

# DARJEELING

*and its* MOUNTAIN RAILWAY

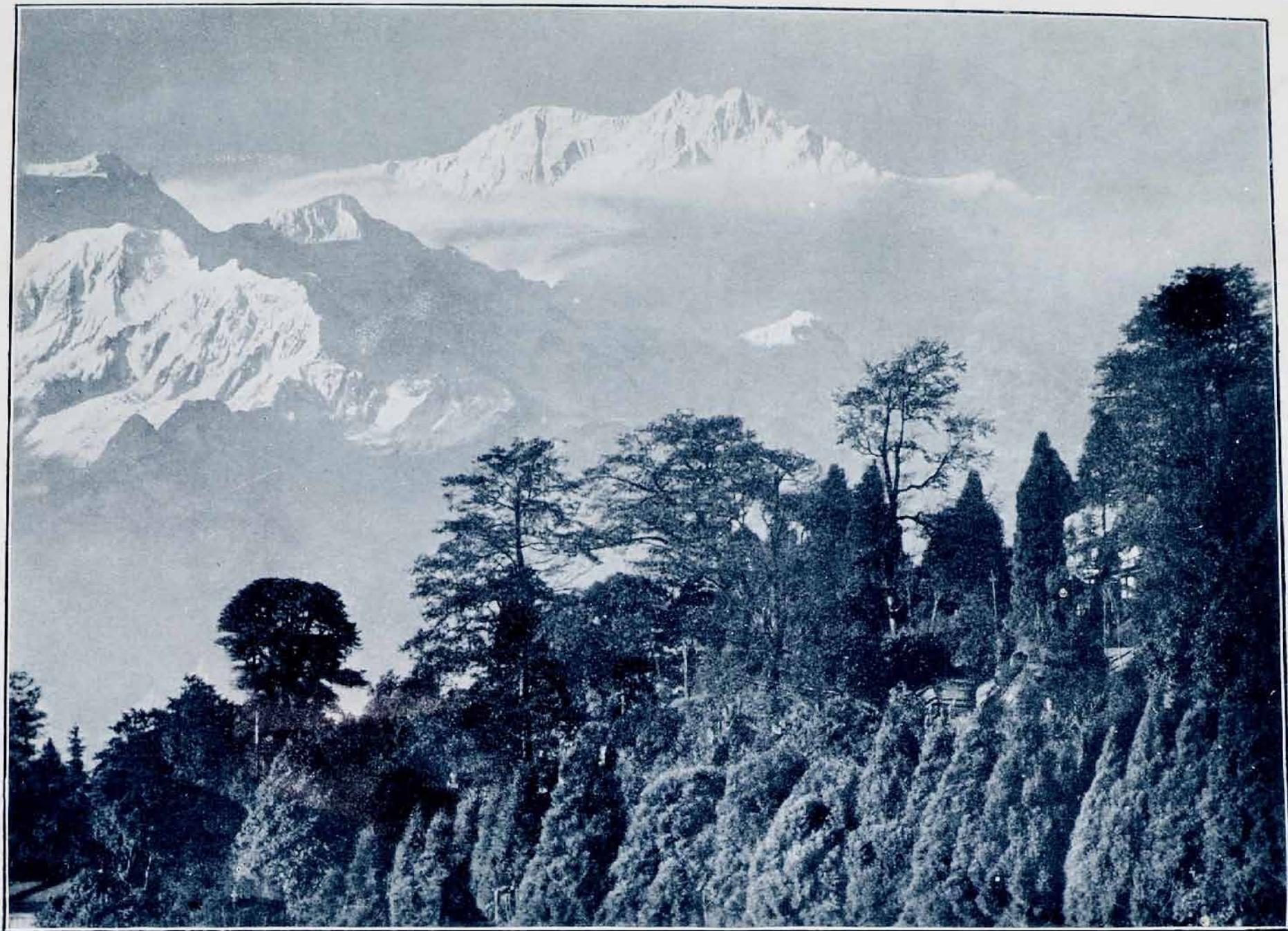
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A GUIDE AND SOUVENIR  
ISSUED BY THE  
DARJEELING-HIMALAYAN  
RAILWAY COMPANY, LD.



1921



THE SNOWS AT SUNSET.

*Photo—Burlington Smith.*

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AND ITS

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*“Northwards soared  
The stainless ramps of huge Himala’s wall  
Ranged in white ranks against the blue—untrod,  
Infinite, wonderful—whose uplands vast,  
And lifted universe of crest and crag,  
Shoulder and shelf, green slope and icy horn,  
Riven ravine, and splintered precipice  
Led climbing thought higher and higher, until  
It seemed to stand in heaven and speak with God.”*

—SIR EDWIN ARNOLD.

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1921

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## PREFACE.

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**A**CKNOWLEDGMENT is due to Mr. F. L. Bussell, who has assisted very considerably in the compilation of this Guide, and for the use of his sketches and photographs. Also to Messrs. Burlington Smith and M. Sain of Darjeeling and Messrs. Johnston & Hoffmann of Calcutta for permission to make use of their photographs.

R. B. A.

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## I.

### INTRODUCTORY.

THE traveller to the Eastern Himalayas enters upon a new tract of country as soon as he reaches Siliguri, and the pleasure and interest of the journey to Darjeeling will then be much enhanced if he is in possession of a few facts regarding the country he is about to traverse and the mighty mountain regions he is approaching.

Siliguri, the starting point of the Darjeeling-Himalayan Railway, is on the verge of the tract known as the Terai—a region of forest trees and tea plantations skirting the base of the Himalayas. Beyond this narrow belt of almost level country, the Himalayas rise abruptly in range upon range of wooded mountains, culminating in the highest snowy peaks in the world and the lofty tableland of Tibet. The suddenness with which the mountain ranges rise from the plains is peculiar to this, the eastern, extremity of the Himalayas, which do not rise so steeply in the north-west of India and the Punjab.

It is up a spur of one of these steep ranges, the Singalela Range, that the mountain railway commences its ascent to Darjeeling at Sukna, 7 miles north of Siliguri. The railway ascends for 40 miles and reaches an elevation of 7,400 feet on this range at Ghum, whence it descends the somewhat lower spur on which Darjeeling stands. The Singalela Range is, of course, only one of the many ranges which the main Himalayan plateau throws down to the plains, but it is one of the two principal ranges in the Eastern Himalayas. It is 60 miles long, and itself culminates in the great peaks of Kabru, Jannu, and Kanchenjunga (28,146 feet above sea level). Thus in rising to Darjeeling the traveller is actually ascending the lower spurs of the mountain range which includes the greatest number of the highest mountains in the world, mountains which reveal to his view more than 10,000 feet of their snowy slopes when he reaches the hill-station.

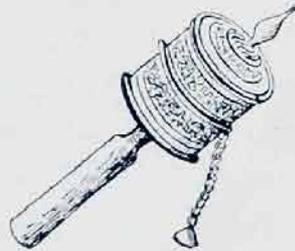


F.L.B.

SCREW-PINE.

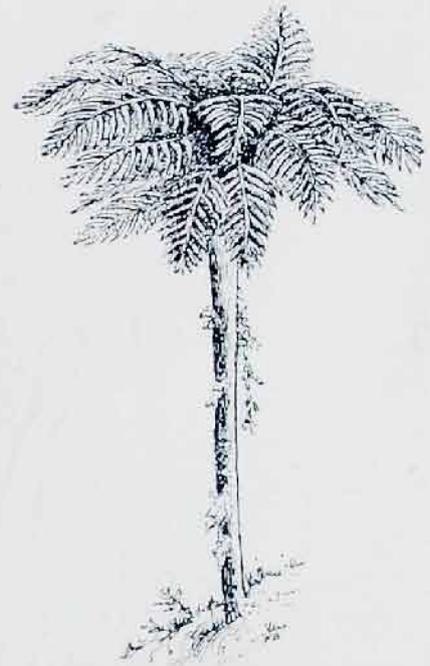
But before these snowy eminences are open to view the traveller will pass through interestingly different climate zones with striking differences of foliage, giving a variety of scenic effect as is seen in no other part of the world. Here again the mountains will be found to be clothed with much more luxuriant vegetation and many more beautiful forest trees than the Himalaya mountains of the Punjab and north-west where the rainfall is less and many of the lower slopes are almost bare.

As the train passes through the lower forests the traveller will see stalwart sal trees, lofty and straight in the trunk, then, as the railway track twists in and out of ravines and ascends the mountainic cotton trees, palms, and the giant bamboo, all entwined with creepers and loaded with numberless ferns and mosses. After the altitude of 3,000 feet is reached (and the traveller will find the altitudes shown conspicuously on a board beside the track at each thousand feet, as well as at each railway station) the forests and mountain sides will show the traveller fig trees, the screw-pine, oaks and chestnuts; higher still, at 4,000 feet, the birch, the maple, brambles and the beautiful tree fern, while numerous lichens, orchids, and mosses carpet the hill-sides and hang from the branches of the trees. At a higher elevation the oaks and



F.L.B.

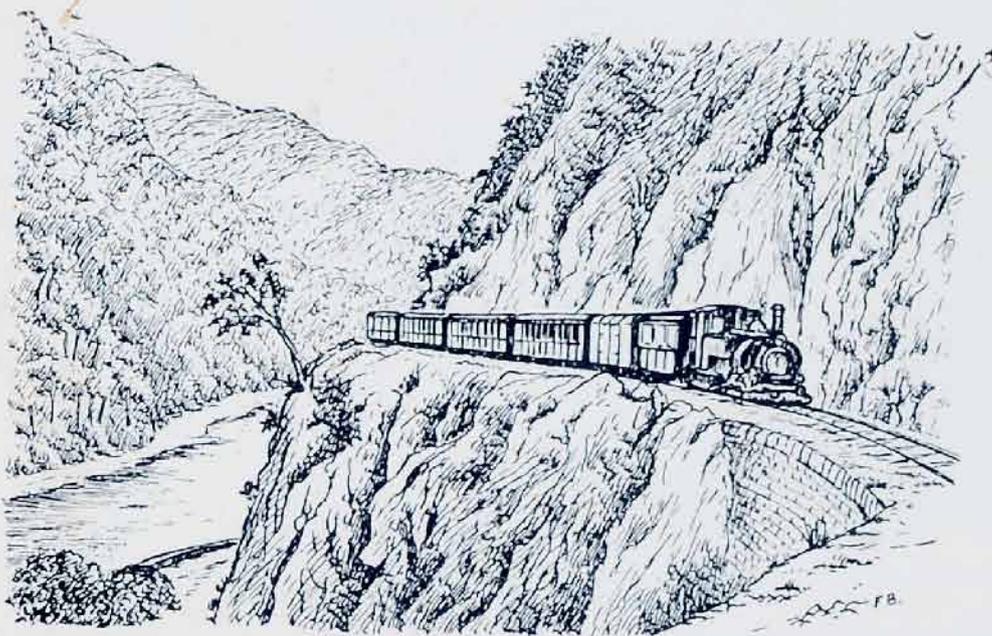
PRAYER WHEEL.



F.L.B.

TREE FERN.

chestnuts are interspersed with walnut trees and laurels, until in the neighbourhood of Sonada and Ghum are handsome flowering magnolias, wild hydrangeas, and rhododendrons. Nowhere else can be seen in one journey of a few hours such a combination of luxurious vegetation, primeval forest, and sublime mountain peaks as that enjoyed by the traveller to Darjeeling; and when the intervening forest-clad mountains have been ascended and the hill station is reached, a quite unparalleled landscape of snowy heights lies open

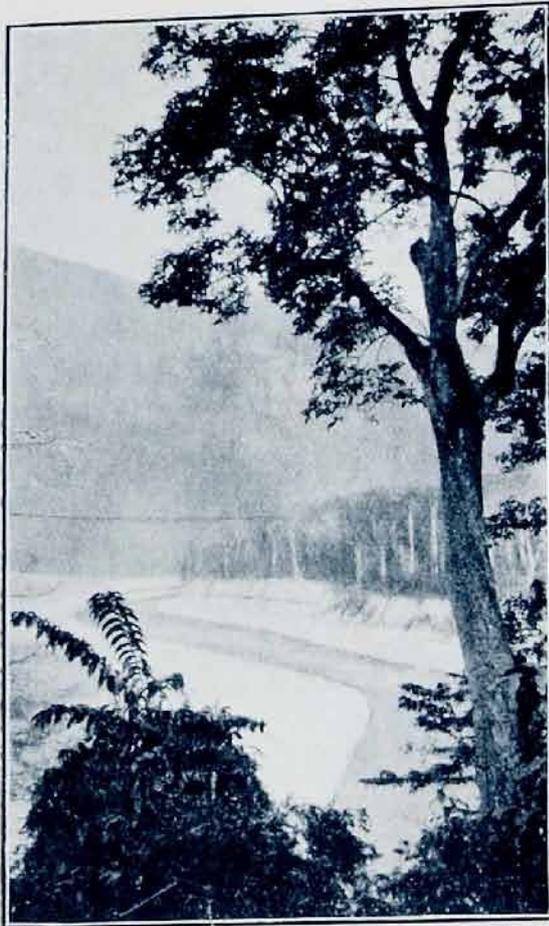


THE TEESTA VALLEY MAIL.

F.L.B.

to view—more than twelve peaks rising above 20,000 feet, Kanchenjunga, with an elevation of over 28,000 feet, and seven other peaks over 22,000 feet. These are the mountains of East Nepal, of Sikkim, and of Tibet, the countries lying west, north, and east of Darjeeling. The peaks have been very little explored and are at once forbidding and alluring, both from their own massive isolation and from the strange inhospitality of the lands of Nepal and Tibet that lie beyond them.

This group of snowy mountains lying north of Darjeeling forms one of the main features of this part of the Himalayas, another is the River Teesta. The Teesta River, with its tributary the Rungeet, is the great drainer of the Eastern Himalaya. Starting from icy slopes at an elevation of over 20,000 feet the Teesta receives



*Photo R.B.A.*  
THE TEESTA IN SIKKIM.

tributaries from the great peaks and flows down deep valleys to the plains. At its narrow outlet from the mountainous tract the river is broad and rapid, and here a branch of the Darjeeling-Himalayan Railway approaches it from Siliguri. The Railway runs through a gate in the mountains and up the wooded valley of the Teesta for 16 miles, and throughout this distance the line follows every bend of the river, hugging its very banks and affording very beautiful views of the valley and of the great river itself. In the upper reaches the current of the river is very strong, and from the train it may be seen rushing in deep eddies between the rocks.



LAMAS.

The third of the principal features of the Eastern Himalaya, and one which will surprise the traveller coming up from the plains, is the sudden and total change which he will see in the inhabitants of the country. Not only does he find that within a few hours he has



A NEPALI WOMAN.

come from tropical climes into a temperate climate, but that the inhabitants have Mongolian features, wear their hair in pigtailed below Chinese types of hats, and assume a bright and peculiar mode of dress. He will notice the manly, independent bearing of the

mountaineers, the Bhutias, their cheerfulness and the freedom and happy faces of their women, who know no purdah. These women will be seen moving freely about and laughing and chatting with the men. They are clad in bright gowns and carry their riches about



*Photo—Burlington Smith.*

A LEPCHA.

with them in heavy gold and jewelled ornaments. The traveller will also see sturdy little Nepalese men, the stock that supplies the famous Goorkha soldier, and will find himself among Tibetan men and women and the aboriginal Lepchas, who twirl prayer wheels in the right hand as they take their food or sell their wares, and who erect bamboo staffs with flags covered with repetitions of a sacred

sentence, all for the purpose of driving away evil spirits and gaining for themselves a sure entrance to their heaven. Such flags will be seen floating from bamboo poles near temples and shrines, or in long



*Photo—Johnston and Hoffmann.*  
A BHUTIA WOMAN.

streamers stretched across mountain torrents, as the train runs round and up the hills from Siliguri to Darjeeling.

Having now acquainted himself with some of the main features of the country and the people he is approaching, the traveller will wish to learn how Darjeeling came to be founded and built on its mountain top.

## II.

### HISTORY OF DARJEELING.

**A** HUNDRED years ago the mountain spur, on the slopes of which the hill station of Darjeeling now stands, formed a part of the independent kingdom of Sikkim and was covered with dense forest. The town of Darjeeling alone now contains a population of nearly thirty thousand people of many different creeds and races, but there were not more than two hundred inhabitants in the whole stretch of the mountains of this neighbourhood when the East India Company, which then controlled British interests in India, first came into contact with it.



KINCHENJUNGA FROM DARJEELING.

*Reproduced from Sir Joseph Hooker's "Himalayan Journals," 1854.*



OLD DARJEELING.

*From a Painting.*

This was in 1814 when the Company intervened in favour of Sikkim as against the war-like Nepalese, who would otherwise have absorbed the whole of the little State of Sikkim and annexed it to their own territory. The Nepalese were repulsed in the war that ensued, and the Rajah of Sikkim was reinstated in possession of his kingdom.

During negotiations consequent on this intervention by the Company, the British representative, General Lloyd, was struck with the suitability of the spur, on which could be descried in the forest the few huts of Darjeeling village, as a sanitarium for British troops. And so, in 1835, we find the East India Company obtaining the lease of a small strip of country in the south of the Sikkim Himalaya for the purpose of a sanitarium and an outpost of strategical importance on the northern frontier of India. A member of the Indian Medical Service, Dr. Campbell, was appointed Agent of the tract leased, and Lieut. Napier (afterwards Lord Napier of Magdala) set to work to fell the forest and lay the foundations of the hill station of Darjeeling. This officer also built the first road from these hills to the plains, a road which is still existing but which was later superseded by a much better road of which further particulars will be found here below.

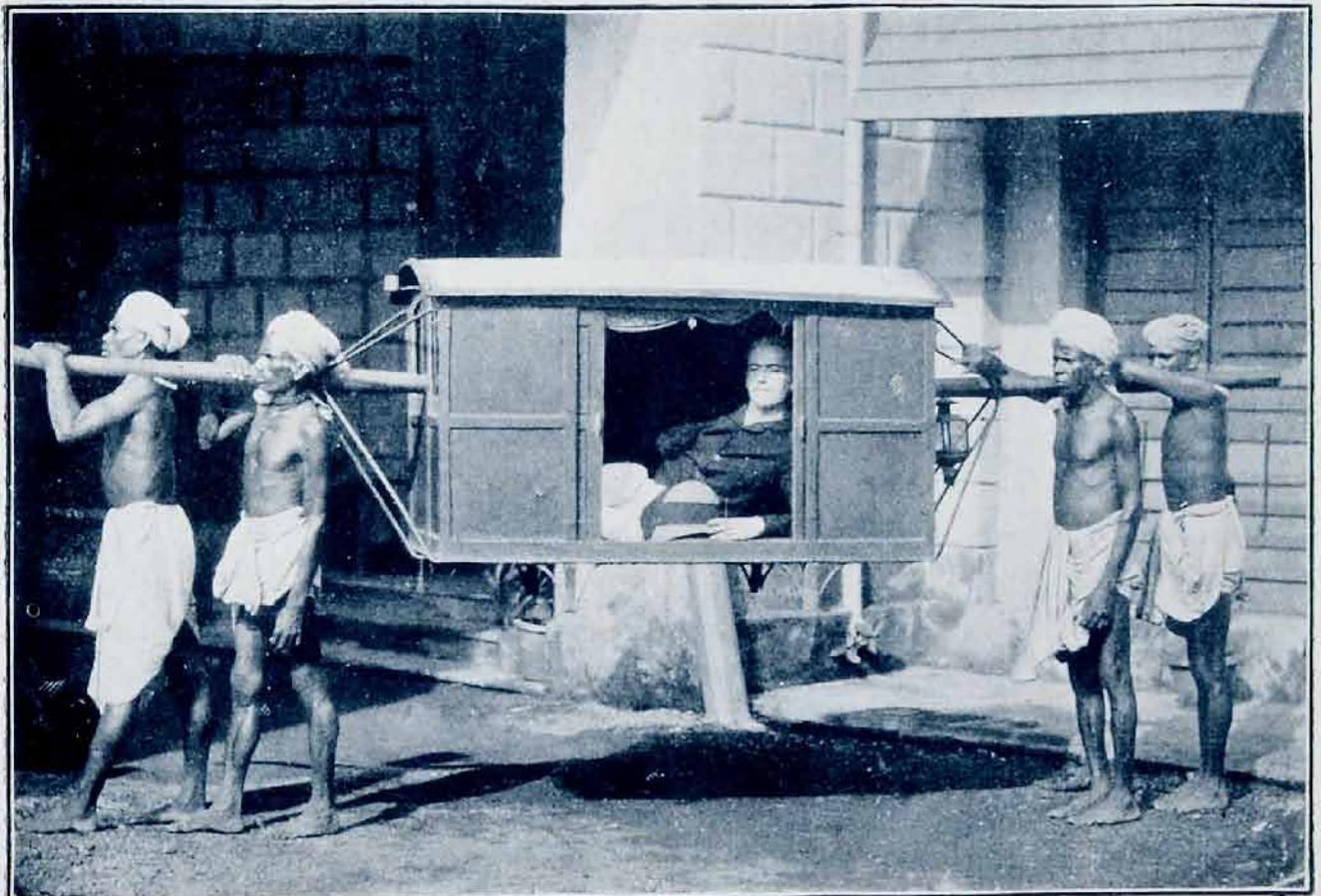
The little town founded by these two officers of Government grew very rapidly, natives of the surrounding country were quick to avail themselves of the blessings of life under the ægis of the Pax Britannica, and within ten years, between 1839 and 1849, the population rose chiefly by immigration from 100 to about 10,000 persons, a truly remarkable tribute to the East India Company and the administration of their officers.

This rapid growth, however, excited the jealousy of the Maharaja of Sikkim, or rather of his Prime Minister, and when Dr. Campbell and the eminent explorer and naturalist, Sir Joseph Hooker, were touring in Sikkim in 1849, with the permission of both Governments, they were suddenly seized and imprisoned. Many indignities and even severe insults were thrust on the British Agent during weeks of meaningless detention, and as a result the usual expeditionary force had to be sent to teach good manners to the uncivilized authorities in Sikkim. Fortunately there was no necessity for bloodshed, and after the Company's troops had crossed the Rungeet river into Sikkim hostilities ceased. Consequent on this trouble, and a further ebullition of misconduct on the part of the Sikkim authorities a few years later,

the mountain tracts now forming the district of Darjeeling became a portion of the British Indian Empire, and the remainder of the kingdom of Sikkim became a protected State.

The march of progress and civilization in the mountains of the annexed territory now became very rapid. The road built by Lieut. Napier was found to be of too steep a gradient and too narrow for wheeled traffic, and so, in 1861, a new and excellent cart-road with an easy gradient was commenced. This road connected with a great road that had been built across the plains of Bengal for over a hundred and fifty miles from the station of Sahebganj on the East Indian Railway, for in those days no railroad existed from Calcutta to the northern confines of Bengal. Then, indeed, the traveller had to approach the hill station by a long, roundabout route, first by rail for over two hundred miles, then by boat, palki, and pony for another two hundred miles and more, his journey taking about a fortnight instead of the twenty hours now required.

But by 1878 a railway had been completed from Calcutta to Siliguri, almost to the base of the Himalayas, and a tonga service took

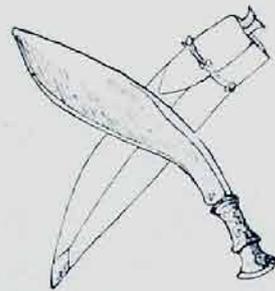


A PALKI.



A BULLOCK CART.

ascend by tongas soon led to dissatisfaction with this means of transit, and to the inception of the laying of a steam tramway along the road from Siliguri to Darjeeling. This tramway was commenced in 1879 and in a couple of years was completed and developed into the Darjeeling-Himalayan Railway, the progress of which will be traced in the next chapter. In this way communication by rail between Calcutta and Darjeeling was established within fifty years after the forest-clad Darjeeling spur of the Sikkim Himalaya came to be embodied in the British Indian Empire. And now the district of Darjeeling, which less than a century ago was principally forest and supported only a few hundred inhabitants, contains a population of a quarter of a million of Britishers, tea industry worth

F.L.B.  
KUKRI.

travellers thence up the hill portion of the journey. The cultivation of tea had by this time developed remarkably and the industry had become firmly established. But the needs of this industry and the inconvenience suffered by the general public in the tedious

And now the which less than a century ago was principally covered by virgin forest and supported only a few hundred inhabitants, contains a population of a quarter of a million of Britishers, tea industry worth millions of pounds.

### III.

#### THE RAILWAY.

**A** FEW notes regarding the original construction of the railway and the improvements subsequently effected may prove interesting to the traveller before he turns to the itinerary of the journey.

The tonga service on the cart road alluded to in the previous chapter served travellers and traders for ten years, but when the obvious disadvantages of such a means of communication led to proposals for the laying of a steam tramway from Siliguri to Darjeeling, Mr. Franklin Prestage (at that time Agent of the Eastern Bengal Railway Company) approached the Government of Bengal in 1878 with a detailed scheme. Sir Ashley Eden, the Lieutenant-Governor, appointed a Committee to examine the project, and this Committee reported that the construction of a steam tramway was feasible and would be of great advantage, both to the Government and the public. The cart road had, indeed, suffered very heavily from slips during each rainy season and inconvenience and lengthy interruption to communications had resulted. The upkeep of the road, moreover, cost the Government about one and a half lakhs of rupees annually (say £15,000), and it was hoped that the tramway would be able to help to defray this cost. This expectation has been in fact more than fully realised, and the Company has not only succeeded in keeping communication open with only rare and short interruptions for a space of forty years with increasing efficiency, but has relieved Government of all cost in the maintenance of the road, thus saving the tax-payers many thousands of pounds.

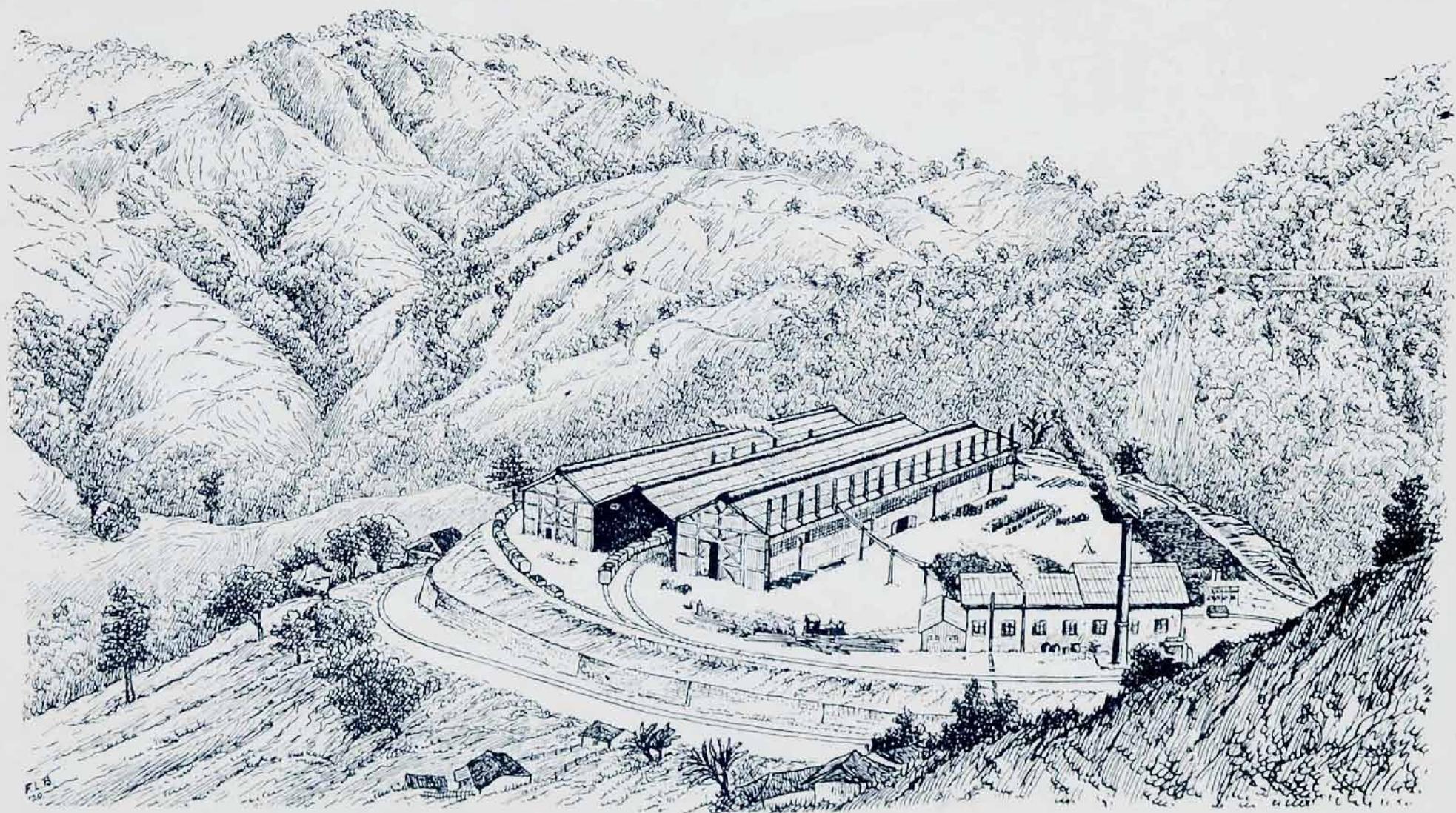
Mr. Prestage's scheme was gladly accepted in 1879, and the construction of the tramway was commenced and pushed on with great rapidity. By March 1880 the line had been opened to Tindharia, and Lord Lytton, the first Viceroy to visit Darjeeling, was conveyed so far by the Company. Before the end of that year the line was

complete to Kurseong, and in July 1881 it was opened for traffic right through to Darjeeling. The name of the Company was then changed to the more dignified appellation of the "Darjeeling-Himalayan Railway Company." Messrs. Gillanders Arbuthnot & Co., one of the leading and oldest firms in Calcutta, were appointed agents of the Company from its inception and still act in that capacity.

