. We crossed the Um on a fishing weir close to where it empties itself into the Brahmaputra (elevation 950 feet), as it was scarcely fordable, and we then proceeded for a few hundred yards up its left bank over some huge boulders (very difficult going for laden coolies). We reached Tâkullong's village (elevation 1600 feet) at 1.30 p.m., having risen some 700 feet in about half a mile. The village has ten houses, all of which are very much scattered, and one and all are surrounded by dense jungle, so that one does not see a house until one is right on top of it.

I asked Takulong where Brümson was (for I had heard that this man, who is one of the most influential chiefs among the Taieng (Digâro) clan, was in the village, as also that he has a grievance of very old standing, and is alleged to have given out that he will oppose my being allowed to procecd through the Diçaro country), and he replied sulkily, "I don't know. He is somewhere in the village." I had heard that this man Takolong, who is Brümson's cousin, has also a grievance, and that he likewise is inclined to prevent my proceeding on through his country. I asked if I might be permitted to sce a Tibetan prisoner whom I believed was in the village, and the man was immediately called upon to appear. He is a strongly built, fine-looking man, about forty-five years of age, and is dressed in the usual coarse slate-coloared Tibetan blanketing stuff, made like a large loose dressing-gown, with very open sleeves, and tied round the waist by a string, so that it bags considerably in the vicinity of the stomach, and only reaches as far as the knee. He is also wearing the typical Tibetan felt billycock hat, with a broad turned-up brim to it. His hair is
short, and he has no pig-tail, the same having been cut off soon after he was seized, and his left foot is secured in a heavy wooden stock, about two feet or so long by ten inches broad, the weight of which he keeps off his ankle when moving about by means of a piece of cane attached to each end of it, and carried in his hand. He saluted us by doffing his hat, and then sat down on the ground. I was informed that he had been seized some months ago by Klima, a relation of Buison (deceased), and some other Digaros, while he was on his way, with two other Tibetans (who managed to make good their escape), to Makkuson's village, which is across the Da'lei (ei like ei in "either") river (vide diary of 20th instant, in which origin of row between Tibetans and Digaros is given). I asked to whem the man belonged, and I was told that Takalong had purchased him from Klimâ, and that he intended selling him to the Chulikattas or to any one else who would give a good price for him. The Tibetan speaks Digaro well, so I had no difficulty in conversing with him through Chowstr, who also speaks it fluently. I told him I intended, if possible, to ransom him, and take him on to his home with me, and this news he received with much joy, to judge from his countenance. I then asked Takalong what he would take for the man, as I had all along-that is, ever since I had first heard of his being a prisoner here-made up my mind to try and ransom him, believing he might be instrumental in getting me into Rimá, but he would not give any definite reply, so I allowed the matter to remain in abeyance for that night. The Mishmi stock alluded to above is an ingenious contrivance. A hole having been cut in a piece of very hard wood, large onough to admit with difficulty a man's foot, the same is forced through it, and an iron pin is then driven through both sides of the hole close to the ankle, so that it is impossible to withdraw the foot.

Wednesday, December 23rd.-Up early and found it very cold and raw. The thermometer registered $49^{\circ}$ at 9 a.m. I saw Takalon about this time, and I told him that I was very anxious to push on, and said I hoped he would give me porters. He replied, "You cannot get any porters from my village. I and Brumson have a deal to talk to you about too, so you will have to remain bere"; and upon my asking why he and Brümson were so dilatory about the matter, he replied, "What we have to speak to you about is not a matter which can be talked over quickly, besides Brtmson is not ready to talk to you yet. He is here on argent and special business of his own, and as soon as he has finished it he will probably come and speak with you."

I was quite prepared for this speech, as Chows\& had previously informed me that I should be compelled to balt here to-day, as also that both Takalong and Briumson have a very old and grave grievance against our Government to talk to me aboat. Takalong, after delivering himself thus, killed a pig, which he presented me with, and he likewise brought us a fowl or two and a little rice, which looks as if he intended to keep friendly after all. I occupied myself in collecting Digaro words, and in listening to the following story, which a Mishmi gave me to account for Brümson's long absence:-
"Many years ago Takalong lived where his forefathers had lived before him, farther to the eastward, on a hill called Kapuilon, but he was driven thence by Kaisha's (deceased) sons and relations, who were aided by the Chulikattas, and the men from Gaming, in revenge for his (Takalong's) father having assisted the British Government in capturing Kaishâ, and it subsequently came to the ears of T\&kalong, Prumson, and other chiefs of the Taieng clan, that the Chulikattas had been shown the way into Takallong's part of the country by a Mishmi belonging to the Dinda, Gâm, and Hârô clans. When this discovery was first made nothing was done, but the chiefs of the Taieng clan set about making secret inquiries about the matter, so as to be able to fix the guilt on the suspected parties; and as soon as they had got sufficient evidence against them, they ordered the men to appear before them at

Takalong's village to answer to the charge. The three suspected men, accompanied by numerous friends, arrived here a few days ago, and they were openly accused of treachery by the Taieng clan. They of course denied the charge, but as the Taieng chief had sufficient primá facie evidence against them, they were ordered to take the Mishmi oath and go through the ordeal usual among Mishmis under the circumstances, viz. each swallow a ' chunga' (four or five inches long and balf an inch in diameter) full of Mishmi poison (aconite, I believe), ground and mixed with water, declaring before doing so that if they were lying they hoped the poison would kill them."

Large crowds of Mishmis from all parts of the country were present to see this performance, and every oue I spoke to about it firmly believed in the efficacy of the test used to discover whether the suspected men had really acted as they are alleged to have done, declaring that if the suspected men are guilty they could not possibly escape dying; while, on the other hand, if they are telling the truth, the poison would not kill them, though it would make them very ill. I asked several men what would have happened had the suspected men refused to swallow the poison, and they replied, "They would have been compelled to take it. If they had not appeared voluntarily, as they have done, they would have been hunted down and killed by the Taieng clan."

By 3 p.m., the above proceedings having been completed, Brümson shortly afterwards arrived at my tent. He is a fine-looking man, about forty-seven years of age, and has a very intelligent face for a Mishmi. He was wearing a large bearskin cap, which effectually hid the upper portion of his face, especially his eyes. He cannot speak Assamese, and this is, I am told, a terribly sore point with him, as he has an idea that if he could narrate his own grievances be would get a hearing, which up to date he has not, he says, succeeded in doing. He asked me why I have come into these parts, and I replied that I am anxious to become personally acquainted with all the Digâro and Mija chiefs, as also see their country, and that I was very anxious also to visit LâmA (everybody here talks of Rimâ as Lâmá), and hoped that he and the other chiefs would help me with their influence, and also give me porters.

Both Takalong and Brümson promised to try and get me as many porters as I required, and Brümson agreed to allow his son, a nice, smart-looking young fellow of about twenty-five or twenty-six years of age, to accompany me.

I spoke to Takolong again about the Tibetan prisoner, and he said he would take 100 rupees for him, and this sum I agreed to give, as I was anxious to see the poor fellow set at liberty, and I beliered that if I took him on to Rimâ with me he might be of some use to me. I then asked for permission to set the Tibetan at liberty, and after a deal of argument I was told I might do so. After several futile attempts to knock out the iron pin or cut the wood through with a kukri, a small Mishmi axe was brought, and a young fellow had to hack away at the wood, at the imminent risk of cutting the poor fellow's legs if his axe slipped, for half an hour, amidst the jeers and uncomplimentary remarks from a lot of young fellows who were looking on at the operation, ere the pin could be got out and the man released. The poor man appeared to be very grateful at having been released, and it was time his foot was taken out, for his ankle was much swollen, and of course very tender and sore.

After dinner I occupied myself in jotting down more Digâro words for the vocabulary I am making. Digâros are not nearly as inquisitive as the Abors, and so, I am thankful to say, we have not up to date been pulled about or molested, such as we should have been had we been in an Abor village. At mealtimes we always have a few present to admire the adroitness with which we feed ourselves with knife and fork. Some of the jouths too occasionally make themselves obnoxious by mimicking everything either I or Molesworth say, as also by placing their anything but sweet bodies in too close proximity to us; but these are very small matters. I retired to
bed very pleased with my day's work, and with my mind mach relieved, for I fit that I had conciliated two very influential chiefs.

Takalong's house, as also the others I have seen in this village, is surrounded by a slight wooden fence on three sides, the front side only being without it. I was at first under the impression that this fence had been erected to protect any vegetables, \&c., which might be grown within the inclosure from being devoured by the village mithon, but I am informed that its object is to prevent the house being rushed suddenly by any force attacking the village. The (mat) walls are likewise protected on the outside by split pieces of wood placed close together, which reach to within a foot or so of the top of them, in order to prevent ingress to the house by cutting the walls. As I have before observed, pigs being kept underneath the "chung" of the houses, that portion is usually railed in, but the railings which I have hitherto seen for this purpose merely come up high enough to keep the pigs inside. With the above exceptions, no other defences which I could see exist.

I have previously noticed that this tribe do not erect their houses in close proximity to one another upon any fixed village site. I suppose experience has taught them that it is safer to live scattered as they do when their numbers are numerically small. It would of course be much more difficult for any raiding party unacquainted as they would be with the village locality, to attack and burn a number of scattered houses, hidden from view until one is right up to them by dense jungle, than it would be were they all clustered together in one spot. The houses too being scattered as they are afford more chance for the inmates escaping with their lives during a sudden attack.

I saw a few cases of goitre, but none of any size, in this village. The spring from which the village gets its water is some distance away, and the water is dirty and not very plentiful at this time of the year.

Thursday, December 24th.-At 8 a.m. the thermometer registered $47^{\circ}$. At 10.30 a.m. I left the village, accompanied by Hai-imsong, Chôsé, and Tâkôlong, who said they would escort me as far as the Dalei river, and just before starting Brümson came up and wished me a safe and successful journey. He said-" Go cautiously and te ever on the alert. The road is dangerously bad for any one but Mishmis in places, and you have a long march before you. I have done all I can for you, and I am sending my son with you. Take care of him." We started in a north-east slightly easterly direction, aud continuing this course for a quarter of an hour, we came upon a bad and dangerous piece of road. The path lay for some 30 or 40 yards along the edge of an almost perpendicular rock, a few hundred feet above the Brahmaputra, with nothing but little niches in it here and there for one's toes, though luckily there were a few creepers about to hold on by, but as they were not strong enough to bear one's weight, they would not have been of much use had one slipped, so that any accident of the kind meant almost certain death, for there was a sheer drop on to the boulders lying in the Brahmaputra below. Molesworth and I determined to go by this path (there is a better one above it by which cattle are taken), for the Mishmis seemed to think we could not get over it, and as we had two women among our porters, we argued that if they could get over such a path with their loads, we could also do so. We forgot, however, that going over such a plare with bare feet is very different from doing so with boots on. We got over it all right, though we were both helped slightly over the last bit, and we were both glad when we had reached a safer spot. This is the worst bit of path we have had to go over to date. The Khamtis, as also my servants, went by the upper or cattle path.

After this we deseended some 700 feet by a steep, slippery, and broken path, and at 11.15 we halted for 10 minutes, and then proceeding in a north-easterly direction, we passed a large mass of broken hill débris, chiefly rock, apparently
hurled down (from the north-west) by the bursting of a glacier, and soon afterwards we crossed the dry beds of the two hill streams, and then a little hiil spring trickling out of the rocks close to our path. Just after passing the hill débris alluded to, we came upon a tolerably level, though somewhat stony, piece of ground, and I was informed that Eden and his men halted there the evening before they surprised Kaishá in his stronghold. We halted here for 15 minutes, and then proceeding E.N.E. for ten minutes or so, we entered Mison (Digâro) village, elevation 1300 fiet, which is a few hundred feet above the Brahmaputra. Mison's house is quite close to the path, and no attempt has been made to erect any defences of any sort at the entrance of the village. Distance from Takulon about $3 \frac{1}{2}$ miles.

Leaving Mison's house at 10 minutes to 1 p.m. and proceeding in a north-easterly direction, we descended 100 feet or so and crossed a small hill stream, from which the village apparently gets its water. Then ascending 100 feet we crossed another hill spring, and the path ascended and descended alternately until at 1 p.m. We came upon the spot where Lamling's house used to be before it was attacked and burnt by Kaisha's relations, the Chulikattiss, and the Gáming people. Elevation, 1500 feet. I took the bearing of the Brahmaputra from this spot and found it coming down from the eastward and making a letter $S$ just below as it proceeds westward. After leaving this spot we proceeded in the easi-south-easterly direction, and descending about 100 feet down a steep path we continued along a fine level path for a quarter of a mile or so. Then descending another 300 feet, we crossed the Dalei river on a fishing weir. It is a fine large river, not fordable even now, and running very strong from the N.N.E. into the Brahmaputra. It is said to rise in the Snowy Range bordering on Tibet, and forms the boundary between the Taieng and Manyô clans of Digaros. The valley on either side of it just here is of considerable size, nearly as wide in fact as that of the Brahmaputra. There are numerous villages up the gorge, some of which are of considerable size, one of them having, I am told, 100 houses in it. Kaishás people live ón a high hill called Sâmêiang, which bears N.E. from the Dâlei, and Mâbüson and Mâküson, two other influential chiefs of the Mânyô clan, live a little below Kaishâ. The country, too, known as Gáming, and inhabited by the Dindic clan of Dicarros, also lies up the gorge of this river about three-quarters of a day's journey from Mâkuison village (vide diary of 23 rd instant), where mention is made of this tribe having helped Kaisha's people in their attack on Lâmling village.

They are not a numerois clan, and it is alleged that they are now on bad terms with the Bêbêjiâs, whose nearest villages are only some two dass' journey from their most northerly villages. None of them have ever visited Sadiya, and as they are still on bad terms with the Taieng clan, they never even come as far south as the mouth of the Dálei. I am told that the Mânyô clan of Digâro villages lying up the gorge of this river reach to within a couple of days' journey of the Bêbêjia villages, as also close to the borders of Tibet.

Before crossing the Dalei I halted for half-an-hour. We crossed the river on a fishing weir, and I pitched camp in the jungle close to its left bank, as it was necessary that I should interview the headmen of the Manyô clan and solicit pelmission to march through their country, as also get them to give me some porters in exchange for some of those from Takulong, who wish to return home from this spot. At 2.30 p.m. Mabüsson, Maküson, and a number of Kaisha's sons and relations, arrived in camp.

I was very pleased at having got Maküson to consent to accompany me, as he is not only a very influential man in his own part of the country (as far eastward as Ton'son village, which is close to the borders of Rima), but he speaks Miju and Tibetan, as also Assamese, fairly well, and I considered that I was justified in promising him a gun if he really acted up to his promise.

Friday, December 25th.-I am told that many Tibetans come yearly as far west as this, trading, while the Digâros from these parts go regularly every year to Rima in quest of salt and cattle, \&c. \&c. By 9 a.m. a sufficient number of porters had arrived, and they all volunteered to go right through with me to Rima and back (as far as Takalon), provided I gave them 10 rupees each for the journey from this to Rima, and 10 rupees each for the return journey to Takolong. I was at first averse to doing so, as I feared running short of funds, but as they refused to move unless I consented to their terms, and Chowsa strongly advised my closing with them, I agreed to do so. I had to pay them the first 10 rupees down ere they would move. I saw several Digaros smoking opium this morning. I am told no one drinks it. The Mijus, I am informed, grow large quantities of opium.

At 10.25 a.m., everything being ready, I succeeded in making a start. After ascending in an easterly (veering occasionally to north-east) direction some 200 feet we turned to the southward of east, and passed through large patches of fine thatching grass, and occasionally through some thick patches of what the Assamese call Mêglabon, which, being very tangled overhead in places, necessitated one's going along with a stooping gait, which was very tiring. We could see the Brahmaputra coming from the E.S.E. down a long straight reach, and the valley is nearly, if not quite, half a-mile across. Shortly befure 11 a.m. we came upon some fine level country, elevation 1200 feet, called Samêlang, and at $11 \mathrm{a} . \mathrm{m}$. we descended some 250 feet down a steep path in a south-easterly direction, and proceeding for a short time over loose stones we came again upon a flat conntry, which was, however, jungly in places (where it has not been very recently cultivated). General direction south-east. Recently cultivated patches can be seen on the hills on either side of the Brahmaputra, but the hills on the left bank are more precipitous than those on this bank, and they come down almost right into the river. At $11 \cdot 30$ a.m. we descended some 300 feet down a steep path to the M'daun (also called DQ) river, which is nearly as large as the Dálei. This river, which runs down into the Brahmaputra from the eastward above us, and from the north-east just below, forms the boundary between the Manyô clan of Digaros and the Miju country. There is a path leading to Lâma along its banks, which is much used for trade purpeses, and I am told that there are numerous Mij0 villages, or hamlets, up the gorge of this river, which reach to within a short distance of Tibet. But few of the people who live to the eastward of it have ever visited Sadiya, but they trade regularly with the Tibetans residing at Rima and its vicinity, and many of the latter visit the MijQ villages yearly, often going as far west as the Dalei. Salt (redlooking stuff, very like brickdust and tasting quite as gritty, though the Mij0s say it is nicer than what can be procured from Sadiya) is the chief Tibetan commodity which the Mijas go in quest of, and after it cattle, for they are excessively fond of meat and devour large quantities whenever they can procure it, and none is too tough for them to masticate or digest. They likewise affect Tibetan woollen conts, large copper "tos," which they use for brewing liquor in, swords, "kerais," cornelian beads, and a filigree silver ornament, sometimes studded with turquoise (called han by the Mij0s), worn as a charm round the neck, powder, and bullets.