In the first instance the alignment of the railway followed that of the cart road throughout, but it soon became apparent that some of the grades on the road were very much steeper than the locomotives could manage without great waste of power. It was necessary therefore to make realignments in parts of the track and to adopt certain ingenious devices to get an easier ascent and to enable heavier loads to be drawn up the mountains. A ruling gradient of 1 in 25 has been aimed at by the engineers of the Company though in places a gradient of 1 in 20 still exists, hence we find that the railway at times leaves the road altogether and at other times attains a different alignment by means of "loops" and "reverses." Some of these devices are illustrated and referred to in the itinerary in the next chapter, but here it may be stated that in the "loop" the railway track circles round and passes over itself by a bridge, thereby quickly attaining a higher elevation and an immediately better alignment. In the "reverse" the same object is obtained by running the track back diagonally up the hill-side for a short distance, and then again resuming an alignment parallel to the original alignment but higher up the side of the mountain.

But these improvements in the grading of the railway only form one branch of the progress that has been made since the first working of the line, the engines and the rolling-stock having also undergone much change. The engine originally employed was very small even for a two-foot track, and was only capable of drawing a load of about 7 tons. But now the standard type can draw a load of 35 tons up the improved track. The speed up-hill was originally only 7 miles an hour but now 12 miles an hour is safely attained.

The original passenger vehicle was a small four-wheeled trolley with canvas roof and two wooden benches for seats, but some years later bogie railway stock was introduced. Carriages 26 feet in length over all, comfortably fitted, are now in regular use. New workshops were opened at Tindharia in 1914, and all rolling-stock



F. L. B.  
1900

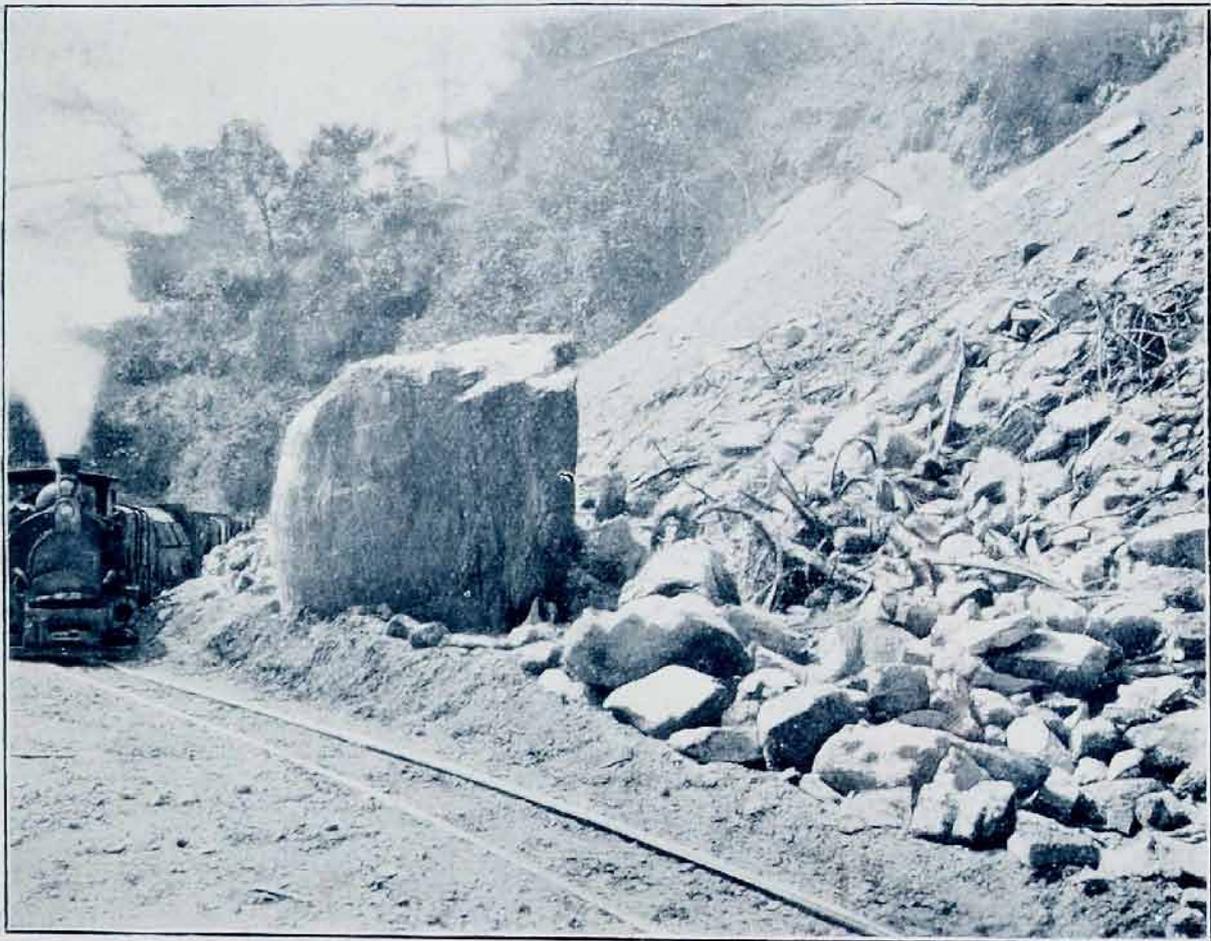
TINDHARIA WORKSHOPS.

Sketch—F. L. Bussell.

is now built in the workshops with the exception of the wheels which are imported.

During his journey up the mountains the traveller may at times imagine that he is almost over the edge of a precipice. This is due to the great "overhang" of the carriages. The gauge being only 2 feet, the carriages, which are 6 feet 9 inches broad, overhang the rails considerably, and the traveller is apt to believe the track to be nearer the precipitous edge of the mountain than is actually the case.

Much skill has to be exercised by the engineering staff of the railway to maintain the continued safety of the line, which is not infrequently temporarily breached by torrents and landslips. In many places the shaly nature of the mountain-side renders it liable to crumble away and throw down rocks and boulders. When such an event takes place it is not allowed to interrupt the traffic for any but the briefest space of time, the railway engineers quickly removing



A LANDSLIP.

the obstruction and repairing the line. But sometimes, as in September, 1899, long stretches of the line are carried away by great landslips and then a new alignment has to be laid down and the railroad reconstructed. Certain mountain torrents, moreover, have required much patience, skill, and expense for their successful control. The traveller will see revetment works below the road and training works far up the hill where many such torrents are crossed by the track. The most troublesome of all such mountain water-courses, and one which has cost the Company many thousands of rupees to control, is the Pagla Jhora, to which the attention of the traveller will be drawn in the itinerary given in the next chapter.

For the information of travellers who may be interested in the technical part of the work and construction of the railway, certain data are given below :—

*Curves.*—The curves are necessarily very sharp on account of the contour of the mountains, no tunnels being bored, a fact for



Loop No. 4—MILE 21.

Photo—M. Satn.

which the traveller in the interests of his comfort and of the scenic pleasures of the journey may be grateful. The sharpest curve on the line is at Loop No. 4 at mile 21 and has a radius of 59 feet.

*Engines.*—The standard engines have four coupled wheels and weigh 14 tons; the cylinders being 11 inches bore and 14 inches stroke. A Garratt, or eight-wheeled articulated engine weighing 28 tons, is also in use in the hill section, while a Pacific type engine with bogie tender is in use in the plains section. This last-named engine weighs, with tender, 49 tons.

*Rolling Stock.*—The ordinary passenger bogies in use have a body 24 feet 3 inches long and are 26 feet 6 inches over all. Bogie vans and trucks are also in use, the longest bogie truck being 32 feet.

*Rails.*—The steel rails used in the track weigh  $41\frac{1}{4}$  lbs. per yard, and portions of the line have recently been relaid with 50-lb. rails.

*Gradient.*—The steepest gradient on the hill section is now 1 in 20, the average gradient is 1 in 29. The line from Sukna to Ghum rises in one continuous grade, there being no reverse or counter grades in a distance of 40 miles.

*Traffic.*—The downward traffic of the hill section is principally tea, seed, potatoes, and fresh vegetables. The upward traffic of this section is principally rice, flour, tea garden stores, oil, coal, miscellaneous goods and general stores.

During the year ending 31st March, 1920, the main line carried 263,082 passengers and 61,704 tons of goods.

Down the Teesta Valley line are carried wool from Tibet, and large quantities of oranges from Sikkim during the winter season, as much as 20 tons of the latter being carried in the day.

The Kishanganj branch carries principally jute and paddy.

*Cost.*—The original cost of the 51 miles of railway from Siliguri to Darjeeling was Rs. 17,50,000 but improvements made during subsequent years have brought the cost up to Rs. 43,00,000 in the year 1920.

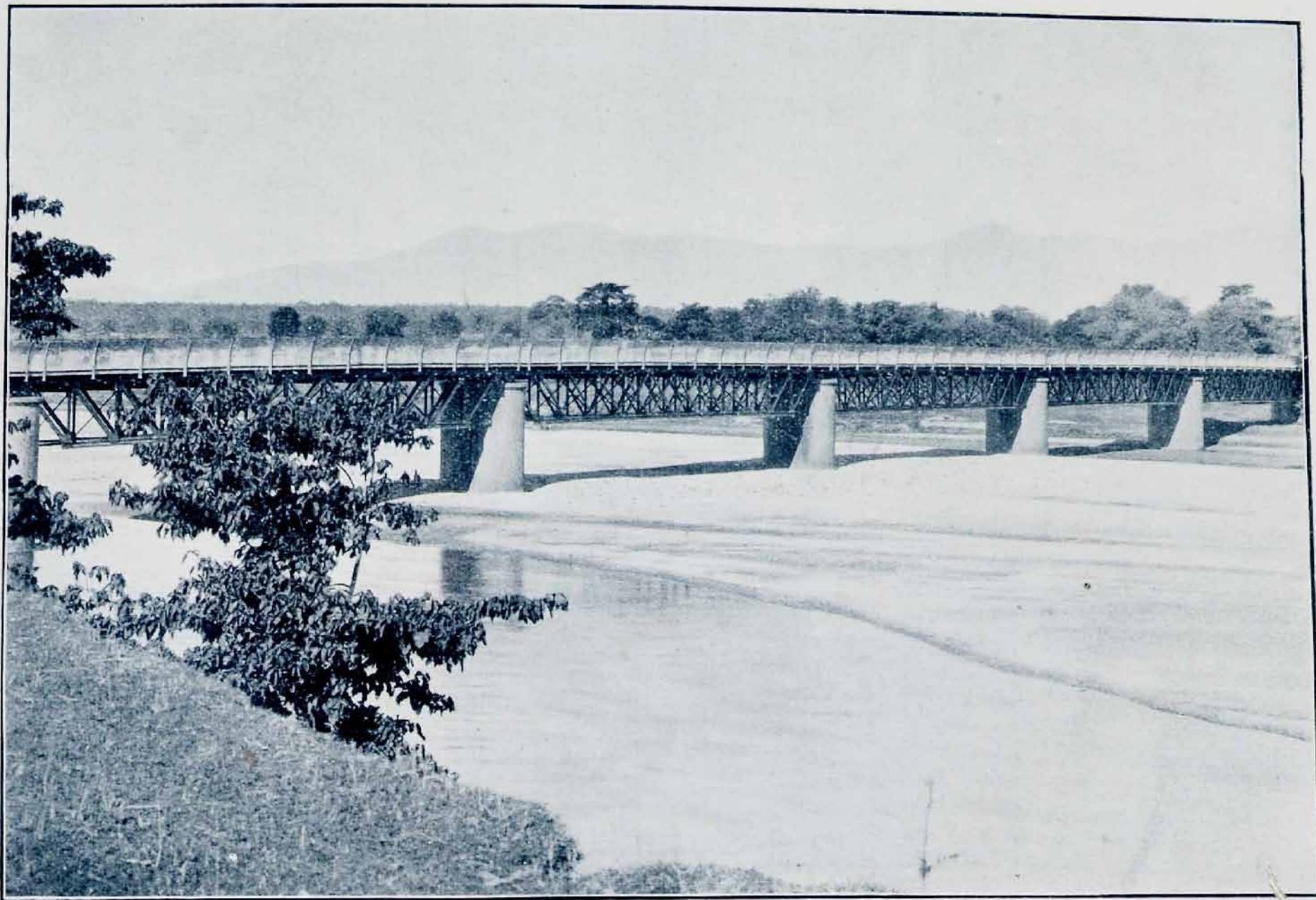
#### IV.

### THE JOURNEY TO DARJEELING.

**T**RAVELLERS approaching the mountain railway from Calcutta will find that the first stage of the journey, across the lower Gangetic plain, is through a rather monotonous country—a boundless plain of rice and jute fields with occasional clumps of palm trees and bamboos clustered about the huts of small hamlets. Within a few hours of leaving Calcutta the corridor mail train of the Eastern Bengal Railway thunders over the Hardinge Bridge, which spans the river Ganges where that great river is more than a mile in width. This bridge, which is 5,900 feet long and has 15 spans of 350 feet, is reckoned one of the finest pieces of engineering work in India and was completed in 1915. The treacherous nature of the sandy bed of the river necessitated the sinking of exceptionally deep well foundations to carry the piers (the deepest wells in the world), and when the traveller is informed that between the lowest and highest water level is 30 feet, and the volume of water passing under the bridge every second at high flood is two and a half million cubic feet, he will not be surprised to learn that great guide banks had to be constructed to train the river and revetment works to protect the bridge.

On the northern bank of the Ganges, at Santahar, the traveller has now to change trains from the broad gauge to the metre gauge line, but it is probable that the broad gauge track will be extended to Siliguri in the near future and this change obviated.

The journey is then continued through the night, and on arising from his bunk in the early hours of the morning the traveller may see from the carriage window the foothills of the Himalaya on the northern horizon, and above these the first view of the great snowy peaks. Jalpaiguri, the centre of a tea district known as the Dooars, is then reached, and while it is yet early morning, Siliguri, the terminus of the Eastern Bengal Railway and the starting point of the Darjeeling-Himalayan Railway.



THE MAI ANADDI BRIDGE NEAR SILIGURI.

*Photo—Burlington Smith.*

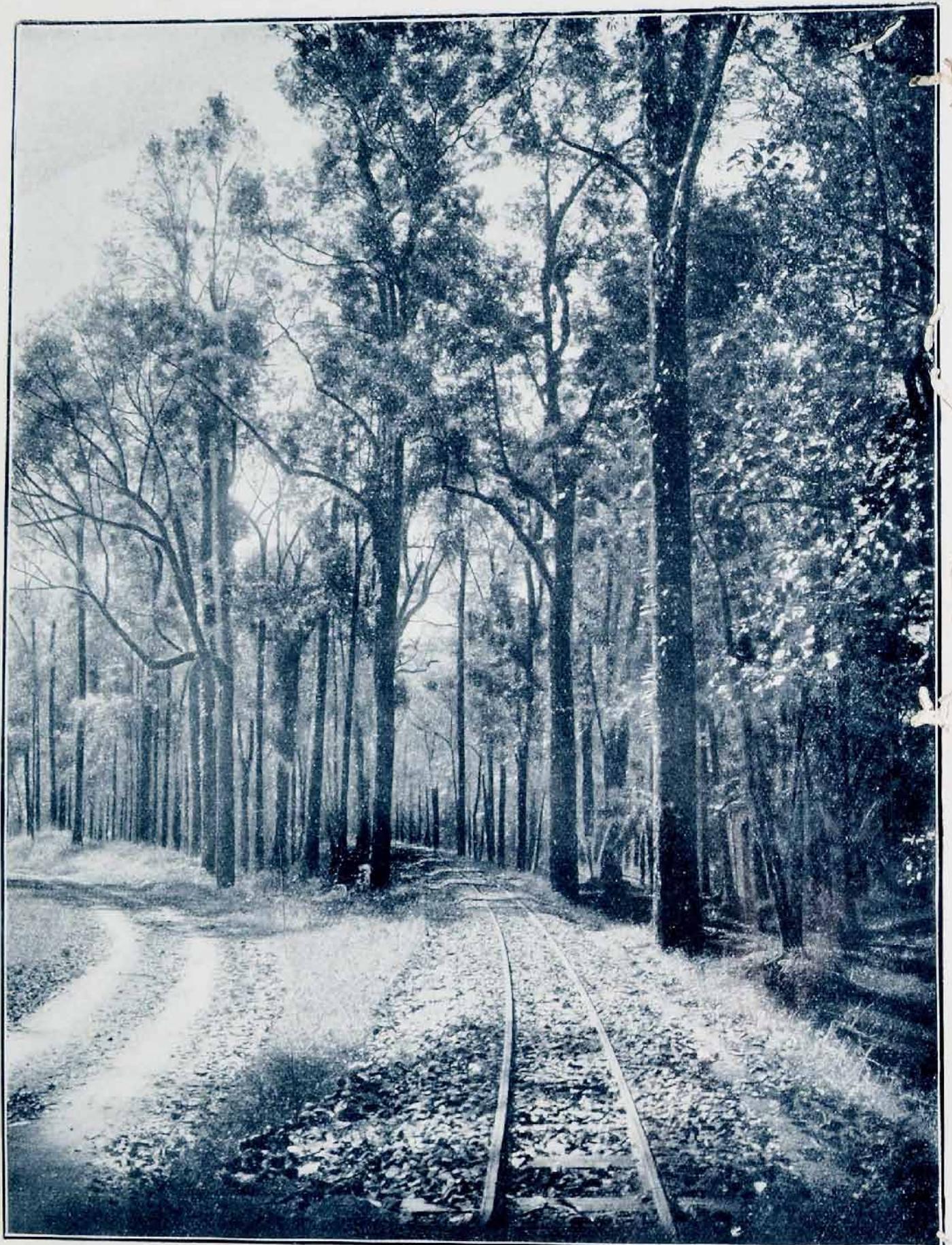
After a halt for early breakfast at Siliguri the traveller takes his seat in the little mail train of the mountain railway which stands waiting on the two-foot gauge track. The traveller's luggage, bedding, etc., will be carried in vans provided for the purpose, but he should be sure to retain with him some warm wraps and a top coat as he will require these a little later in the day to fortify himself against the cold of the sudden ascent to higher altitudes.

Shortly after the mail leaves Siliguri Station precincts, the traveller may notice on the right the branch line of the railway that runs up the Teesta River Valley, and it is to be hoped that he will later find opportunity to traverse this and enjoy the romantic river and mountain scenery it embraces and which is described in a later chapter.

A few minutes further on the train leaves Siliguri village and crosses the Mahanaddi Bridge 700 feet in length. Not much water is seen in the bed of the Mahanaddi River except during the rainy season for the reason that, in common with most of the rivers flowing from the Himalayan foothills, the water flows beneath the shingly bed for several miles after debouching from the mountains, to reappear again further down the river course. This Mahanaddi River rises in a spur of the Singalela Range and flows into the Ganges. When the traveller has been carried up to 4,000 feet he will pass near the source of the same river. The track of rails seen in the bed during the dry season is that of a ballast line of the Eastern Bengal Railway.

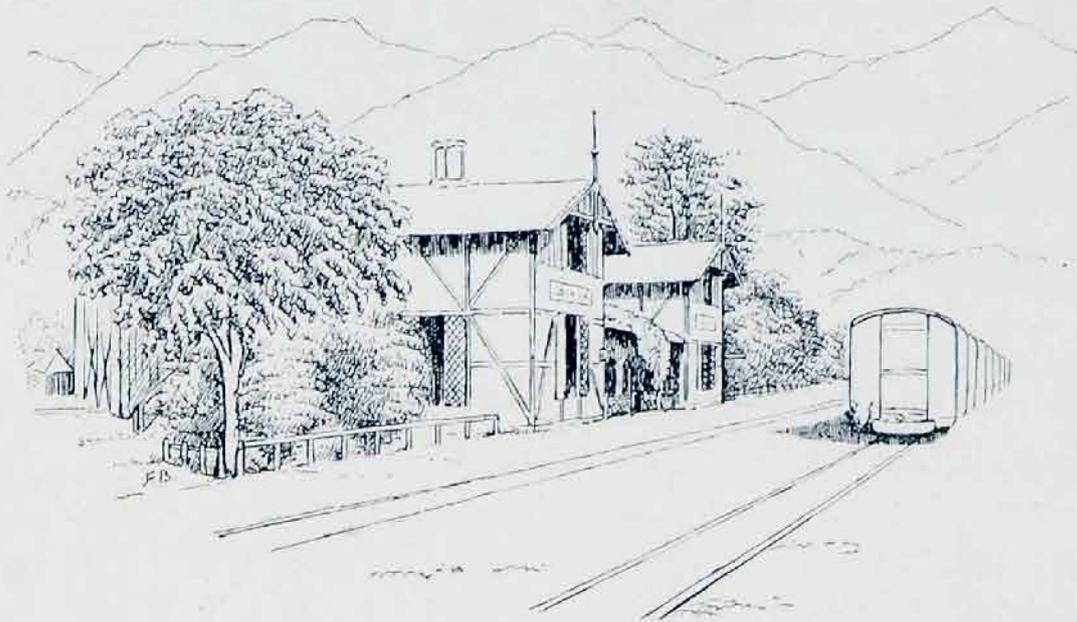
For the next six miles the train traverses a comparatively level track until Sukna Station is reached, where the real ascent begins. The blue mountain ranges of the foothills appear ahead, and after Panchanai Station is passed (junction with Kishanganj branch of Darjeeling-Himalayan Railway), the first tea garden on the route is seen, with the white buildings of the tea factory and bungalow and the regular lines of the tea bushes. From here lofty forest trees, the semul, toon, and sal, commence to line the road, the buttressed semul trees being the most noble in appearance.

At Sukna there is a short halt for the engine to take water. In the early spring the traveller should note the beautiful bignonia (*bignonia venestra*) on the roof of the pretty gabled station building,



SAL FOREST ABOVE SUKNA.

Photo—M. Sain.



SUKNA STATION.

Sketch—F. L. Bussell.

and the terra-cotta and purple bougainvillia creeper draping the trees to the south and north.

From Sukna the ascent of the mountains commences in earnest and the track runs up a spur of the Singalela Range, that range

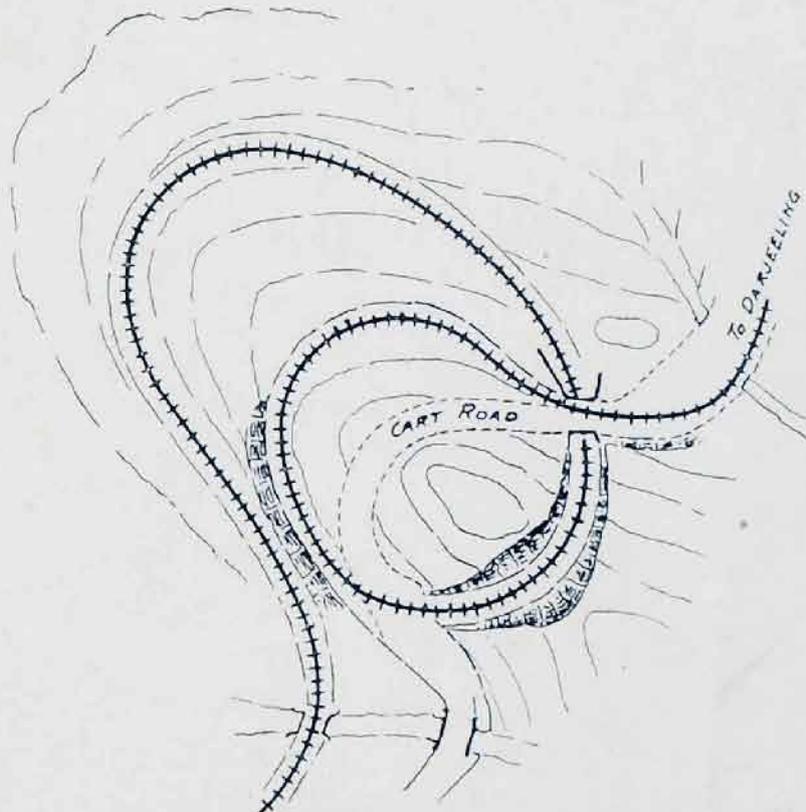
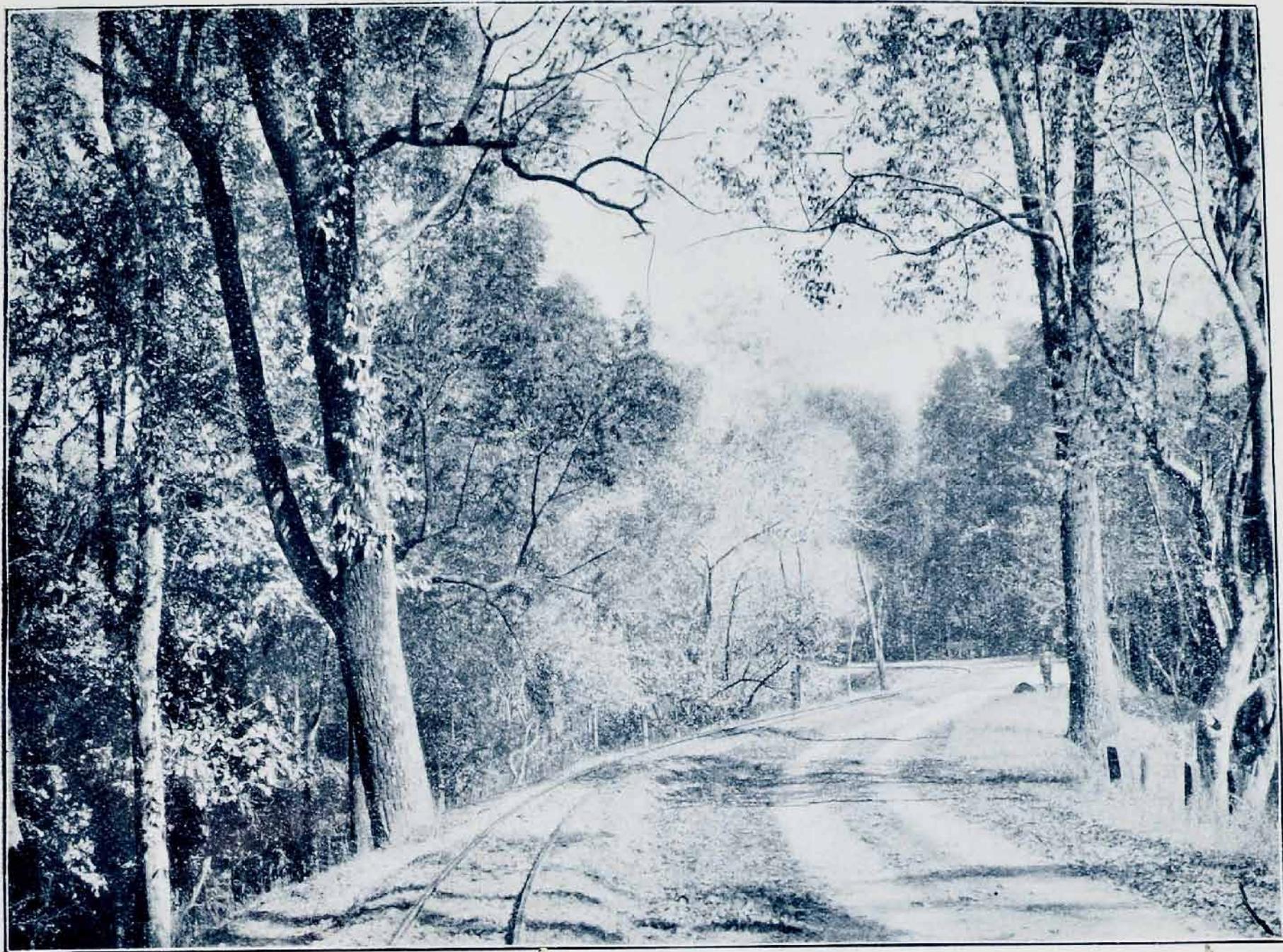


DIAGRAM OF LOOP No. 1—MILE 11½.



THE FOREST E. S.

Photo—M. Sain.

of mountains which terminates in Kinchenjunga, itself the centre of a group of the highest mountains in the world. Continuous forest is now entered and on the right is seen a depôt of the Forest Department, whose officers control and administer the great reserves of forest, which have been long protected by the British Government against the ravages of fire and have been systematically developed.