The chief articles which the Mijas barter in exchange for the above are muskpods (called $t$ 'lâ), Mishmi "tita" (called pôrvâ) deer, Takin, tiger, and leopardskins, horns, a creeper (called lany'gé) for making red dye, and the leaves of a plant (called chêrâm) for making a black dye, and they likewise supply the Tibetans with a great deal of the inner bark of the sasi (Assamese word) tree, called tâkla by Digaros, which they use for making paper. They don't in fact often go to any villages to the westward of it.
'There is a cane bridge across the M'daun, but we all crossed it on a fishing weir,
for it is not easily fordable even now. A little to the eastward of the Mrdaun the Brohmaputra is seen running down from the east ward, but it turns south-east close to where the M'daun empties itself into it. There is a cane bridge across the Brahmaputra a few feet below where the Md'aun empties itself into it, and the river (Brahmaputra) is very narrow just under it, for it rushes through a stony gorge.

We halted for three-quarters of an hour after crossing the Md'aun to lunch, and Chowse made arrangements with a Mija, who is an old friend of his, for keeping one of his Khamtis who has a very sore foot until we return. Starting again at 12.20 p.m., we proceeded for three-quarters of an hour over the boulders lying alongside, but a few feet above, the Brahmaputra, and about one mile to the eastward of where we had lunch we passed another cane bridge (consisting of five thinnish canes), length about 120 yards (width of Brahmaputra about 70 yards. It turns here to south of east for a bit). At 1.30 p.m., leaving the boulders we turned in an easterly direction and ascended some 300 feet into the jungle, in order to clear a mass of rock coming down perpendicularly into the Brahmaputra. At 10 to $2 \mathrm{p} . \mathrm{m}$. we halted for five minutes, and then continuing south-east by south for a few hundred yards we came upon some recently cultivated "khets," and saw a Mija village on the left bank bearing south-west, and immediately afterwards we emerged upon a bcautifully level piece of country lying in two tiers just above the Brahmaputra, and about 1000 yards wide, the whole of which is, or has been recently, cultivated. I saw the remains of the last cotton crop in places, also some fields with Miri sweet potatoes growing in them, and many patches with opium, the plants being an inch or two above the ground. I noticed here that the Mijus waste their field rubbish instead of utilising it to improve the soil after burning it.

As observed in a previous diary, the Mijus grow large quantities of opium, and they barter as much of it as is not required for their home consumption among the Bor Khamtis for "dass" and other commodities. Large numbers of the Bor Khamtis come down yearly, I am told, into the MijQ villages situated a little further to the eastward on the left bank of the Brahmaputra to trade.

After leaving this cultivated valley we tarned to the north, and then gradually worked our way round to the north-east, and turned a couple of spurs, after which we descended a steep path and came out on to the Brahmaputra again. At $2.30 \mathrm{p} . \mathrm{m}$. We crossed the dry bed of a small hill stream, and soon afterwards a large one called Ka'sê, running down into the Brahmaputra from the north-east. From 2.30 till a quarter to 3 p.m. our path was a very rough one, often over loose stones, and round the abrupt edges of spurs, full of ups and downs. Halted for 5 minutes at a quarter to 3 p.m., and then proceeded E.S.E., and directly afterwards I saw the Brahmaputra coming down a good long reach from south-east by south, and at 3 p.m. we came right out on to it and saw another cane bridge. River about 70 yards wide. Recently cultivated khets to be seen all about on both sides of it. Then ascending for 200 feet up a steep and very broken path, we passed a small mountain stream coming down from the north-east, and soon afterwards one of considerable size called Tint, coming down from the south and running into the Brabmaputra on its left bank. After halting for 10 minutes on top of a spur, we proceeded at 3.30 p.m. in an east-south-easterly direction till 10 minutes to 4 p.m., when we came upon an open plateau, again just above the Brahmaputra, which is here running from the south-east, the hills on this bank gently undulating, those on left bank steep. At 8 minutes to 4 p.m. we descended a steep and rugged path and came out upon a lovely little sandy bay known by the name of Harangi (very similar to, only scmalier than, the one at Nara, where we camped on the 21st instant), close alongside the Brahmaputra, elevation 1250 feet, and I pitched camp there. I calculate the distance marched to-day at 12 miles, the best march we have as yet
made since wecame into the hills. The path was, on the whole, good, but difficult (except for Mishmis) in places. It would have been impossible to have made as good a march with Dowanyas, even had they been carrying half the loads. There is a rapid just opposite cur camp, and the water is rushing so furiously over it as to cause quite a small sea. Brahmaputra running from east by south just above our camp, but turning to south-east by south for a good long reach after passing it.

Saturday, December 26 th. -Up at 6.30 a.m. Thermometer registered $56^{\circ}$. Got a fine view of the snows bearing S.S.E. Left camp at 9 a.m., and proceeding south-east by south for a couple of hundred yards or so over hnge boulders close to the Brahmapatra, we left the river, and proceeding' to a point or two more easterly, we came upon a plateau, and continued for a quarter of a mile along a good path, though it was jungly in places. After this, descending a few feet, we came upon a good large river, called the Of, running down from the E.N.E into the Brabmapatra. After crossing the Oif (at an elevation of 1250 feet), which is fordable at present, we proceeded for a short distance a little south of south-east, and after crossing the dry bed of a hill stream coming down when in flood from the south-east, we arrired half an hour after leaving camp at a path leading to the eastward to the Praugd hill, upon which Taggriuson village stands, and I halted there to enable the villagers to bring us supplies.

I sent off a man yesterday evening, immediately after I had pitched my camp, to inform the villagers of my arrival; and consequently very soon after our arrival at the path alluded to, Tággriison's wife (he is away at Rima purchasing cattle) appeared. She brought down a small pig, which was immediately killed, singed, and cut up, it being the easiest way of carrying it, three small fowls (which were very acceptable, as we had been cating nothing but pig for some time past), and a maund or so of rice. She also brought down a large quantity of fermented Pobosa, and a fire having been kindled, she proceeded to make "mad," which every one (excepting myself and Molesworth) appeared thoronghly to enjny.

I noticed some very Burmese-looking faces among the women of this village, but in other respects there is nothing to distinguish them from the Digâros. Many of the women were wearing the typical Assamese silver Kenth0 so affected by Miris and Abors. A great many of the large rings worn in the top cartilage of the ear are silver, and many women were wearing heavy silver Kâras. I have seen very ferv cases of goitre in these hills to date, and none of an abnormal size. Ophthalmia too does not appear to be a prevalent disease, though squints are very common. The women are not nearly as strong-looking as the Abors, and far less demonstrative.

Leaving at 20 minutes to 12 a.m., we proceeded in a sonth east by south direct:on, and crossing the dry beds of two hill streams just after leaving the village, our path lay through a number of recently cultivated khets, and about a quarter of an hour afterwards we crossed another dry hill stream, which when in flood runs down (like the first two) into the Brahmaputra from the eestward. Half an hour after leaving the path where we had halted so long we descended to the Brahmaputra, and we walked over boulders for a bit. Chowsâ showed me a hill on the left_bank down which Cooper marched in 1870. The Brahmaputra is running down from the south-east, and is not more than 40 yards across in places. There is a cane bridge across it here. We halted for half an hour (elevation 1400 feet) to lunch. After lunch we left the Brahmaputra and ascended some 200 feet into the jungle to clear a mass of overhanging rock, and we kept in a south-easterly direction for the first 100 yards or so along a very broken and bad path, but afterwards along a tolerably good, though jungly one. At 1.20 p.m. crossed two small hill streams close together, ruuning down from the F.N:E. into the Brahmaputra (general direction aince lunch south-east). Halted bere for 10 minutes, then continuing again at $1.30 \mathrm{\mu m}_{\text {, }}$
we passed a small stream five minutes afterwards running down from the southward into the Brahmaputra on its left bank. The path from 1.30 to a quarter to 2 p.m. was very winding up and down, and stony, which made progress very slow. it. this time we came right out on to the Brahmaputra again, which is not more than 30 yards wide in places. General direction to this south-enst.

At $2.15 \mathrm{p} . \mathrm{m}$. we were still proceeding in a south-easterly direction, and we came upon a long stretch of flat country about half a mile long, most of which has been recently cultivated. It was, however, jungly in places. I saw a good many more opium-fields here, and I noticed again that the rubbish taken off the same had been thrown on one side, instead of having been burnt and worked into the soil. The long grass which originally grew on the fields had apparently been burnt, and the roots having been pulled up by means of a piece of stick with a hook to it (the ground is all very sandy, and so not very hard) had been thrown on one side. The hills on both sides of the Brahmaputra still show signs of having been recently cultivated. Soon after leaving this long stretch of flat country behind us we crossel a small hill spring called Tâkânôn, running down into the Brahmaputra from the north-east. After this, ascending about 100 feet up a steep zigzag path a point or so cast of south-east, we crossed a spur and came upon more recently cultivated country, elevation 1700 feet, on a gently sloping hill, about half a mile lcng. There is a Mijù village just above, but not in sight, and no one could give me its name. We could see the Brahmaputra from this spot, coming down from a point or two further to the eastward. After leaving the recently cultivated country alluded to, we turned a point or so east of south-east, and went over some uneven and stony ground, the path sometimes ascending, at others descending and running through thick Mềlâbôn, terribly tangled overhead, and at 3 p.m., after turning suddenly to east, we descended 100 feet or so, and crossed a small hill stream (easily fordable now), called the Halong, coming down from the north-east to east, and falling into the Brabmaputra. After crossing the Halong we ascended the left bank for some 200 feet up a stecep path, and then proceeding south-cast by south, we passed a good-sized hill stream called the Tonwân, coming down south by west, and falling into the Brahmaputra on its left bank. Then turning to the north-east to turn a spur coming down into the Brahmaputra, our path wound about over very broken ground for a sbort time until we again emerged upon another fairly large patch of recently cultivated country on the slope of a steepish spur coming down into the Brahmaputra. After winding round this spur and crossing a small hill spring running down from the north-cast over bard rock and forming a small waterfall, I camped at $3.35 \mathrm{p} . \mathrm{m}$. in a vilely uneren and jungly spot, as the Mishmis declared that there is no water on ahead that we could reach before dark. Elevation 1900 feet. We saw the snow which was visible before leaving camp this morning nearly all day long. We were marching for four hours only to-day, exclusive of halts, and I reckon we did about eight miles. General direction south-east.

Sunday, December 27th.-Up very early. We could not pitch a tent last night, owing to the unevenness of the ground, and so passed a somewhat disagreeable night. After evelything had been packed ready for a start I wrote a letter to the Deputy Commissioner, telling him of my movements since leaving Takulong's village, and I got two Mishmis to carry it into Sadiya for 10 rnpees and one tin of powder each, and a promise of a little rice and salt on arriving there. I left camp at 9.20 a.m., and proceeding in an east-sonth-easterly (turning sometimes a little more east, at others a little more south) dircction for an hour, we passed a cane bridge across the Brahmaputra soon afterwards, and then a small hill stream coming down from the north-east. The path to this point was very bad, being terribly up and down, and in one spot it tcok us across the edge of an almost perpendicular rock with nothing
but a few little niches for one's toes to rest upon, and with a yawning cavern below to receive one in the event of a false step or a slip being made. The ordinary Mishmi cattle path is some distance above it. At 8 minutes past 10 a.m. we passed another small hill spring, trickling down from the northward. After crossing the spring our path turned a little more to the eastward, and we passed another trickling hill stream not very far from the last one. At 10.25 we came out into some opium fields and saw the Brahmaputra just below, coming down a good long reach from the eastward. Our path had been very stony, up and down, and jungly, from where we camped last night up to this point.

Chowst again pointed to a hill called Kalom, on the left bank, as the one along which Cooper marched in 1870. There is a little snow to be seen on a hill bearing W.S.W., and another thickly clad peak, with large masses of suow in the gorgea, bearing east by north, and a beautifully cold wind is coming down from it. Halted for 10 minutes to enjoy the view. The several spurs on both sides of the Brahmaputra to be seen from this spot show signs of having been recently cultivated, but there are no villages in sight.

At 10.30 a.m., continuing our journey in an east-south-easterly direction, we descended some 700 feet down a good path, though the first portion of it was overgrown with Mêylabôn, and at 11 a.m. we passed another cane bridge across the Brahmaputra right opposite a hill stream called the Chatti *unning down from the south into the Brahmaputra on its left bank. Saw more snow-clad hills to E.N.E. Our path from 10.25 a.m. up to this spot lay close alongside the Brahmaputra. At 11.25 a.m. I halted at an elevation of 1300 feet for three-quarters of an hour, just under the Mij0 village of Tild, which is on the Mon Hill, bearing north. MM. Krick and Boury went to Rimâ by this route.

Leaving again at $12.10 \mathrm{p} . \mathrm{m}$., we commenced proceeding east by south, but soon turned sharp round to the N.N.W., and crossed the almost dry bed of a large hillstream called the Kalan, which comes down when in flood from the north-west, after which we turned again to south-east, then to east, and subsequently to northeast, and ascended some 900 feet up a winding and at first a steep path. Then proceeding east by north we passed a large hill stream rushing down from S.S.E., evidently from the snow-clad peaks to be seen in that direction, and falling into the Brahmaputra on its left bank, after which we turned again to south-east, then to east, and subsequently to north, ond soon afterwards turning to the north-east and then to north, we crossed the dry bed of a hill stream, coming down when in flood from the north.

After this our path turned again to the north-east, and then to east and southeast, and we descended 900 feet and crossed a large hill stream at an elevation of 1300 feet, called the Halai, running down very strungly from the north-east from afar, but from the northward a few hundred yards or so before it empties itself into the Brahmaputra. It is not fordable even at this time of the year. We crossed it by means of a slight wooden bridge, with railings to it, and there is a cane bridge across it a few feet below the wooden bridge. The hills on the right bank of the Halai, where we crossed it, are very steep, hence our having to turn in a northeasterly and northerly direction and proceed some distance ere we descended to it.

Just before descending to the Halai we passed through a large recently cultivated Khet, full of large felled unburnt trees, which made the going, especially for laden men, very difficult. It was 10 past 1 p.m. when we crossed the Halai, that is, one hour from the spot where we had lunched, distance 21 miles. Just below the bridge which we crossed it on, the river (Halai) turns sharp to the westward

* $t$ is the Mija word for "water," so many of the names of the rivers in thers country end in $\boldsymbol{t}$.
for a few yards, and then sharp round to south, before it falls into the Brahmaputra. I halted here 25 minutes for Chowsa, who stayed behind to eat. There are a large number of pine trees growing close down to the Halai on its left bank. This is the first day we have seen any. The first were visible just after we passed Matshonshâ village. There are numerous Mijd hamlets up the gorge of the Halai, but the people inhabiting them are all poorly off, and no Mijd of any influence lives amongst them. These hamlets do not extend beyond a day's journey or so from this spot. After crossing the Halai we ascended in a south-by-east direction some 800 feet up the side of a spur running parallel with its left bank through tree jungle, and on reaching the top of it we continued for ten minutes or so E.S.E. along a level path, and then crossed a hill stream called the Namtl running down freely from N.N.E., after which our path became winding for a bit, when we came on to a beantifully level plateau, and we continued along it in an east-south-easterly (varying occasionally a point or so one way or the other) direction till 20 to 3 p.m., when we saw the Brahmaputra coming down from a similar direction. Just about this time we saw a beautiful waterfall above the Brahmaputra on its left bank. The hills are all covered with pines and hill oaks from the Halai to this spot. After this, descending a bit, our path lay round the edges of the neighbouring hills till 3 p.m., when my aneroid registered the height 1900 feet, and we halted for 10 minutes among a lot of wild lime trees, some of the fruit of which every one picked and ate. They had but little jaice in them, but were otherwise not bad for jungle limes. After leaving the vicinity of the lime trees, we crossed the dry bed of a hill stream which, when in flood, comes down from the north, and continuing in a winding direction, we doscended another 100 feet or so, at $3.30 \mathrm{p} . \mathrm{m}$. I pitched camp on a tolerably level spot alongside of a small running stream. Elevation 1800 feet.

There is a M1j0 village on a hill called Moing, which is to the north, above us. The village is said to be a very large one, and the headman's name is Gongsha. He is of the Naf clan. We were marching for five hours to-day, exclusive of halts, and I reckon we did aboat 10 miles. General direction E.S.E. In the evening I tried to get Makuison to give me the names of the Mija villages on this bank of the Brahmaputra from the M'daun river eastwards, but he declared that he could not do so. He merely said, "There are a great many villages, or rather bamlets, along bote banks of the Brahmapatra, as also up the gorges of the large rivers which run down from the north and southward." The names of the chief Miju clans are:-Lapa, Pran, Manlo, Nar (a very numerous one), Sâmlê, Hâgon, Tơwâ, Rô, Tumbla.