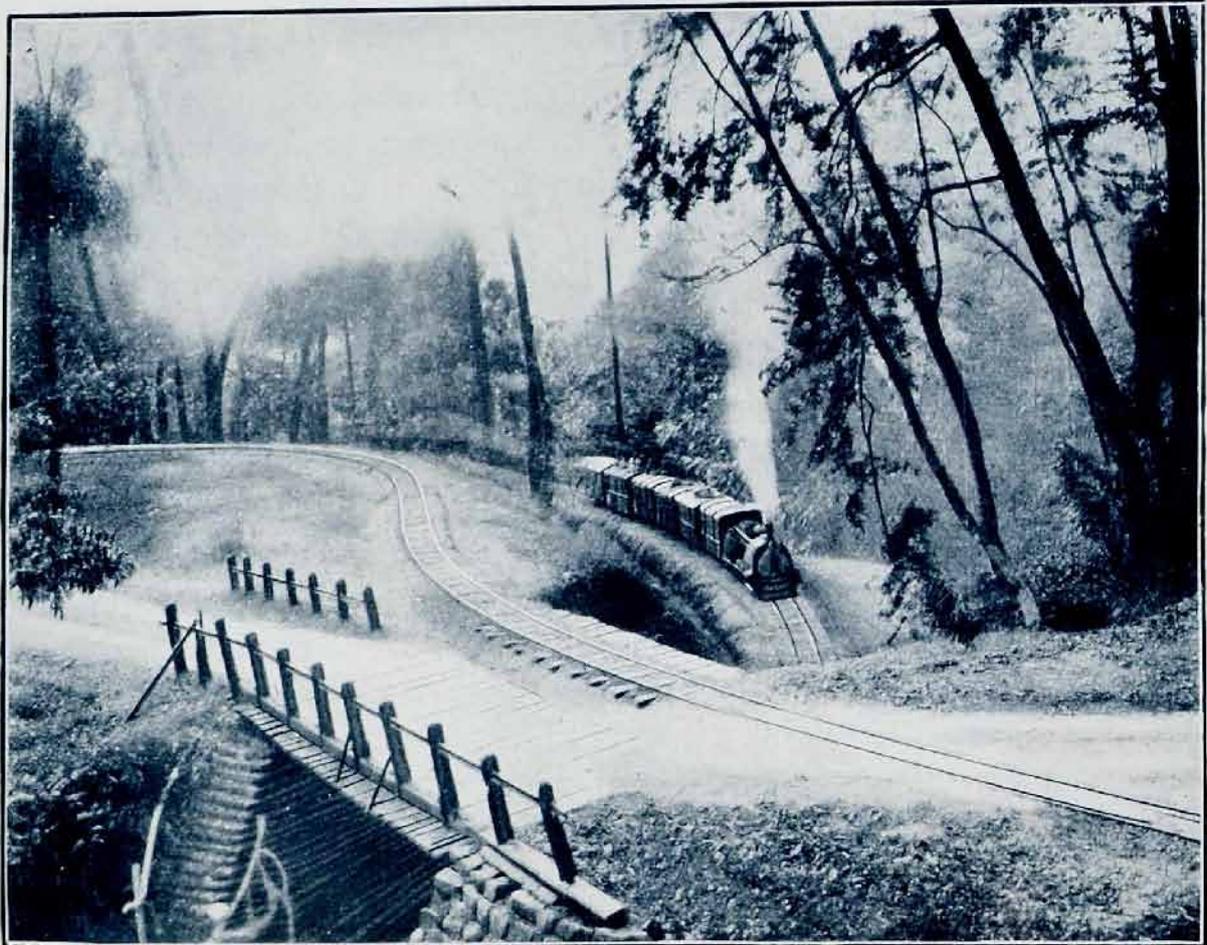
At the ninth mile from Sukna the track passes through the fine sal and toon forest. Not many years ago a herd of wild elephants disputed the passage of the train through this forest and the driver had perforce to put back into Sukna and await the departure of the unwelcome marauders. These lower forests form cover for tiger, leopards, wild buffalo, deer, hogs and wolves, as well as for a host of small animals such as monkeys and wild cats. Rhinoceri are found in the Teesta and other rivers, while the jungle coverts are replete with jungle-fowl, woodcock and pigeons of various sorts.

Creepers are now seen pendant from the trees, and ferns and bamboo grass cover the banks. Giant bamboos wave their feathery crests above. Presently the view opens out to the south and the wooded plains of the Terai are seen below. The traveller may be surprised to see how rapidly he has already risen from the plains. The railway track now winds in and out of the ravines of the mountain sides with many and swiftly-following curves, and soon the first of the devices for easing the gradient is passed. This is Loop No. 1 and the inset plan indicates sufficiently clearly how the track doubles round and passes over itself by the bridge shown in the picture.

Rangtong Station follows (elevation 1,404 feet). The mail does not stop at Rangtong but pulls up for about seven minutes at a water stop a little further on. Here the traveller may alight for a few minutes and gaze into the depths of the surrounding forest.

Continuing the upward journey, fine views are soon obtained over the lower hills. A great wooded mountain, Selim Hill (3,500 feet), looms up in front. Presently the train passes under a bridge, circles round the end of the spur and then crosses the bridge. This is Loop No. 2, somewhat more complicated than the first loop on account of the contour of the mountain. This spot is well known locally as the haunt of the leopard, and it is said that over a hundred have been killed here during a space of twenty years.

A wild luxuriance of vegetation is now seen on the mountain sides, and choking the ravines, streamers and ropes of many-hued climbers hang from tree to tree, and the undergrowth between the stems of the tall acacias and semul trees, the figs, and mimosas



LOOP NO. 1.

*Photo—M. Sain.*

is almost a forest itself. From time to time there are extensive views of the plains; the factory buildings and cultivated slopes of a hill tea-garden on a neighbouring ridge are seen through a vista of forest trees.

A little below the 2,000-foot altitude post the train runs round the Third Loop, the Chunbhati Loop, past the old staging bungalow that offered hospitality to many a weary traveller in the days of travel by palki and tonga before the railway was built. This loop is a double circle as is shewn by the inset plan. Beyond the loop

Chunbhati Station is passed (the mail does not stop) and after another few minutes' run through the forest the train swings round the end of a spur and the view is at once entirely changed.

The traveller will find himself now fairly among the mountains.

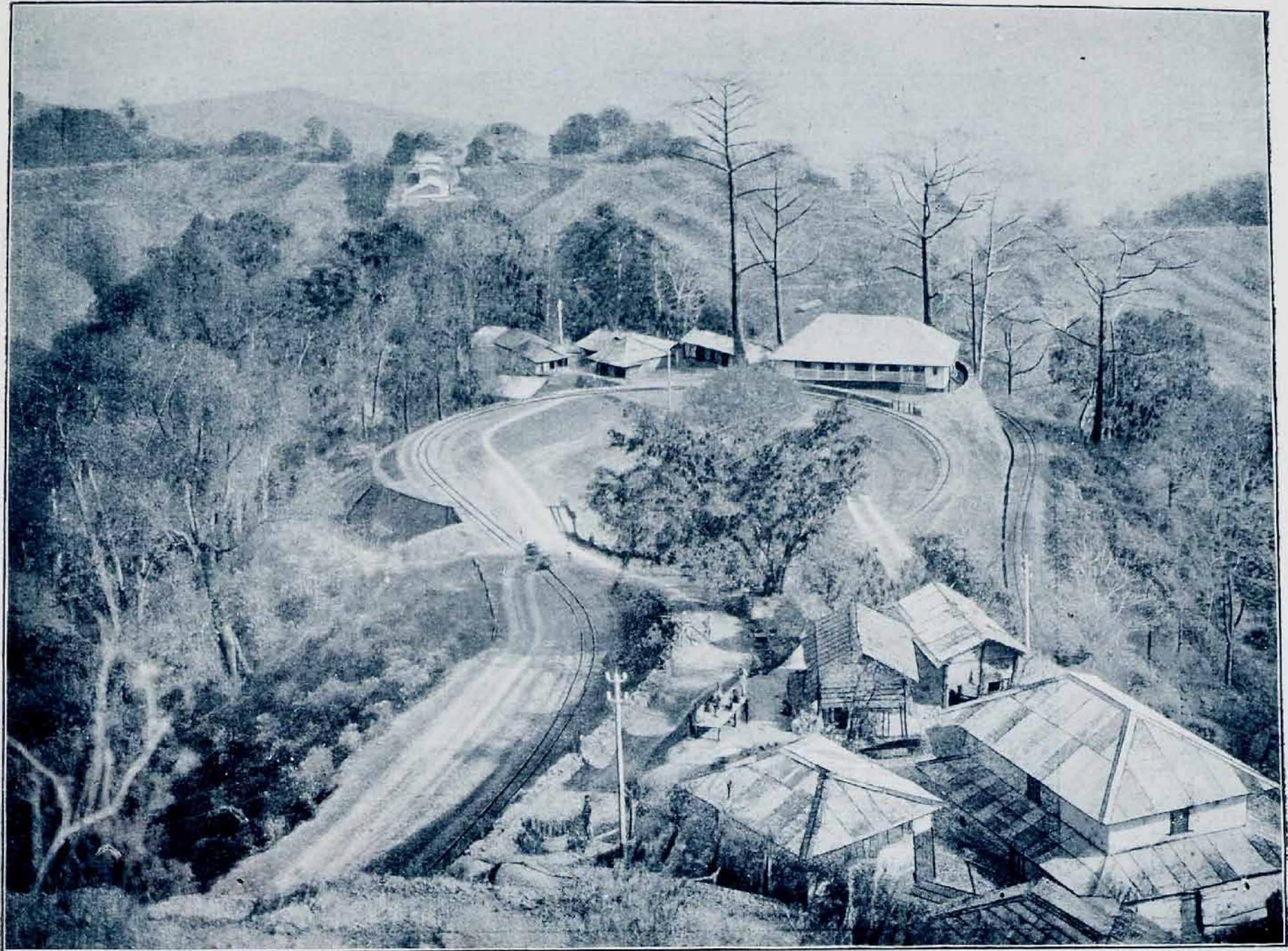


THROUGH THE FOREST—MILE 9.

*Photo—M. Sain.*

A deep enclosed valley lies below and beyond it the high range of the Mahalderam Mountains, the most prominent feature in the landscape being the hump-shaped summit of Mount Sitong (7,000 feet). Several lesser spurs of mountains are seen running down to the valley and the buildings of Nurbong Tea Factory crown one of these.

Following the contour of the spur the track soon bends inwards and a comprehensive view along the slopes of Selim Hill at Tindharia is obtained. As is shewn in the illustration, the railway



CHUNBHATI LOOP—MILE 16.

Photo—M. Sain.

passes to and fro along the slopes of this mountain on less than five times and here can be seen what circumvolutions of the slopes and ravines are necessary to retain a sufficiently easy gradient for the

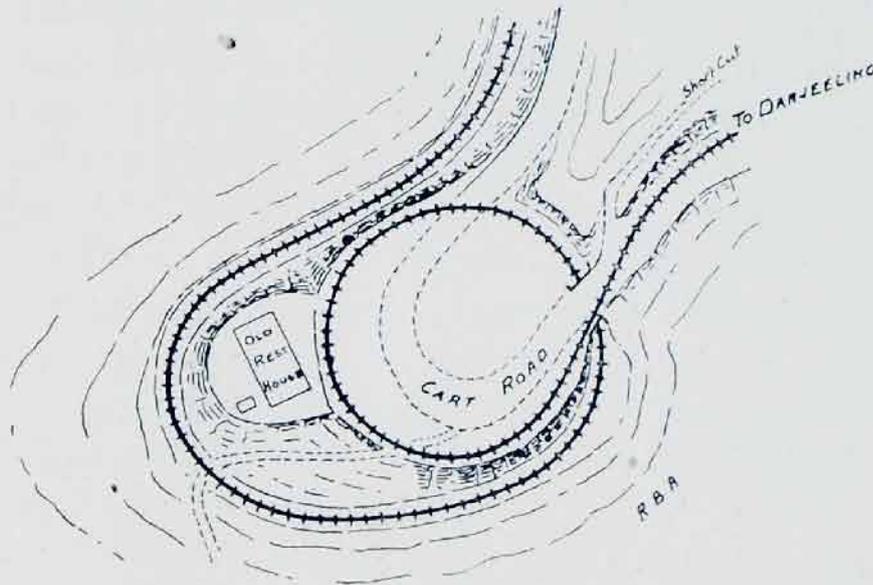


DIAGRAM OF No. 3, OR CHUNBHATI LOOP—MILE 16.

railway alignment. At the end of the ridge stand the chimney and gabled building and outhouses of the Tindharia Workshops, truly a romantic position for so prosaic a group.



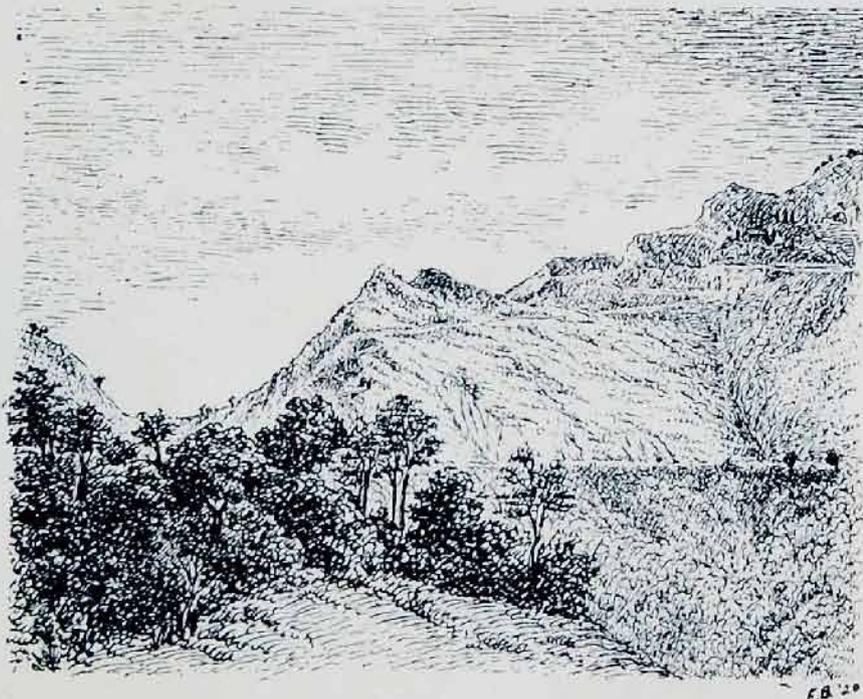
THE RAILWAY AT TINDHARIA.

Sketch—F. L. Bussell

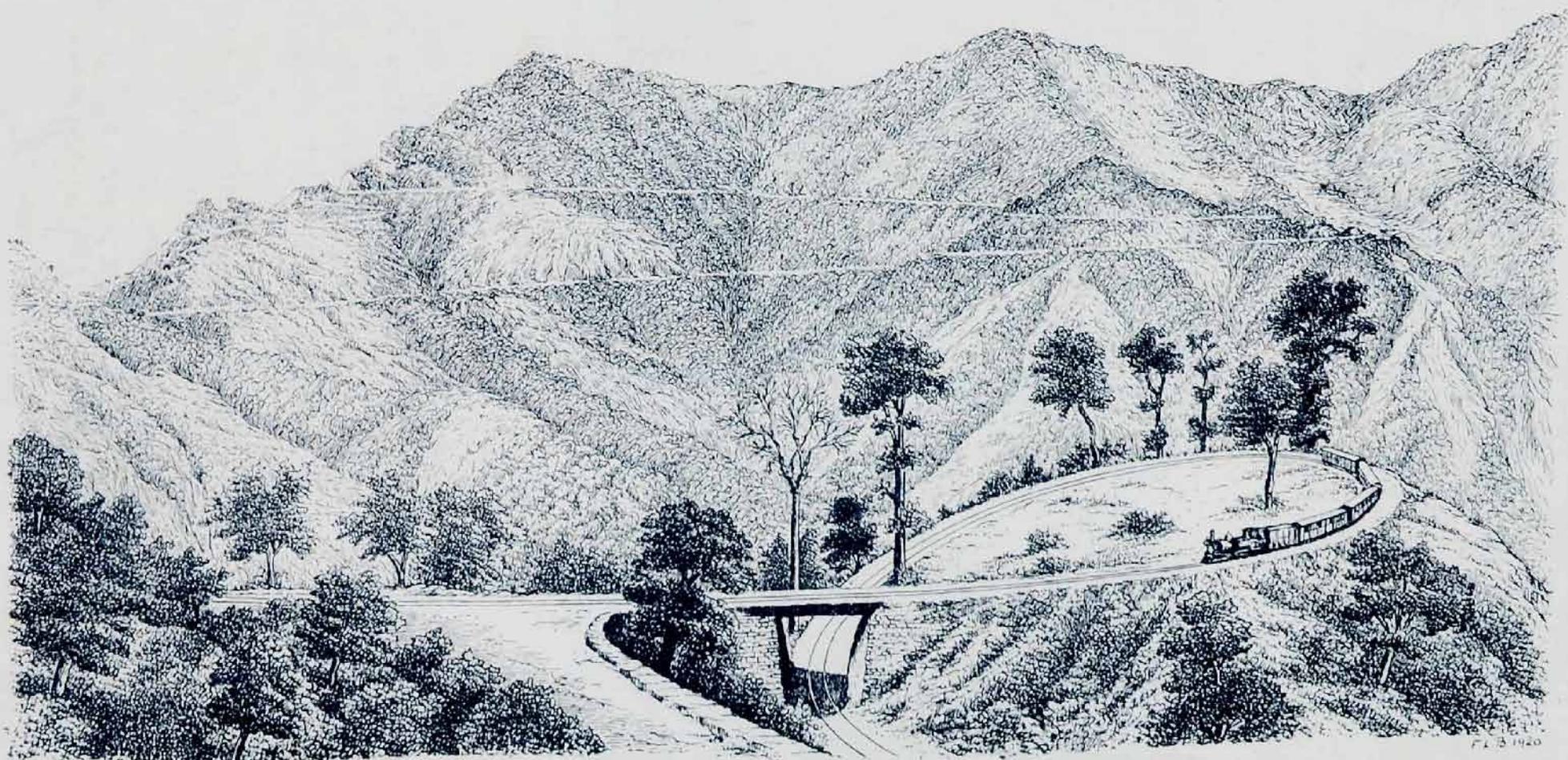
Then the engine comes to a stop and shunts the train back up the first "reverse," thereby enabling the journey to be continued again at a higher elevation. Leaving the reverse and traversing the broad slopes of Selim Hill the train soon doubles round about the Workshops, follows another course diametrically opposite to and immediately above that just followed, doubles round again into the original direction, always surely and steadily creeping up the mountain, and runs into Tindharia Station (elevation 2,822 feet).

At Tindharia there is a short halt for tea and coffee. The traveller will see several fair specimens of the Sikkim screw-pine close to the train on the side remote from the platform. There is also on this side a very extensive view over the intervening hills and valleys to the rugged mountains of Bhutan in the east and, further south, over the courses of the Teesta and Mahanaddi Rivers running out into the plains of Bengal. The hump-shaped summit of Sitong Mountain, almost opposite, which forms the watershed between the Mahanaddi River and tributaries of the Teesta, is easily identified from here.

Leaving Tindharia Station the train soon swings round a promontory and the view is again changed. A very deep valley lies



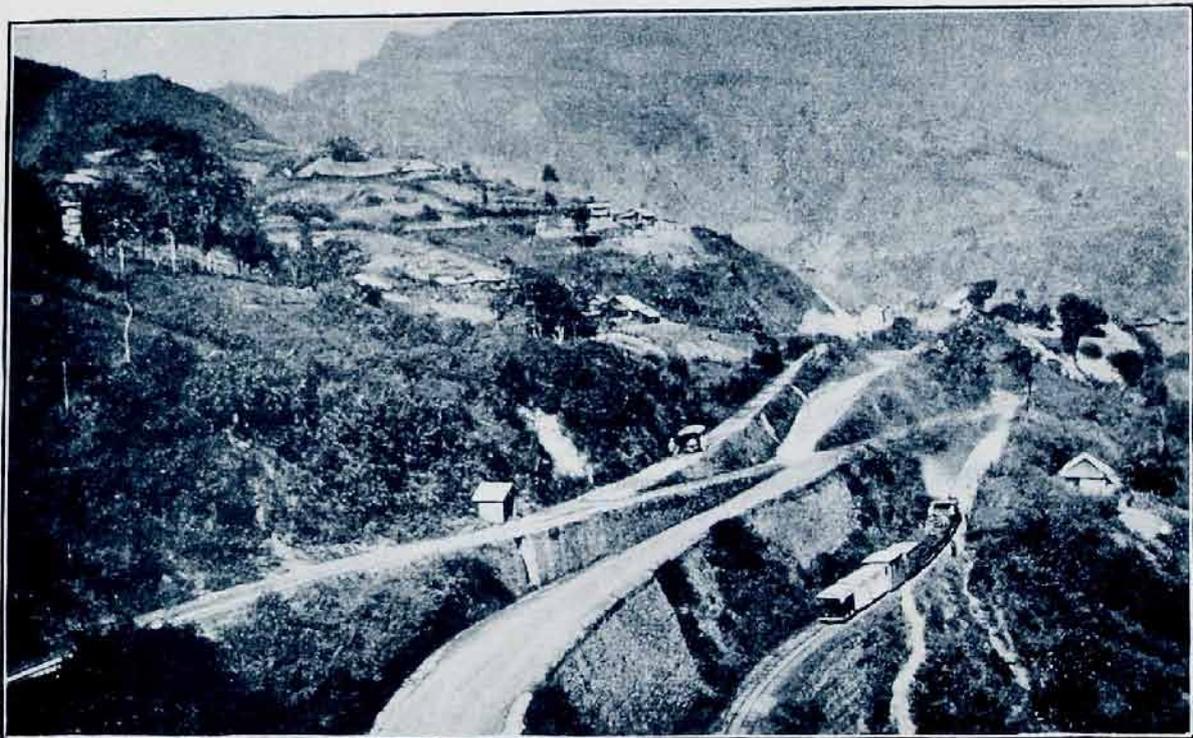
GIDARPAHAR.



F. B. 1920

LOOP NO. 4 AT MILE 21 WITH GIDARPAHAR IN THE DISTANCE

below with a white tea factory, Lizziepore, at the bottom of it, and beyond this valley is a lofty range of forest-topped mountains, the Mahalderam Range, rising above 7,000 feet and throwing down numerous spurs to the valley below. The jagged rock-faced mountain high up and ahead on the right may be noticed; this is Gidar-pahar Mountain and the train will later pass through a cutting in the rocks near its summit.



REVERSE BELOW GAYABARI.

*Photo—Burlington Smith.*

Another reverse is soon passed through, and the Fourth Loop. Here the traveller can get an excellent idea of how these loops are constructed. A large amount of work was done at this point, and the curve of the loop had to be cut very sharp (only 59 feet radius) on account of the configuration of the hill-side.

The track now runs along the eastern slope of a great mountain which has been largely cleared for tea cultivation, but in the numerous wooded ravines the traveller may see some fine forest trees and screw-pines. The third reverse is then passed and immediately after it Gayabari Station (elevation 3,400 feet), where the mail does not stop. The first tree-fern may be seen near the reverse. From

Gayabari there is a steep short-cut road running directly up to Kurseong, but in order to preserve a workable gradient the Cart Road and railway had perforce to wander along a mountain spur to the east and then to return along the same ridge higher up, as was the case below Tindharia. The last reverse is passed shortly above Gayabari and here the traveller may notice the sharp nature of the rocks that project from the mountain side and overhang the track, a rock formation known as Sikkim Gneiss. Many of the rocks hereabouts are too steep for the ferns even to be able to cling to them.

Then the train pulls up to take water again. A notice board informs travellers here that they may walk on to the Pagla Jhora (2 minutes' walk) where the train will pick them up again. The Pagla Jhora or Mad Torrent is the name given to a large watercourse, the largest on this side of the Mahalderam Range. The name is derived from the fact that after heavy rain this watercourse swells suddenly to a raging torrent that rushes madly down the mountain side. Then, indeed, it forms a very noble spectacle, but after dry weather there is little water. This torrent has cost large sums of money to control, it has on occasions completely carried away a portion of the road and railway, and the traveller will see revetment works below the road and training works far up the hill, evidencing the patience and skill that have been demanded for its control. A rainfall of fourteen inches in six hours has been measured in this locality.

Shortly after the journey is resumed the 4,000-foot altitude post is passed and the track runs round the end of the spur and into Mahanaddi Bazaar and Station. Here the traveller may obtain peeps at groups of the Mongoloid hill-people who have trudged up to the little bazaar from valleys below, or down to it from the heights, bearing their loads in baskets strapped over their foreheads. In the forest-clad mountain looming above the railway station is the source of the Mahanaddi River, the broad bed of which was crossed by a bridge just outside of Siliguri.

Leaving Mahanaddi the mail hurries along to the west through a cutting pretty fast along a splendid piece of road affording very fine views over the mountain spurs previously traversed and over the plains, the courses of three rivers being clearly discernible, the

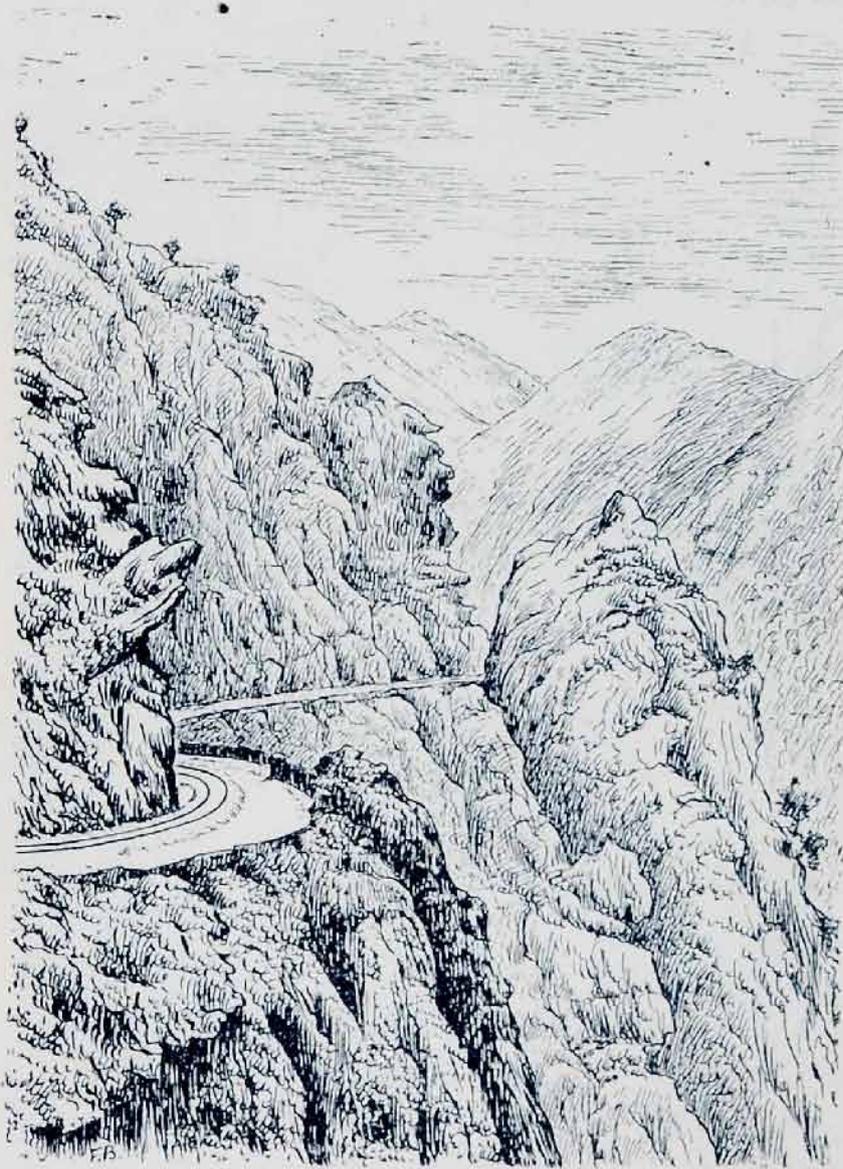
Teesta, the Mahanaddi and the Balasun (from left to right, or east to west). Presently the track passes through a cutting in the precipitous rock face of Gidarparhar (the Jackal's Hill), and immediately on emerging from this cutting the traveller sees before him an entirely different prospect. The change is dramatic and surprising to a degree. There are now seen range upon range of mountains running



A CUTTING NEAR MAHANADDI STATION. *Photo—Johnston & Hoffmann.*

down to the plains, getting dim and yet more dim in the blue haze of distance as far as the eye can see. At the foot of these ranges is the wooded Terai, cut by the courses of numerous rivers and streams that shine like silver threads in the sunlight. The two principal rivers seen are the Balasun and the Mechi, the latter forming the boundary between British India and Nepal in which forbidden country all but the nearer ranges which the traveller now sees are situate.

The white buildings of tea factories and bungalows now dot the nearer slopes and a steep mountain mainly covered with tea cultivation stands prominently ahead. This is known as Eagle's Crag, and on its saddle are seen some of the houses and bazaar of Kurseong.

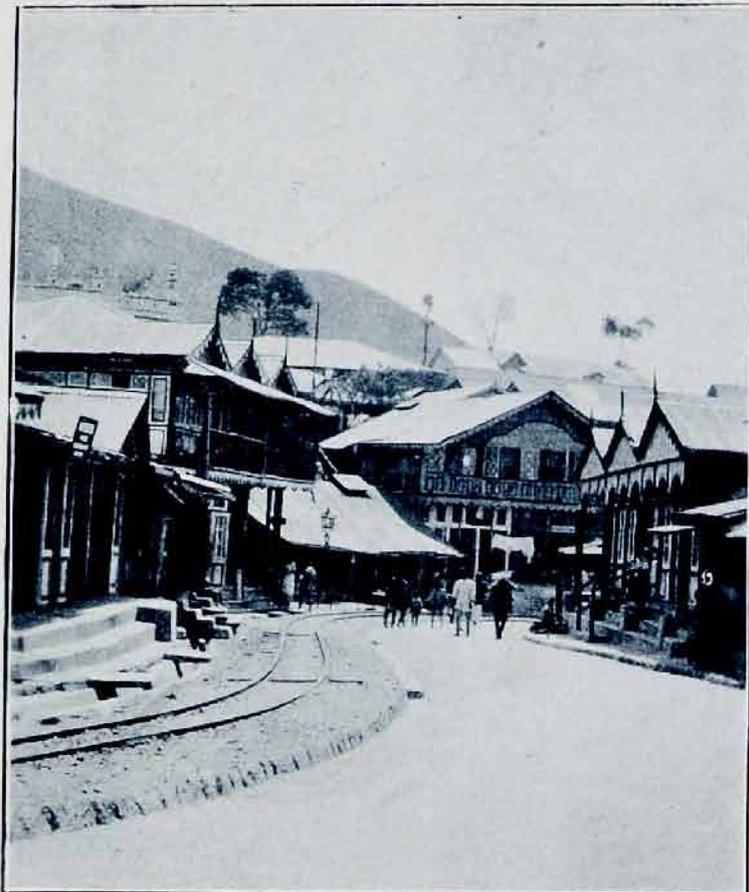


Sketch—F. L. Bussell.  
ROCK CUTTING—MILE 29.

The mail soon runs into Kurseong Station (elevation 4,864 ft.) where a halt is made for breakfast. Travellers' appetites will by this time have received a healthy stimulus from the bracing air.

Kurseong is a thriving little hill-station, it has fair accommodation which is not well seen from the train, and commands excellent views. The traveller should endeavour to visit Kurseong from Darjeeling; he will find particulars given in Chapter VI hereafter.

At Kurseong Railway Station the traveller will see picturesque hill-people and will probably be offered wares for sale in the shape of curios, turquoise amulets, trinkets, and so-called amber necklaces. But he is advised to buy nothing of value and to generally reserve his purchases for the dealers' shops, in Darjeeling.



KURSEONG BAZAAR. *Photo F. L. Bussell.*

Resuming the journey after breakfast the train first passes through the Kurseong Bazaar which is a curious compromise between the hills and the plains of India. When the shops have been passed a very fine view is obtained down into the valley of the river Balasun, the eastern slope of which valley is now followed by the railway for the next sixteen miles. Beyond is the rounded top of Mirik where there is an excellent site for a hill-station, and the Nagri Spur, the slopes of which are dotted with white tea factories.

A first view of the snowy mountains is now obtained to northwards and the white peaks of Kinchenjunga with Kabru and Jannu

on his left are seen in the gap to the west of the dark forest-clad summit of Senchal Mountain.

Soon the track runs round the spur below the Clarendon Hotel and Kurseong is left behind. The 5,000-foot altitude post is close to the hotel. A few rocky ravines adorned with streamers of flags and groups of the lofty cryptomeria fir are now passed. This fir is not indigenous to these mountains but was successfully introduced from Japan many years ago.

Tung Station is next reached and here the engine takes water again. The traveller is now in a temperate climate and the vegetation has completely changed. Tall tree-ferns with their feathery fronds still suggest the tropics but in other respects the whole aspect of nature is different, and the bramble and raspberry on the banks, the maple, chestnut, pear, cherry, willow, and other temperate trees on the hill-sides and in the gorges strike a familiar note.

Shortly after leaving Tung (elevation 5,656 ft.), as the train doubles round the southern face of the spurs, a pretty view of the Kurseong Ridge and town is gained to the south, and then to the north is seen the little settlement of Hopetown, a small group of English cottages and a church nestling in the trees on the crest of a long ridge. Passing the Sonada Brewery, which occupies a building formerly used as a rest-house for soldiers on the march before the days of the railway, the train winds in and out of richly wooded ravines. Banks of beautiful ferns almost overhang the track and the forest trees, oaks and chestnuts are hung with lichen and mosses. The oaks above all spread out their sinewy branches, the tips and twigs of which are hung with thick moss and assume fantastic shapes. In some of the ravines are pretty groups of cottages.

The next station is Sonada (elevation 6,552 ft.), and shortly after leaving this the 7,000-foot altitude post is passed. From here to Ghum the track skirts the Government Forest Reserve. The oaks and chestnuts are now joined by walnuts, laurels, magnolias and rhododendrons. The foliage becomes a greenish blue at this altitude and the forest is seen to be dripping and dense. In the spring and summer beautiful orchids may be seen in flower where they cling to the trunks or nestle in the forks of the trees, and the climbing golden magnolias vie with the many-coloured and brilliant rhododendrons for the chief glory of these lichen and moss hung forests.



Sketch—F. L. Bussell.

ORCHID AND MOSS COVERED OAK.

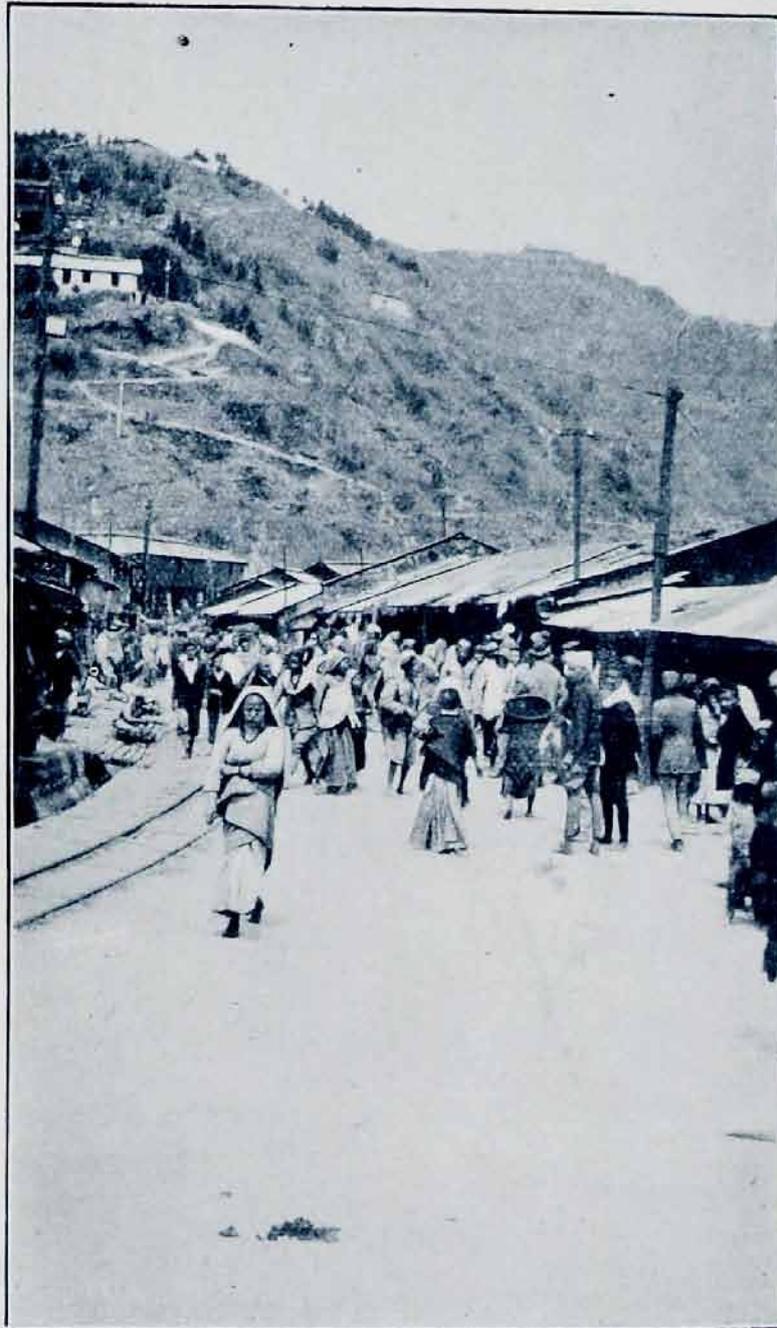
Soon the train enters and passes through Ghum Bazaar under the shadow of the lofty Senechal Mountain. Ghum stands on the road to Tibet and is the first outpost of the Tibetans or Bhutias. As the mail passes through the bazaar the traveller will see them in their snow boots and rough cloaks and mantles, chatting and laughing in groups, or singly plying their prayer-wheels and counting over their rosaries. Mongoloid women, brightly complexioned and gaily caparisoned, will also be seen, loaded with heavy gold and turquoise ornaments. The atmosphere altogether will be found to be thoroughly of Central Asia. Prayer-flags flutter from tall bamboos erected by the roadside and waft the petitions inscribed on them to the appropriate demons and deities.

Ghum Station is the highest point reached by the railway (7,407 feet), and from here there is a descent for four miles down a spur to Darjeeling Station (6,812 ft.).

The dark lofty mountains seen in the west when the mail leaves Ghum are those of Tonglu and Sandakphu, peaks of the Singalela Range, to which tours can be made from Darjeeling to see the Everest Range as described in Chapter VII.

Running along the slopes of the Little Rungeet River Valley, for the Balasun Valley has now been left south of the Ghum Spur of the Singalela Range, the track soon runs out on a promontory and the train circles round the Batasia Loop, the last of the loops to be traversed. From here the first grand panoramic view of the Kinchenjunga snowy range lies open to the traveller's view, and if the weather is favourable he will see the mighty twin peaks of Kin-

chenjunga towering up in the centre with those of Kabru and Jannu on his left hand and Pandim on his right, all much over 20,000 ft. in elevation. More will be said of these peaks and the snowy



GHUM BAZAAR.

*Photo—F. L. Bussell.*

range generally in a later chapter, and the vision of their beauty may be enjoyed at leisure from Darjeeling, but the first grand view of their unexampled majesty as seen from the Batasia Loop will certainly leave an indelible impression on the traveller's memory.

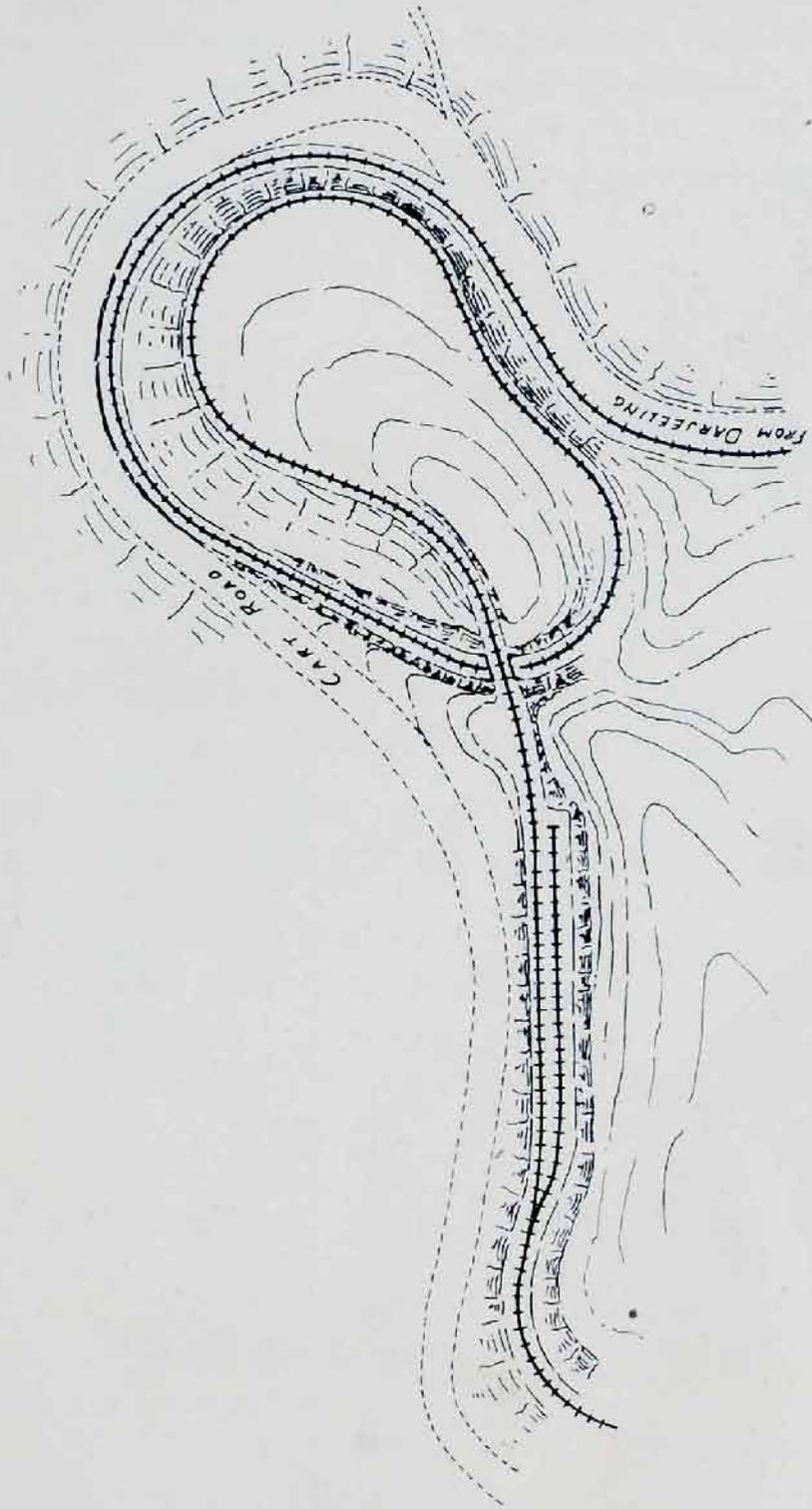
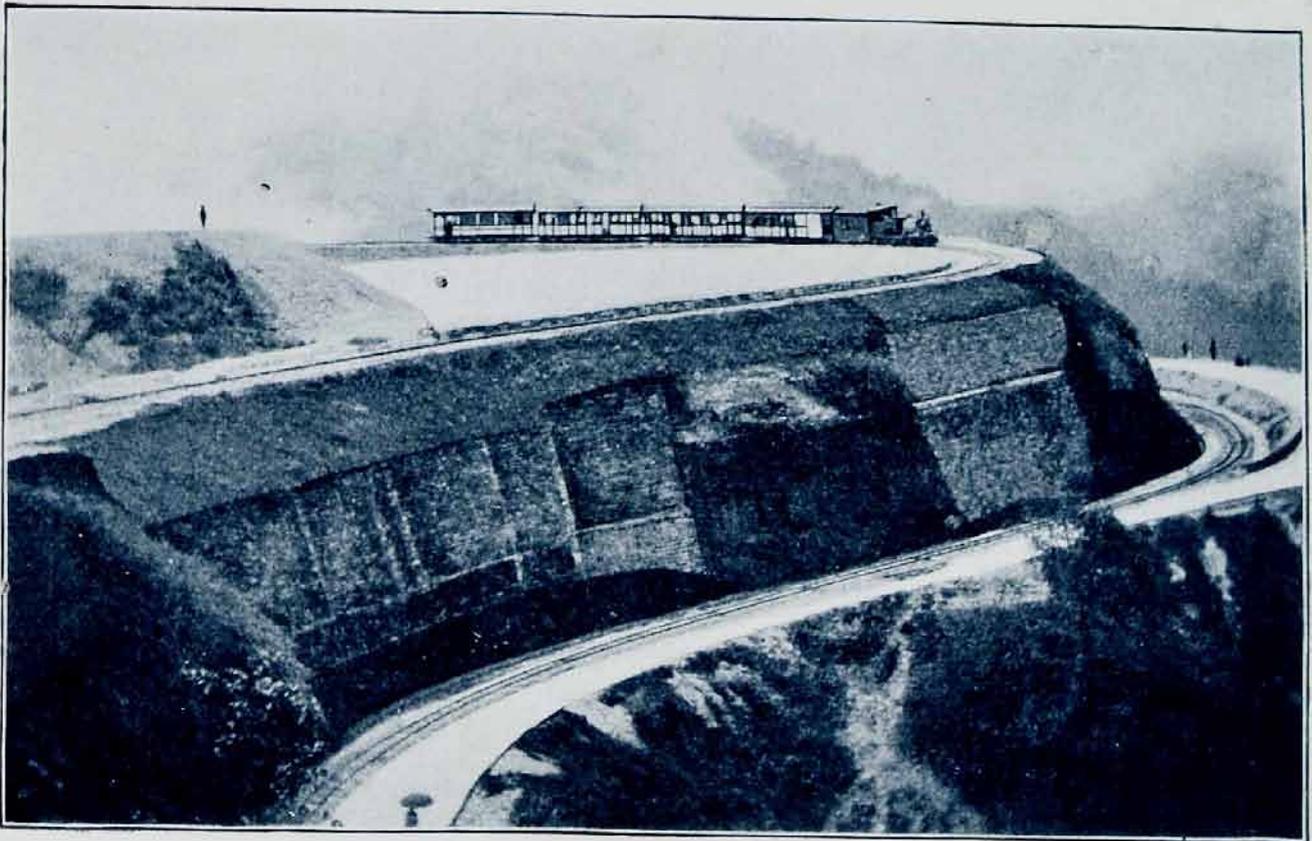


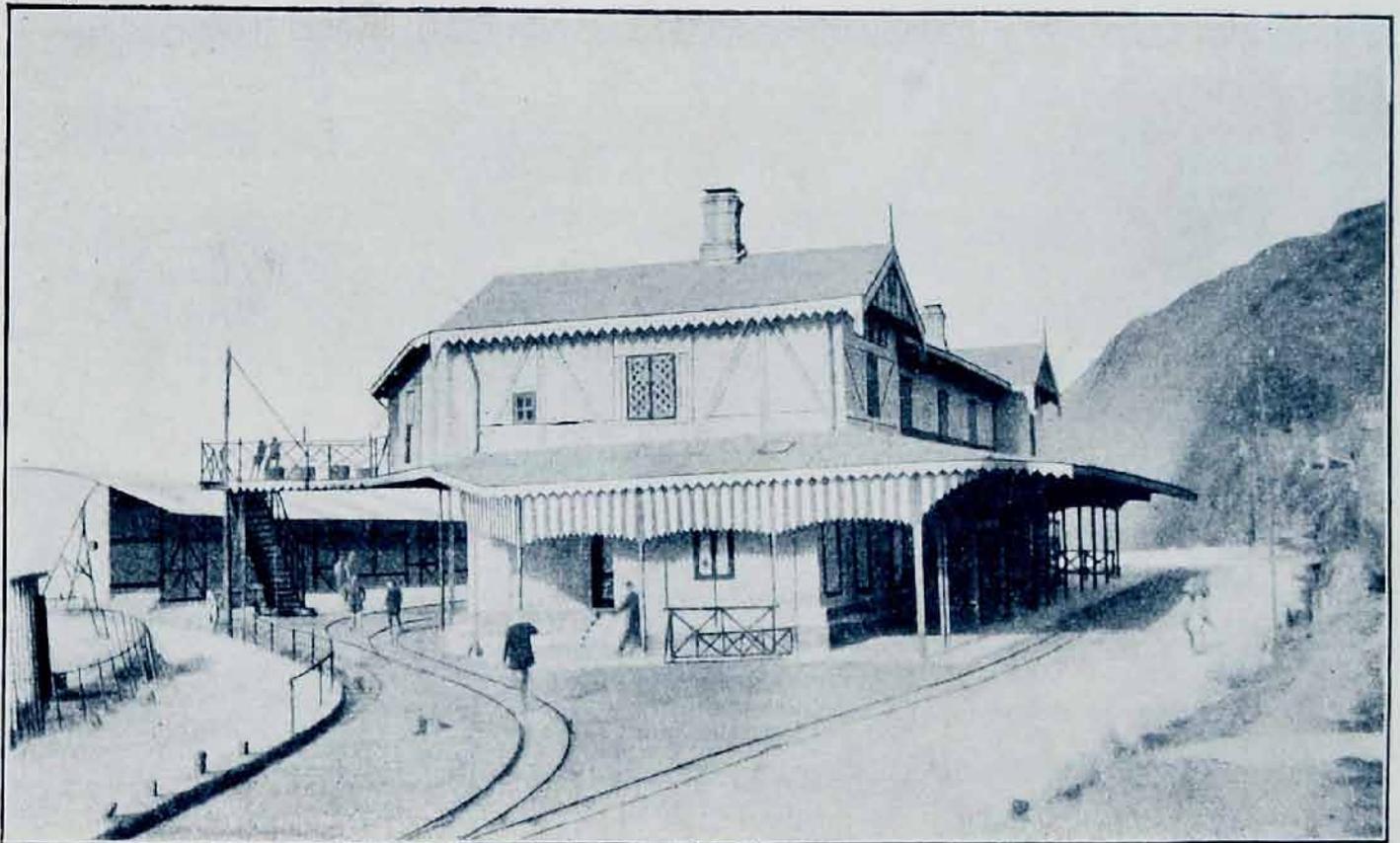
DIAGRAM OF No. 5, OR BATASIA LOOP—MILE 48.

The town of Darjeeling is also seen in this the crowning view of the journey, its white and red roofed buildings prettily lighting up the wooded spur on which it is built, and forming the foreground to the



BATASIA LOOP BETWEEN GHUM AND DARJEELING.

*Photo—S. Singh.*



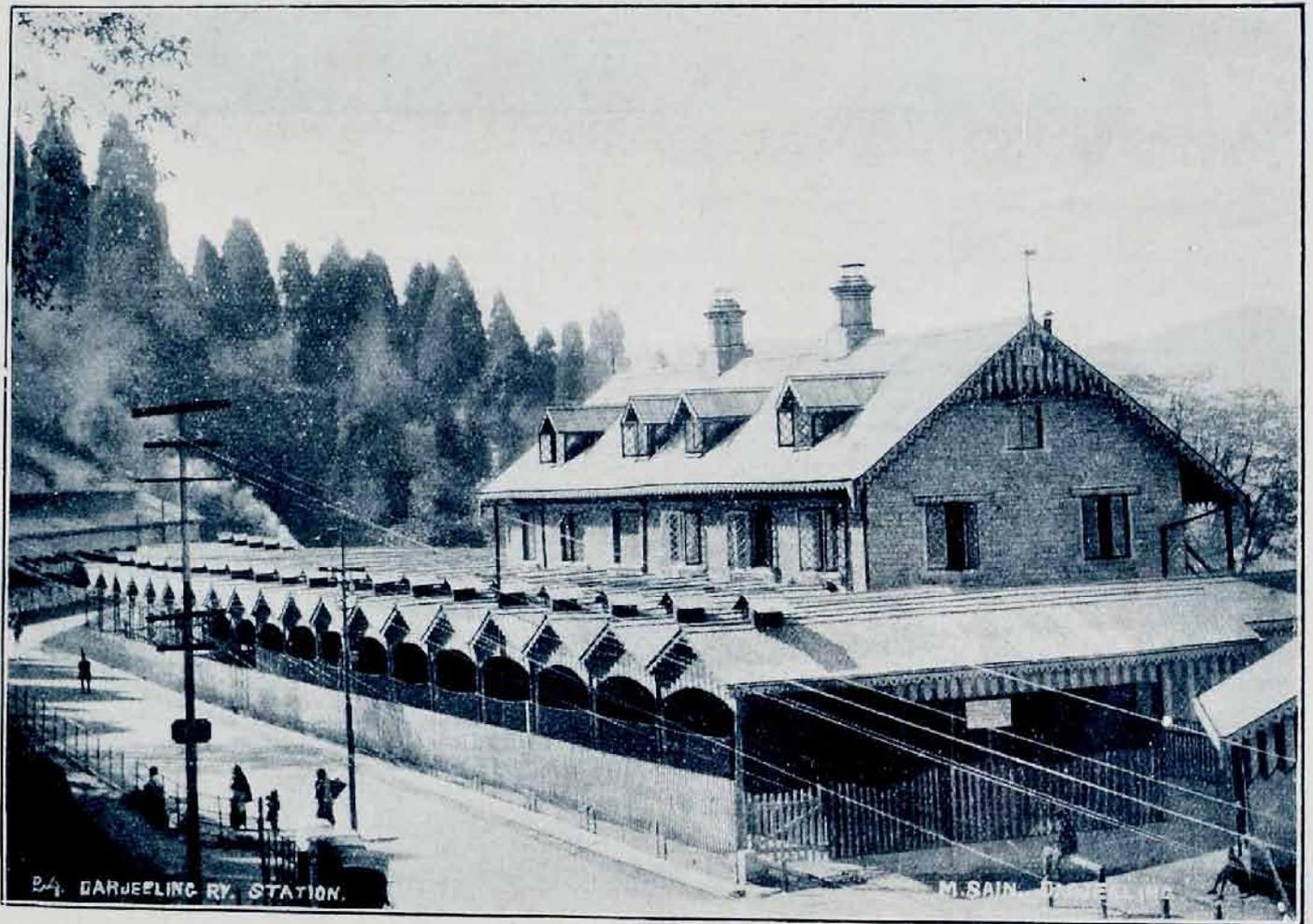
GHUM STATION.

*Photo—F. L. Bussell.*

scene of which the snowy chain of mountains forms a fitting background. The photographic frontispiece to this book may give some idea of the composition of this natural picture.

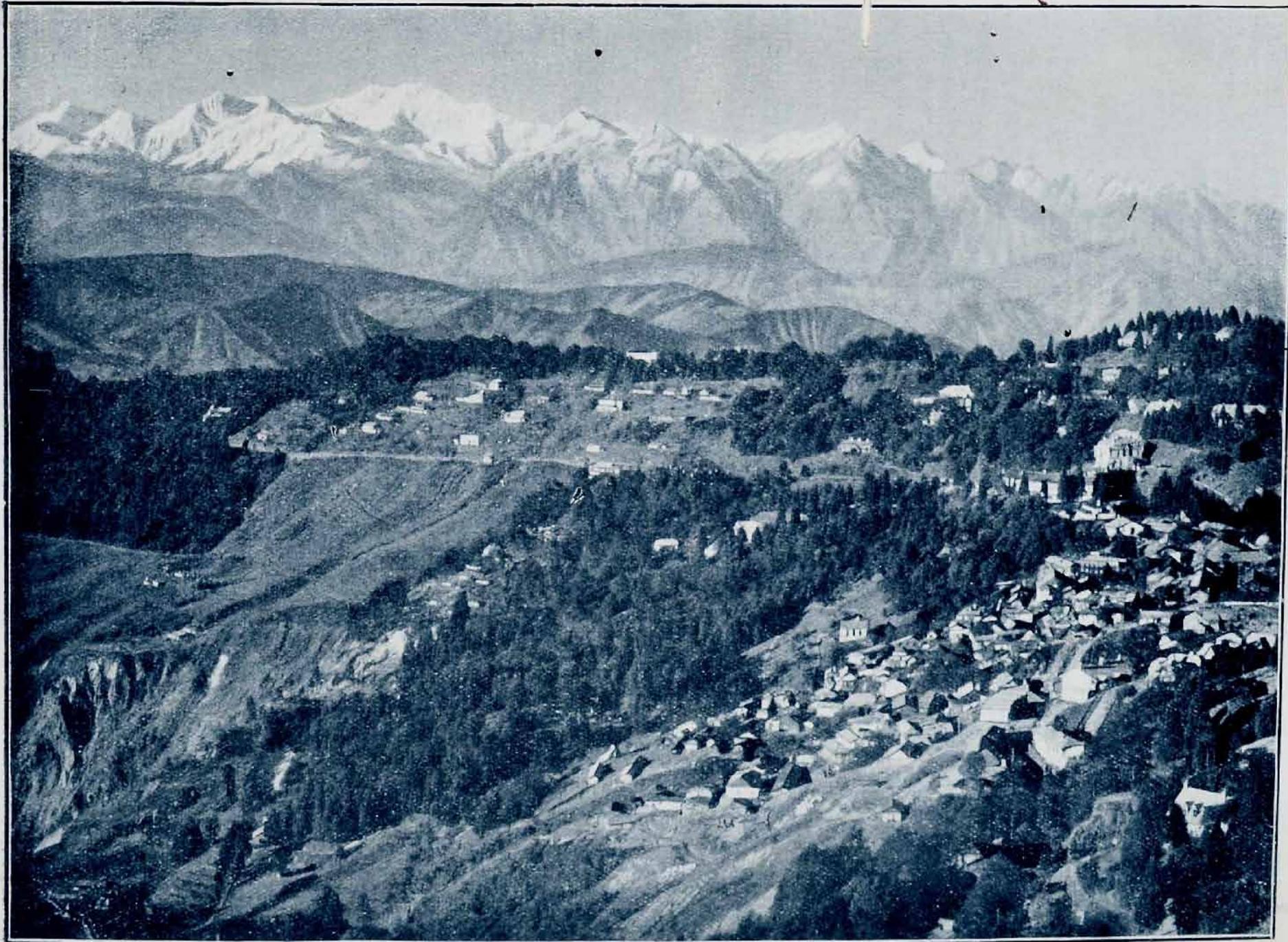
A few minutes later the mail runs into Darjeeling Station, and the traveller will have completed within the past few hours a journey which, provided he has been favoured with fair weather, will have afforded him a variety and nobility of scenic effects such as are unexampled elsewhere in the world.

Most of the hotels are situated fairly near the railway station and the traveller may assign his luggage to licensed coolies and walk to his destination, or he may have a rickshaw, dandy, or pony, a plentiful supply of which is always plying for hire at the station.



DARJEELING STATION.

Photo—M. Sain.



DARJEELING AND THE SNOWS.

*Photo—Burlington Smith.*

## V.

### DARJEELING.

THE town of Darjeeling is situated in an ideal position. It is built on the crest and slopes of a long ridge which runs in a northerly direction from Senchal Mountain at Ghum, and which divides into two lesser spurs that descend abruptly into the deep valley of the Great Rungeet River, 6,000 feet below. Almost equally deep valleys lie east and west of the main Darjeeling Ridge and merge in the Rungeet Valley to the north, across which the eye sweeps to range upon range of the lofty mountain chains of Sikkim and, beyond and above these, to the great snowy peaks that dominate the northern horizon.

The prominent object in the mountain landscape that lies open to view at Darjeeling is the great Kinchenjunga rising to 28,146 feet, which with its twin peaks towers above a majestic line of snowy summits in which are seven other peaks rising above 22,000 feet and none below 15,000 feet. Kabru (24,015 feet) with crest like a tent, and Jannu (25,300 feet) flank Kinchenjunga on the west; and on the east the best known peaks are Pandim (22,020 feet), Nursing (19,150 feet), Siniolchu (22,520 feet) and Kangchenjau (22,509 feet). There are many other snow summits in the range that are little known and unnamed. As compared with mountain panoramas in other parts of the world the outstanding superiority of the Eastern Himalaya as seen from Darjeeling lies in its immensity and extent, no known view from any other town in the world being capable of comparison with it when the number and height of the mountains is considered and their proximity, Kinchenjunga being only 45 miles distant and Nursing, the nearest perpetual snow, being 32 miles.

The best views of the snowy range are obtainable from the Mall, a level circular road north of the Chowrasta, and from Observatory Hill, a short step climb from the Mall. A more extensive view, including a peep at Everest, is obtained from Tiger Hill on the



THE MALL,—DARJEELING.

*Photo—Johnston and Hoffmann.*



*Photo—S. Singh.*

LEPCHA WOMAN.