Monday, 28th December.-Up at daylight. Thermometer registered $47^{\circ}$ at 7.30 a.m. Lovely morning. We have been exceptionally lucky in our weather since we left Sadiya, having had rain twice only.

I noticed some very Burmese-looking faces again among the women of this village. It is wonderful how uninquisitive every one is. People of both sexes of course prowl about examining things, but not in the monkey-like manner of the Abors or Chulikattas. We left camp about 8.30 a.m., and proceeding in an east-southeasterly direction, descended to within a few feet of the Brahmaputra. Crossed a hill stream running down strongly from the north-east (could not get the name). Soon afterwards turning north-east by north, we ascended some 50 feet or so, and proceeding a little more easterly, we descended a few feet, and the path running close alongside the Brahmaputra, which is not more than 30 yards wide in places, turned E.S.E. At 9.15 passed a cane bridge across the Brahmaputra and halted 10 minutes. The path up to this time was very broken, stony, and uneven, Brahmaputra running from south-cast just here. Saw a lot of fine mithon belonging to Gôngsh̊ village, also some fine hybrids (cross between a Hâmâ cow and a bull mithon, I was told).

Continuing again at 9.25 a.m., we soon afterwards came upon a tolerably level piece of recently cultivated country, covered however with rocks, some of which are of large size. General direction till 10.10 a.m. E.S.E., after which we turned a little more easterly, and passed a hill stream coming down from the northward, and at 10.20 another small one, called the Krang, descending from the north-east (elevation 1700 feet). Path continued stony and uneven to this. It is also very badly defined, for, being a new one, it has not yet been properly trodden. General direction to this east by south, distance about two miles. At 25 minutes to 11 am. my aneriod registered the height at 1800 feet, but we soon afterwards descended for some 100 feet, again down a very steep path, in a south-south-easterly direction (Brahmaputra running down from a similar direction). Then we ascended 100 feet or so again (my aneroid registering 1800 feet), but immediately afterwards descending 50 feet or so, we came upon a tolerably good path, though very up and down here and there, and overgrown with Mêglabôn in places, running E.S.E., and sometimes east and N.N.E. We continued along this middling path till 11.5 a .m, when I halted for five minutes. Elevation 1800 feet. Saw snow (apparently the same which we saw yesterday) pretty close to us and bearing E.S.E. The bills are all covered with pines, and recently cultivated khets are to be seen everywhere on both sides of the Brahmaputra.

Continuing our journey again at 11.10 a.m., we deecended a few feet in an east-north-easterly direction, and passed through a recently cultivated khet, full of fallen trees. Path very bad, being over large rocks. At 11.20 mm . I halted at a fine large hill stream called the Sa, running down into the Brahmaputra (which is some little distance to the S.S.W. below us) from the north-east, for 30 minutes to lunch. We bad no difficulty in crossing the SA by jumping from boulder to boulder. Elevation 1850 feet, where we lunched. Starting again at 11.50 a.m., we ascended some 300 feet or so in a south-east by south direction, and then turning more to the eastward we continued along a rough, winding, and jungly path till 12.25 p.m., when my aneroid registered 1900 feet, and we looked right down into the Brahmaputra, running from E.S.E., which turns to south-west and south a little below. Our path since lunch-time was very bad in places and it wound about in order to turn the several spurs abutting on the Brahmaputra to the south-west of us. After this, descending 100 feet or so down a nasty and somewhat dangerous path for porters, we came right out on to the Brahmaputra (elevation 1700 feet) and proceeded for a short time over boulders in an east-south-easterly direction. At a quarter to 1 p.m. we crossed a large hill stream called the Cbua, coming down from the northeast, and emptying itself into the Brahmaputra, which is not more than 20 yards wide in some places, where it runs straight, and I halted for 10 minutes.

Then, continuing again at five minutes to 1 p.m., we left the Brahmaputra, and proceeding in an east-south-casterly direction for a few yarde, we turned gradually to S.S.E., and descending to the Brahmaputra again, we proceeded over boulders and rocks once more, and at ten minutes past 1 p.m., after crossing two small hill streams running down into the Brahmaputra from the eastward (elevation 1800 feet), I halted 10 minutes. Then at 1.20 p.m., leaving the Brahmaputra, we ascended in a southeast by south direction some 100 feet or so, and at 1.35 p.m. crossed a small hill stream trickling down from the north-east into the Brahmaputra, and saw another cane bridge over the Brahmaputra soon afterwards. From 1.20 p.m. up to this time ( 1.35 p.m.) our path was very winding, up and down, and stony. General direction between south and south-east. The Brahmaputra is running from E.S.E. just below the cane bridge alluded to. At eight minutes to 2 p.m. we crossed another amall hill stream coming down into the Brahmaputra from the east of north-east. Path
still bad, being very uneven and jungly. Halted eight minutes. Elevation 1900 feet. Brahmaputra running from S.S.E.

At 2 p.m., continuing our journey in a south-sonth-easterly direction, varying every now and then a point or so either way, we proceeded just above, and almost parallel with the Brahmaputra till 2.15 p.m., up to which time the path was still stony, rough, and in places jungly. Saw two small streams close together, one called the Watl and the other the Sumjl, running down from south-west by west into the Brahmaputra on its left bank. Halted just opposite them for five minutes, after which, at 2.20 p.m., we proceeded over the Brahmaputra boulders till 2.30 p.m., when we left the river, and ascending in an east-south-easterly direction for a short time, we turned due east, owing to a rocky hill coming down perpendicularly into the Brahmaputra. The path frum 2.30 till a quarter to 3 p.m. was as bad as it could possibly be, being terribly up and down, stony, and jungly.

At a quarter to 3 p.m. we emerged into the Brahmapatra again (elevation 1700 feet), and proceeled over boulders in a south-east by east direction (river flowing from a similar direction) till 25 minutes to 4 p.m., when we left the river, and ascending in un easterly direction an extremely uneven, stony, jungly, and badly defined path, turned to north-east and then back to south-east, and at 4.10 p.m. we came upon a narrow piece of flat country a few feet above the Brabmaputra, which is running east by north (just below this it runs away due west, and just above us it is coming down from the south-east), and I pitched camp there. The spot is known by the name of Phing, and the elevation is 1850 feet. Chowsa asked me to halt here to-day, in order that I might interview Tonson, who is a brother of Boson, deceased (the chief alluded to at page 243 of Cooper's book 'The Mishmi Hills'), and a man of great influence in these parts. We were marching for $\mathbf{6 !}$ hours to-day, exclusive of halts, and we did about 12 miles. General direction E.S.E. It was, in my opinion, the hardest march we have yet had. We are a little to the eastward of Tonson ''s village, marked on the map as Prun, which is, by-tho-bye, the name of one of the Miju clans. Cooper's fartheet! We could see the village, which is said to have thirty houses in it, while proceeding along the boulders of the Brahmaputra at 3 p.m., but we cannot see it from where we are now. Two of Tonsung's nephews came into camp soon after we arrived here, and stated that Tonsong, who is said to be very ill, and to have been unable to move for some time past, had eent them down to try and dissuade me from proceeding to Rima. The arguments they used were in substance that the Rima officials object very much to strangers entering their country; that they dare not, in fact, let any into Rima, as the Lhassa Raja has prohibited their doing so; that consequently, if I insist on proceeding there, I shall be insulted and most certainly turned back as soon as my presence is discovered; that Tonsong, for the above reasons, is most anxious to prevent my proceeding there, if for no other reasons than that he will be blamed for not having stopped me.

In reply to this I said that I thought it was impossible for Tonsong to say, with any degree of certainty, how the Rima officials would receive me; that I was most anxious to go there, and that I would run the risk of getting an unwelcome reception; and as Chowsa had a long talk with Tonsong's two nephews after this, and no doubt explained that Tonsong would get a good present if he placed no obstacles in my way, bat permitted me to proceed to Rima and take my chance of being well or otherwise received, they intimated that they would return to their villagu and tell Tonsong what I had said, and would visit me again on the morrow at a spot some litule distance to the eastward of this, where it was arranged I should move to in the morning, as the only water available here has to be got with much difficulty, on account of the boulders, from the Brahmaputra. It was quite dark when Tonsong's nephews left my camp to return home.

Tuesday, December $29 t h$.-Thermometer $53^{\circ}$ at 6.30 am . this morning in a very sheltered spot. On leaving camp we proceeded east by south along an uneven and stony path, parallel to, but a little above the Brahmaputra, for five minutes or so, and then descending to the river, we continued over boulders till 25 minutes to 10 a.m., when we passed a suspension bridge across the Brahmaputra quite different from any I have yet seen. It consists of three three-stranded bamboo ropes, each about an inch in diameter, twisted beautifully together, the whole forming a small hawser some three inches or more in diameter, which, I am told, is very strong and durable. As far as I could judge after examining the rope carefully, it is made up of the tough outside part of the bamboo only, so that a very large number would be required to make a bridge, and the work of twisting must be very laborious. This particular bridge is nearly, if not quite, 200 yards long. It has a stage or platform to take off from or land on, but there are no hoops attached to the hawser, so I have yet to learn how the crossing is effected. I halted here seven minutes. The Brahmaputra makes a small letter 8 , just above the bridge, coming down from N.N.E., then east by south, and then from south and W.S.W. Leaving the Brahmaputra again at 18 minutes to $10 \mathrm{a} . \mathrm{m}$., we ascended in a north-east turning to easterly direction 100 feet, up a very steep and difficult path, and then turning to sonth-east by south, got on to a tolerably level bit of country, and the path ran through some recently cultivated khets, in which I pitched camp at 10 a.m. (elevation 1850 feet). I reckon the distance from our last camp at two miles only. The name of the place in which our camp is pitched is Chunggum, and the land is cultivated by Tonson's people. The Brahmaputra is some distance below us, and is flowing from nearly due east to the westward down a fairly long reach. In the afternoon large numbers of Mijus from Tonsong's village came into camp.

Wednesday, December 30th.-Up at daylight and found it spitting with rain. We also had a little during the night. Thermometer registered $52^{\circ}$ at 7 a.m. I aaw a beautifully soft, and well twisted, three-stranded rope, about half an inch in diameter in the middle, but tapering away at both ends, this morning. It looks exactly like camel's hair, and feels like it too when handled, and it is made of stuff called chikok by the Mijus. It is a very fibrous creeper I believe. This rope is, I am told, very strong and tough, and it is said to last a long while, and from the look of it I can well believe that this is so. It is used to cross the bamboo-made hawser bridges alluded to in yesterday's diary. The following deecription will illustrate how the crossing is effected on these bridges. The bight of the rope having been passed through a wooden eye made on the top of a piece of very hard wood, about eight inches long, and six inches in diameter, with a slot in it of sufficient size for the bamboo-made hawser to reet firmly in it, the two ends are passed through the bight and are made to hang down, one on each side of the piece of wood with a slot in it. The slot in the latter is then placed on top of the bamboo-made hawser and the two ends of the rope having been picked up from underneath (the bamboo-made hawser), they are passed round the rump of the person wishing to cross the river, and both having then been brought up again tigbtly to the eye on the piece of wood with a slot, they are twisted carefully and then knotted in a peculiar way, so as to leave a bight large enough to go over the person's head and rest on the nape of his or her neck, and when all is ready the person about to cross places both hands (open) over the top of the piece of wood with a slot, and pressing it down tightly on to the bamboo-made bawser, lifts his legs off the platform (erected for taking off from), and away he slides towards the centre of the span. As soon as the piece of wood with a slot in it stops going, the person crossing lies back and, cocking his legs in the air, works his way up the other side by means of his hands, and, if necessary, feet aleo, like the Digaros do when in the hoops they use.

If a Mishmi has a load to cross he tiow it below him and carries it over with him. This MijQ method of crossing rivers is far preferable to the Digâro one, for in the first place there are no joints in the bamboo hawser, so that the piece of slotted wood travels more easily and much faster than the Digaro hoops do, while in the second the person crossing is in a sitting posture (which it is impossible to effect in hoops) for one-balf of the journey across, and so is much less fatigued. He or she can also return to this sitting position and rest thus, whenever it suits their doing so, whereas in the hoops one has to reet, if necessary, in the most awkward position possible.

It was five minutes after 9 a.m. when we left camp. We commenced going in an easterly direction, but only for a few hundred yards, when we turned to the northcast, and proceeding thus for a short distance, we descended a few feet, and crossed a good-sized hill stream called the Matt, coming down from the N.N.E. and falling into the Brahmapatra. After crossing the Mati I saw a large river called the Latt, running down from the south into the Brahmaputra, on its left bank. There is quite a large-looking valley just where it emerges from the hills before it falls into the Brahmaputra. Then turning gradually to the eastward and subsequently to the south-east to turn a spur coming down into the Brahmaputra (which is running from east to west here) we crossed, at 9.30 a.m., another hill stream coming down from the N.N.E. (our direction at the time being south-east by east) and falling into the Brahmaputra. Our path thus far was very up and down and stony.

At a quarter to 10 a.m. we emerged on some recently cultivated khets (Brahmaputra running from the E.S.E. here down a short reach) and our path up to this still continued up and down, and stony, and was likewise very winding in places. Tonsong has two or three huts just here, on the left bank of the Brahmaputra, where he keeps some slaves at this time of the year to collect fuel, \&c. These huts are on a fine piece of level country covered with pine trees, and the Brahmaputra is coming down from the E.S.E. After passing through the recently cultivated khets we descended close to the Brahmaputra and kept along a path running close to, though a little above, it till 10 a.m., when we turned to the north and ascending some 40 feet or so up a steep hill we turned round to E.S.E. and emerged upon some old Indian-corn cultivation. Path up to this still very winding, uneven, and stony. At 10.15 a.m. our elevation was 2100 foet, as we had ascended a steep and badly defined path in an easterly direction. After this we turned S.S.E. again and saw a lot of hill monkeys. At 25 minutes to 11 a.m. We passed another Mijd bridge across the Brahmaputra. Elevation 1800 feet. After passing the bridge we ascended in a north-easterly direction 100 feet or so in order to clear a mass of rock, falling perpendicularly into the Brahmaputra, and at 15 minutes to $11 \mathrm{a} . \mathrm{m}$. we came out on to the Brahmaputra running from the east down a short reach. Elevation 1800 feet. River only 35 yards or so broad in places. There is a very furious rapid just here, with a drop of eeveral feet to it, another just above it. These rapids are, I notice, getting much more frequent now. Recently cultivated patches are still to be seen on the hills bordering on both sides the river. The hills on the left bank appear a little less steep and broken now than they were further to the westward. Two Miju houses on the left bank are in sight, and there is a very large accumulation of drift wood, chiefly pine, about the place. I halted here for thirty-five minutes.

Starting again at $11.20 \mathrm{a} . \mathrm{m}$. we proceeded in an east-north-easterly direction for nearly an hour, often over a very rough, uneven, and jungly path, and at 15 minutes to 12 we emerged upon a fine flat grassy piece of country, balf a mile or so long, after which we entered more jungle. At $12 \mathrm{p} . \mathrm{m}$. we crossed the beds of two small hill streams, coming down from the north, and fifteen minutes later we emerged on
the Brahmaputra. Elevation 2000 feet; our path from 11.20 till now having been but a few feet above it. I halted here for an hour. The Brahmapatra is not more than 20 yards (here) in places, and it is running from the E.N.E., bat jast above it runs down from east, and then from the north-east. The hills on the right (this) bank are rocky, bare, and bleak looking, while those on the left bank, though less bare looking, are also very rocky.

Continuing again at 1 p.m. we proceeded east, and ten minutes afterwards came upon a fine level piece of country (elevation 2000 feet) over a mile long, and I saw some very fine old pines. At 1.20 p.m. passed another Mija house on the left bank. Brahmaputra flowing from northeeast just here. At 1.30 p.m. our path was jungly, up and down, and stony. Passed a small hill stream coming down from north-west by west, our direction being N.N.E., and the Brahmaputra is flowing from the same direction. At 1.35 p.m. We came right out on to the Brabmaputra, elevation 2000 feet, and we continued in a northeasterly direction along its boulders, some of which are of an enormous size, and the whole slope at an unpleasant angle towards the river, so that walking along them is dangerous work; for if one were to become dislodged, a large number would go with it and probably crush one before one could escape. There is a distinct muddy look about the boulders lying for some 20 feet or so above the river which marks very clearly the height of the river when in flood. At 1.40 p.m. (when still going over boulders) we turned to E.N.E. (Brahmaputra coming from same direction down a good long reach). Rapids numerous, and very strong. Hills still bleak and rocky, and very bare in places. $\mathbf{\Delta}$ few recently cultivated patches to be seen on the hills on the left bank, but none on those on the right bank. We continued going over boulders till 2 p.m., when we ascended into the jungle growing just above the river. Passed another Mija bridge here, also a small hill stream running down from the northward. Halted here for ten minates.