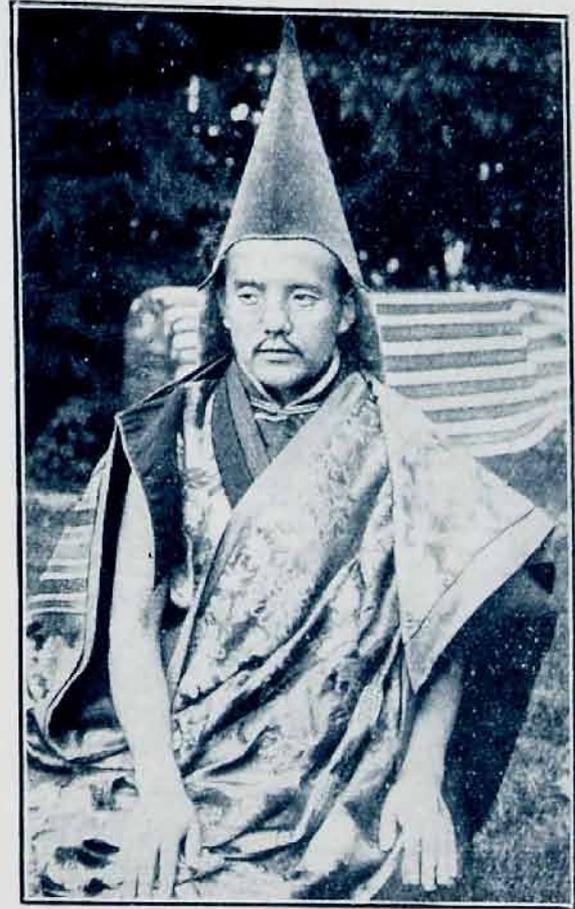
summit of Senechal Mountain (8,515 feet) near Ghum, information in regard of which will be found in the next chapter. During the months of November, December and January, during March and April, and during breaks in the rainy season, the traveller may feel fairly certain of seeing this panorama unveiled, but, on the other hand, if he has only a day or two for his visit he might be unfortunate enough to find the snows temporarily hidden behind a curtain of mist and cloud. As an offset to this possible disappointment, however, the traveller will find there is an abundance of beauty and interest around him at Darjeeling itself and on the nearer mountains, and in this

chapter, after a brief account of the chief characteristics of the hill-people that form such an attractive feature of the place, notes will be given to inform him of places of interest in Darjeeling and walks around the hill-station worthy of his attention.

Perhaps the most arresting and interesting of the hill men and women met with in Darjeeling are the Bhutias. These are of Mongolian type and Tibetan extraction. Most of them are descendants from Tibetans who settled in Sikkim a few centuries ago. The men are sturdy in build, noisy and very cheerful. In Darjeeling they form the majority among the men who pull rickshaws, carry the dandies, and act as porters generally. Their broad faces and twinkling eyes have a habitually jolly expression; ear-rings and gambling are their chief weaknesses, if we except an apparent abhorrence of soap and water. In dress they affect a long wide-sleeved mantle hitched up by a girdle at the waist, snow boots and every shape of old soft hat conceivable, sometimes trimmed with fur. The Bhutia women are broadly built and have fair yellow complexions and ruddy

cheeks. They load themselves with massive gold, silver, and bead ornaments: necklaces, amulets, chains and belts, studded with rough turquoise. They wear short jackets and blouses, brightly coloured, and heavy striped skirts. They are as merry and open-hearted as the men. They are continually knitting and spinning when not otherwise engaged.

Next come the Lepchas who are the aboriginal race of these parts. The Lepchas are also of Mongolian type but they are not so sturdy as the Bhutias. They are a meeker and quieter race with sallow complexion; they wear their hair plaited in a tail. The men are as fond of ornaments as the women, and in their woollen



A LAMA OR PRIEST.

garment, a sort of gown gathered at the waist and a tunic or blouse, they would often be scarcely distinguishable from their women but for the fact that the latter plait their hair in two tails instead of one. The women dress much like the Bhutia women and carry similar ornaments. Both Bhutias and Lepchas are nominally Buddhists, but the Buddhism they practise is of a very debased kind. Their religion amounts to little more than the propitiation of evil spirits, their main idea being that the good requires no attention as good spirits do no harm, but the countless demons who infest the air, the streams, and the ravines must be petitioned and propitiated. Hence cloth flags are stretched across streams on elevated poles to flutter in the breeze and waft to the demons concerned the petitions printed on the calico. Similarly, prayer-wheels are likewise decorated with mystic sentences and revolved for the same purpose.

The third race that is principally met with in Darjeeling, and the dominant race, is the Nepalese. The Nepalese are less Mongolian in appearance than the Bhutias and Lepchas and have an



A NEPALESE WOMAN.

admixture of Aryan blood. They are an alert and virile race, hard-working and intelligent. Most of the work on hill tea-gardens is done by the Nepalese. They dress simply, in loose cotton trousers, a tight jacket, and a small cotton cap, without bright colours, or indeed any at all, and they cut their hair short. Into a cloth girdle about their waist they thrust their curved knife, the kukri. Many of them enlist in the famous Gurkha regiments, and the loyalty and fortitude of their character is expressed in their own proverb, "Orders have no answer and death has no medicine." The Nepalese are Hindus but it is only a

thin veneer of Hinduism that they embrace.

If the traveller is in Darjeeling on a Sunday he should not fail to go down in the morning to the bazaar and Municipal market where he will see the hill men and women decked out in all their finery and loaded with jewellery.

The Chowrasta and the Mall form the centre of Darjeeling, the former being a broad open space on the saddle of the mountain-ridge, and the latter a circular road running from the Chowrasta, northwards along the western side of the ridge, past the Church, the Park, and the Amusement Club, to the gates of Government House, and then circling round the base of Observatory Hill and returning again to the Chowrasta along the eastern side of the ridge. The Mall is a pretty, well-kept road, bordered by grassy banks, flowers, and fine cryptomeria firs. It commands excellent views of the snows.

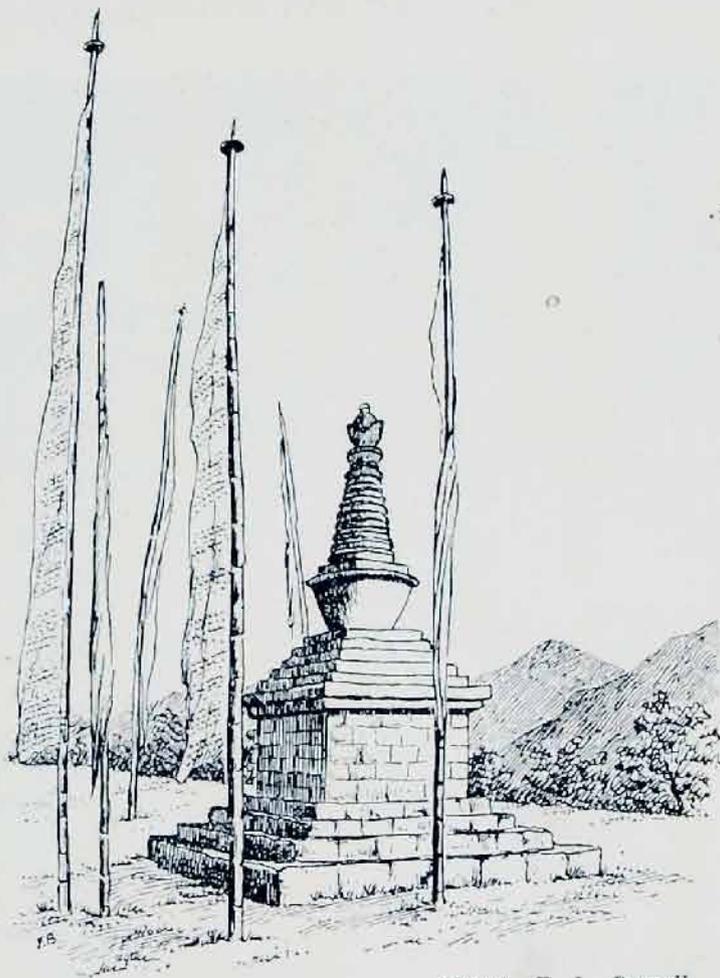
Observatory Hill ( $\frac{1}{2}$  mile from Chowrasta) is ascended by a path taking off from the northern end of the Mall. The climb is steep and visitors may use a dandy or a rickshaw if desired. The ascent is well worth the trouble involved as the views from the hill-top are very fine, especially at dawn and at sunset. At one time



MARKET DAY IN DARJEELING.

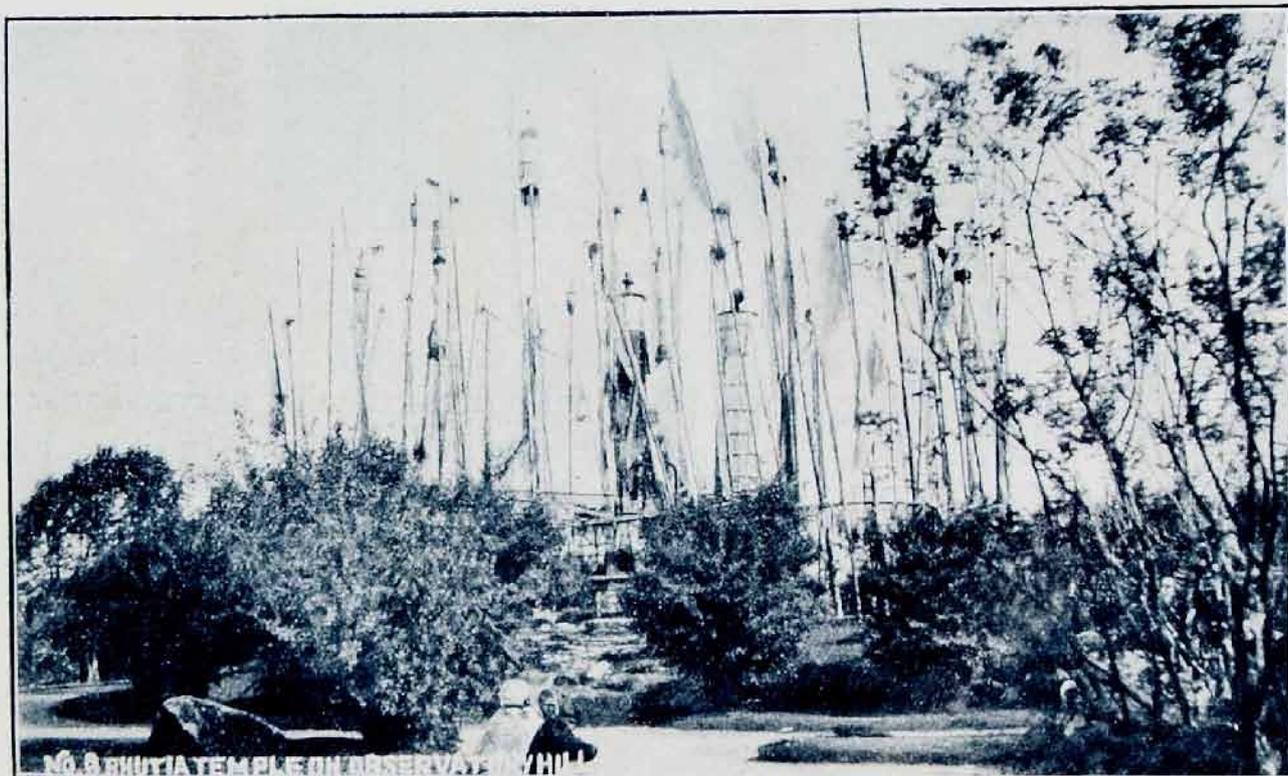
there was a Buddhist Monastery on the top of the hill, and there is now a small shrine and a group of lofty poles dressed with prayer-flags.

The Church of St. Andrews was built in 1870. In it is a memorial tablet to the beautiful Lady Canning, wife of the first Viceroy of India, who died as a result of fever contracted while sketching in the Terai. There is a Scotch Church, St. Columbia's, near the railway station, a Roman Catholic Church at the Loreto Convent, and a Union Chapel, in charge of the American Methodist Mission, on the Auckland Road.



Sketch—F. L. Russell.

CHAIT AND PRAYER-FLAGS.

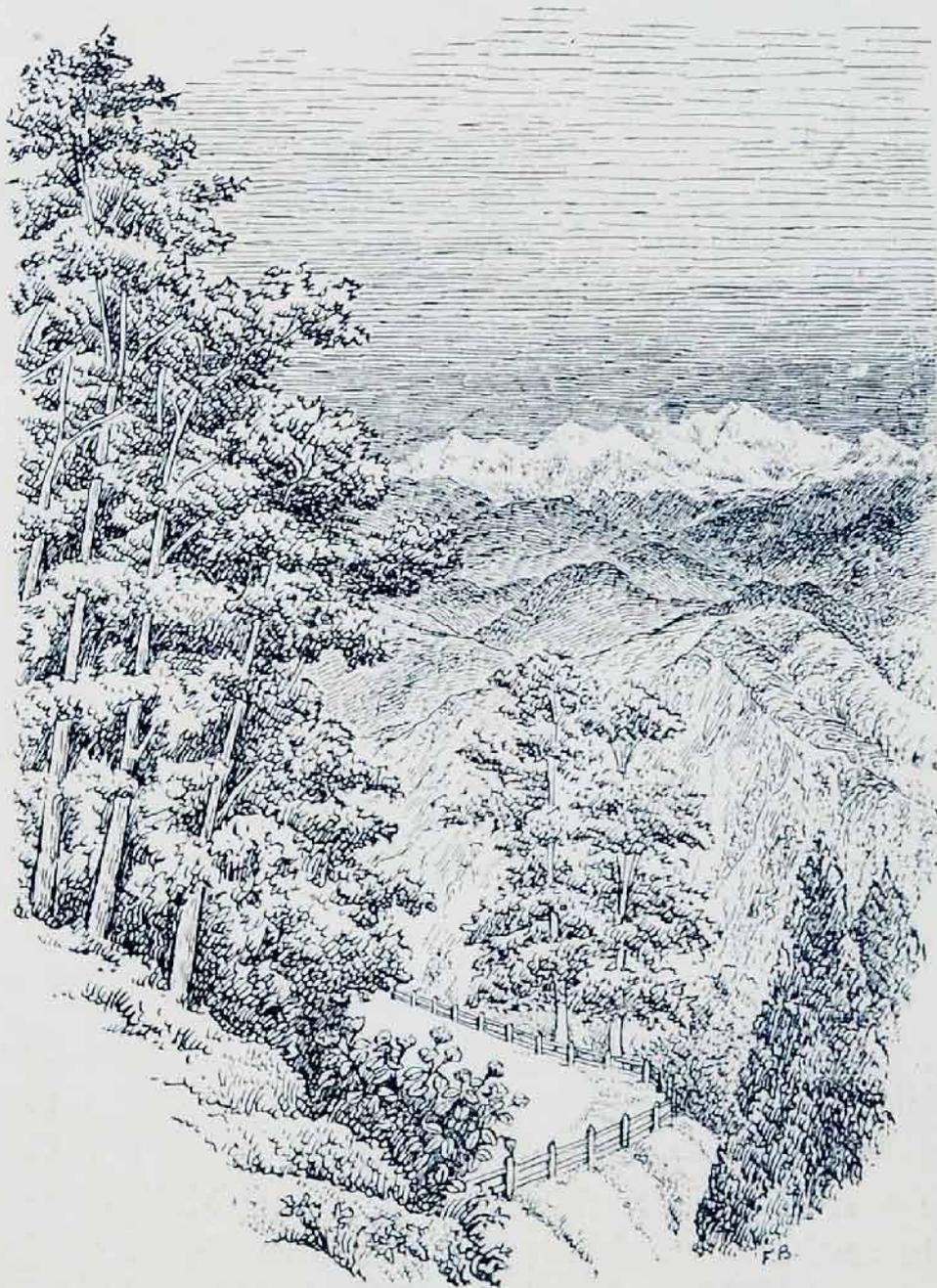


NO. 8 BHUTIA TEMPLE ON OBSERVATORY HILL

PRAYER-FLAGS ON OBSERVATORY HILL.

The Park is small but prettily laid out. Here the rosy-cheeked English children of the hill-station congregate on most fine days. There are also shelters for protection from the rain, a very necessary precaution for the months of June to October, the average rainfall of Darjeeling during these months being about a hundred inches.

Just below the Park is the Natural History Museum in which the visitor will find a fair collection representative of the flora and fauna of the Darjeeling District and Sikkim.

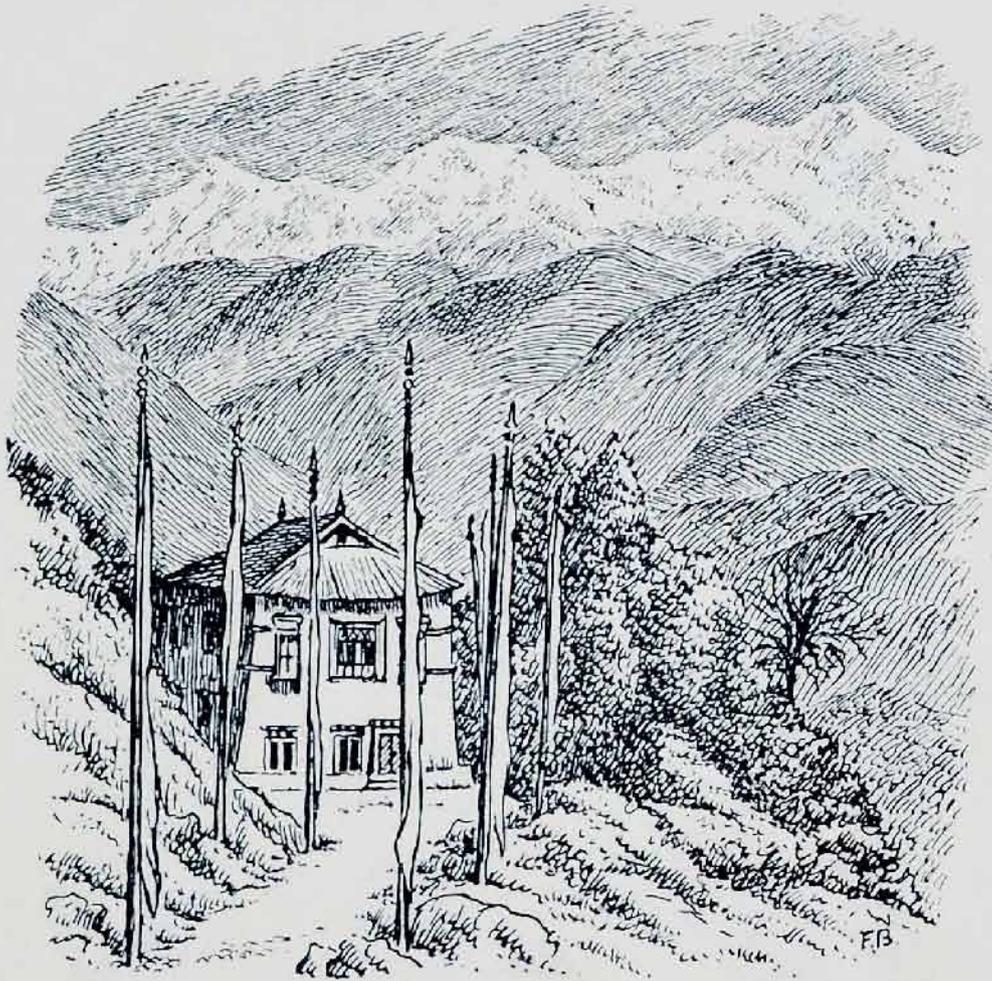


Sketch—F. L. Bussell.

SNOWS FROM BIRCH HILL PARK, DARJEELING.

The Amusement Club is the principal social centre of the station. Membership is by election, but there is a system of temporary membership for duly recommended visitors. The Club has six tennis courts, a ball room, a skating rink, a theatre, billiard room, reading rooms and library.

Government House is the summer residence of His Excellency the Governor of Bengal who spends the hot-weather months in



A BUDDHIST MONASTERY.

Sketch—F. L. Bussell.

Darjeeling. It stands within beautiful grounds but these are not open to the public. Sentries and a guard of sturdy little Gurkhas may be seen on duty at the gate when the Governor is in residence.

If the traveller, instead of following the Mall where it turns to the right at the gates of Government House, goes straight on for a mile further, following the Birch Hill Road, he will drop down to Birch Hill Park. In this beautiful and natural park are magnificent

forest trees through which a few clearings have been made, allowing of lovely vistas to the snowy peaks. Wild strawberries, anemonies, violets and other English flowers grow on the mossy banks by the paths in the spring. There are grassy plots which form excellent picnic spots, and a pavilion (2 miles from Chowrasta). The park may be approached and entered in rickshaw or dandy.

From the north-eastern end of the Chowrasta the Rungeet Road drops down to the Lebong Spur through the Bhutia Basti (the village of the Bhutias). After a few minutes' descent from the Chowrasta the traveller will come to a large Buddhist Shrine, or *chorten*, with prayer-flags. A little further down, almost hidden by the trees and approached by a path on the left, is the Buddhist Monastery. Every traveller to Darjeeling should make a point of visiting this interesting habitation of the Lamas, as the Buddhist priests and monks are termed. The front of the building is fitted with rows of cylindrical prayer-wheels, and the recessed doorway and wooden pillars and rafters within the temple are of carved wood, decorated with curious coloured designs. In an ante-room is a large prayer-wheel, 6 feet



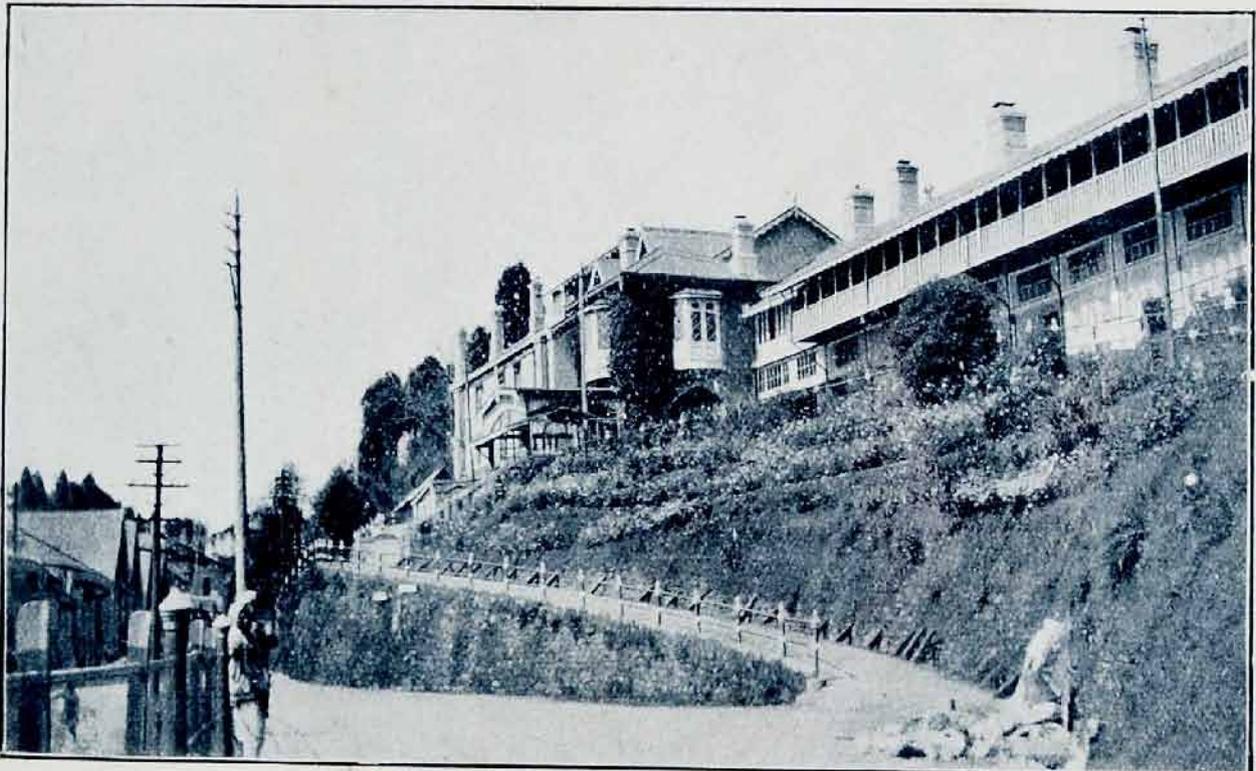
DEVIL MASKS USED AT CERTIFICATES.

Photo.—Burlington Smith.

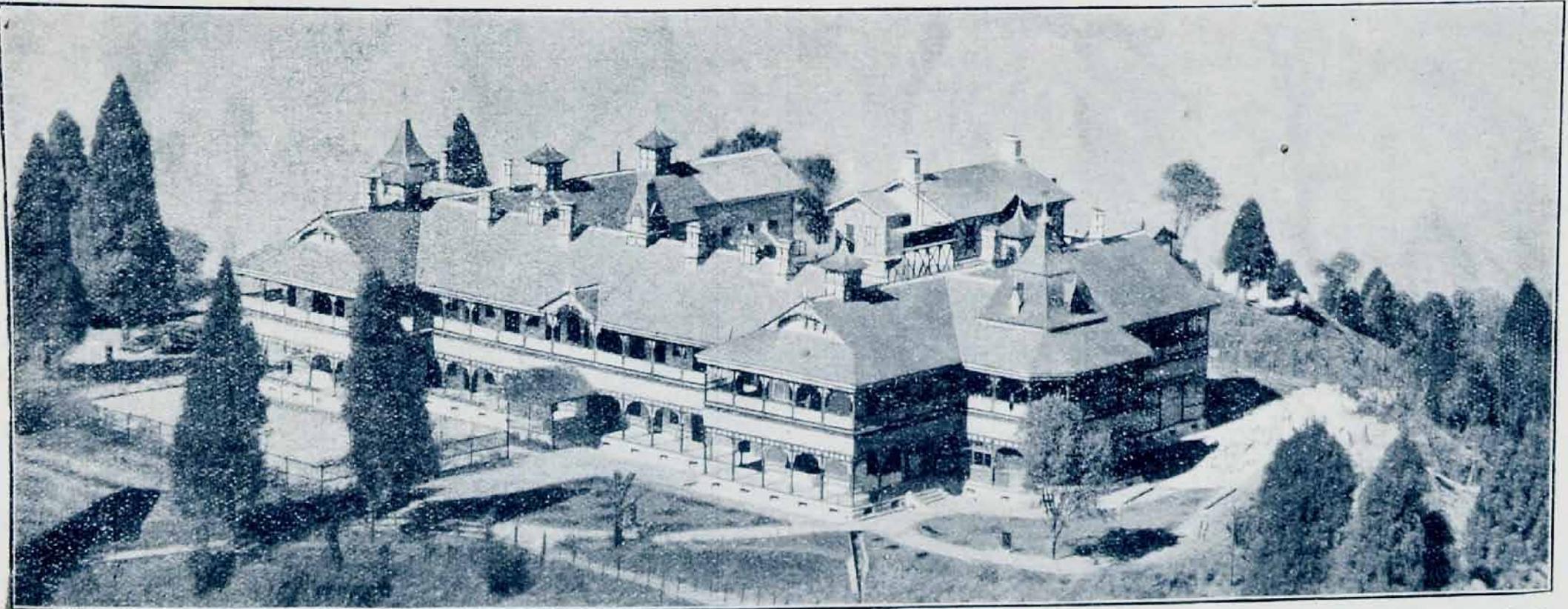
in height, which a Lama works with a strap and which rings bells as it revolves. In the temple may be seen Tibetan manuscripts and all the various implements of worship used in Buddhist temples, such as the cymbals, bells, conches, brass cups, copper trumpets six feet long and trumpets made of human thigh bones. The Lamas, interesting and mediæval-looking in the mantles and cowls, are pleased to show visitors round the monastery but expect a trifling contribution towards the upkeep of the place. Rickshaws may be taken down to the monastery.

Running southwards from the Chowrasta is Commercial Row where the principal European shops and the Rockville and Drum Druid Hotels stand. Commercial Row joins the Auckland Road which is one of the principal and the oldest roads in Darjeeling. It passes above the Woodlands and Mount Everest Hotels and leads through a residential quarter for several miles eventually rising to Ghum, 4 miles from Darjeeling.

At the junction of Commercial Row and Auckland Road stands the long building of the Darjeeling Club, a residential club for tea-planters and others, and here the Post Office Road descends to



THE CLUB, DARJEELING.



EDEN SANITARIUM, DARJEELING.

*Photo—Burlington Smith.*

Mount Pleasant Road. These are the roads followed in descending from the Chowrasta to the Bazaar and Cart Road. Mount Pleasant Road is the happy hunting ground of the curio-seeker.

The Bazaar and Municipal Market are always interesting but should be visited above all on Sunday when coolies from the neighbouring tea-gardens and a heterogeneous collection of hill men and women assemble to make their weekly purchases.

Standing on a separate spur beyond the Cart Road is the Eden Sanitarium. This handsome two-storied building was erected during the Lieutenant-Governorship of Sir Ashley Eden in 1882, and named after him. It has accommodation for over sixty convalescents, and there is also the Eden Hospital adjoining the Sanitarium. The charges are moderate and the institution is of great benefit to the Europeans of Bengal. The same benefit is provided for Indian convalescents in the Lowis Jubilee Sanitarium not far from the railway station.

Below the Eden Sanitarium and approached by the Lochnagar Road are the Botanical Gardens. The traveller should endeavour to visit this beautiful spot. The descent and the return uphill are



BOTANICAL GARDENS, DARJEELING.

steep, but a rickshaw or dandy may be used as the path is good. The lay-out of the grounds is very pretty and some fine orchids may be seen in the hot house.

During the rainy season, but only then, the Victoria Falls (3 miles from Chowrasta) are worth visiting and these can be reached readily from the Botanical Gardens. The falls are about half a mile from the west gate of the Botanical Gardens which open on the Victoria Road. The water at the falls has a sheer drop of 100 feet.

The Cart Road when it leaves the bazaar at the northern end is then known as the Lebong Road, and runs round the main Darjeeling Spur past the Loreto Convent, the Courts, Cemetery, Diocesan Girls' School and St. Joseph's College, to Lebong Parade Ground. Lebong is dealt with in the next chapter.

The Loreto Convent, an imposing stone building standing in beautiful grounds, is a large school of 200 scholars taught by twelve nuns supplemented by lay teachers.

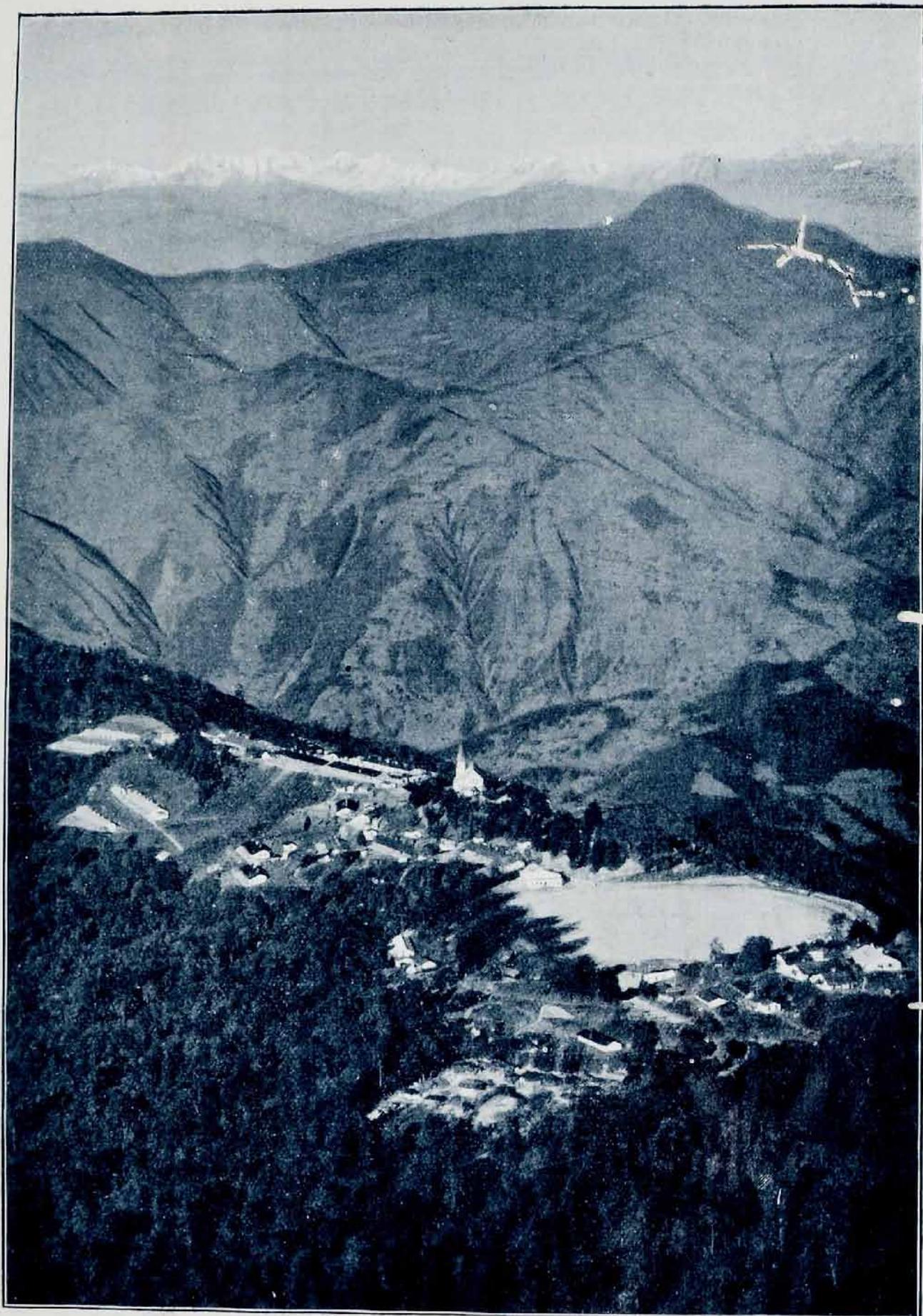
The Kacheri, or Magistrate's Office and Court, is of no particular interest to the visitor except that it is here he must apply for passes if he intends to undertake any of the tours detailed in Chapter VII.

In the Cemetery are the tombs of Cosmo de Korosi, a Hungarian philologist who compiled a Tibetan dictionary, and of Gustavus Septimus Judge, a pioneer of the tea industry.

The Diocesan Girls' School is under the management of the Clewer Sisters and has over one hundred and fifty pupils.

The St. Joseph's College is a thriving Roman Catholic School for boys under the Jesuit Fathers. The building and playing ground are excellent and the standard of teaching is high. There are about 250 boys in the school. The other large boys' school in Darjeeling is the St. Paul's School which is on Jalapahar Hill and is referred to in the next chapter.

Reverting to the Chowrasta, if the traveller follows the road that starts from the south-eastern corner, the Jalapahar Road, he will quickly reach a turning on the left, the Calcutta Road. A couple of miles distant along this road, which commands very beautiful views, is an old Bhutia Cemetery on the hill-side with old stone tombs (the curiously shaped *chorten*), surrounded by prayer-flags. The place is well worth visiting, the bold mountain slopes and a deep valley below forming an attractive setting to the picturesque old tombs.



LJBONG.

Photy—Burlington Smith.

## VI.

### SUBURBS OF DARJEELING.

CLOSE to Darjeeling are the Cantonments of Lebong, Jalapahar and Katapahar. The former lies north of Darjeeling and the two latter are situated south of the town on the crest of the ridge above Ghum. Ghum is principally important to the traveller in its relation to Senchal Mountain. Fifteen miles further south and built on a spur overlooking the beautiful valley of the Balasun River is the small but growing hill-station of Kurseong. It is to information about these places that the present chapter will be devoted.

Lebong Cantonment stands on a lesser spur running from the northern end of the main Darjeeling Ridge and has an elevation of 5,970 feet. There are two routes from Darjeeling to Lebong, one (about 2 miles) being from the Chowrasta by the Rungeet Road to the east of the Mall, and the other (about 5 miles) *via* the Cart Road from the Railway Station and the Municipal Market. The former route which passes through the Bhutia Basti is steep but rickshaws can be used. The route by the Cart Road, a gradual descent, is very beautiful both by reason of the ravines and valleys of the locality and on account of the excellent views obtained of the snowy range. The Cantonment can also be reached through the Birch Hill Road.

Lebong is well seen from the Mall, east of Government House gate. It has accommodation for a battalion of British infantry, a parade ground, and a church. It is about 10° warmer than Darjeeling. On the slopes of the spur below and beyond the Cantonment are several tea gardens.

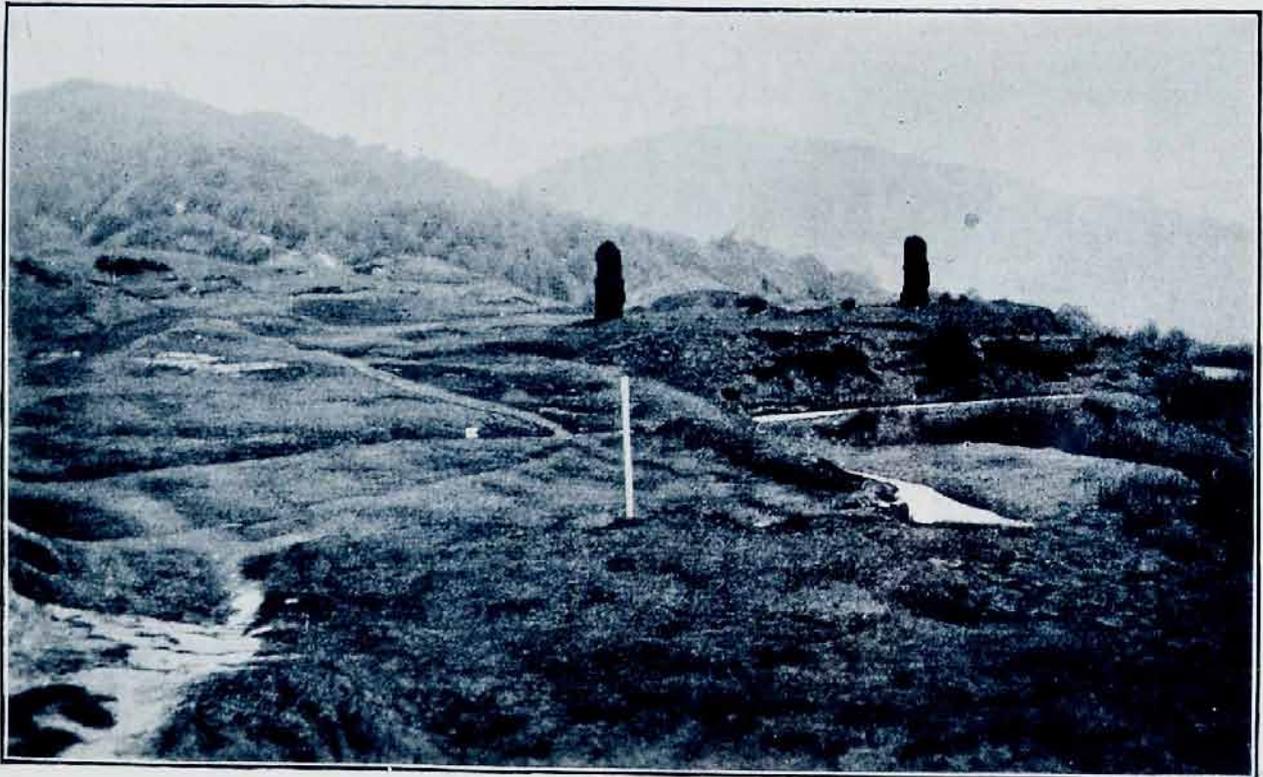
At the Lebong Parade Ground the Darjeeling races and station polo are held at suitable seasons of the year.

Jalapahar is the name of the hill above Darjeeling which forms part of the ridge running from Ghum down to Lebong. It is a convalescent depôt to which invalid soldiers are sent from the plains of Bengal and there are barracks, officers' quarters, a military hospital, church, and parade ground.

Jalapahar is best reached through the Auckland Road (about 2 miles from the Chowrasta *viâ* Commercial Row). Rickshaws may be used for the ascent, about 500 feet. There is another route from the Chowrasta *viâ* the Jalapahar Road. This road passes St. Paul's School which is one of the two principal boys' schools in the Eastern Himalaya. It was founded in Calcutta in 1846 and removed to Darjeeling in 1864. There are nearly two hundred boys in the school. The playing grounds include nearly 40 acres and very fine views of the snows and of the Darjeeling and neighbouring spurs are obtained from the school site.

Above Jalapahar, on the summit of the ridge, is Katapahar. Here is a small cantonment where about 200 men and officers of the artillery are stationed. A good road descends from Jalapahar and Katapahar to Ghum, whence the return to Darjeeling may be made either by rail or *viâ* the Auckland or Cart Road.

Ghum will be remembered by the traveller as the highest point to which the railway attains (7,407 feet). It is a place of some importance as a trade centre, standing at the junction of the three principal roads of the locality: the Cart Road from the plains, the



GOLF LINKS AT SENECHAL.

Sketch—F. L. Bussell,

road to the Nepal frontier, and the road to the Teesta Valley, Kalimpong, and Tibet. There are two hotels at Ghum: the Pines and the Balaclava Hotel, both of which cater for lunch and tea for tourists. The traveller to Darjeeling should not omit Ghum, and especially the ascent of Senchal Mountain, from his programme if he can spare a day.

A good road ascends Senchal for two miles from the eastern end of Ghum Bazaar. The ascent of the mountain is fairly steep but ponies are easily obtained at Ghum and a dandy or rickshaw may be engaged by previous arrangement from Darjeeling. The road ascends through a thick forest of oak, maple, birch, chestnut, laurels, magnolias and rhododendrons, the two latter, when in bloom in April and May, affording a magnificent blaze of colour. Many varieties of ferns clothe the banks and rocks on either side of the path, while the trunks and branches of the trees are hung with lichens, mosses, and orchids. At one time there were military barracks on the summit of Senchal (8,163 feet) but these were abandoned some years ago in favour of Jalapahar, and the open grassy slopes which are a pleasant feature of the top of the mountain have been laid out in Golf Links.

A mile above Senchal the road tops Tiger Hill (8,515 feet). The views from Senchal and Tiger Hill are the finest obtainable in the immediate neighbourhood of Darjeeling. To the south beyond the Kurseong Spur, the plains of India threaded by the courses of four great rivers, the Teesta, Balasun, Mahanaddi and Mechi, lie stretched out as in a map. To the north immediately below Senchal is the deep valley of the Rangeet River, 7,000 feet below, which runs into the valley of the great Teesta beyond which are seen range upon range of the mountains of Sikkim, Nepal and Bhutan topped by a great line of snowy peaks along more than half the horizon. The great Kinchenjunga with its twin peaks forms the centre of the snowy mass, the summits of Kabru and Jannu standing on the western side and those of Pandim and Nursing on the east, all within 45 miles distance from Senchal. Chumularhi Mountain, of Tibet, is seen in the north-east, 84 miles away, appearing as a great rounded mass over the snowy Chola Range. But the peak that claims the chief interest is that of Mount Everest (29,002 feet) which is seen above the black Singalela Range to the north-west over



F.B. '20

A PATH IN THE FOREST,

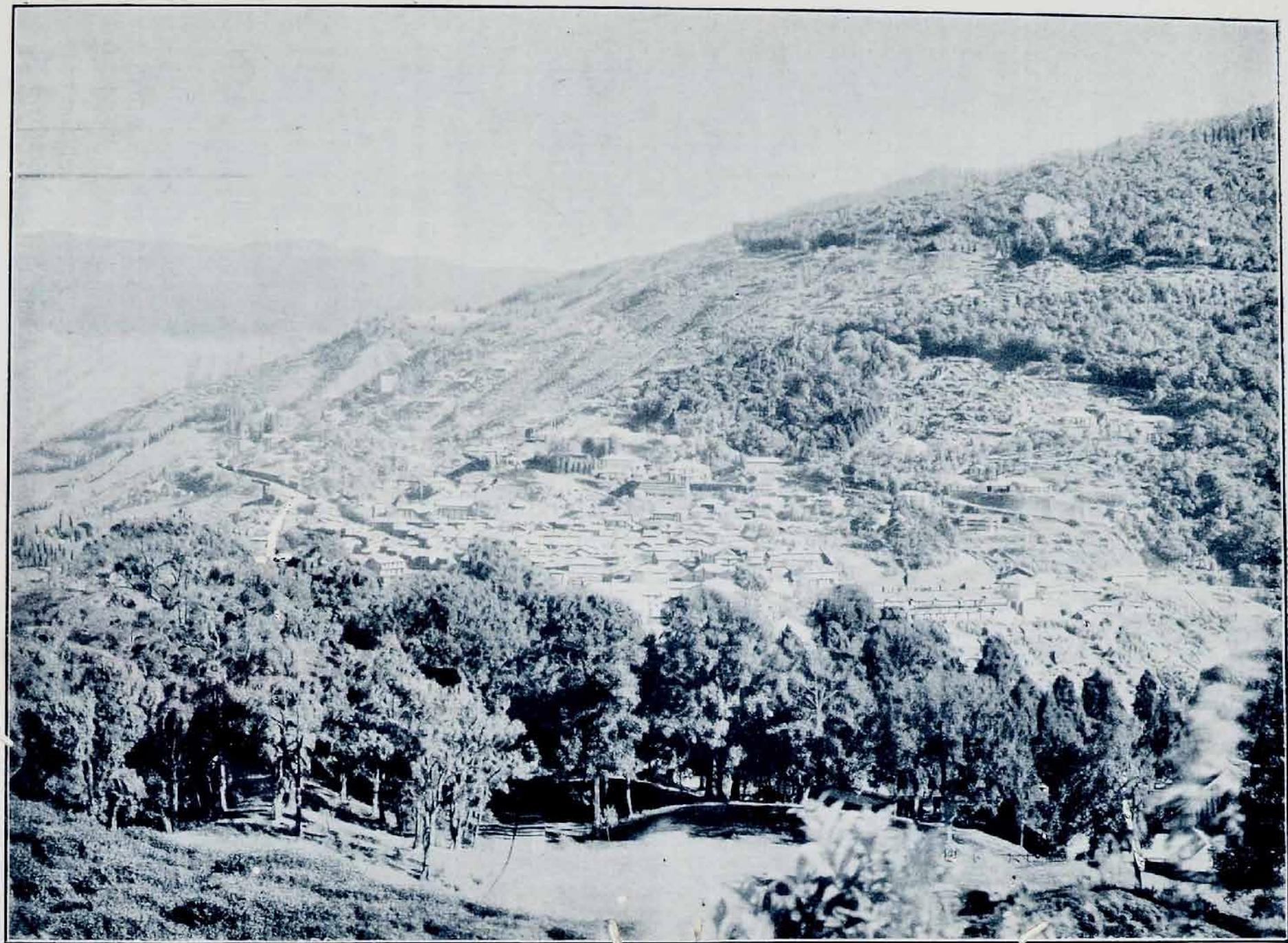
100 miles distant. Only the top of Everest is seen, standing between two other peaks one of which, the arm-chair shaped Makalu (27,799 feet), makes a loftier appearance than Everest on the horizon as it is considerably nearer.

Tiffin baskets, drinks, etc., to be taken up to Senchal, can be obtained by arrangement from hotels at Ghum or Darjeeling, and coolies are available. Using the train for the journey to and from Ghum the visitor can make the trip up Senchal and readily return to Darjeeling the same day. But there is a comfortably furnished bungalow on the top of the mountain and leave for use of this can be obtained from the office of the Deputy Commissioner, Darjeeling. A favourite plan is to ascend Senchal in the afternoon or evening, spend the night at the bungalow, and rise early to see the sunrise effects on Everest and Kinchenjunga.

Senchal is unfortunately very frequently shrouded in mist, the spur on which it forms a prominent summit intercepting the full force of rain clouds from the Bay of Bengal. But although the visitor may be disappointed of his hopes of obtaining distant views he will find the forest through which the path ascends, and the grassy slopes on the top of the mountain, well worth the excursion on their own account. There is, moreover, a Buddhist Monastery at Ghum which may be visited if local weather conditions do not invite the ascent of Senchal.

Four miles from Ghum, along the road that leads from the railway station westwards to the Nepal frontier, is the Ghum Rock, a favourite spot for picnic parties. This rock forms one of the natural curiosities of the locality; it is a huge boulder of gneiss, 100 feet high, and from its flat top fine views are obtained of the Balasun Valley, the Nepal ranges and the plains. It is said that previous to British rule criminals were executed by being thrown from this rock.

Three miles from Ghum in the opposite direction and approached by a broad cart road running eastwards from the middle of the bazaar is the Rangaroon Botanic Garden. This garden is the father of the Darjeeling Botanic Garden and was abandoned in favour of the latter as the site at Rangaroon was rendered unsuitable by violent hail-storms. The broad road from Ghum is almost level for two miles, then there is a drop for a mile by a path on the left through



KURSEONG FROM EAGLE'S CRAG.

*Photo—M. Sain.*

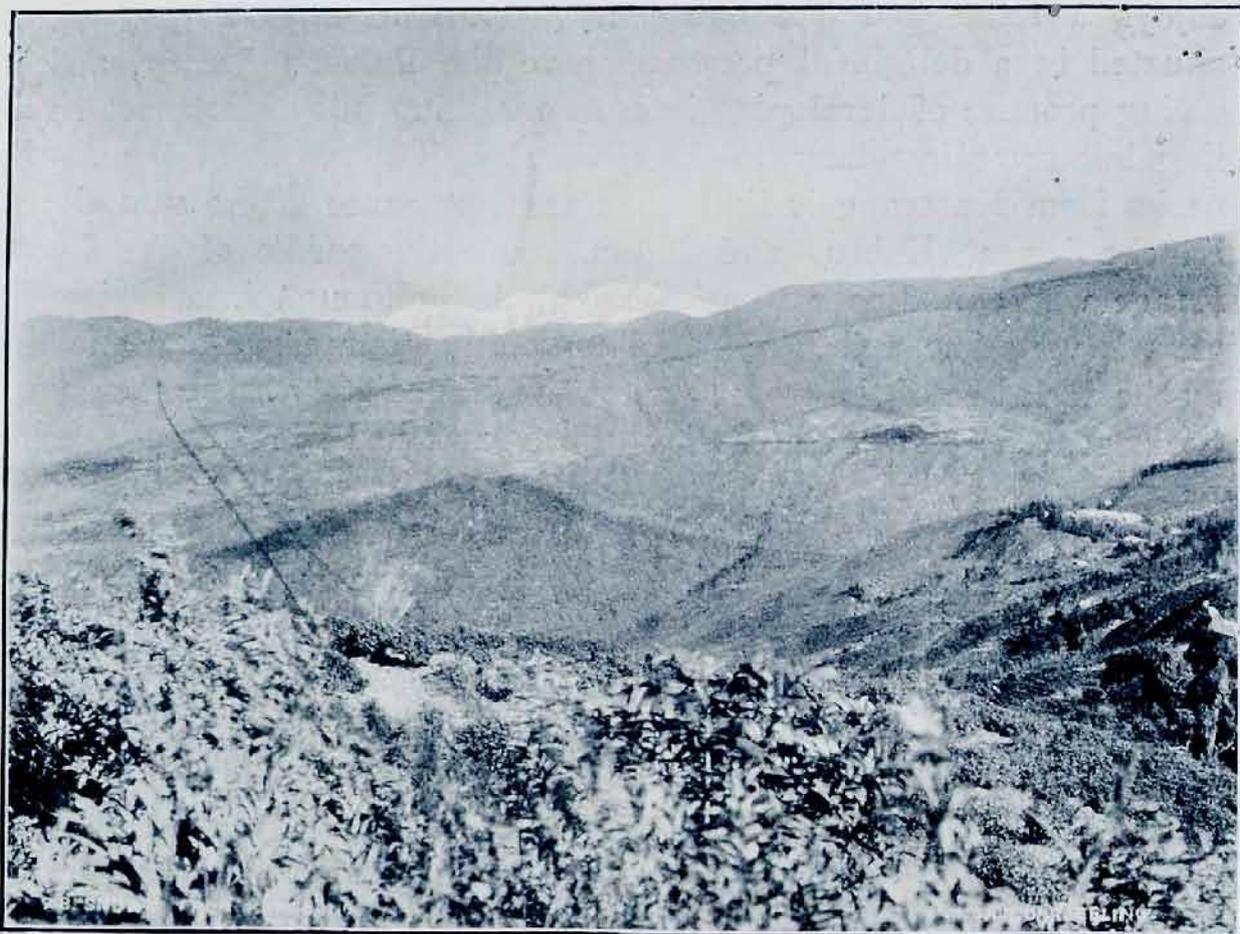
thick forest to the Rangaroon bungalow. A good view is obtained from the bungalow across a deep valley to the snowy range and the forest scenery here is the finest around Darjeeling.

Thirty-two miles from Siliguri and nineteen from Darjeeling and on a lower spur of the Senechal-Singalela Range stands the hill-station of Kurseong at an elevation of 5,000 feet. This town enjoys a milder climate but a larger rainfall than Darjeeling, is situated in a delightful position above the Balasun Valley, and is giving promise of developing into a flourishing hill-station, not rivaling but complimentary to Darjeeling. The view of the snowy peaks from Kurseong is limited to an appearance of the summits of Kinchenjunga, Kabru, and Jannu above the saddle of the Ghum Range where it dips west of Senechal, but although inextensive the view is very fine and is rendered especially picturesque and effective by the dark hue of the forest-clad range immediately below the snowy horizon. The Balasun Valley aforementioned lies directly below Kurseong the whole length of the ridge on its western side, and is bounded by the Nagri and Mirik Spurs that enclose the subsidiary valley of the Rangbong, the whole presenting a magnificent outlook over deep valleys and over hills studded with the shining white buildings of tea factories. To the south is a totally different view. From Eagle's Crag and from the Punkhabari Road a wonderful view over the plains is obtained, more extensive than the view of the plains from Senechal and more impressive from the fact of the Kurseong Spur itself dropping abruptly to the plains immediately below, and from the view of spur after spur of blue ranges in the west, jutting out into the plains one behind the other till lost to view in the blue distance.

The history of Kurseong is bound up with that of Darjeeling, the spur on which it stands having been included in the tract of country leased and finally annexed from Sikkim.

The principal roads at present are the Punkhabari Road, which ascends to Kurseong from the plains at its western extremity and runs up the ridge to the railway station; the Cart Road, which runs beyond the railway station through the bazaar and past residential quarters and the Clarendon Hotel at the northern end of the station; and the Dow Hill Road, which ascends from the railway station up the track of an old military road (built by Lord Napier of Magdala when a young officer) to the summit of the ridge.

On the Punkhabari Road stand "Constantia" (the Sub-divisional Magistrate's house), the Parsonage, Springside Tea Factory, Woodhill Hotel, the Church, the Kacheri, the Amusement Club, the Railway Offices, and lastly close to the railway station the Post Office.



THE SNOWS FROM KURSEONG.

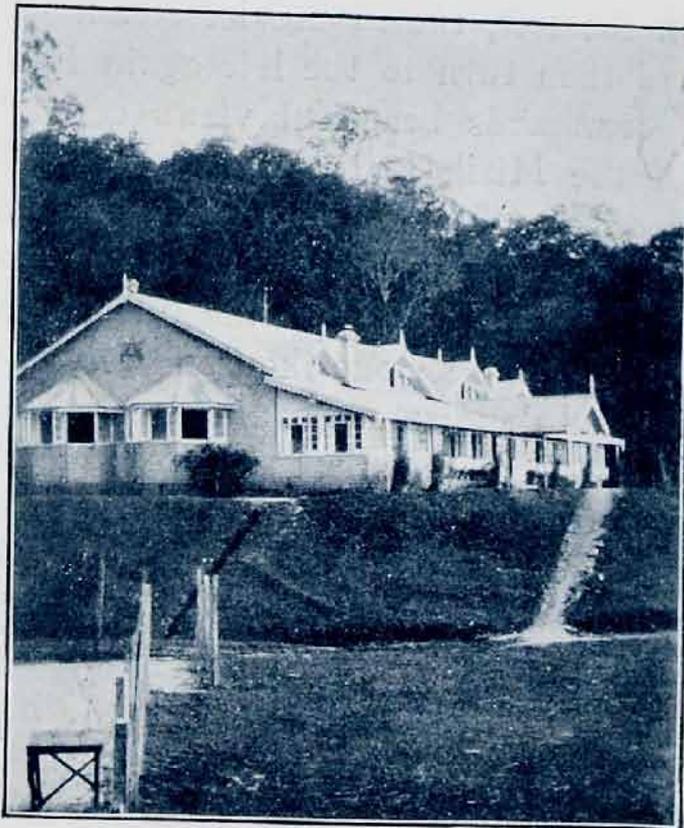
*Photo—M. Sain.*

Near the railway station are the principal shops, chemists and stores. After emerging from the bazaar the Cart Road passes above the houses of the Monteviot Estate which together with the hotels provide the principal accommodation for visitors to Kurseong. Above the Cart Road are the houses of the General Manager and other officers of the D.-H. Railway, the Roman Catholic Church, the St. Helen's Convent School and the Clarendon Hotel (1 mile from railway station).

The Dow Hill Road leads up to Victoria School and Dow Hill School which are large Government institutions for the education

of boys and girls, principally children of railway employees and Government servants generally.

The Amusement Club has four tennis courts, a ball-room, bridge rooms, library, etc. There is an arrangement by which visitors can become temporary members at a small charge. Ladies also can become members.



*Photo—F. L. Bussell.*

KURSEONG CLUB.

The visitor to Darjeeling should endeavour to devote a day or two to Kurseong. He will find convenient trains between the two stations. Meals and tiffin baskets can be obtained at short notice from the Railway Refreshment Room.

There are several pretty and interesting short walks about Kurseong, notes of which will now be given, taking the railway station as the starting point :

1. Take the road branching off from the Cart Road immediately east of the railway station. It is one mile's fairly easy ascent to the summit of the hill known as Eagle's Crag, where very fine views are obtained over the plains and to the snows.

Follow the road for a quarter of a mile, then take the narrower road on the left. This road circles Eagle's Crag, is almost level, and commands excellent views across numerous spurs of mountains. After a mile and a half the road joins the Punkhabari Road by which on turning to the right a return to the railway station may be made past the Church and Club (3 miles in all).

2. Follow the Cart Road up through the bazaar for half a mile. Take a turning on the left, the Monteviot Road. Follow this road for half a mile and then turn to the left again into the Bourdillon Road. The road commands beautiful views of the Balasun River and Valley and of the Mirik and Nagri Spurs. The Punkhabari Road is met south of the Club. Turn to the left and return to railway station past the club and railway offices (2 miles in all).

3. Take the Dow Hill Road up the hill opposite the railway station. A fairly stiff climb for one thousand feet affords very extensive views. Ponies and dandies are available at the railway station. Pass below Dow Hill School (2 miles) and continue the ascent. The road soon crosses to the eastern side of the ridge and affords very varied views. "The Chimneys" are merely the ruins of an old staging bungalow on this, the original route to Darjeeling from the plains, but the hill-side here is open with grassy slopes, and the forest and views are very fine. On the return, half a mile below Dow Hill School, vary the walk by taking the turning on the right and descend to the Cart Road near the Clarendon Hotel by Weston Road.

4. A delightful climb through a forest of cryptomerias to Victoria School, where good views are obtained, is got by turning to the right a mile and a half above the railway station. The walk may be continued to Dow Hill and "The Chimneys" from Victoria School.

5. Follow the Cart Road down from the railway station for a mile and a half where it runs out on a promontory. Here is a summer house commanding magnificent views of the Terai, the plains, and countless ranges of mountains running down to the plains. The scene is best at sunset.

## VII.

### EXCURSIONS.

**S**HORT walks and excursions which do not necessitate absence for a night from Darjeeling have been described in previous chapters, but there are a number of more extensive tours which will well repay the visitor to Darjeeling for the forethought, time, and small expense involved. Such tours will now be outlined, but for more detailed and comprehensive information of these and other tours the traveller should consult the "Notes on Tours" issued from the Deputy Commissioner's Office, Darjeeling, and "Tours in Sikkim" by Mr. Percy Brown (Messrs. Newman & Co., Calcutta).