The country on the left bank belongs to a clan of Mijus called Lâmât. They are said to be pretty numerous, and they are very fond of exercising their lordly rights in thees parts by levying black-mail from such Digâros who visit this part of the country, especially those who happen to be on unfriendly terms with their clan, or with any members thereof. If the black-mail is refused, any articles which the Digaros refusing it may be carrying are immediately seized and stuck to. Their villages lie far up the gorge of the Kalang, a large river a little more to the eastward of this. The Brahmaputra is running from the E.N.E. here.

Continuing again at 2.10 p.m. in an E.N.E. direction, we proceeded for five minutes or so over an uneven and stony path just above the Brahmaputra, and then came upon some old cultivation, when the path improved a bit. $\Delta t$ a quarter to $3 \mathrm{p} . \mathrm{m}$. the Brahmaputra was seen running down from the cast by north, and turning to south just below us. We ascended some hundred feet or so above the river about this time, and continued in an E.N.E. (varying occasionally a little to north) direction along a better path till 3.10 p.m., when we arrived opposite the Kalang (the river alluded to just above). It is a very large river coming down from the south-east, and falling into the Brahmapatra on its left bank. It has a fine broad valley (in the vicinity of) where it empties itself into the Brahmaputran As before observed, the Lâmât clan of Mijus have numerous villages up its gorge. I am told that there are very few Mijus living to the eastward of the Kalang. This river is alleged to take its rise in the high mountains lsing to the south-east, but close to the country of the Bor Khamtis; whose villages are said to be only four days distant frcm this. The Bor Khamtis trade freely with the Lamât and other clans of Mijus, and people from both tribes visit one anotber regularly every year for purposes of trade. The Bor Khamtis visit the MtjO villages lying a long way to the west of this. The chief articles brought down by the

Khamtis for trade are "daos" (which they obtain from the Singphos, for they have no iron in their own hills and do not understand manufacturing them. It is difficult to understand how these weapons originally came to be called Khamti "daos," when they are really Singpho "daos." I suppose because Khamtis sold them they were believed to be manufactured by them) and gongs, and very large numbers of the former are, I am informed, disposed of yearly. The Mtjos likewise purchase slaves from the Bor Khamtis, and the chief articles which they carry to the Bor Khamti country are cloths of all kinds (most of which come originally from Sadiya, being parchased from the Digalros living to the weet of the M'daun river, who again purchase them from Digaros living west of the Dalei), musk pods, and opium (large quantities are, I am told, taken up to the Bor Khamti country yearly by the Mijus).

There is no path to Rim\& on the left bank beyond the Kalang river, so that any one wishing to go there must cross over to this side to do so. Just before passing the Kalang I saw another MljQ bridge over the Brahmaputra, as also a Mijd house on the left bank of the river. The hills on the left bank are now a little less bleak looking, but those on this bank are still so. At 3.30 p.m. we crossed a hill stream called the Chart, running down very strongly from the westward, and our path then turned in that direction; and ascending a few feet through thick jungle we arrived at Lüsê Mija house, and I pitched camp close to his house at 20 minutes to 4 p.m. Elevation 2200 feet. Brahmaputra about a quarter of a mile to eastward below us.

There are four other houses belonging to LAsê's hamlet, but they are all very scattered. These people have never visited Sadiya, and it may be asserted generally that but very few of the people living to the east of the M'daun have ever been in there, and that consequently they knew literally nothing about us, and this being the case, it is marvellous how well we have been received everywhere. Some of the Mijus, living as far east as this, have guns, which they purchase from those living further to the westward. I am told they can get none from Rima.

We were marching for 4 hours and 50 minutes to-day, exclusive of halts, and I calculate we did about 10 miles. Our general direction was E.N.E.

Thursday, December 31st.-Up at daylight. Thermometer $50^{\circ}$ at 7 a.m. We are surronnded by hills, or we should feel it much colder. As it was, the early morning was very raw, and there can be no doubt that snow is falling on the higher hills. At 9.25 a.m. we left our camping ground. Starting in a north-east by north direction we-crossed two small streams, coming down from the northwest, just after leaving the village, and continuing thus, along a path running a few feet above the Brahmaputra, till 10.10 a.m. we turned a little more to the northward, and the Brahmaputra was seen coming down from a similar direction. Our path up to this point was stony, very up and down, and jungly. Passed a very furious rapid just about this time, having a drop of several feet to it. From 10 minates to $10 \mathrm{a} . \mathrm{m}$. till $10 \mathrm{a} . \mathrm{m}$. we were going along a fine grassy level, but afterwards ascending a few feet we got into jungle again, and the path became once more stony and uneven. Met two Mijus returning from Rima. They told us that the Rima officials bad no intimation of our coming up to the time they left. At 10.10 a.m. the Brahmaputra was seen coming down from the N.N.W. down a short reach, and our path was still nneven and stony, and the jungle so low overhead that we were compelled to go along in a stooping posture. At 10.15 a.m. we passed a Mij0 bridge across the Brahmaputra (path still jungly), and at 10.20 a.m. a small hill stream coming down from the west, after which we emerged from the jungle on to a level piece of country, bearing signs of having been recently cultivated in places. Then soon afterwards, proceeding N.N.E. for a short distance, we turned northeast, and emerged soon afterwards on to the Brabmaputra (elevation 2100 feet).

Leaving again at 10 minutes to 11 am . we proceeded north-east along a fine level piece of conntry (passing a small hill stream coming down from the westward -and I saw another coming down from the eastward and falling into the Brabmaputra on its left bank-at 11 a.m.) till 10 minutes past 11 a.m., when we passed a furious rapid in the Brahmaputra, which is running down north by east, and our path became uneven and jungly, though only for a short distance, as we came upon a level bit of country again almost immediately, and continued along it in a northeasterly direction till 11.25 a.m., when, turning to the north-westward we crosed a large hill stream (at an elevation of $\mathbf{2 2 0 0}$ feet) called the Kamti, running down from the W.N.W. into the Brahmaputra. Then proceeding north-east again, we ascended some 200 feet or so up a steep hill and got on to more flat country, and proceeding along it till we gradually rose another 100 feet, the aneroid registering 2500 feet; after which at 15 minutes to 12 we turned a point or two further north, and proceeded so till noon. Saw snow-clad peaks to south and south-west, aleo two or three reaches of Brahmaputra in same direction from this spot.

After this we descended some 200 feet down a winding path and continued just above the Brahmaputra in a north-north-easterly direction (elevation 2300 feet), and at 20 minutes past 12 p.m., we came out on to the river (elevation 2200 feet). Passed two small hill streams coming down from the westwand just before emerging on to the Brahmaputra, and I discovered to my great grief that I had lost the needle from my pocket compass, the only one I have with me. At 10 minntes to 1 p.m., wo left again in a north-north-easterly direction, and, proceeding over boulders till 1 p.m., we passed a magnificent rapid with a drop of several feet, running like a sluice. The Brahmaputra is not more than 20 yards wide in places. After this, turning a little more to the northward, we continued going over the boulders for five minutes longer, when we ascended some 200 feet and soon got into jungle just above the river, and continaing in it till 1.20, we emerged on to an open piece of country, recently cultivated in places (elevation, 2400 feet), and we continued along it till $1.30 \mathrm{p} . \mathrm{m}$., when we again found ourselves close to the Brahmaputra (elevation, 2250 feet). For some ten minutes or so before coming out on to the river our path was rough, stony, and jungly. After proceeding over boulders for a few yards, we got on to a fine sandy path, interspersed with bonlders, and running a few feet above the river, and continuing along it till 20 minutes to 2 p.m., I halted for 10 minutes opposite Shâphes Mija's house, which is on the left bauk. He is of the Talang clan. Country very bare and rocky-looking, and but little old cultivation to be seen about anywhere. 'The left bank of the Brahmaputra is rocky aud perpendicular just here.

Continuing our journey at 10 minutes to 2 p.m., we proceeded over boulders till 2 p.m. in a slightly more northerly direction, when we passed a amall hill stream coming down from the westward, and then got on to a level piece of grasy country, just above the Brahmaputra, and continued over it till $2.15 \mathrm{p} . \mathrm{m}$. Hills on the left bank a good deal cut up with ravines, which have tree jungle in their vicinity, but the rest of the hills are bare and bleak-looking. Halted here for 10 minutes.

At 2.20 p.m. continued in a north-north-easterly direction and 8000 got into jungle again. Crossed a hill stream coming down from the west at 2.30 pm , and then ascending some 50 feet or so up its left bank, we got on to a level grassy pieco of country just above the Brahmaputra, with a recently cultivated khet or two here and there about it, and passed a Mij0 bridge (across the Brahmapatra) at 20 minutes to $3 \mathrm{p} . \mathrm{m}$. Continued along till 8 minutes to 3 p.m. (elevation 2400 feet), when we again got into jungle, and our path wound about among some spurs, coming down in a very broken manner into the Brabmaputra. In some places the path
was good, but in others it was stony, up and down, and uneven. At 8 minutes past 3 p.m. we passed a good-sized hill stream (I couldn't get the name) coming down from the south-east into the Brahmaputra on its left bank. I halted for 10 minutes just after passing it, and continuing again at $3 \cdot 18$ p.m., we met three Mijls returning from Rima directly afterwards. They told me that they had slept out four nights since leaving Rimâ, so that we are some distance off yet! Proceeding onwards our path became uneven, up and down, and jangly, until at 3.30 p.m., when (at an elevation of 2500 feet) we descended some 200 feet down a steep zigrag path, and getting on to a long strotch of flat grassy country just above the Brahmaputre we contioned along it till a quarter to 4, when I halted for 15 minutes to let stragglers come up. I notice that our Mishmi porters are travelling slower every day. Chowss says they complain of being foot-sore, and say that their loads are heavier than they are accustomed to carry. There is an old Mija bridge across the Brahmaputra here. The hills on the left bank are bleak-looking and bare ; thoee on the right bank are covered with trees.

At 4 p.m., starting again, we proceeded into some jungle (just above the Brahmaputra) in order to turn a spur or two, coming down into the Brahmapatra, and at 4 p.m. we crossed, by means of a wooden bridge, a large hill stream called the Chungt1, running down from the westward, and scon afterwards a small one, the name of which I could not get. Then ascending a few hundred feet, gradually at first, but up a ateepish path just before reaching the village in a northerly direction we reached Krondong's house (elevation 2600 feet) at 4.30 p.m., and our Mishmi porters all came in about half an hour afterwards. The name of the hill on which the house stands is called Satf, after a hill stream running down from the west a little to the north-eastward of this. Krondong came out to pay his respects to me soon after our arrival. He is a pleasant, quiet-looking, old man, about 48 years of age, very short and thick-set, and he was wearing a woollen Tibetan coat (not tied at the waist), and the typical Tibetan billycock with a turned-up brim. He killed a Lama cow soon after our arrival, and presented us with a piece of the beef, two fine cocks, and a little rice.

Friday, January 1st, 1886.-Thermometer $46^{\circ}$ at 7 a.m. It was very cold during the night, and the wind, whistling ap through the mat floor of the granary that we slept in, made it any thing but pleasant. Krondong is a very wealthy Mija, bat he is spoken of as being a very mild man, and as wanting in energy, and consequently he possesses less influence among his tribe than he would otherwise command on account of his wealth and numerous relations. He addressed me in substance as follows :-"I have never seen a Saheb before, for I cannot remember the Padri Sahebs who came this way, as I was then too young, but I have heard a great deal about them, as also about the Maharani and her counsry. I hear you are desirous of proceeding to Rims, but I would strongly advise you not to go there, as the Governor is certain to insult you, and you will be ordered to leave the country as soon as your presence is discovered. Your going into the country too will bring trouble on the ryots, as the Governor will declare that they have given you food, \&c., and will fine them heavily, as also beat them, and, as I have many friends in the place, I do not wish them to get into tronble. If, however, after hearing what I have said you still express a wish to be permitted to continue your journey, I will not oppose you, but will let you proceed, and you must take your chance of what happens."

I thanked him for his advice, and said I was very anxious to proceed on towards Rima, and that I would take my chance of being well or otherwise received there, and I begged he would not send on any messenger to inform the Governor that I was in the neighbourhood.

It was 22 minutes to $10 \mathrm{a} . \mathrm{m}$. when we started. We proceeded in a north-
easterly direction, and deecending a few feet, croseed the Sâti, a large hill stream coming down from the westward (from which Krondong's people get their water), after which we continued descending until my aneroid had registered 2400 feet, when we turned to the north, 'and kept along a path running just above the Brahmaputra till 10 a.m., at which time we pased a house on the left bank belonging to Krondon's son, then descending another 500 feet or so nearer to the Brabmaputra we came (at five minutes past 10 a.m.) upon a level piece of country, and continued along it in a northerly direction for five minates, when leaving the vicinity of the Brahmaputra we turned to the westward, while, turning a spur coming down into the Brahmaputra, and then got round gradually to north again, and after crossing two small hill streams trickling down from the westward (towards the Brahmaputra), we turned a point or so more easterls. Our path up to this was rough and jungly in places. At 20 minutes to 11 a.m. we were at an elevation of 2800 feet, and looked right down into the Brahmaputra, which was then flowing from nearly due north down a pretty long reach. Halted here for 10 minutes to let stragglers come up. The path which lay on the eige of a perpendicular spur was a very narrow one, and it was covered with pine needles likewise, making it very slippery, so that we had to go along very cautiously, for a slipmeant certain death. I saw another Mij0 house on the left bank and a Mija bridge acrose the Brahmaputra from this point. The hills on both banks are rocky and are covered with pine trees.

At 10 minutes to 11 a.m., starting again, we continued winding round two other spurs, and got a glorious view of the snows to the south-west, as also a glimpee of more to the north-east, then commencing to descend at 13 minutes past 11 m m . we came upon a flat piece of country just above the Brahmaputra. Elevation 2400 feet. I halted here for 30 minutes to let our porters come up, as they had lagged very considerably behind, owing to the path being difficult and very slippery. The Brahmaputra is running down from a point or two more easterly here. At 15 minutes to 12 we left again in a north-north-easterly direction, and soon afterwards got into jungle, growing on the edges of the hills which run down into the Brahmaputra, and our path wound about a good deal, ascending and descending 100 feet or so, and at 15 minutes past 12 p.m. we came out close to, but a short distance above, the Brabmaputra. Elevation 2600 feet.

At a quarter to 1 p.m. we continued our journey along a path which led us into the jungle, and wound in and out of the gorges between some spars, coming down into the Brahmapatra. It was very stony and uneven, and, after descending and then ascending 100 feet or so, we passed at 1 p.m. a small hill stream coming down from the westward, as also a few recently cultivated "khets," and at 15 minutes past 1 p.m. we came upon one of considerable size (all belonging to Krondong's people). Elevation 2600 feet.

Then continuing E.N.E. along a path just above the Brahmaputra, we wound round the edges of some more spure, and at 25 minutes to 2 p.m. we emerged on the Brahmapatra. Elevation 2500 feet, where 1 halted for 15 minutes. Saw a little old cultivation on left bank of river, which is running from east by north just here. It is only 20 yards wide in places, but appears to be very deep, and is running very fast and strong.

Leaving again at 10 minutes to $2 \mathrm{p} . \mathrm{m}$. we proceeded over boulders for a few yards, and then ascending a few feet a point or two north of east by north, we came upon a fine stretch of open flat country, and continued going over the same until 2 p.m., when we passed a small waterfall coming down into the Brabmaputra from the south-east on its left bank. I also saw a little snow to the northward. Then, descending a few feet, we crossed a large bill stream, fordable at present, called the

Sikkt, running down strongly from the northward, and after ascending its left bank I halted for 15 minutes, while Chowse conversed with a party of Mishmis returning from Rim\& with cattle. They informed me that they had left Rimé three daysago, and that up to that time the Governor was ignorant of our being any where near the Tibetan border, but they advised our pushing on there with all possible speed, as they said the Governor would be sure to hear of our coming from some one, and that as soon as he did so, I would be stopped and obliged to retrace my steps. I noticed that nothing but old and worn-out Lama cattle are sold to the Mishmis, and this is all that the Assamese down our way ever give thern.

At 2.20 p.m. we continued N.N.E. along a tolerably level path for five minutes or so, and then got into jungle again just above the Brahmaputra, and continuing in it in an east by north direction for five minutes, we emerged (at 2.30 p.m.) on the Brahmaputra, elevation 2550 feet, and proceeded over boulders till 23 minutes to 3 p.m., when we once more ascended into jungle growing just above the river, and soon afterwards passed a large waterfall coming down from the northward. At 10 minutes to 3 p.m. we emerged on level country, elevation 2500 feet, with the Brahmaputra just below us, and running from E.N.E. (nothing but pines, some very fine, about, no cultivation, hills bare and rocky, also steep on left bank. Snow peak visible to northward), and continued going over it till five minutes to 3 p.m., when we came upon more jungle, but only for a few yards, but the path was stouy and uneven. At seven minutes past 3 p.m. were going north-east by east, Brahmaputra running from north-east, and eight minutes afterwards we emerged on the Brahmaputra, elevation 2550 feet, and walked along boulders till 3.20 p.m., when I balted for 20 minutes. Passed another waterfall between 3.15 and 3.20 p.m. The Brahmaputra is here running from the N.N.E. Hills on left bank are rocky and bare, and those on this (right) bank but little better.