The hill tracts about Darjeeling and in Sikkim are well provided with travellers' bungalows all of which are furnished, and the traveller who undertakes tours outlined in this chapter need bring nothing beyond his bedding, food, and clothes. To transport these, coolies are employed. For the shorter tours of two and three days' duration the coolies may be engaged in Darjeeling and managed by the traveller himself, but for the longer tours it is more convenient and satisfactory to engage a "sirdar" or headman who makes all arrangements. The sirdar will require two or three rupees a day for pay, and the coolies will require ten or twelve annas a day each. Three or four coolies per traveller for the shorter trips of not more than six or eight days, and five or six for the longer trips will suffice. In addition to this, a cook and a sweeper at Rs. 1-8 and Re. 1 per diem, respectively, must be engaged for the tour. It is also advisable for those who are not experienced hill walkers to hire a pony for the trip, unless otherwise stated in outline of tours here below, the usual method being to ride up hill and walk down (Rs. 4 per day is the usual charge). The traveller will find no difficulty in summoning a sirdar, coolies, or other servants with the assistance of the hotel staff, but enquiries may be made at the municipal office in

Darjeeling if necessary. Stores, fowls, bread, eggs, rice, etc., should generally be taken by the traveller from Darjeeling, but these articles can be obtained locally at Kalimpong, Siliguri, and Gangtok.

Before starting on any of the tours the traveller must obtain passes from the office of the Deputy Commissioner, Darjeeling, for occupation of the bungalows (Re. 1 per day per traveller). Travellers to Sikkim must also have a frontier pass (8 annas). Firewood is available at each bungalow.

The roads are not fit for wheeled traffic but are generally good bridle paths. The traveller should be provided with strong footwear, and plenty of warm clothing and bedding for the higher altitudes. The hill people are peaceable and friendly and there is no danger to be feared from them. Game is not plentiful and sport not good for the ordinary traveller; licenses are required for shooting.

The scenery is as varied as it is grand. The different aspects of the snowy mountains, the wild and impenetrable forests, the deep valleys resounding with the roar of a river tumbling down a rocky bed are the accompaniment of every day's march, while the beauty of the flowering magnolias and rhododendrons, the orchids, and the great masses of primulas, gentians, and poppies that clothe the mountain-sides, and of the violets, wild strawberry, anemonies, and lilies that people the banks and woods, are a perpetual source of delight.

The best season of the year for travelling in Sikkim and in altitudes below 10,000 feet is from October to the end of January. For the Phallut trip October is suitable provided the rains have ceased, and in November excellent views of the snows are obtained, but it is very cold. April and May, although liable to occasional rain, are in many respects, particularly as regards the flowering trees and shrubs, the best months for travel in all altitudes.

#### TWO-DAY TRIPS.

1. *Senchal and the Forest*.—Take train to Ghum on the morning or afternoon of the first day and stop the night in the bungalow at Senchal. Get up to see the sunrise. After an early breakfast descend the hill and take the old military road which runs south above the Cart Road. After five miles' walk through grand

forests take a turning down the hill and emerge at Sonada Station. Thence return by train.

2. *To Lopchu.*—Train to Ghum and walk down the Cart Road from station. Turn to the left in middle of Jorebungalow bazaar down another broad cart road which commands good views. After the sixth mile follow the bridle path ahead through the forest to the Lopchu Bungalow at the 14th mile and halt the night. Excellent



A BAMBOO BRIDGE IN SIKKIM.

Sketch—F. L. Bussell.

views of snowy range, Rungeet valley and Bhutan mountains (with Kalimpong clearly visible). Return the same way.

3. *The Rungeet River.*—Take the Rungeet Road from the Chowrasta and descend through the Bhutia Basti and east slope of Lebong Spur. At the 8th mile reach Badamtam bungalow and halt the night. Next morning early, descend  $1\frac{1}{2}$  miles to promontory where there is a fine view over the river (or 3 miles to the river itself, a 2,000-foot drop). Return by same route ( $9\frac{1}{2}$  miles or 11 miles) to Darjeeling.

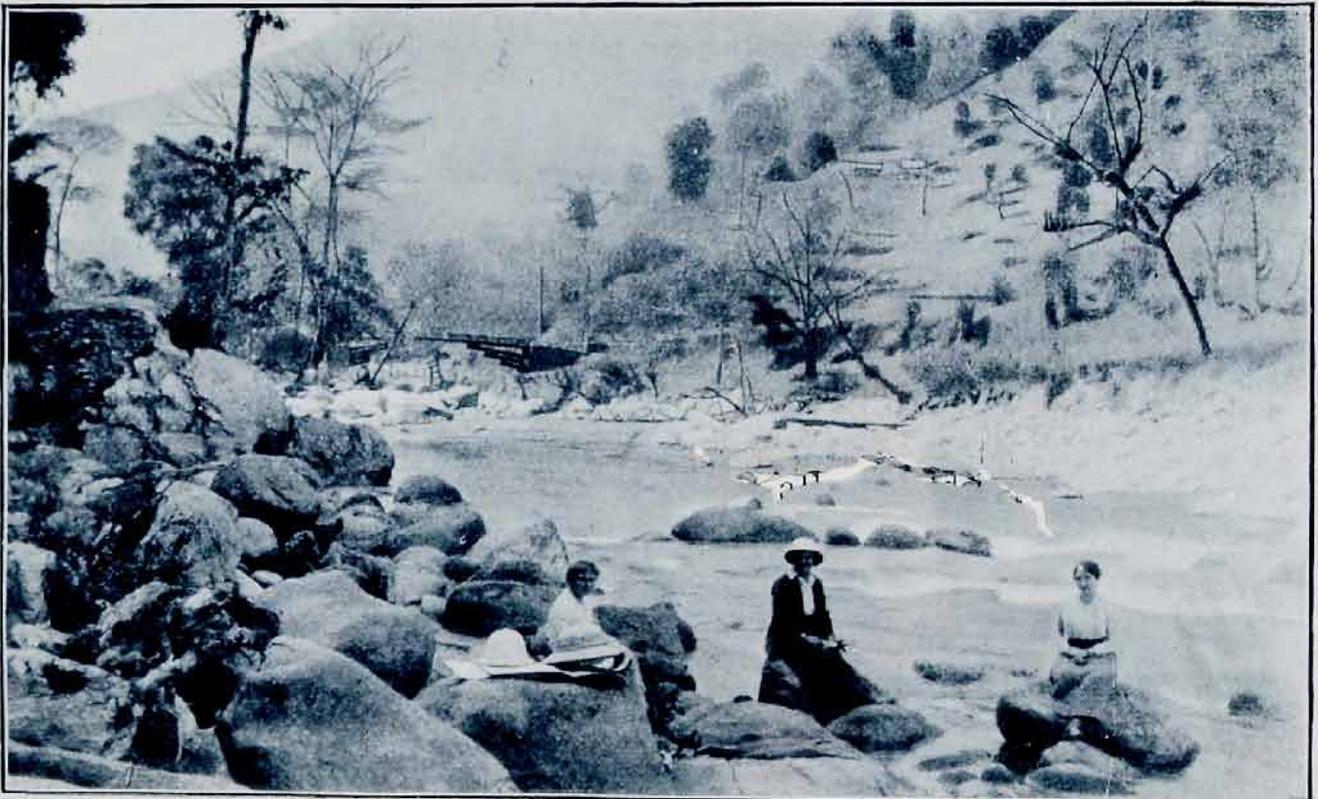
4. *To Jorepokri.*—Train to Ghum and follow Cart Road

running along ridge at back of railway station. Pass Ghum rock. Fine views of Balasun valley and plains. At 7th mile rise up through forest to Jorepokri bungalow. Snowy range seen over forest trees. Return by same route. No pony required.

### THREE-DAY TRIPS.

1. *Teesta Valley*.—Leave Darjeeling by down mail, and stop the night at Siliguri bungalow. Next day do the railway trip up the Teesta Valley (take tiffin basket), and return and halt at Siliguri. Return Darjeeling by mail on morning of third day. The traveller can get his meals at the Refreshment Room at Siliguri, so no arrangement for cook or coolies is required. This trip is more fully described in a later chapter.

2. *Pashok View*.—First day to Lopchu as described above. Thence descend through forest past the Pashok bungalow to a summer house (5 miles from Lopchu). Here is a beautiful bird's eye view of the junction of Rungeet and Teesta Rivers. Return to Lopchu and stop there the second night. Thence return to Darjeeling next day.



A PICNIC IN SIKKIM.

Photo—R. B. A.

3. *Punkhabari*.—Train to Kurseong in morning. Thence down Punkhabari Road commanding extensive views of plains, rivers, and Nepal ranges. Stop the night in Punkhabari bungalow (6 miles). Next day walk to Sukna (12 miles) arriving there in time to catch mail train to Siliguri. Halt night at Siliguri. Thence return to Darjeeling next day, or do the Teesta Valley trip. No pony is required.

#### FOUR-DAY TRIPS.

1. *Kalimpong*.—First day to Locphu. Thence descend to the River Teesta (7 miles), cross it by the suspension bridge and ascend to Kalimpong by short cut (7 miles). Halt night in Kalimpong and see the place next morning. Thence to Pashok on third afternoon (10½ miles) and halt night. Return to Darjeeling next day (17½ miles).

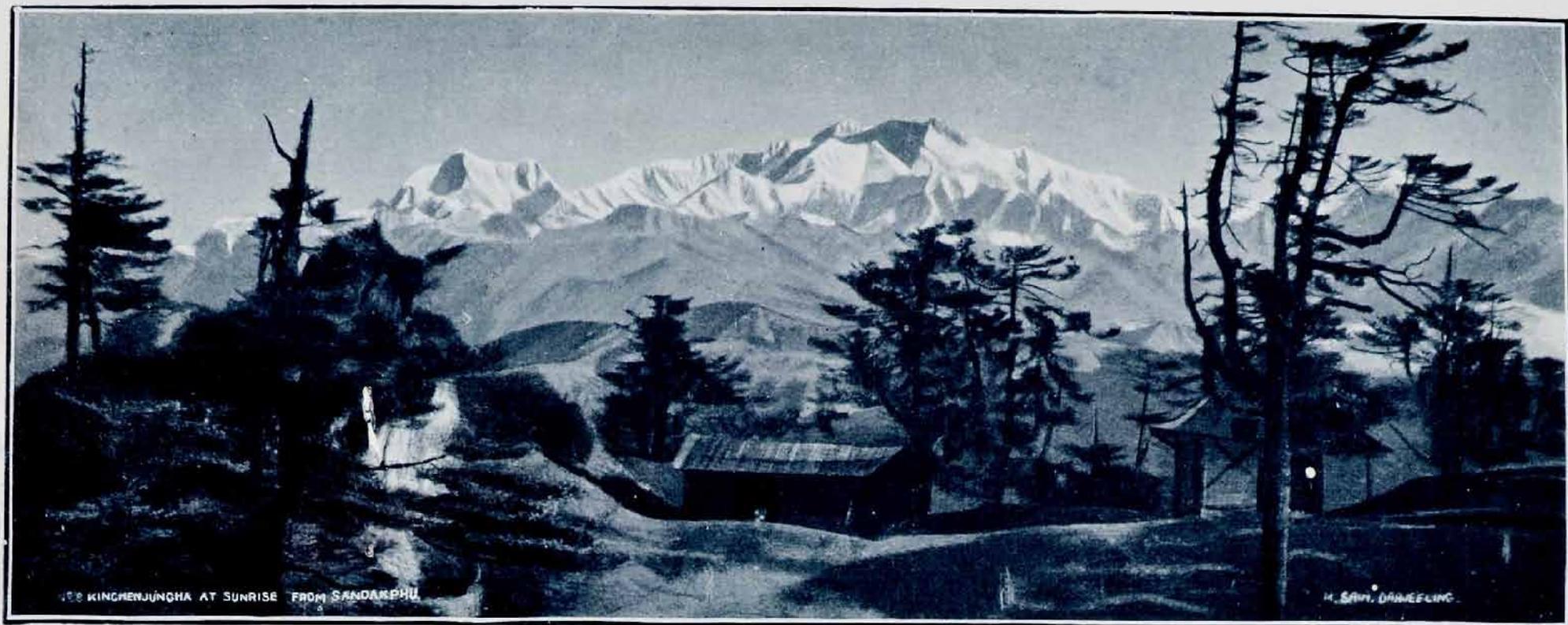
2. *Rungeet and Teesta Rivers*.—First day to Badamtam bungalow. Next day descend to the Rungeet River and then along the right bank for six miles to junction of Rungeet and Teesta, an exceptionally beautiful ride. Note the marked difference in colour between the waters of the two rivers for a considerable distance below the junction. Continue along Teesta River to the bridge (12 miles from Badamtam) and stop night in Teesta bungalow.

Next day walk down Cart Road above the rapid river Teesta to Riyang (5 miles) whence take afternoon train to Siliguri and halt the night. Pony and coolies may be dismissed at Kalimpong Road station. Return next day by train to Darjeeling.

#### EIGHT-DAY TRIPS.

1. *Phallut*.—First day to Jorepokri, next day to Tonglu bungalow. Thence on third day (14 miles) to Sandakphu (11,929 feet) where are magnificent views of Kinchenjunga Range and the Everest Range. On fourth day (12 miles) through rhododendron forests and over grassy uplands to Phallut (11,811). Return by same route in four days. The trip to Sandakphu alone (6 days) is well worth the while of those who cannot afford the two extra days for Phallut.

2. *Pamionchi*.—First day to Badamtam, second day descend to Rungeet and cross it and thence steep ascent to Chakung (12 miles). Fine view over Rungeet valley. Next day to Rinchinpong



THE SNOWS FROM SANDAKPHU.

Photo—M. Sain.



Sketch—F. L. Bussell.

THE TEMPLE AT PAMIONCHI MONASTERY.



LAMA'S HOUSE, SIKKIM.

Sketch—F. L. Bussell.

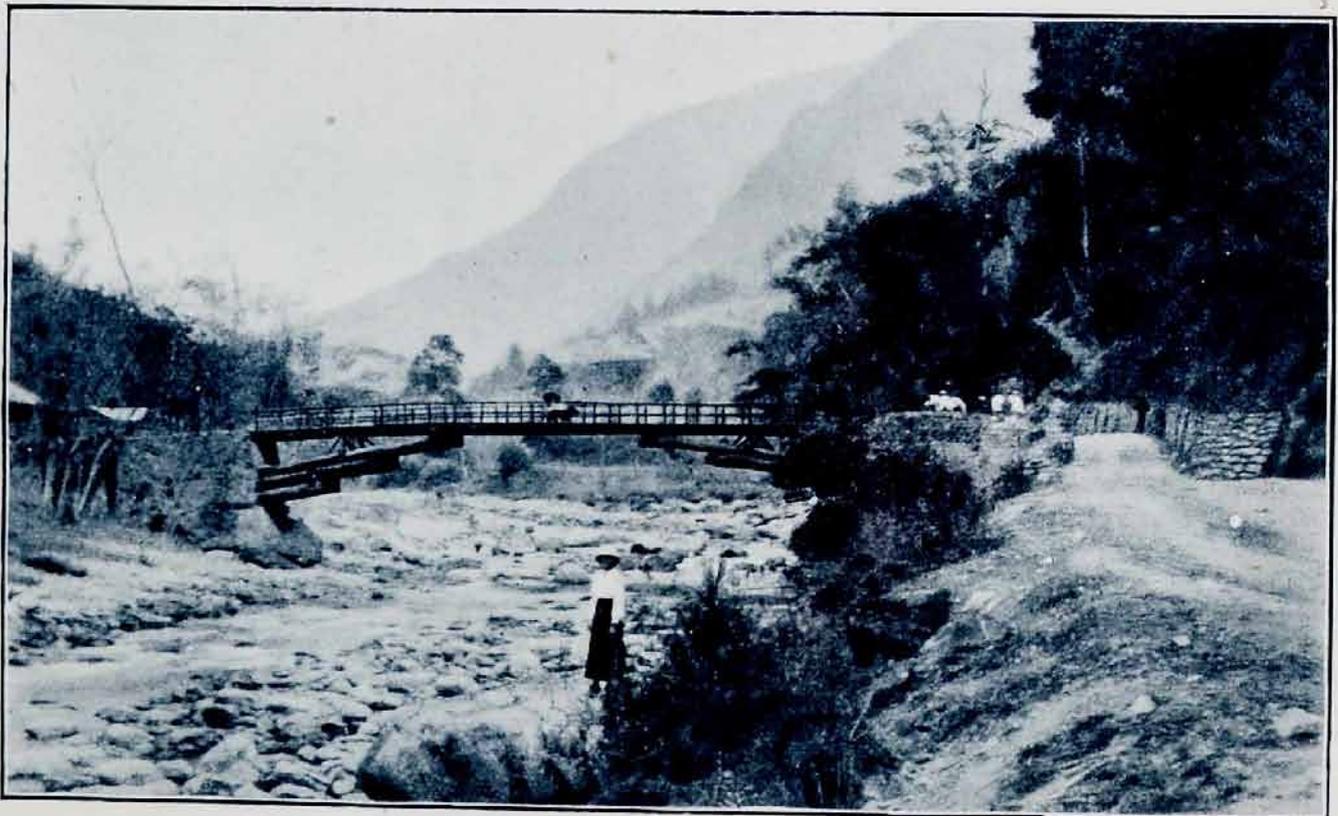
(11 miles) with good view of snows. Fourth day descend to junction of Kulhait and Rungeet and thence ascend through forest to Pamionchi (10 miles). There is a fine monastery here, the largest in Sikkim, and a magnificent view of the snows. Fifth day descend to Dentam in valley of Kulhait (10 miles). Sixth day, Dentam to Rinchinpong (12 miles). Seventh day Rinchinpong to Chakung. Eighth day Chakung to Darjeeling *via* Singla Bazaar (20 miles). By omitting Dentam the trip may be done in 7 days.

#### NINE-DAY TRIP.

*Phallut and Pamionchi.*—Darjeeling to Phallut as in four days. Thence to Dentam (17 miles) next day, a steep descent after passing over Singalela Mountain (12,161 feet). Sixth day to Pamionchi (10 miles). Remaining three days *via* Rinchinpong and Chakung as described above.

#### TEN-DAY TRIP.

*Gangtok.*—First day to Badamtam, thence to Namchi across the River Rungeet (10 miles). Next day to Temi (11 miles) with its lovely view over the Teesta Valley. Fourth day to Song across



A BRIDGE IN SIKKIM.

Photo—R. B. A.

the Teesta (11 miles) or to Shamdong and fifth day to Gangtok (14 miles), the capital of Sikkim. Here is a fine view of the snows over a wooded foreground. Return journey, sixth day to Pakyong (10 miles) with its pretty bungalow, thence to Pedong on the seventh day, Kalimpong on the eighth, Pashok the 9th, and Darjeeling the 10th.

If the traveller has already seen Kalimpong the trip may be shortened to 9 days by going from Pakyong to Rungpo (10 miles) and Rungpo to Pashok (17 miles).

#### FIFTEEN-DAY TRIP.

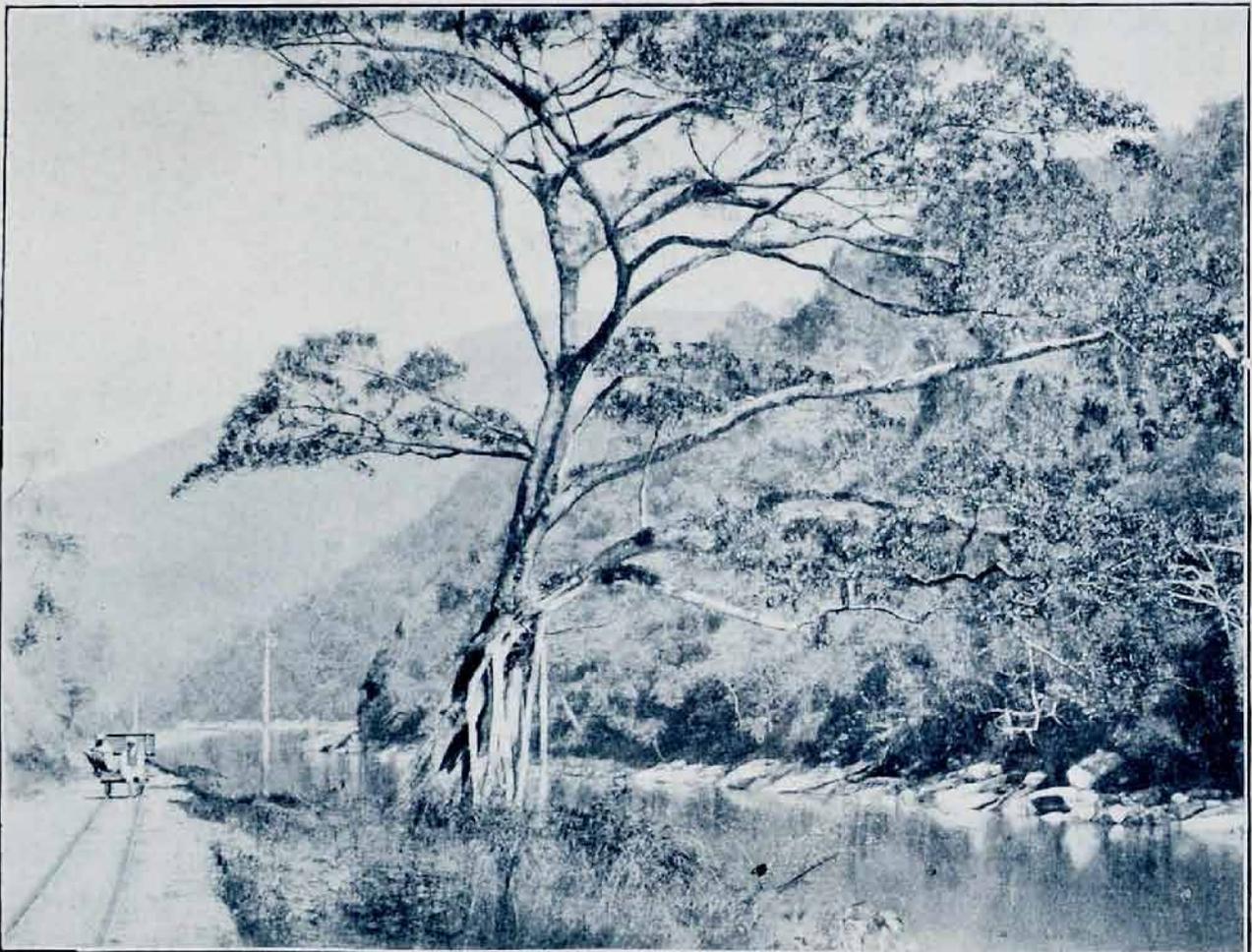
*Phallut, Pamionchi and Gangtok.*—First six days to Phallut and Pamionchi. Seventh day from Pamionchi to Kewzing (10 miles), eighth day to Temi (10 miles) and thence for the remaining seven days as for the Gangtok trip. This is a remarkably fine tour embracing as it does the high elevations of Sandakphu and Mount Singalela (12,000 feet), the deep valleys of the Rungeet and Teesta, the lovely Sikkim forests, and the interesting monastery of Pamionchi and towns of Gangtok and Kalimpong.

There are many other longer trips of a more ambitious nature to altitudes of 13,000 feet, and more at the foot of Kinchenjunga, and to the passes into Tibet, and for particulars of these the traveller must refer to the books mentioned earlier in this chapter.

## VIII.

### THE TEESTA VALLEY.

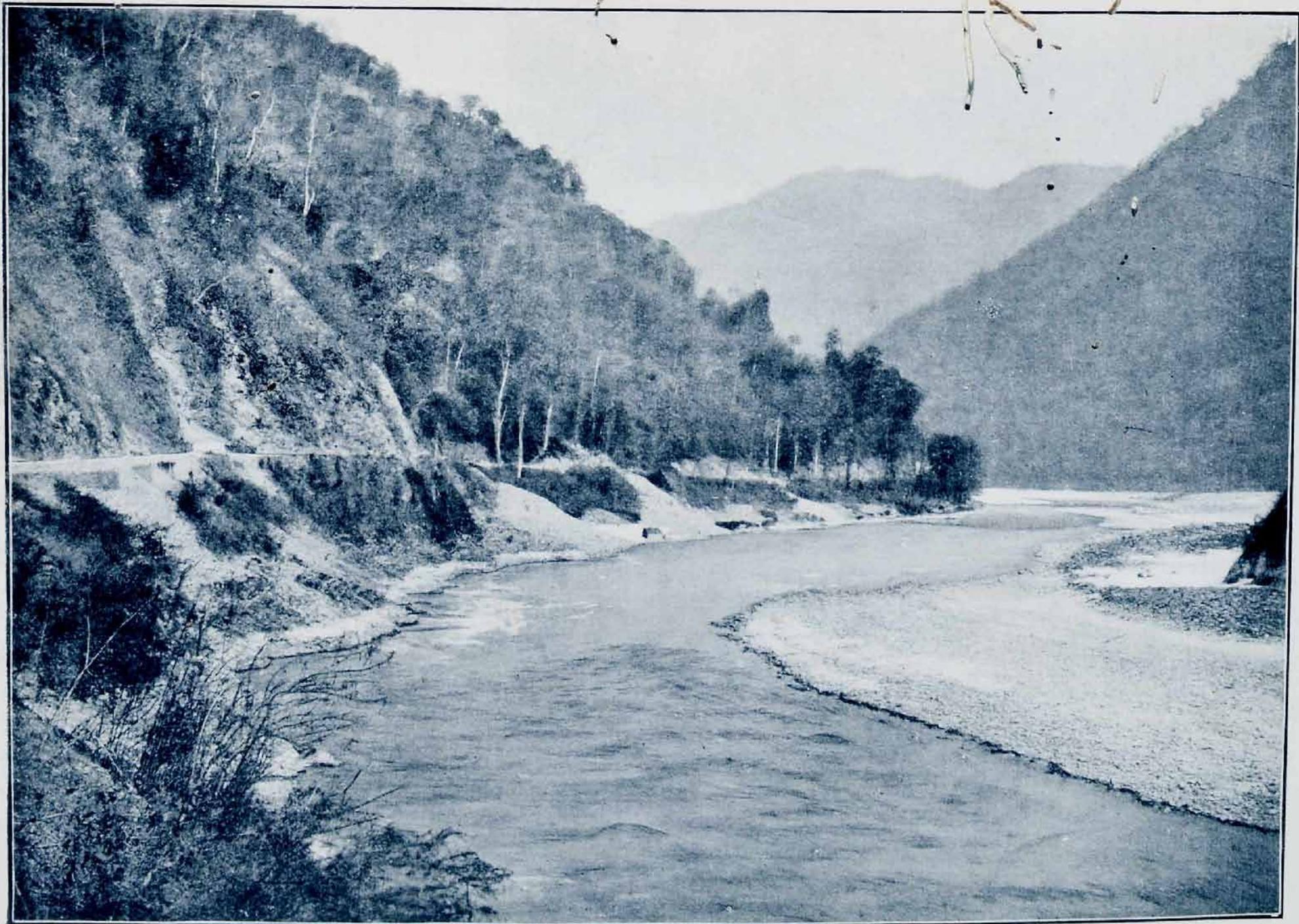
**A**N IMPORTANT branch of the D.-H. Railway system leaves the main line just outside Siliguri railway station, and after crossing a belt of the Terai at the foot of the Himalaya runs up the valley of the River Teesta.



THE TEESTA RIVER NEAR SEVOKE.

*Photo—Burlington Smith.*

The great River Teesta, like many other drainers of the Himalayas, rises on the northern side of the high mountainous tract. It then flows southwards through Sikkim, receives tributaries from the great snowy peaks, and cuts its way through the mountain



TEESTA RIVER AND RAILWAY—MILE 18.

*Photo—Burlington Smith.*

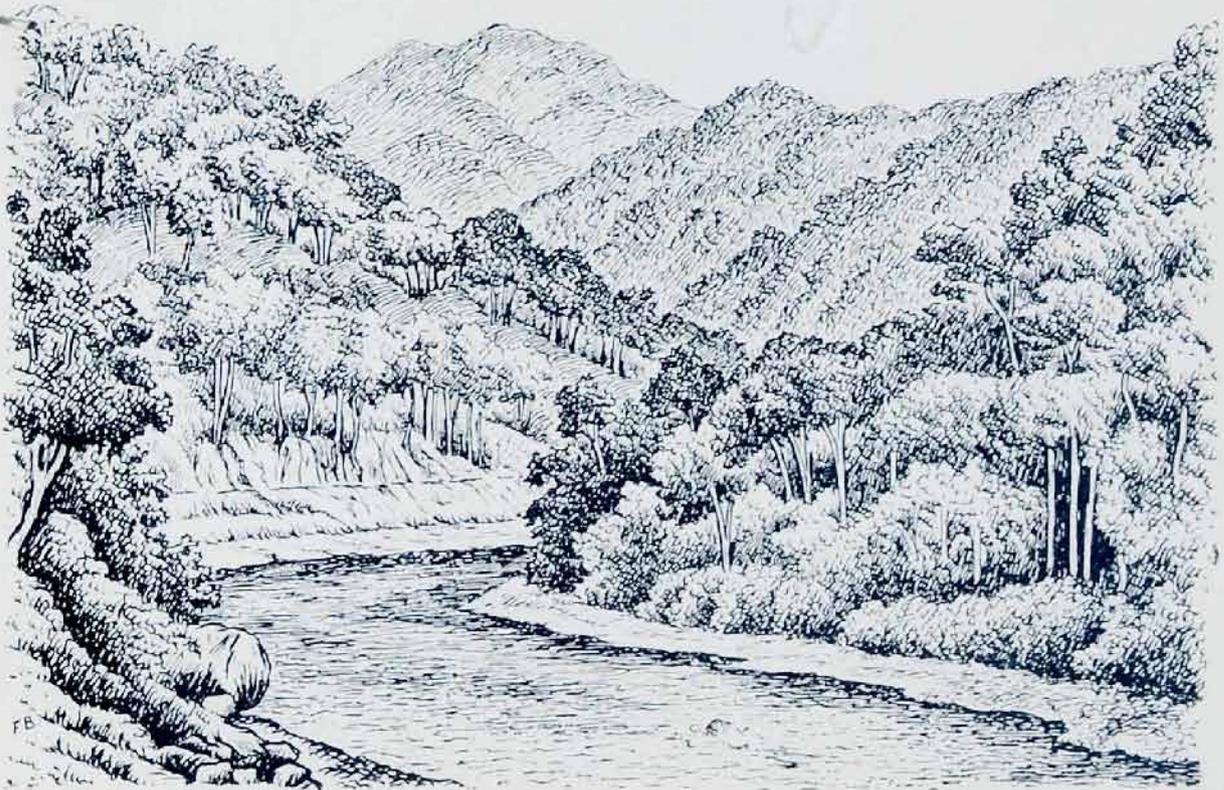
barrier to the plains, where it eventually joins the Brahmaputra River and empties its waters into the Bay of Bengal. It is the principal river of Sikkim and, indeed the main drainer of the lofty snowy peaks of the Kinchenjunga group, and it forms the boundary between Sikkim and British India for many miles. But before leaving the Himalayan tract it receives that other great drainer of the snows, the great Rungeet River, and, enlarged by the waters of this river, flows for nearly twenty miles in a deep narrow valley between lofty forest-clad mountains before it debouches on the plains at the gorge known as the Sevoke Pass. It is up this deep valley, for 16 miles, that the Teesta Valley Extension of the D.-H. Railway follows every bend of the river and affords a magnificent succession of beautiful views.