Starting again at 15 minutes to 4 p.m. we ascended a few feet, and getting into the jungle just above the Brahmaputra, continued in it till three minutes past 4 p.m., when we came out into 2 flat piece of country, elevation 2700 feet, along which we proceeded for a couple of minutes only, and then descending 100 feet or so we crossed the Monggla, a mountain stream, fordable at present, coming down from the N.N.W., and at a quarter past 4 p.m. we emerged on the Brahmaputra, and, proceeding along it till 30 minutes past 4 p.m., I pitched my camp upon a small level piece of grassy ground just a few feet above it. Elevation 2600 feet.

We are now very close to the borders of the Tibetan country. So far we have been excessively lucky, as Chows\& has successfully prevented any Mishmis from being sent on ahead of us to give the Tibetans intimation of our arrival in the vicinity of their country. I have been very much struck with Chowsa's influence among both Digaros and Mijus. Many of the former tribe no doubt see a great deal of the Khamtis, who reside on the Têngapani, for they go there yearly in large numbers to purchase salt and other commodities, as certain of the Sadiya Kyabs have shops there all the year round, and the latter tribe mir a good deal, I am told, with the Khamtis from the Bor Khamti country, but even so it seems to me unusual that the chiefs of both Mishmi tribes should not only be very friendly with ChowsA, but likewise listen to, and unhesitatingly accept, his counsel. We were only marching for four hours to-day, exclusive of all halts, and I reckon we travelled about eight miles, and that our general direction was about N.N.E.

Saturday, January $2 n d$.-Thermometer $47^{\circ}$ at 7 a.m. Lovely morning, and the Brahmaputra looks very grand, as it goes roaring and foaming along over a rapid just underneath where we are camped. I went over to Chowsa's grass hut about 7.30 a.m., and he addressed me as fullows :-" Saheb! I have done all I ever professed to be able to do for jou, viz. have brought you safely through the Digaro
and Mija country. We are now close to the borders of Tibet, and from this time you must act according to your own discretion. I have told you that we shall all be insulted, and possibly ill-treated, if we go on to Rima, but you will not believe me. I can be of no more use to you, as I do not understand Tibetan."

Chowse appears to be in low spirits this morning, but he brightened up a little when I told him that I am very much pleased and entirely satisfied with all that be has done for me since we left Sadiya, and intimated that I was quite prepared, if necessary, to act for myself in future. I said I did not anticipate any harm happening to us, and that I had no intention of retracing my steps towards Sadiya until I had used my best endeavours to reach Rima.

Left camp at 8.50 a.m., and proceeding in a north-easterly direction for a quarter of a mile or so, we got on to an open piece of undulating grassy country called Mâ-nek'ré, which is the boundary between the Mtja and the Tibetan country. There is a very large and solitary stone, lying close to the edge of this spot, and upon it may be seen standing upright two small slabs, each about two feet high, which were placed there, I am told, by the Padres Krick and Boury, to commemorato their journey to these parts. There is no river or even remarkable hill of any kind in the neighbourbood to mark the boundary, so that it may be said to be undefined. There is, however, one very noticeable feature about the spot, viz. that several pine trees, entirely branchless on all but their north-east sides, are to be seen on the slope above where the large stone just alluded to lies, as also a few similar ones growing just below it. These trees present, it is true, a most pecaliar and scarecrow appearance, and the Mishmis believe that the Tibetan sylvan spirit has caused them to grow in this unique fashion in order to define the Tibetan boundary and show people the way on to Rima; whereas the real cause of the apparently strange phenomenon is that the spot, being very unsheltered to the south-weet, the branches in that direction of such trees as are most exposed to the force of the wind have been blown off.

After halting close to the huge stone alluded to for a few minutes we proceeded along a fine level path till $9.30 \mathrm{a} . \mathrm{m}$., when we turned a point or so more to the north, and directly afterwards crossed a fairly large hill stream (now fordable) called the Yêpak, running down from the north-west. This stream one would have imagined should have been made the boundary between the Mij0 and the Tibetan country. Then ascending the left bank of the Yêpak, we got on to more flat country, and soon afterwards our path wound round the edge of a spur for a time. At 15 minutes to 10 a.m. I saw the Brahmaputra coming down a short reach from due north, and at five minutes to 10 a.m. We passed a large hill-stream called the Dingti running down strongly from the eastward and falling into the Brahmaputra on its left bank. It is said to take its rise in the hills bordering on the Bor Khamti country. At 10 a.m., while going N.N.E., we came upon more flat open country, and at $10.10 \mathrm{a} . \mathrm{m}$. We crossed a small stream coming down from the north-weat, and I halted for five minutes just above the Brahmaputra, which is running from the north-east. The valley appears to be widening. The hills on both banks are low, and bleak-looking. Sometimes flat open country is to be seen on one side and sometimes on the other. Snow is visible on the hills to the horth of na. The country about here is known by the name of Walong. A little cultivation can be seen on both banks of the Brahmaputra just here, and also a little further to the eastward, where the country is beautifully level, for the valley is nearly, if not quite, a mile broad. Old Makuison, as also Tonsong's brother, left us here, and there can be no doubt that they are both afraid of being seen in our company. They pretead that they intend crossing the river here and, preceding us to Rima, will inform the Governor of my arrival, but I do not believe a word of it.

Starting again at 10.15 am ., we continued along a capital path and passed below a Tibetan village, which was not in sight, but behind a hill to the west of us. Chows informed me that all the villagers were away, hiding in the jungle, as the Tibetan tax collector had arrived at the village. The Brahmaputra is coming down from the westward of north just here. At 11 a.m. we passed a Tibetan hamlet called Ttai, consisting, as far as I could see, of a couple or three wretched-looking hovels, on the left bank of the Brahmaputra, and I halted nearly opposite it for 10 minutes. Elevation 2700 feet. The country on this side is still called Walong, and the Brahmaputra is still flowing from the west of north. At 11.10 a.m. we continued our journey and proceeded a little west of north for a short time, when, turning a little more westerly, we ascended some 200 feet, and working our way round the edges of some spurs, coming straight down into the Brahmaputra, we got back gradually to W.N.W., and at 11.20 a.m. we passed a large hill stream (I could not get the name), flowing down strongly from the north-east into the Brahmaputra on its left bank. It is said to come down from the mountains which border on the Bor Khamti country. At. 11.30 a.m. we were some 100 feet or so above the Brahmaputra, and were looking right down into it. It is running down from the north-west through a narrow rocky defile, and the hills on both sides of it for some 300 or 400 yards or 80 are precipitous and run right down into it. There is literally no valley just here. At 10 minutes to 12 a.m. I halted for 40 minutes. Elevation 3000 feet. From $11.30 \mathrm{am} . \mathrm{up}$ to this time we bad been winding about among the precipitous spurs alluded to above, the path being very narrow and slippery, owing to the large quantities of pine needles about. Saw snow which I had seen in the morning bearing north-east by north.

Starting again at 12.10 p.m., we left the Brahmaputra several hundred yards on our right, that is to north-east of us, and proceeding in a north-westerly direction, we soon afterwards came upon a large platean (elevation 3000 feet) with some unusually fine pine trees upon it. Sew some terrace cultivation upon the left bank. At 12.40 p.m. we descended some 200 feet or so, and after crossing the dry bed of a hill stream which flows down from the south-west when in flood, we ascended its left benk, and then our path, which was somewhat broken in places, and covered with huge stones, wound about over fine undulating country. At 1 p.m. we all left the path to go and look at a hot-water spring in the jungle a few yards or so to the north of us, and I halted close to it for 20 minutes. The apring is a very diminutive one, and the water is tasteless. It is warm, but not too hot to sit in. Chowsa and his Khamtis, as also my Mishmi porters, washed themselves in it. The Mishmis tell mo that it used to be some distance further to the north-west of where it now is.

Leaving again at 1.20 p.m. we passed through a large grove of lime trees, bare of fruit, and emerged on to a splendid piece of flat country, covered with short frost-bitten grass and ferns, and we kept along in a north-easterly direction until 1.80 p.m., when we struck the Brahmaputra again, running down from the E.N.E., and our path was stony and uneven for ten minutes or so, when it became very good, and we continued in an east-north-easterly direction over a fine plateau covered with short grass and over three-quarters of a mile wide, till 10 minutes past 2 p.m., when I halted about a quarter of a mile from the Brahmaputra for 10 minutes. At 20 minutes to 2 p.m. we passed a large hill strcam, coming down strongly from the south, and falling into the Brahmapatra on its left bank. Snows visible to N.N.W., S., S.S.W., and S.W., those to N.N.W. being close-to. We first saw these snows about a quarter of an hour or so before I halted. The hills on the left bank are steep and rocky, as also those on this bank immediately above the plateau. Pine trees, some of them exceptionally fine, to be seen everywhere, and
as the path is strewn with their needles it is very slippery. There used to be a large Tibetan village close to this spot years ago; but the villagers first refused to pay revenue to the Rim§ officials, and next endeavonred to throw off their allegiance, so they were attacked, I am informed, by a large force from Rima, and the village was burnt and a large number of the inhabitants were killed.

The remains of stone walls, erected to protect cultivated crops from the ravages of cattle, are still to be seen about. At 2.25 p.m., continuing our journey, we proceeded for a few minutes a little to the west of north, and then descending some 30 feet or so, we crossed a large hill stream, now easily fordable, coming down from the north-west, and after crossing it ascended in a north-aasterly direction a steep path for some 350 feet, and got on to a fine, open, and semi-level piece of country. Elevation 3300 feet (Brahmaputra a short distance to the S.S.E. of us), and at a quarter to $3 \mathrm{p} . \mathrm{m}$. I again halted for 15 minutes to let stragglers come up. Then continuing again at 3 p.m., we proceeded in a north-easterly direction along a path which was at times very winding until $3.25 \mathrm{p} . \mathrm{m}$., when I again halted for 10 minutes opposite a fine waterfall coming down from the E.S.E., and falling into the Brabmaputra on its left bank. The valley in this vicinity is wide, and the Brahmaputra is running from the N.N.E. Snow is visible a long way ahead, as also a little to the westward.

Leaving again at $3.35 \mathrm{p} . \mathrm{m}$., we proceeded north-east, and afterwards turned a little more to the north, and crossed 2 small hill stream coming down from the north-west, and ascending its left bank we continued along the edge of a spur covered with jungle for a while, and then descending gradually for some 250 feet, we came upon a small stream trickling down from the north-west, and at 10 minutes past 4 p.m. I pitched my camp close to it. Elevation 2900 feet. The valley is considerably narrower just here. The spot was not a desirable one for 2 camp, as the only available water is bad, while wood is scarce and the space is very limited; but I was informed that there is a Tibetan village a short distance ahead, and fearing that if the villagers discovered us in their vicinity they would send in word to the Rima officials, and that they would most probably send out a force and prevent our proceeding any further into the country, I considered it advisable to halt where I did.

We are now only a little more than one marchfrom Rima, so we shall soon know our fate. Chowsê is still somewhat despondent. He has not forgotten the treatment he received when he visited these parts ten years ago, and being (as all Khamtis are) very proud, be is loath to give them the opportunity of insulting us in the presence of the Mishmis who are with us. I, on the other hand, do not so much mind being rudely treated of even insulted, so long as I succeed in reaching Rima, and he appears to be much astonished, as also, I believe, disgasted with my indifference. We were marching for $5 \frac{1}{2}$ hours to-day, exclusive of all halts, and as our path was a very good one during the greater portion of the distance, I reckon we travelled 11 miles. Our general direction I calculate was north-east by east, though this is sheer guesswork, for our path often wound about in and out of the several spurs which run down into the Brahmaputra in the most puzzling manner. The march was certainly an easy one compared with most of those which we have hitherto made.

Sunday, January 3rd.-Lovely morning again and very cold. Thermometer $42^{\circ}$ at $7.30 \mathrm{a} . \mathrm{m}$., and the ground was covered with hoar frost. The Brabmaputra (which is some distance below us to the soutb-eastward, and can only be heard faintly roaring from where we are) is running from nearly due north just below our camp. Left camp at 9 a.m. (it was so cold that neither the Khamtis nor the Mishmis could be persuaded to leave their camp-fires earlier), and proceeding in a
northerly direction, we continued along a capital path bordering on the Brahmaputra till a quarter to 10 a.m., when, leaving .the river, we turned nearly due west, and proceeded for some distanoe up the right bank of a very large hill stream called the Krupti, coming down strongly from the westward; and then crossing it on a log thrown across it for the purpose, with a rough railing to it, we ascended its left bank, and at five minutes to 10 a.m. I halted for five minutes. The Kruptl is not fordable even now. Snow is to be seen close to this spot to the sonthward, as also to the south-west some distance away. The valley, which was somewhat narrow in the vicinity of our last night's camp, commenced widening again soon after we began marching this morning.

Continuing our journey at five minutes past $10 \mathrm{a} . \mathrm{m}$., we turned sharp round to north of north-west and proceeded along a fine level path for a few minutes when we struck the Brahmaputra again, which is running from the north-west (below us, i. e. to the south-east, it appears to flow in a very winding manner, and just above where we are it is coming down from a little west of north), and we continued along a good path just above it till 20 minutes past 10 a.m., when we came upon some small patches of Pobost cultivation, lying just below a small Tibetan village called Kan'dê.

We could not see the village, as it is on a flat piece of sountry some 200 or 300 feet above us. I halted here, and sent a man up to the village to see if Taggriuson was there, but the man had scarcely reached the village when a large herd of cattle were seen emerging from some pine trees to our north, and soon afterwards Taggriuson and his cousin appeared. Ho was, of course, quite prepared to see us, as we had sent on a messenger to tell him of our intention to visit Rima. Chowse told him that I wished him to precede us to Rima and inform the Jên of my arrival, and solicit him to allow me to visit him, but he at first refused pointblank to do anything of the kind, and upon his asking why I had undertaken such a long, arduous, and disagreeable journey, Chowsl explained that I wished, if possible, to find out where the Brahmaputra took its rise from. Taggruison seemed sceptical that I had spoken the truth, and he said:-"The Lama Raja will never believe that this is your real reason for coming to these parts. He is not like you Sahebs. He is more like a dog than anything else, and he is not to be trusted. He will find all sorts of excuses to pick a quarrel with you, for he will say you have come to look at the place with the ulterior object of taking it."

After which he declared that as he does not know Tibetan he could not talk to the Jên, and so that it would be useless my sending him there. I explained that this difficulty could very easily be got over by his taking the ransomed Tibetan with him, but this he pooh-poohed. After this Chowsa took him aside, and had a long talk with him, and having promised him in my name a couple of guns if he would do as I wished him to do, Taggrïson subsequently intimated that he would cross the river and, preceding us to Rima, would inform the Governor of my being close by, and tell him that I wished to be permitted to have an interview with him; but he tald me plainly that it was impossible to say how the Governor would receive the information, and after some further conversation he left us to cross the river, as arranged.

During Chowsa's conversation with Taggrison the latter told him that he felt sure that the Jên would not permit me to go into Rims, as also that he would not consent to see me. Taggrüson also informed him that the Tibetan Raja is so terribly exacting and tyrannical that every one of the ryots would joyfully welcome the advent of a large force, provided they came to take the country, and Chowse says that he can fully corroborate all this.

My conversation with Tâgriuson delayed us for two hours. Continuing our
journey again at five minutes past 12 p.m., we proceeded in a northerly direction along a good and even path till 12.20 p.m., when we crossed a small hill stream running down from the westward, and 10 minutes later our path, which bad become stony and up and down, brought us close to the Brahmaputra, which is coming down from the north-east. We passed a Tibetan village on the left bank, consisting of four or five wretched-looking houses, with a little terrace cultivation in their vicinity. The valley is very narrow again just bere, there being scarcely any flat country on either bank.

At a quarter to 1 p.m. we crossed a small stream coming down from the westward, and I saw another about the same time coming down from the eastward, and falling into the Brahmaputra on its left bank, and our path continued stony and up and down until 1 p.m., when we turned to the north-east for a little while, and then a point or two further to the eastward till 1.15 p.m., when we got on to a plateau, and I halted for five minutes to let stragglers come up. The Brahmaputra just here is full of bends. Saw snow to N.N.W. and southward on tops of high peaks only. Pine trees, some unusually fine, everywhere. The valley here is, however, insignificant, and what flat country there is, is covered with large stones.

At 1.20 p.m. we proceeded north-east along a capital even path, and passed some low-lying rice-fields, and soon afterwards we crossed three small streams, coming down very close together from the north-west; then ascending some 300 feet up a steep zigzag path, got at a quarter to 2 p.m. on to the edge of an undulating spur, elevation 3400 feet; I halted here for 10 minutes. The hills on the left bank are rocky and precipitous, and come right down into the Brahmapatre, which winds about in the most fantastic manner away to the south-west. Fine view of snows to the north-west, north, and north-east.

Continuing again at five minutes to 2 p.m. in a northerly direction, we descended some 200 feet, and continuing along a level piece of country for half a mile or a0, we descended another 200 feet, and leaving the vicinity of the Brahmaputra, we turned in a north-westerly direction; and, continuing so for nearly a mile, we turned sharp to the eastward and crossed, by means of a $\log$, a small river called the Kocho , running down strongly from the north-west. This river is not fordable, even at this season of the year. It is said to be a branch of the M'daun (or DC), which we crossed on the 25th of December, and there is a path along its banks, leading to Tibet. I halted here 20 minutes.

Starting again at 10 minutes to 3 p.m. in a south-sonth-easterly direction, we ascended some 200 feet up the edge of a spur on the left bank of the KOcha, and got on to a fine plateau (saw snow to the northward); then tarned gradually to east, and then to north-east again, and at a quarter past 3 p.m. we were looking right down into the Brahmaputra, which is a hundred feet or so below us to the eastward, and running from north-west down a good long reach. At $3.30 \mathrm{p} . \mathrm{m}$. we passed the largest Tibetan village, consisting of some twenty houses, 1 have yet seen. It is called Kanau, and it has a good deal of terrace coltivation in its vicinity. Then, continuing a point or two west of north, we crossed at 25 minutes to 4 p.m. a hill stream coming down from the westward, and, ascending its left bank, I halted for five minutes to let stragglers come up. Saw a little snow to the eastward close to us. Continuing again at 20 minutes to 4 p.m., we proceeded along an uneven and stony path till 10 minutes past $4 \mathrm{p} . \mathrm{m}$. When we crossed a dirty little stream running down from the north-west, and then rising a few feet we got on to a flat piece of country, where I pitched my camp. Elevation 3100 feet. Brahmaputra running 100 yards or so to the south-east of us down from west of north. Snow visible to the northward, and also a little to the south-east. We were marching for $4 \frac{1}{2}$ hours to-day, and I calculate that we did about nine miles. General direction N.N.E.

We are now only five or six miles from Rima, and so to-morrow we sball know our fate. I myself do not believe that the Tibetans will harm us. If, however, all that the Mishmis have told me be true they will prove inhospitable, and may possibly peremptorily order me out of their country. Directly after pitching camp I sent off Taggrison's cousin, who is with me, with five rupees to endeavour to get some fowls. We have been very short of good food for the past three days, having had nothing but tough, tasteless beef, and bad, dirty rice. Vegetables, even of the commonest kind, we have not tasted for some ten days. The country is beyond doubt a wretched one for a white man to travel through, so different to Afghanistan, where one can get capital bread and first-class sheep.

Monday, January 4th.-Up very early and wrote a letter to the Deputy Commissioner, giving him a short account of my movements to date, and at a quarter to 10 a.m. Taggrüson's cousin returned from his visit to a Tibetan village in quest of fowls, \&c., and reported that the villagers would sell him nothing, as they fear incurring the Rim\& Governor's displeasure. We started in a north-northwesterly direction immediately afterwards for Rima, the Brabmaputra coming down from a similar direction, and soon afterwards passed a good-sized stream coming down from the north-east, and falling into the Brahmaputra on its left bank. Hills on this (right) bank slope gently down to the river, and I saw a little new cultivation about, the ground having been scratched merely with a plough. There is very little flat country on the left bank. At $10.15 \mathrm{a} . \mathrm{m}$. saw Brahmaputra coming down a good long reach from N.N.E., and snow was visible to W.N.W., N.N.W., northcast and E.N.E. Our path lay just above the Brahmaputra, and was a very good one as far as this. Saw a good many Tibetan men and women belonging to a village (name of which I could not get) close to, but out of sight. They are all clothed in the long dressing-gown-looking garment I bave before alluded to, and appear to be very dirty and poor. They stared very hard at us, but kept quite aloof. Some of them pointed, however, in the direction of Rim\&, and then in a pantomimic manner drew their hands across their throats, meaning us, I suppose, to understand that this was the treatment we might expect on arriving there.

At 25 minutes to 11 a .m. the river was coming down from the N.N.W., and our path was still close to, though a little above it, and ten minutes later we turned to the westward, and descending a few feet we crossed a good-sized hill stream coming down from the westward. Then turning sharp round to the eastward we ascended its left bank and turned to N.N.W. again, and our path led us over a fine plateau. Elevation 3200 feet. The valley winds just here considerably, but the hills on the left bank come right down into the river.

At 10 minutes past 11 a.m. I halted for 30 minutes just above the Brahmaputra, which was running down from the N.N.E. Snow to be seen to south-east by south, south-east, east, north-west by west, and west. The path to this was a rery good one, as it lay chiefly through flat country, covered with short grass. The hills on the left bank still come right down into the river, but there is a fine broad valley on this bank. Starting again at 11.40 a.m. we proceeded along a capital level path, just above the Brahmaputra in a northerly direction, turning graduaily a little more easterly till 5 minutes to 12 , when we crossed a small hill stream, coming down from the north-west, and I then halted 30 minutes to lunch. At $12.30 \mathrm{p} . \mathrm{m}$., continuing our journey in a north, slightly easterly direction, we arrived at a quarter to 1 p.m. just below the Tibetan village of Sa-mê, where the Padres Krick and Boury were killed. I tried to purchase a few provisions here, but no one would sell us a thing, lest the Rima Governor, coming to hear of it, should have the party who did so called in and order him to be beaten and fined.

This is the village where my ransomed Tibetan lives, and his brothcr, who had got
intimation from some one of our arrival in the vicinity, and who had also apparently heard how his brother had come to be ransomed and brought back home, appeared and brought him down a new coat. He also gave me a fowl and a little rice, and presented the Khamtis and Mishmi porters with a small basketful of fermented Pobosi ; and during the conversation which transpired while we were halting to receive his gifts, he explained, by pantomimic signs, that he and his brother intended fleeing to Assam with us when I returned from Rima. My aneroid showed the elevation here to be 3600 feet.

After parting with my ransomed friend's brother we continued our journey for a short distance a little to the north of west, and then descending 100 feet or so, crossed a small stream called the Sa-chu, coming down from the north-west, after which, ascending its left bank, we continued in a north-easterly direction along a good path, and soon afterwards came upon some recently cultivated khets belonging to the Tibetan village of Sangga, and at 10 minutes past 1 p.m., after turning the edge of a spur, we came suddenly upon a fine open valley (elevation 3600 feet), some $2 \frac{1}{2}$ miles long, and more than a mile broad, with a good deal of terrace cultivation about it at our (south-west) end.

I halted here for five minutes or so in order to make a few notes. The Brahmaputra (which is some little distance to the east of us) is running down from nearly due north just here, and I can trace it (for two miles or so) to the northern end of the valley, where two distinctly visible openings can be seen in the hills, one to the west of north, the other a few points east of ditto, and my Mishmi porters (many of whom have visited Rimâ often on former occasions) tell me that the opening to the west of north is the one down which the Brahmaputra flows, and that the Tibetans assert that it takes its rise in some high mountains away to the north-west, distant about 15 days' journey, and that on the other side of that mountain there is another river (the Nagongchu on A-k's map, I take it), which flows away west into the Abor country. My Mishmi porters cannot tell me the name of the river which flows through the other opening, which is visible in the hills (to the north of us). From a copy of A-k's map which I have with me it would appear to be the Zayul-chu. The ransomed Tibetan, however, calls it the Lati, and he tells me that it is now fordable. There can be no doubt the river marked Rong Thod-chu in his map is identical with the Brahmaputra, and it is correctly shown there too as laking its rise in the mountains situated about a fifteen days' journey to the north-west of Rima.

I cannot see Rimd from where we are, but from what my Mishmi porters tell me it must be close to the spot where the river flowing down the opening visible in the hills east of north, empties itself into the Brahmaputra. The hills bordering the valley to the north-west and south-east appear less bleak than they were further back, and their height is insignificant. The Brahmaputra, too, is minus the large boulders we have been accustomed to see daily of late. My Digaro porters do not recognise the word Zay 01 ; when asked what the name of the valley is, they replied Lania. The ransomed Tibetan also looked confused when Chowsa asked him its name, though he subsequently said Zai WA. He tells me, too, that there is another small river close to Rimâ called the Mictra, which takes its rise in the same hills as the Nagong-chu. Chu is undoubtedly the correct word for "water."

Continuing our course along a fine level path leading through some recentls cultivated "fields" down the centre of the valley we crossed at $1.35 \mathrm{p} . \mathrm{m}$. a small sandy bay, lying close alongside of the Brahmaputra, passing several finelooking mules grazing close by, and then our path led us through a piece of country covered with low scrub, and at 10 minutes to 2 p.m. we saw some mounted men proceeding to the soutb ward along the pine-clad slope some distance to
the westward of us, and immediately afterwards we observed a small group of men -apparently armed, for we saw flashes.jssuing from their midst every now and again-collected on the left bank a short distance ahead of us, as also two or three mounted men galloping about in their vicinity, and as we drew nearer to the spot where this group was gathered some of them commenced shouting in an unmistakably hostile manner; and were immediately answered by others, whom we could not see, on our bank, while several guns were simultaneously fired in quick succession. We nevertheless proceeded quietly in the direction of the group alluded to, but after continuing for a short distance we got to a nasty low patch of ground, with thick scrub growing very close to the path on either side, and finding that the shouting was becoming momentarily greater and the firing was increasing, I halted my party and waited to see what would bappen, Chowsa remarking (in anything but a frightening tone however, for, like all Khamtis, he is no coward), "There, Saheb! I told you that we should not be well received, but you would not listen to me. We shall probably all be shot."

We were so completely hemmed in by the scrub alluded to that we could not see a soul, though it was evident from the shouting and firing which was proceeding that we were being speedily surrounded, and some of my Mishmi porters, who had pushed on a short distance ahead of us and had peered round the corner of the scrub, reported that an armed party barred the path by which we should have to proceed were we to alvance any further, and while I was hesitating whether to proceed or extricate ourselves from the scrub (which not only completely obscured our view, bat would likewise mininise our chance of defending ourselves were we to be attacked) by retiring a short distance, a fine, powerful young Tibetan was seen making his way hurriediy towards us. Upon arriving close to where Molesworth and I stood, he doffed a cloth which he was wearing round his head and respectfully saluted us, but having done so, he passed brusquely by us, and seizing the ransomed Tibetan by the arm he led him aside, and after the pair had seated themselves the young man entered into an earnest and hurried conversation with him. After they had been thus conversing for some minutes Chowse and I walked over to their vicinity, for the shouting and firing of guns was still going on, and Chowse asked the ransomed Tibetan what the Rima man had said, but instead of replying promptly to Chowsa's query, he pretended he had not quite understood it, and even after it had been repeated he was very slow at replying to it, and appeared to me to be thinking what he should say. At last, however, he blurted out: "The RimA man is an emissary of the Jên, and he has been sent to find out who you are or what you want, as also to ask you if you have come to take the country." Chowse told him to reply that we had come from Assam upon a perfectly peaceful errand, viz. to endeavour to trace the source of the Brahmaputra, and to explain that the question whether we had come to take the country or not scarcely needed a reply, inasmuch as we had not come with any force, much less an armed one. After the ransomed Tibetan had interpreted Chowse's speech, the Rimá emissary continued talking in the same low and earnest strain, and I accordingly told Chows\& to ask again what it was about; but he had either been speaking in an uncomplimentary manner about us, or his speech contained threats from the Jên, which my ransomed friend considered it better I should not hear, for he would not tell us.

I then requested the emissary to return speedily to his master, and having acquainted him with all he had heard, solicit him to allow me to cross the river and pay my respect to him ; and after conversing for some few minutes longer with the ransomed Tibetan, he suddenly arose and left us, and the ransomed Tibetan informed me that he had gone off to do as I had desired him to. The shouting and firing not having diminished in the least, I suggested that we should vacate the spot we were
on and seek a more suitable one, but the ransomed Tibetan declared that the Rim emissary had particularly requested him to keep us where we were until he should return, and he added, "It is better too for you to remain where you are, as you are out of sight here. If you get into open ground the people may become excited and fire upon your." So I decided to stay where I was. It was about 3 p.m. when the Rima emissary left us, and after his departure we had a somewhat anxious time of it, for the shouting and firing not only continued spasmodically, but a bullet was sent whizzing over our heads aud struck the ground within a few inches of one of my Mishmi porters, while he was endeavouring to reconnoitre the country from a little knoll some 20 feet or so from where Molesworth and I were sitting. It was in vain that I looked for the arrival of old Maküson or Taggriuson, for neither came near us, and to make matters worse the Rimâ emissary had declared before leaving us that neither of the men mentioned had preceded us; that every one, in fact, was ignorant of our being in the neighbourhood until a Tibetan had come in hurriedly to Rima and reported that a party of strangers were close to the spot.

It was not until 4 p.m. that the emissary returned, and he was as provokingly uncommunicative (to us) as he had previously been. Following his former tactics, he sat himself down with the ransomed Tibetan, and again entered into a confidential conversation in a low tone of voice, on seeing which Chowse became very restive and angry, while I was of course anxious to know the result of his conversation with the Jên, and so Chowsê and I again walked over to where the pair were sitting. I directed Chows\& to ask the ransomed Tibetan what the emissary was saying (for he did not relax speaking, even when we went over to him), but he again appeared averse to act as interpreter. Upon being prossed, however, somewhat sharply, to state what the emissary was saying, he said the man had informed him that he had crossed the river and delivered my message to the Jên, who had gone off to acquaint the Raja (I had heard in the morning that a Raja-whose name I was afterwards informed is Tâpelâ-is here on inspection or something); and that, as the latter's residence is some distance off, some delay would occur ere his orders concerning us were received. I then told Chows\& to tell the ransomed Tibetan to request the emissary to stop the firing and shouting that was going on, as also to complain to him about the bullet which had been fired into our midst, and Chowsa did 80 in a palpably angry and excited tone of doice. The ransomed Tibetan interpreted Chowsa's speech in due course, but the emissary did not appear to be in the least perturbed at it, though (if the ransomed Tibetan interpreted truly) he expressed regret that the bullet had been fired amongst us, and declared that he had alteady upbraided bis people for having done so. As regards the firing and sbouting he said he had no power to stop them.

I waited patiently till 4.30 p.m., and then finding that no orders were forthcoming from the Raja, I directed Chowsa to ask the emissary (through the ransomed Tibetan) to show us a suitable spot for a camp, pointing out that as we had huts to erect, firewood (which appeared to be very scarce) to collect, and our food to cook, before it got dark, we could no longer delay camping. He, however, refueed pointblank to do so, excusing himself by saying that he could do nothing for us until the Raja had given his orders concerning us. I accordingly determined to act for myself, and as I decided to encamp for the night on a little sandy bay which we had pasead on our way to this spot, I ordered the porters to pick up their loads, and we commenced retreating, the Rima emissary refusing to accompany us. As socn as wo had emerged from the thickest part of the scrub which bad hitherto obstructed oar view of what had been going on on the slopes above us, we saw groups of armed men ensconced in safe places of vantage, viz. behind trees, \&c., above us, and one of these, which we passed within 200 yards or so of, deliberately called out for permission to
fire at us as we went by; at least this was the impression which their tone and actions left on my mind.

After proceeding a short distance in the direction of the place I intended camping on, we were met by two fully armed Tibetans, mounted on stardy-looking 13-hand ponies, in capital condition, who peremptorily ordered my Mishmi porters to halt, which they at once did, and upon my asking them (through the ransomed Tibetan) what they wanted, they asked where we were going to, and I told them.

We then proceeded again, and the two mounted men followed us to the edge of the sandy bay, and then dismounted; and soon after my tent had been pitched they sauntered jauntily into our camp, having first tethered their ponies, and pryingly examined everything they saw, as likewise closely scrutinised Molesworth and myself. They seemed especially interested with my cooking paraphernalia, and closely examined everything. They were both tall, powerful-looking fellows, and were clad in the typical long loose woollen Tibetan cost, with very loose flowing sleeves, tied up at the waist. Theirs were, however, slightly different from any I had hitherto seen, for they were trimmed round the edges with some three inches or so of fur (one of the coats was trimmed with tiger fur); as head-coverings one man wore the typical billycock hat, with a broad turned-up rim, of the most æstheticlooking colour, while the other had on a most fantastic-looking hat, in shape like a Welshwoman's, except that the crown was much lower and the straight rim broader. I cannot say what it was made of, but it looked like hard felt, coloured blue and red. It gave me the idea of being a most uncomfortable head-dress, for instcad of being large enough to fit on to the wearer's head, it was poised jauntily on one side, and was kept in that position by means of a strap which passed under his chin. Their nether garments consisted, as far as I could tell, of white Hindustani-looking pajamas, and these were tucked inside the tops of their long boots, unshapely loose-fitting things, with thick raw hide soles, sewn on to cotton cloth tops, embroidered in places with coloured cotton. I noticed one of them was wearing an undervest made of Assamese Mooga silk. Both men had pigtails, and the one wearing the fantasticlooking hat wore what hair had not been so tied up in long straight locks. Both had several ornaments studded with turquoises tied up in their hair, and they both wore earrings in the lobes of their ears, as also several roughly made rings, containing turquoise and other stones, on their fingers. They also had an unusually large massive-looking Tibetan "madulis," which we so often see the Digaros who visit Sediya wearing. Both men took snuff while prowling about. They dipped their thumbs (with long nails to them) into the packet containing it, and then sniffed the same up. I also saw one of them blow his nose upon-well-an apology for a handkerchief. It was a small coloured piece of cloth, about eight inches long by six inches broad. He used both hands for the process, which he performed in quite a neat and orthodox European style. Their arms consisted of long straight swords, the handles of which were studded with turquoises, tied round their waist, and one man had powder and priming flasks, made of wood, with leather necks to facilitate the measuring out of powder, hanging about him. He had no gun with him, but I saw it strapped across his back when he was mounted. It was the only one I had seen close, but beyond perceiving that it was a matchlock with a very long barrel and peculiarly shaped stock, as also that it had a peculiar looking stand, like a two-prong fork, with a wooden handle attached to it, just under the muzzle and lying parallel with it, I had no time to notice it minutely. I could not see what their saddles were like, as they were completely hidden by the coats they wore, but I noticed that they rode with very short stirrups. Their bridles were made of fairly soft leather, and there was nothing peculiar about them or their snaffle-bits. I noticed, however, that the latter were strapped up much too tightly into their ponies' moulhs. I was
told afterwards that these two swells do not belong to Rimá, but that they have come here very recently with the Raja. I could not find out what their ${ }^{\text {rank }}$ is, but I believe they are officers of a sort. Scarcely a quarter of an hour had elapeed after camp had been pitched when twenty or thirty more horsemen suddenly appeared in 2 cluster, and halted some hundred yards or so to the westward of us, on the eige of the path leading toward Rimf, and upon my asking (through the ransomed Tibetan) why they had come there, I was told that the Raja and the Jên had arrived.

Time, however, went by without any sign of such exalted persons appearing, and I soon discovered that the party of mounted men had been sent to watce our movements, and prevent our returning in the direotion of Rima. They picketed their ponies and then lit fires, and several of them sauntered over to our camp and prowled about there, looking at things, until it was nearly dark, when they returned to their fires. The young Rimâ emissary was among those who sauntered into our camp, but he continued as uncommunicative as ever. I directed the ransomed Tibetan to ask him if any orders had been received from the Raja, but he did not deign to reply.

The Khamtis, as also our orderlies, managed to collect a little waod before it got dark, but there was no jungle about fit for making huts, and so they had to content themselves with camping out in the open. About 8 p.m. Tâggrisop's cousin and the ransomed Tibetan were called to the Tibetan camp, and they were absent for over half an hour, and when they returned they informed us that they had boen directed to tell us that a message had been received from the Raja to the effect that he did not know who the Maharani was; that we were not wanted at Rima; that no provisions would be given to us; and that the best thing I could do would be to go back from whence I had come as quickly as possible; and such a message coming on the top of the treatment we had received, made me determine to retrace my steps towards Sadiya in the morning, especially, too, as I knew that the Khamtis and Mishmi porters were almost entirely without food, and I accordingly warned my Mishmi porters to be ready very early.

Tuesday, January 5th.-Molesworth and I went to bed last night with all our clothes on, but as we were not disturbed we both slept soundly. Up at dayligit, and had eversthing packed by $6 \mathrm{a} . \mathrm{m}$. , but it was so bitterly cold that the Mishmis, although more eager than any one to be away, could not be persuaded to leave their. fires till 8 a.m. The thermometer registered $29^{\circ}$ at 7 a.m., and the ground was covered with hoar frost, so that everybody must have had a very miserable time of it during the night in the open. When daylight appeared, no Tibetan pickets were to be seen anywhere. We left camp at five minutes after 8 a.m. and went along at a brisk pace, my Misbmi porters and the Khamtis complaining bitterly about the cold on their feet, until 10.10 a.m., when I balted for fifteen minutes, elevation 3200 feet, and the Mishmis lit a fire and warmed themselres a bit. Starting again at $10.25 \mathrm{a} . \mathrm{m}$. we passed our Sunday night's camp at a quarter to 11 am . and continuing on till $11.25 \mathrm{a} . \mathrm{m}$. we halted for 55 minutes right opposite the Tibetan village of Kanau to lunch, and a few minutes before we had finished we discovered a party of folly armed Tibetans (leading their ponies at the time, as the ground was very rough and uneven), following in our track. The spot where we were was auything but a nice one to defend ourselves on had it been necessary for us to do so, and so we pushed on as hard as we could towards the Kochu river, and at 10 minutes to $1 \mathrm{a} . \mathrm{m}$. we crossed it, but I was compelled to halt immediately afterwards, as I found that my servant, as also the ransomed Tibetan, who was carrying my camp bed, had lagged behind. At 2.30 p.m., as neither of them bad come in and no Tibetans had made their appearance, I was apprehensive that my servant had been stopped and made a prisoner of, and I sent Taggrison's cousin,
who was still with us, back to reconnoitre, and he returned soon afterwards and reported that the man had got fever and was consequently coming along very slowly ; that the Tibetans whom we had seen on our track had sent one or two of their party on ahead of them to endeavour to catch me up and induce me to halt, as they wished to speak with me, and that, having met these men a short distance on the other side of the spur, running down parallel with the left bank of the Kocha, they had directed him to return to where I was, and ask me to wait until their main body conld come up with us. Upon my asking him where the ransomed Tihetan was, he said that he was detained by the advance party alluded to; but that heywere sending my bed on to me by another Tibetan, and almost immediately afterwards the same was brought in. The Tibetan who brought it informed us that Taggrison was with the main body of the Tibetans, and so I determined to halt and hear what the Rima men, and particularly Taggriuson, had to say. I pitched my camp upon a tolerably level spot, a few yards above the Kôcha on its right bank, elevation 3000 feet, at about 3 p.m., and my servant, as also a Tibetan villager, came in very soon afterwards; and upon my asking the latter if he could tell me what the Rime men wanted with me, he said they had come to tell me that the Raja was surprised, and likewise annoyed, that I had gone off in such a hurry, as he had intended seeing me if I had not done so. I was very pleased at hearing this speech, and I had it explained to him that I should most certainly not have left as harriedly as I had done had I been better received, and had not a message been sent to me over night, which purported to have come from the Raja, telling me that I had better go off as quickly as possible, and I concluded by saying I would return again to Rima in the morning, provided I got some provisions given me; but upon hearing this latter speech his tone and manner changed directly, and he said plainly that he did not think it would be any good returning to Rima, as the Raja would not see me now. After this I held no further conversation with this man, as I was informed that he had no official status, and so could not possibly know anything about the Raja, but I waited patiently for the arrival of Taggrison and the main body of Tibetans. It was about $3.30 \mathrm{p} . \mathrm{m}$. when they all appeared leading their ponies down the path on the left bank of the Kôchâ, and on arriving at the river they tethered their animals among a lot of boulders on a semi-flat and grassy spot close to its left bank, and soon afterwards numbers of them crossed over to our side and prowled abont examining things. No one, however, showed any signs of desiring to confet with me in order to explain why they had come amongst us, and I did not ask any questions, as I hoped that some one in authority would in due course request to have an interview with me.

During the remainder of the afternoon Molesworth and I occupied uurselves in showing them such few things as we had with us that we thought would interest them. I exhibited my guns and revolver, and after taking them to pieces and putting them together again, I fired several shots to show them the breech-loading action; then we gave them a few boxes of matches, and a small looking-glass or two I had with me, and we showed them some tea which they looked at closely and declared it to be good. The guns and revolver did not astonish them half as much as I expected they would, but they were very mach taken with the matches and the looking-glasses

At about 4.30 p.m. they brought us about 13 seers of rice and a little dirtylooking stuff, half butter half cheese (which we had eventually to throw away), and they declared that more provisions had been sent for from a large village situated on the left bank of the Brahmaputra, and not very far off; but evening came, and up to the time it got dark no more had arrived, and about this time Chows\& informed me that he had had a long conversation with Tâggrüson, and had gathered from him
that the party had merely been sent from Rima to see us all well out of the country, as also to find out, if possible, what our future intentions were, and that they bad really nothing particular to talk to me about. Taggriison had likewise told Chowas that the story which had been previously told us in re the Raja having been annoyed at my going away so precipitately was false, and he (Tâggrïson) had statod that he was not sanguine about our getting any more provisions, as the Tibetan had given us all they had brought with them from Rimat, and as far as he knew they had not sent to any village for more, and had no intention of doing so, and he (Taggrison) strongly advised our leaving early on the morrow and making a forced march to Walong, where he had some stores which he would place at my disposal. I accordingly settled over night that we should leave as early as possible on the morrow for Walong, and have nothing more to do with the Rima people, all of whom had gone over to their camp across the river just as it was getting dusk. After dark I let off a couple of rockets, as I had promised them I would do so.

When Chowse asked Taggriuson why he had not come over to our side of the river at Rima when all the firing and shouting was going on, he replied that he did not reach Rima until very late. His story was that, after leaving us on the 3nd instant, he had crossed the river and gone to a Tibetan village close to Rim\&, where he slept the night ; that while there he happeped to mention that we were in the vicinity, and tbat in the morning he was sent for by a high Rima official who happened to be in the village, and that the latter kept him so long talking about us that he did not reach Rima until it was nearly dusk; and that early on the following morning, when he was about to proceed to deliver my message to the Jèn, he heard that we had all departed, and so he came away after us as fast as he could. I have now no doubt whatever that the whole of this speech is false, for I have ascertained that the Rima officials, like all eastern potentates, petty, or otherwise, do not deign to converse direct with any one beneath them. They are consequently surrounded by numerous understrappers and sycophants, who prevent, by force if necessary, any attempt at such familiarity ; consequently, it is not to be wondered at that even such Mishmis who trade regularly at Rima know literally nothing about the officials there. They merely know that there is an individual called the Jân (and occasionally a Raja), who treat every one (especially their own subjects) beneath them harshly, and sometimes even cruelly. Of course, if Taggrison had explained this to me when I first intimated my desire to utilise his services I should have known how to act. I should in fuct have directed him to do exactly what he subeequently did do, viz. proceed ahead of us and tell some of his Tibetan friends that he had seen some strangers, with two Sahebs accompanying them, quite close to, and mo had run on to let them know in order that, if necessary, they might aoquaint their Governor. I should have been very much easier in my own mind too when the firing and shouting was going on at Rima had I known that Taggrïson was powerless to interview the Jên (much alone the Raja) and deliver the meceage I had asked him to do, as I ahould then bave known that I bad to trust implicilly to my own tact; whercas I foolishly believed (even when the young Rima emissary told me that he had seen nothing of either Taggriison or Maküson) that they had one, or both, preceded me and had fully explained to the Jetn why I had come and all about me; and that the unwelcome reception I was getting was owing to Taggrison's explanations. I did not see anything of the ransomed Tibetan during the afternoon, bat in the evening I was informed that he was in the Tibetan camp attending to one of the men's ponies.

Wednesday, January 6th.-Up at daylight, having slept in my clothes in case I might have had to turn out in the night. The thermometar was only down to $30^{\circ}$ this morning at $7 \mathrm{a}, \mathrm{m}$. None of the Tibetans came near us. They wero
amusing themselves, between 7 and 8 a.m., firing at a mark. Tâggrüson tells me that they are first-class marksmen, and may often be seen practising at Rima. He declares that they can hit a very small mark while riding past it at a galop, but I can hardly believe that it would be possible to 'perfurm such a feat with the long clumsy matchlocks they use. I am under the impression that, before attempting to shoot, the owner of one of the matchlocks must first find a level spot where to place his wooden fork, after which he has to place gunpowder in the pan and then strike fire with the flint to ignite the tinder. Up to 8.30 a.m., as no more provisions had been given to us, I sent a polite message over to their camp to say that, as my party was very short of fuod, I would be obliged if they would give me a little more rice or something; but they ordered my messenger to return and ask me who I was and where I had come from, and to tell me that if any more Sahcbs came this way they would most certainly be killed; and they again commenced firing guns. It appeared to me clear that I should get nothing more from them except insolence, and so I determined to have nothing more to do with them, but to retrace my steps as speedily as possible. Accordingly, at 9 a.m., everything being ready for a start, we left camp and marched until 11.15 a.m., when we crossed the Krapti, and I halted for one hour and ten minntes to lunch and wait for my sick servant, whom I had left some distance behind, in charge of a Mishmi, and one of our orderlies to come up. Starting again at 12.25 p.m., we passed the spot on which I had camped on the night of Saturday, the 2nd instant, at 1.30 p.m., continuing until 2.15 p.m., we again halted for 15 minutes, and met old Makiison on his way to Rima. It appears that he has been nowhere since he left us! He was afraid in fact to go to Rima and inform the Jên of our presence in the neighbourhood, as the latter would have upbraided him for allowing us to go there, as also for having acted as our guide. I could hardly be civil to the old man at first, for I felt that he had grossly deceived me. Having thought the matter over, however, I came to the conclusion that I could not blame him for the manner in which he acted. He rendered me yeoman's service when he supplied me with porters, as also for having used his influence to secure us a safe and speedy passage through his part of the country, and I feel therefore that I am still beholden to him. At 2.30 p.m. we continued marching again, proceeded till $3.30 \mathrm{p} . \mathrm{m}$., when my Mishmi porters rested for ten minutes. After which, starting again at 3.40 p.m., we marched until 5 p.m., when we reached Walong, and I pitched camp in an old field full of tobacco run to sued, a portion of which I had first to pull up, alongside of a wretched tumble-down and miserable-looking Tibetan house. Elevation 3200 feet. Distance marched about 16 miles, as we were moving for six hours and 20 minutes, exclusive of all halts. I purposely pushed on to this place; as Taggrison promised me supplies here, and he right royally fulfilled his promise. The place consists of but three houses, all in the same condition as the one already described. 'raggriuson keeps a good many cattle here, and the Tibetans (there are about fifteen souls, all poor-looking) look after them for him, and are allowed to make use of them for ploughing, \&c. I notice that the ordinary villager wears no pigtail, so I farcy it is a mark of rank with the Tibetans.

Thursday, January 7 th. -The thermometer stood at $34^{\circ}$ at 7 a.m. We got off about 10 minutes past 10 a.m., and crossed the boundary between the Tibetan and MijQ country at a quarter to 12, and ten minutes later we arrived at the spot where we had camped on the night of the 1st instant, and we halted there for 55 minutes to lunch; and, starting again at 10 minutes to 1 p.m., we moved along at a good pace till 25 minutes past 1 p.m., when we again halted for 15 minutes. Leaving again at 35 minutes past 1 p.m., we continued going till 20 minutes to 3 p.m., when we halted 10 minutes; and starting again at 10 minutes to 3 p.m., we marched without another halt to Krondong's village, where we had halted on the night of the

31st December, arriving there at 10 minutes past 5 p.m., and right glad $I$ was that we had made such a good march and bad got into such good quarters. I calculate the distance marched to-day at about 11 miles. We were moring for five hours and 40 minutes, exclusive of all halts. Krondong presented us with a fowl and six eggs, and persuaded him to sell me a pig for nine rupees.

Friday, January 8 th. $-\mathrm{T}^{\prime}$ hermometer $33^{\circ}$ at $7.30 \mathrm{a} . \mathrm{m}$. We started, and marched until 10 minutes past 11 a.m., when the Mishmis halted for five minutes. Then leaving again at 11.15 am . we continued till 10 minut 3 past $12 \mathrm{p} . \mathrm{m}$., when I halted for an hour close alongside the Brahmaputra tolundr. After lunch, starting again at 10 minutes past 1 p.m., we continued going till 25 minutes to 2 p.m., when we halted for 15 minutes to let Chowsf and his Khamtis eat. Then proceeding again at 10 minutes to 2 p.m., we moved along until 20 minutes to 3 p.m., when I halted 10 minutes for stragglers to come up, and then continuing until 20 minutes pest 3 p.m., our Mishmi porters again rested till 25 minutes to 4 p.m., after which we marched on till 4.15 p.m., when I pitched camp on a flat grassy piece of country close to, but a little above, the Brahmaputra, and a little to the north-east of Lise's house (alongside which I was encamped on the night of the 30th of December last). Elevation 2300 feet. Distance travelled 11 miles.

Saturday, January 9 th.-Lovely morning again. Thermometer $37^{\circ}$ at 7 am. Left camp at 8.30 a.m., and, marching till 9 a.m., we halted for 40 minutes. Starting again at 20 minutes to 10 a.m., we continued till 25 minutes to 11 a.m. Leaving again at 15 minutes to 11 a.m., we continued till 20 minutes to 12 , when I halted for 50 minutes close alongside the Brahmaputra, elevation 2000 feet, for lunch. After lunch, continuing again at 12.30 p.m., we marched on till 25 minates to 2 p.m., when we again halted for 10 minutes close alongside the Brahmaputra, and leaving again at 15 minutes to 2 p.m., we continued going till 2.30 p.m. Continuing again, we marched on till a quarter to 4 p.m., when we reached the spot where I had camped on the 29th. Distance travelled to-day 11 miles.

Sunday, January 10 th. -Thermometer $39^{\circ}$ at 7.30 a.m., at which time Chowsa sent down word to say I must halt here to-day. I accordingly occupied myself in collecting Mija words for my vocabulary.

Monday, January 11th.-Feels like rain. Thermometer $39^{\circ}$ at 7 a.m. Left camp at 8.30 a.m. and continued going till $10 \mathrm{a} . \mathrm{m}$., when $I$ halted for 15 minutes to allow stragglers to come up. Starting again at 10.15 \& m ., we continued till 11.25 a.m., when we halted for an hour at the Chua. Then leaving again at 12.25 p.m., we crossed the Sa at 1 p.m., elevation at crossing 2000 feet, and continued going till $1.10 \mathrm{p} . \mathrm{m}$., when we halted for 15 minutes. Leaving again at 1.25 p.m., we kept going till 3.10 p.m., when we reached the site of our old camp of the 29th December last, and I pitched camp on the old spot, elevation 2000 feet.

There can be no doubt that yesterday's rest did our porters (and ourselves likewise for that matter) a great deal of good. They marched splendidly to-day, and I calculate we covered 12 miles. We were marching for five hours and ten minutee, exclusive of halts. I promised them a large pig (if it could be got) provided they reached this place to-day at a tolerably early hour, and probably this may have had something to do with the way they all stepped out.

Tuesday, January 12 th.-Thermometer $42^{\circ}$ at 7 a.m. Managed to effect a start by $9.30 \mathrm{a} . \mathrm{m}$., and continued going until 20 minutes to 11 a.m., when we crossed the Halai river, and I halted for 15 minutes. Then proceeding again at five minutes to 11 a.m., we continued marching till seven minutes past 12 p.m., when we halted for 53 minutes to lunch at the spot where we lunched on the 27th altimo, viz. below the Mija village called Tila. Starting again at 1 p.m., we continued going until 20 minutes to 2 p.m., when we halted, at an elevation of 2200 feet, for 10 minutes;
then continuing again at 10 minutes to 2 p .m., we marched until 10 minutes to 3 p.m., when we reached the uncomfortable site I camped on the night of the 26th ultimo, and I again halted for 10 minutes to let the stragglers come up. Then starting again at 3 p.m., we marched till 10 minntes to 4 p.m., when I pitched camp upon a fine flat grassy piece of country alongside a small hill stream called Dakand, running down from the north, elevation 1700 feet. I calculate the distance marched to-day at 12 miles. We were walking for 4 hours and 52 minutes, exclusive of all halts. There are some Mijd houses on the hills above us, but none in sight.

Wodnesday, January 13th.-Lovely morning. Thermometer $35^{\circ}$ at 7 a.m. Had some difficulty in getting the Mishmis to leave their fires, owing to the cold, but I eventually got them off by 10 minutes to 9 a.m., and they continued going until 9 minutes past 10 a m., when we halted for 10 minutes. Proceeting again at 19 minutes past 10 a.m., we continued marching, and crossed the ot at 5 minutes to 11 a.m., elevation 1250 feet. I left Chowsa with his Khamtis and our Mishmi porters to bring on supplies promised from Taggrison's village, and I and Molesworth marched on as far as Harangt, the little sandy bay close to the Brahmaputra, where we were encamped on Christmas Day (20 days ago!) reaching there at 20 minutes to 12 , and very sorry I was afterwards that I had left Chowsa and the others behind us; they did not turn up until 25 minutes past $1 \mathrm{p} . \mathrm{m}$. (that is, one hour and forty-five minutes after Molesworth and I had arrived at Harangi), and they all appeared to be very full of liguor.

Leaving Harangt at 25 minutes past 1 p.m., we continued until a quarter past 2 p.m., when we halted for 15 minutes at a Mishmi bridge across the Brahmaputra, opposite a hill called Thôlang. At 2.30 p.m. we continued marching till 25 minutes to 4 p.m., when we halted for 10 minutes in an opium field (opium just a few inches above the ground). Elevation 1500 feet. Then continuing at a quarter to 4 p.m., we marched on briskly till 5 p.m. (the last mile and a half of our journey being over boulders lying close to the Brahmaputra), when I pitched my camp on a nice sandy spot alongside of the Brahmaputra. Elevation 1100 feet. The place is known by the name of Nyê, after a small stream which runs down (a short disfance from us) into the Brahmaputra from a point or so east of north. There was any quantity of drift-wood about, so we had heaps of firewood at our doors.

Thursday, January 14th.-Up at daylight. Morning very wild. Thermometer $50^{\circ}$ at 7 a m . We left camp at 10 minutes to $10 \mathrm{a} . \mathrm{m}$., and crossing the M'daun 20 minutes later, we ascended its left bank up a steep path, and proceeded on in the direction of the Dalei and got very close to that river ere we could find a suitable spot to camp on with water anywhere at hand. We had to halt for nearly an hour while Mishmis were sent out prospecting for the same, and some having at last been found, we pitched camp at 12.30 p.m. on a tolerably decent spot, which had recently been under cultivation, elevation 1300 feet, and Molesworth and I rested ourselves for a few hours.

This place, like all the country in its neighbourhood, is called SAmellang, after the hill upon which Kaishâ's people reside. Soon after camp had been pitched Mabritison appeared and presented me with a small mithon, and a fine pig was also brought in soon afterwards, as also some rice and a large quantity of fermented Pubost, showing that the MânyO chiefs were determined, if possible, to carry off the palm for hospitality. I was very loath to accept so much from them gratis, but they would heed nothing that I said. The Mishmis killed both animals in due coarse, and by 4 p.m. there was not a vestige of either of them to be seen about raw, though large chunks tied on to the Mishmi or Khamti baskets, or skewers full of grilled pieces lying about, met one's eyes everywhere. The prospect of getting heaps of beef and pork, as also liquor gratis, apparently proved more altractive to
my porters than home ties, for they were all still in camp up to 5 p.m., though I believe some of them went up to their villages afterwards. How long the manufacturing of liquor went on I can't say, for I went to bed early.

Friday, January 15th.-Thermometer $52^{\circ}$ at 7 a.m. I found $y u$ (liquor) being brewed at a very early hour, and it appeared clear therefore that I should have the usual difficulty in getting off early. At eight minutes to $11 \mathrm{a} . \mathrm{m}$. I managed to get them to start. We crossed the Dalei running very strongly (I fancy if we had been much later we should not have been able to cross it on the weir, as a portion of it was broken) at 11.30 a.m., and after ascending some 300 feet or so up its right bank, I halted at a quarter to 12 for eight minutes to let stragglers come up. Then continuing again at 7 minutes to 12, we reached Misong's house, where I left my servant on the 24th December last, at 12.20 p.m. I found he had returned to Takulong's village two or three days ago.

Contiruing again at 1.15 p.m., we marched till a quarter to 3 p.m., when I reached Takalong's village. I camped upon the old spot where I had been on the 23rd and 24th December last. Only five out of the sixteen porters I have with me will agree to go into Sadiya with me, so I shall be compelled to call upon Takalong for assistance.

Saturday, January 16 th. -Thermometer $54^{\circ}$ at 7 a.m. It rained on and off all last night, though not heavily. I believe it is snowing on the higher ranges. At 15 minutes past 11 a.m. the last cooly had left the village, and Molesworth and I left immediately afterwards. It was just drizzling at the time, and the little rain we had already had during the night made the path very slippery, so that we were unavoidably very slow in descending the very steep path which leads from the village to the Úm, and we didn't cross it till noon. After crossing it, we proceeded on till 10 minutes past 1 p.m., when we reached Nars, the sandy spot where we camped on the night of the 21st December last, and I halted for half an hour. Leaving Nari at 1.40 p.m., we crossed the Talut at 25 minutes past 2 p.m., and at 3 p.m. I halted for five minutes at an elevation of 1000 feet in the jungle. Then continuing agaid at 5 minutes past 3 p.m., I again halted in the dry bed of a mountain stream for 10 minutes to let stragglers come up. Elevation 900 feet. Continuing again at 3.30 p.m., we marched till 5 minutes after 4 p.m., and after halting five minutes we proceeded on till 10 minutes past 5 p.m., when I pitched camp on a filthy jungly spot, covered with nasty wet grass, close to, but a good deal above a little stream called Chtlang. The spot is alleged to be half-way between Takalong's and Hai-imsong's villages. It is pot much used as a camping-ground, as the majority of Mishmis who travel between the two villages prefer camping in Chôse village (where I camped on the 19th of December), which is some distance above us. The last 1\& mile to this place was along a beautifully level path, but it was terribly overgrown with jungle, and so we all got wet through. The jungle, too, was terribly tangled overhead, and so we had to go along in a stooping position, which was very tiring. We were marching for five hours, exclusive of halts, and did, as nearly as I can guess, 10 miles.

Sunday, January 17th.-Up at daylight; foggy, clondy-looking morning. Thermometer $53^{\circ}$ at $7 \mathrm{a} . \mathrm{m}$. We left camp at 9 minutes to 10 am ., and continuing till 15 minutes to $11 \mathrm{a} . \mathrm{m}$., we crossed the Mâyê, and halted for 10 minutes (elevation 800 feet). Starting again at 5 minutes to 11 a.m., we marched till 12.25 p.m., when I halted for 35 minutes to lunch. Continuing again at 1 p.m., we reached the Têdêng at 2.30 p.m., and after crossing it on a weir at a spot higher up than we did on the 19th December last, I halted for 25 minutes. Starting again at 5 minutes to 3 p .m., we reached Hai-imsong's village at 10 minntes past 4 p.m. The path up from the Têdêng is a long and stiff one, as the elevation of the village is

1800 feet, and where we crossed the Têdêng my aneroid registered 500 feet only. Soon after arriving in the village I arranged with Hai-imsong for four porters for to-morrow, to replace four men from Takalon's village, who wish to return home. We were marching for 5 hours and 10 minutes, exclusive of halts, to-day, and I reckon that wo did 10 miles.

Monday, January 18th.-Thermometer $40^{\circ}$ at 7 a.m. We effected a start by 8.45 a.m. Commencing to ascend the hill above Hai-imsong's village, we continued marching till 9.30 a.m., when I halted at an elevation of 2900 feet for 10 minutes. Then continuing again at 9.40 a.m., we marched on till 10 a.m., when I again halted for 15 minutes. Elevation 3100 feet. We had thus ascended 1800 feet in $1 t$ hour, i.e., in about two miles. After this, continuing at 10.15 a.m., we proceeded till 11 a.m., when the Mishmis again halted for 10 minutes, at an elevation of 3300 feet.

Leaving again at 11.10 a.m., we reached the highest point in the hill ( 4300 feet) at noon, and after this, descending 300 feet, I reached Papiar (the spot from which we got such a glorious view on the 18th December) at 10 minutes to 1 p.m., and balted 30 minutes. Elevation 4000 feet. After this, leaving again at 1.20 p.m., we continued again till 2.10 p.m., when we reached Hareling (elevation 3200 feet), where I camped on the night of the 18th December last. Then leaving again at 2.15 p.m., we continued till 3.20 p.m., when we again halted 10 minutes. After which, starting once more at 3.30 p.m., we proceeded till $4.30 \mathrm{p} . \mathrm{m}$., when I reached Tâmêmûkh, where we were camped on the 17th December last (elevation 450 feet). We were marching for 5 hours and 55 minutes, exclusive of halt, and I reckon we did about 15 miles. Digaros (male or female) can't compete with Abors in carrying loads down hill. Had I been performing to-day's journey with Abor porters, we should have reached Tâmêmâkh by 1 p.m.

Tuesday, January 19 th.-Thermometer $50^{\circ}$ at 7.30 a.m. At 9.30 a.m. I started on ahead of every one in order to try and get a shot at a deer, as a little venison would have been a treat for us all, but I reached the spot where we are camped to-day at 11.20 a.m., distance five miles, without seeing anything. During the afternoon I occupied myself in jotting down Digatro words for my vocabulary.

Wednesday, January 20th. -Started at $7.30 \mathrm{a} . \mathrm{m}$. for Dorram0kh, which we reached about 10.30, and about half an hour afterwards we left by boat for Sadiya, reaching there at midnight.


[^0]:    * The story told of this river, that it rises from a mountain which shines like gold when lighted by the sun in summer, resembles the circumstance recorded by Humboldt of a peak near the Upper Orinoco; and the cause is probably the same in both cases, viz. the fact that micaceous granite enters largely into the composition of the mountains which feed the affluents of the Orinoco and the Brahmaputra.

[^1]:    * Lieutenant Rowlatt writes these names as Rumling and Diree.
    $t$ The name Glee does not occur in the Pandit A-l's enumeration of villagee in the Zayul valley.
    $\ddagger$ Duániyas are half-breeds between Assamese and Singphos, 80 called from their value as interpreters, duán being the Assamese word for language.

[^2]:    * The facility with which part of a word is dropped in composition is a characteristic of monosyllabic languages. The compound Zai-wa is analogous to the name of the Corean province of Phyong-an, which is compounded of the two first syllables of Phyong-yong and An-ju, names of its principal cities.
    $\dagger$ It seems certain, at least, that this is the etymology of the district immediately to the east of Zayul, viz. Tea-rong, which means literally "the hot ravine," rong being the Tibetan name for a region of deep river-valleys.

[^3]:    * Dr. Griffth (1836) says that the Mishmis of the Tedeng and its neighbourhood used the name dai for the Zayul valley, and that the word means "plain." It may, however, be a corruption of the name dzain. In a recent paper in the Nineteenth Century, Mr. C. Lepper (writing apparently from accounts given by Chinese or Tibetan travellers) calls the district Dza yeu, where yeu evidently stands for yul, final $l$ being mute in some dialects of Tibetan.
    $\dagger$ John Pon, or in exact orthography, rdzong-pon, signifies " lord of the castle." The word Shian-u literally signifies "treasurer." Mr. Lepper gives Shiang-ze as the title of the treasurer of a monastery. Dr. A. Campbell (1855) says that the state treasurer of Lhassa is assisted by "two sub-treasurers styled Shang-jotes." In this latter form the word is nearest to its correct Tibetan spelling, phyag-mdzod: the combination phy in Tibetan is commutable into soft ch, which again interchanges with sh.
    $\ddagger$ Tibetan ( $r$ ) je, "ruler"; the final $n$ is apparently a provincialism, as also in Zain for Zai or $Z a$ as the name of the district.

[^4]:    * Zayulmed means " lower Zayul."
    $\dagger$ This man's name for the eastern branch of the Brahmaputra above Rima (the Pandit's Zayul Chu) was La Ti, which plainly seems to be Mishmi. Ti is the Mishmi word for water.

[^5]:    * So called by the Assimese because they trade with the plains of Assam by the way of the Digaru river. They call themselves Tároan.
    $\dagger$ In former times the Digarus were settled on the north and the Mijus on the south bank exclusively, but this distinction, which is now no longer observed, can have held good only in the country from the Ghalum Ti westwards towards Assam.

[^6]:    * Chuno came from Choke's village on the Dora, a long way westward of the residence of his father Krosa, whose village was situated beyond the Tedeng when it was visited by Griffith in 1836. It appears that Premsong, who was a neighbour and perhaps a relative of Krosa, moved westwards to the Doria about 1842, where he was found by Lieutenant Rowlatt. Choke is probably one of his family, and his connection with Kroes's son Chuno can thus be understood.

[^7]:    * It was some little distance capt of the Painí, and seems to have corresponded closely with the site of Prongsong's village mentioned by Mr. Needham in his diary of the 21st December. The name of the hill on which Krosa's old village was situated is said by Mr. Needham to have been Kap-pui-lang, but no such hill is mentioned by Dr. Griffith.
    $\dagger$ They cut their front hair (chuli) in a fringe across their forcheads. Their own name for themselres is said to be Nedu.
    $\ddagger$ The name is an Assamese one, signifying "degencrate " or "ontcast," and probably has reference to their savage and unsooial character.

[^8]:    * The teeta is valued as a febrifuge. Dr. Griffith, who was shown specimens of it, calls it coptis teeta, and describes it as.yielding, when chewed, a yellow sap of a pure intense bitter of some permanence, but without amma. The Mishmi poison is said to be a plant with a small white flower, causiug irritation when touched. Both plants are found on high hills, which are covered with snow in winter. It is strange that teeta does not occupy a prominent place in our latest reports of Mishmi trade with Tibet. It is still imported into Sadiya.
    $\dagger$ This word is not the name of any Miju clan as given to Mr. Neerham, nor does it eeem to be a recognised Tibetan word. The Pandit's Lhobas, who bring the ordinary Mishmi staples to Sonling, 37 miles up the Rong Thod Chu, and get salt in exchange, are probebly one of the tribes whom the Assamese call Bebejia

[^9]:    * These knives or bill-hooks are made by the Kanangs, who are dependent upon the Khamtis, and inhabit a mountain tract to the north of Bor Khamti, where iron and silver are found. The bill-hooks are brought down in the rough, and sold first to the Singphos, who fit them with handles and sheaths, and pass them on.