The Teesta Valley line was opened for traffic in the year 1915. It has been constructed largely on or near the alignment of the old Public Works Department road, which was abandoned by Government some years previously in the following circumstances. In the year 1899, there was an unprecedented rainfall in the Eastern Himalayas. Disastrous landslips occurred in many places, and rivers rose 30 ft. to 50 ft. in a night. The Teesta came down in a flood of great height, overflowed its banks and caused great damage; large stretches of forest were swept away and long portions of the Teesta Valley Road practically disappeared. In consequence of this a new road at a higher level was built in 1907 and 1908 and some years later the railway company took over the old road and used it as a basis for a railway track up the valley from Sevoke to Kalimpong Road, to tap the resources of Sikkim and of Tibet through the trading centre of Kalimpong.

Travellers to Darjeeling who can spare the time will be amply repaid for undertaking the railway trip up the Teesta Valley by the magnificent scenery they will enjoy, whether they intend to continue the journey up the hill to Kalimpong and visit that place or whether they return again to Siliguri by the evening train from Kalimpong Road railway station. It is not possible for the traveller to do the trip up the river valley and return to Darjeeling on the same day; he must make arrangements to spend the nights preceding and following the trip at the Dâk Bungalow (Travellers' House) at Siliguri. Accommodation in this Bungalow can be reserved on application to the Superintending Engineer, Darjeeling, and Messrs. Sorabjee,

Railway Refreshment Room, Siliguri, will arrange for supply of all meals, etc.

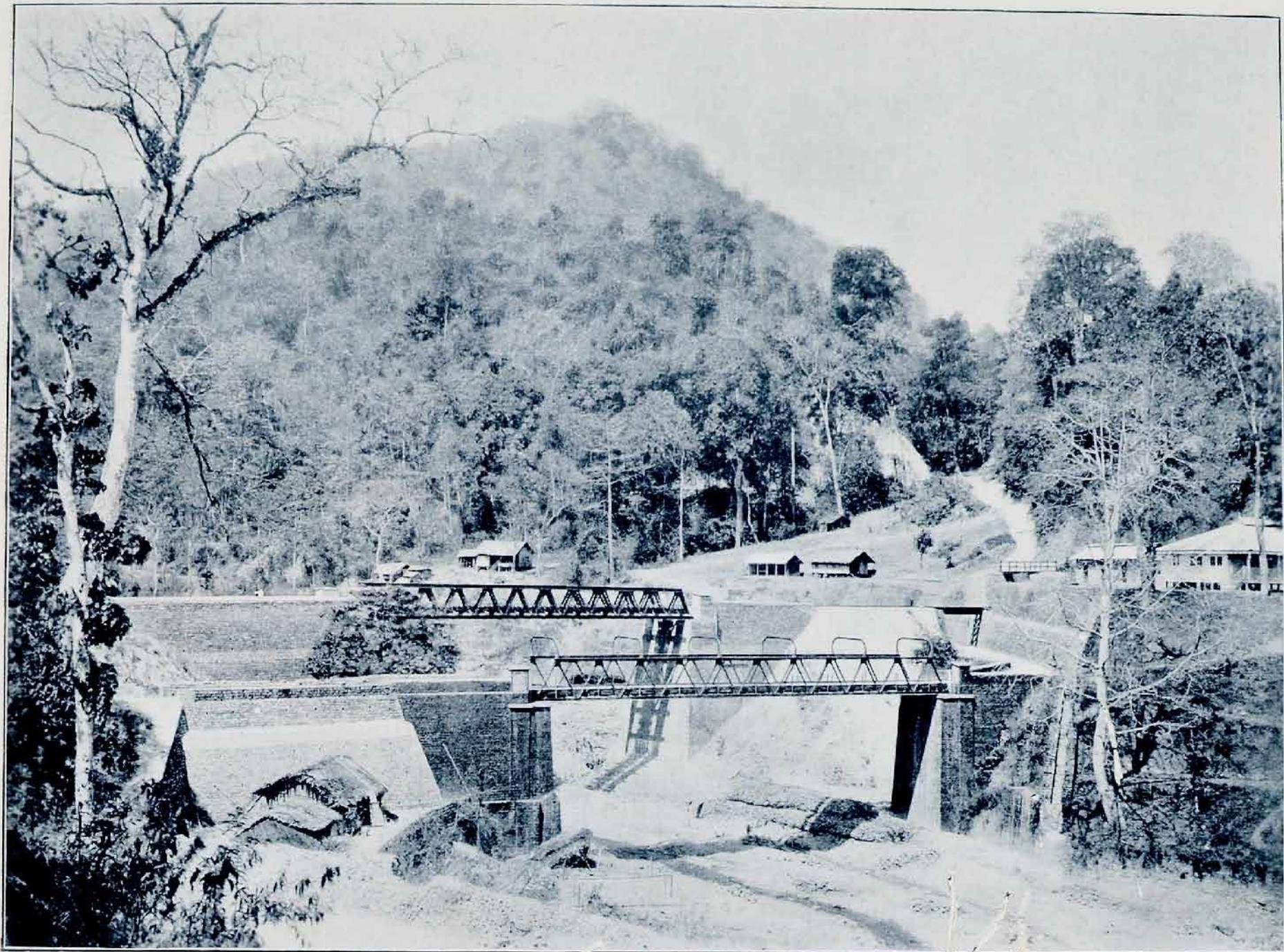
For the first twelve miles from Siliguri the Teesta Valley Railway crosses the Terai, a tract of almost level country lying at the base of the Himalayan ranges. The railway track is here laid beside a broad cart road, and is soon fringed by a sal tree forest which provides cover for tigers and wild elephants. Then the Sevoke River is crossed by a fine bridge just above its junction with the



RIVER TEESTA.

*Sketch—F. L. Bussell.*

Teesta and the valley of the Teesta itself, here 750 yards wide, is suddenly entered at the point where the great river has cut its way from the mountainous tract to the plains through a deep and narrow gorge. At once on passing through the Sevoke gorge, the traveller finds himself enclosed by steep mountains with the great river flowing close at hand. The mountains are clothed in dense forest, and during the months of the cold weather season (November to February), when the waters of the river are jade-green, and when white rocks appear between the dark overhanging foliage above and the deep green river below, the colour and grandeur of the scene are startlingly impressive. During the rainy season the waters are not



KALIJEORA, TEESTA VALLEY.

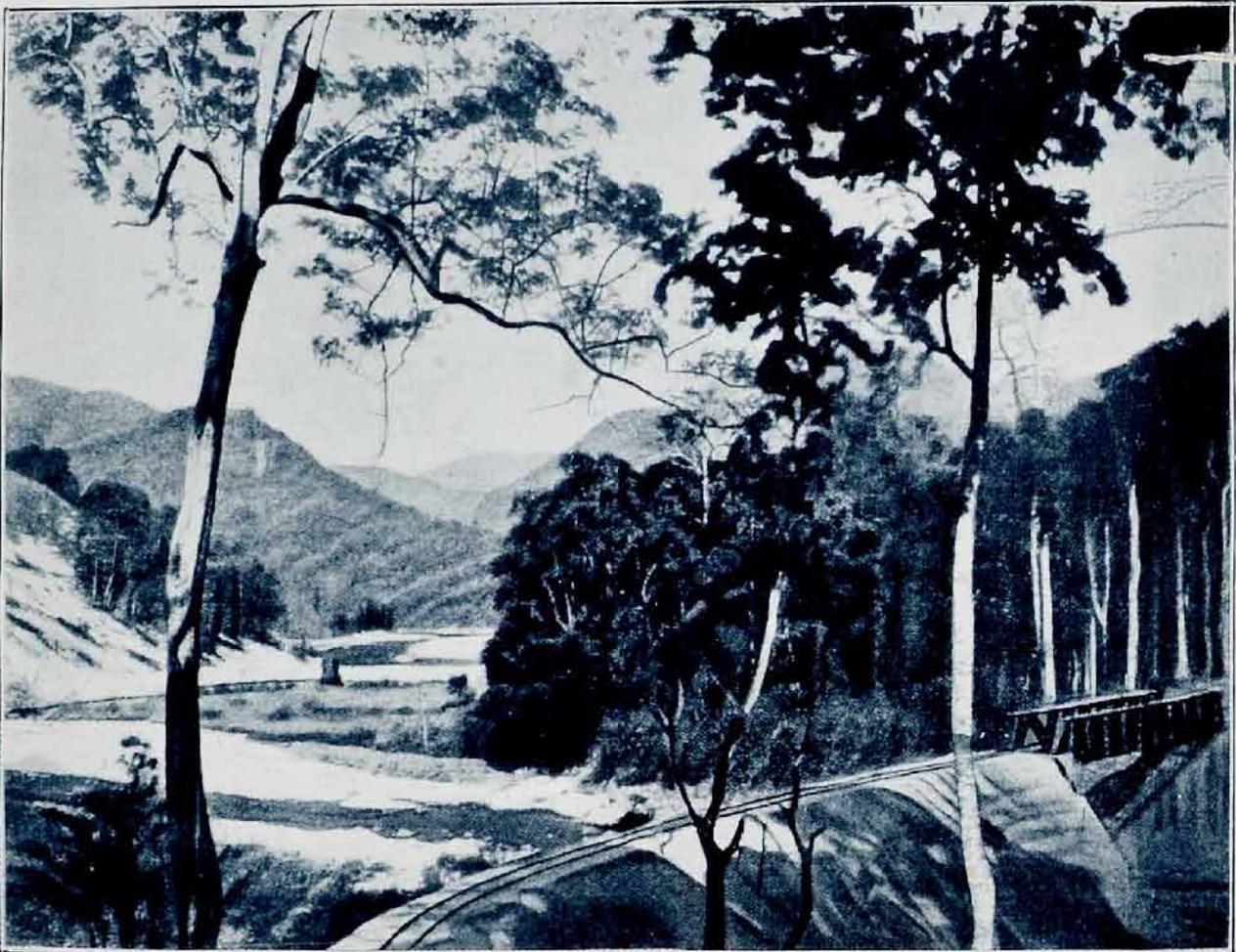
Photo—Burlington Smith.



DIAGRAM OF THE LINE AT RIYANG.

so beautiful in colour, bearing at this season a milky hue, but the volume is of course greater and the current is then seen to be very swift, running in places at the rate of 14 miles an hour.

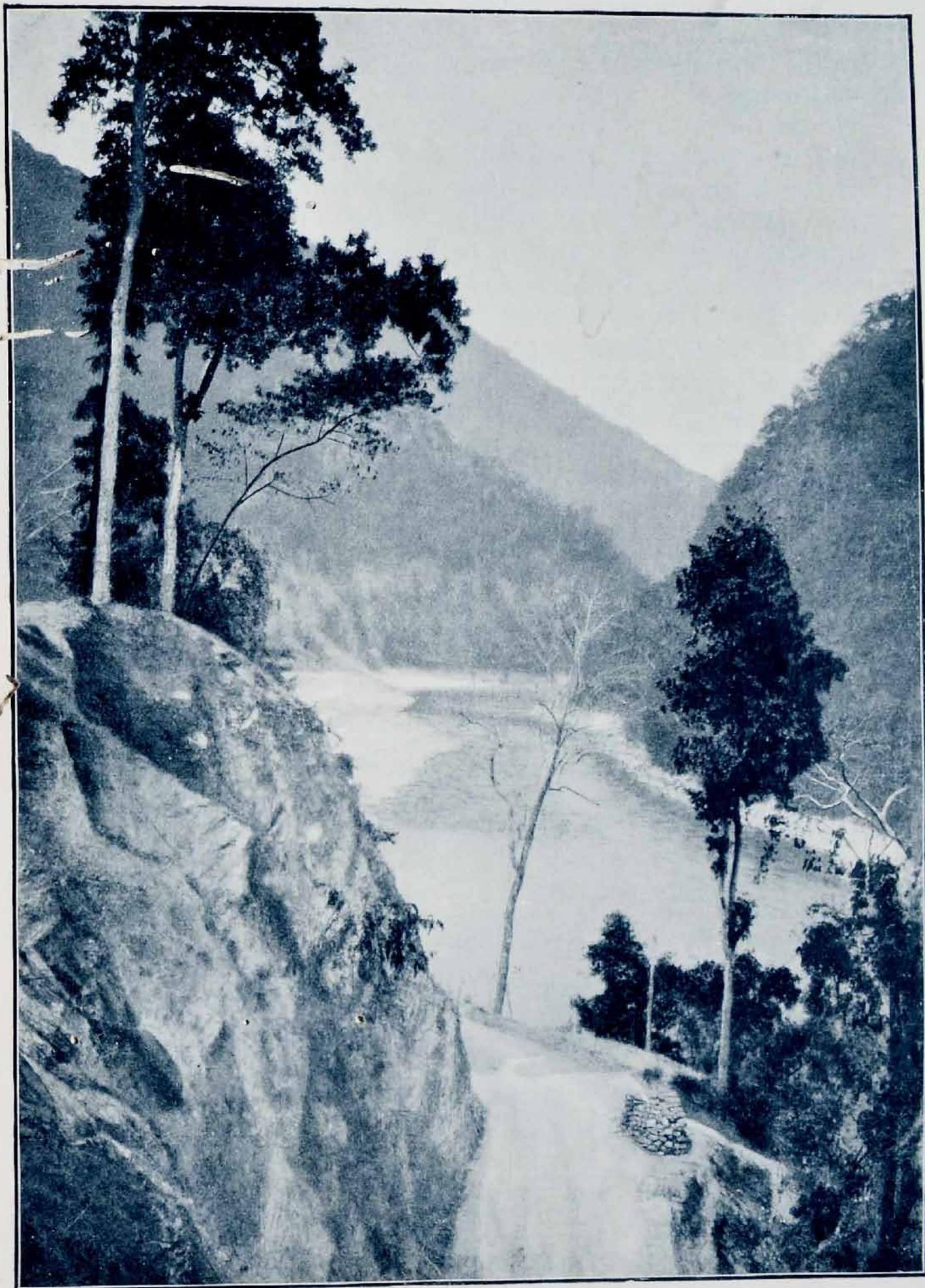
Threading its way along the steep sides of the narrow valley the track now circles round deep wooded bays in the depths of which torrents rush down to the river below, now passes through shady



BELOW RIYANG STATION.

*Photo—Burlington Smith.*

groves of overhanging forest trees, and now circumvents precipitous rocks, the great river itself being ever present but a hundred feet or less below. Sweeping round a bend the line then reaches Kalijhora (the black stream). Here a bridge spans the mountain torrent which has given its name to the spot. After Kalijhora the valley is somewhat less confined and higher mountains become open to view beyond and above the forest-clad slopes that enclose the river, until,



THE TRESTA RIVER AT MILE 28.

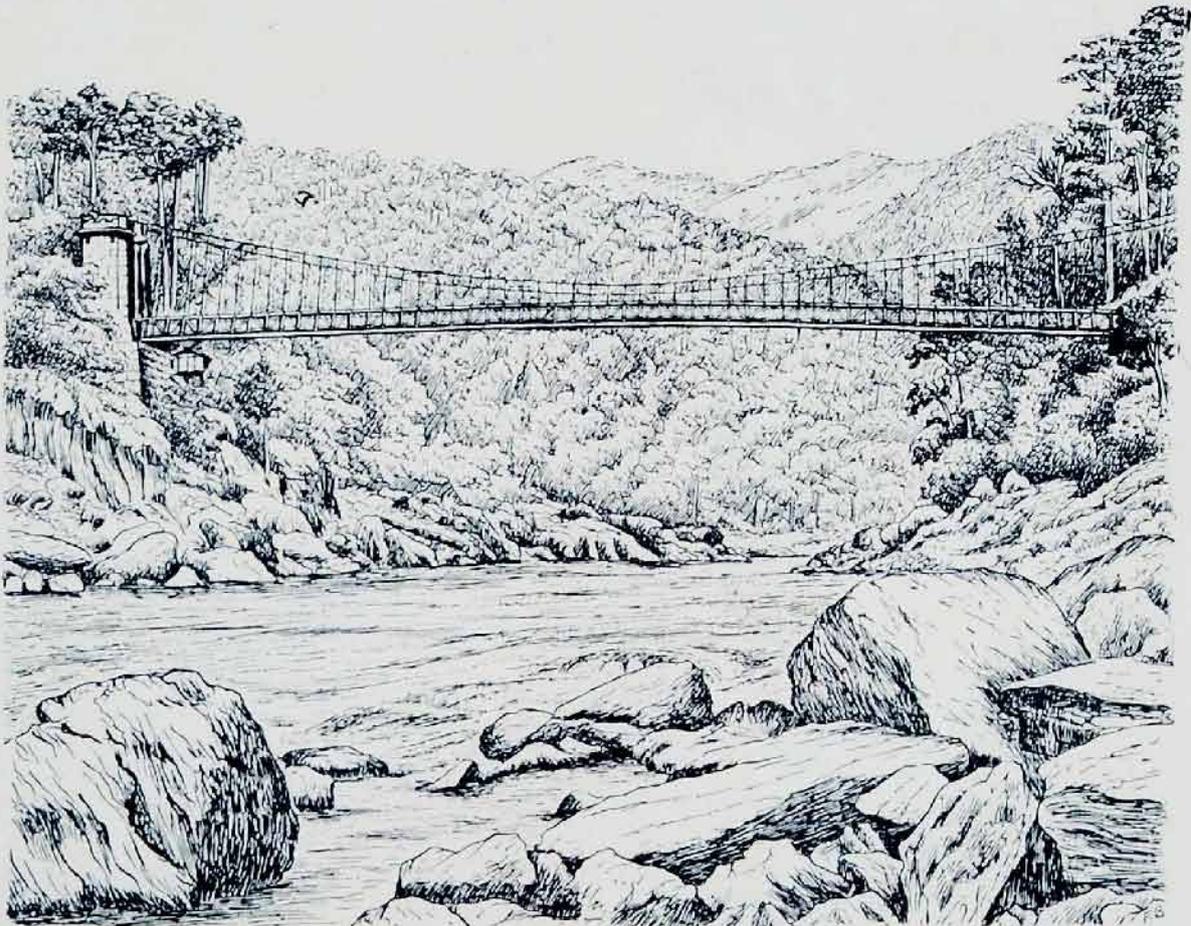
*Photo—Burlington Smith.*

as the track approaches Riyang, a view of the snowy range itself is obtained.

The approach to Riyang Station is an interesting engineering feat, the quick rise from bridge over the river to the level of the station being obtained by a double eight curve. The river scenery here, and just after the station is left, is exceptionally lovely. Bold mountains rear their lofty summits high above the swift waters of the river which here flows around beautiful bends and has thrown up banks of pure white sand and glistening pebbles at each turn.

The River Riyang which is crossed here came down in mighty flood some years ago, and changed its course decisively within the space of a single night. The piers of the old bridge, marking the original course of the river, may be seen standing high and dry in a wilderness of stones.

Shortly after Riyang is left the track passes for half a mile through tropical forest and then, emerging again from the trees, it



TEESTA SUSPENSION BRIDGE.

Sketch—F. L. Bussell.

appears to almost overhang the river flowing swiftly below. Borne along now at a height of over a hundred feet above the waters of the Teesta, the traveller obtains magnificent views up and down stream, with the great mountains of Sikkim looming on the northern horizon. As the track approaches Kalimpong Road Station the most difficult part of the line from an engineering point of view is reached. Here much heavy blasting had to be done and intermingled with the shaley nature of the mountain sides caused much trouble. But the scenery grows always more grand with its succession of lovely gorges and the traveller by the time he reaches the terminus of the little railway line near the Teesta Bridge, will have enjoyed a countless number of views presenting the wildest and most picturesque associations of mountain, river, and forest conceivable.

A good road continues from Kalimpong Road Station to the Teesta Suspension Bridge, and if he is not pressed for time the traveller is advised to walk the two miles. The bridge is an elegant structure suspended high above the river which thunders down the gorge a hundred feet below. All along the bridge itself, and stretched across the river between the flanking towers of either extremity, will be seen streamers and flags, offerings of Tibetan passengers to the spirits of the torrent.

Kalimpong is distant seven and a half miles up the mountain from the Teesta Bridge and a description of the route to this hill-station from the Teesta will be found in the next chapter.

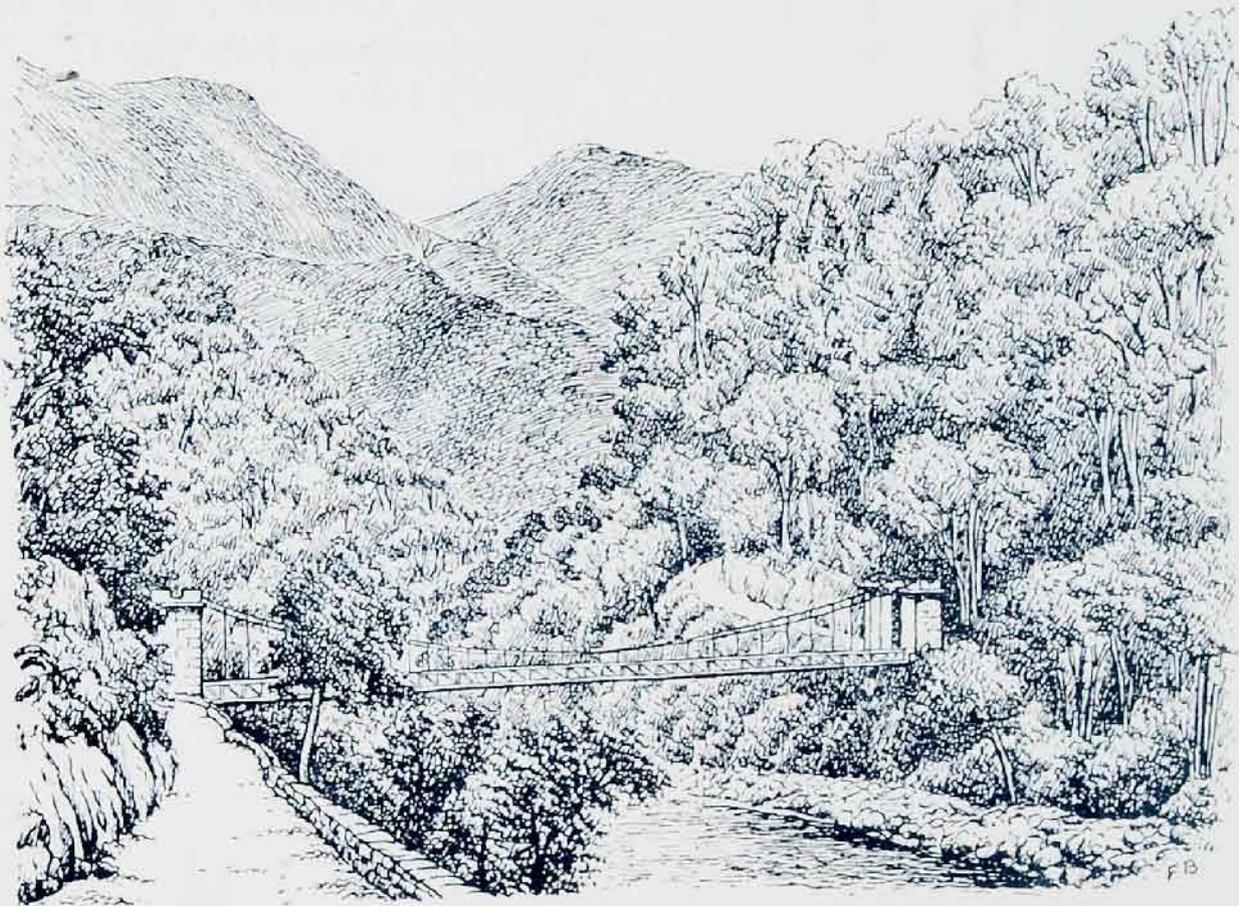
## IX.

### KALIMPONG.

**K**ALIMPONG was at one time part of the independent state of Bhutan, but became incorporated in British India in 1865. Previous to this date for thirty years the condition of affairs on this frontier of India had been very unsatisfactory, the Bhutanese frequently indulging in raids over the frontier into British territory. Expeditions to put a stop to these incursions were sent into Bhutan by the East India Company as early as 1783 and 1837 but matters went from bad to worse and in 1863 a mission under Sir Ashley Eden was sent to the capital of Bhutan to treat with the Durbar. The force accompanying the mission was weak and ill-equipped and the life of the British envoy was seriously endangered and would have been forfeited had he not signed a treaty with the Bhutanese which was altogether unacceptable to the Indian Government. The British envoy, however, added the words "under compulsion" when signing the treaty, and on his release it was repudiated by the Government and a punitive expedition was despatched. This at first appeared to have knocked sense into the Bhutanese, but their hostility and the raids continued nevertheless, and finally in 1865 a larger field force was sent into Bhutan. The fort of Daling was stormed and taken, and as a result of this frontier warfare the district of Daling Hills, of which Kalimpong is now the chief town, was added to the British Indian Empire. From that day peace and prosperity have reigned in the place of turmoil and poverty.

The town of Kalimpong (just upon 4,000 feet) is approached from the Teesta Bridge by a cart road nine and a half miles in length. The Teesta being only 700 feet above sea-level there is a rise of some 3,300 feet to be accomplished from the bridge before the town is reached. Most travellers to Kalimpong do not follow the cart road but shorten the journey to six miles by riding up bridle paths for most of the way. A dandy may also be used for the route.

In the first place the cart road is followed for a short distance from the Teesta Bridge and then the bridle path is seen leading up through the forest on the right of the road. The forest is deep and beautiful for a mile or more and then the path ascends open cultivated slopes with orange gardens and pretty thatched houses here and there. Again the cart road is met just before the 7th mile post from Teesta



TEESTA BRIDGE AND ROAD TO KALIMPONG.

Bridge where it runs out on a promontory. Here beautiful views are obtained; the valleys of the Great Rungeet and Teesta Rivers, with the many bends of the broad streams in their depths, lie immediately below and are seen enclosed by lofty mountain spurs. After another short ascent up a second bridle path the cart road is again met and followed for the remaining two miles to Kalimpong.

The first glimpse of this hill-station as it bursts unexpectedly into view when the road rounds a spur has been much admired. The cluster of buildings on the main saddle of the ridge are flanked by a wooded eminence amongst the trees of which rises the lofty tower

of a church that appears among the mountains and valleys of the scene with an unexpected homeliness.

The views from Kalimpong itself though not so extensive as those obtained at Darjeeling are yet very grand. The higher slopes of Kinchenjunga and other snowy peaks are seen to northwards above the bold mountain chains of Sikkim; to the west is a view up the valley of the Great Rungeet with the waters of the river reflecting the light of the sky in the wooded depths of the valley; eastwards is another valley, that of the river Rilli, beyond which is ridge over



KALIMPONG.

*Sketch—F. L. Bussell.*

ridge of forest-clad mountains; and to the west and south-west is the great mass of Senchal, and numerous spurs running down to the valleys of the Rungeet and the Teesta, while to the south the plains are seen over the lower hills of the Teesta gorge.

Kalimpong is an important trade centre on the trade routes from Sikkim and Tibet to Bengal. The cart road enters the hill-station at the bazaar, which is situated on the neck of the ridge. The traveller will find much to interest him here; trains of pack ponies recently arrived with wool from Tibet are seen on the flats below; traders of many creeds and races jostle each other in the main street, Sikkimese, Bhutias, Tibetans, Nepalese, Bhutanese and Chinese; picturesque shops and houses with Tibetan and Chinese signboards; prayer-flags on lofty poles and streamers of flags stretched from tree to tree high above the bazaar. The general atmosphere is thoroughly

of Central Asia and a visit to the bazaar, especially on Saturdays and Wednesdays, the market days, is a unique experience for the traveller. Good examples of Central Asian art can be had from dealers in the bazaar.

In the main street of the bazaar, a broad thoroughfare, are shops where European stores can be bought, a small subscription library, and the Victoria Memorial. This latter is a handsome open porch of Tibetan architecture with a bronze bust of the Great Queen within it. The brightly coloured picturesque pillars and cornices were carved by Lamas from Sikkim.

On a wooded eminence to the north of the bazaar stands the Scotch Mission Church and grouped around it are several mission houses, a large hospital, training schools for men and women teachers, an industrial school and an experimental silk farm and filature. The church was built in 1890 as a memorial to a pioneer missionary of the Eastern Himalayas, William MacFarlane, and services in many languages are conducted within its walls. The training schools send out teachers throughout the Darjeeling District and Sikkim. In the industrial school are sections for lace, embroidery, weaving, carpet making, tailoring and carpentry. Of the beautiful work the traveller should secure an example. A tennis club is also located in the mission compound.

Further northwards, on the higher eminence of Deolo Hill, are the St. Andrew's Colonial Homes, which are an institution for the education and training of poor European and Anglo-Indian children. The Homes comprise over twenty separate cottages and were founded in 1900 by a Board of Management comprised of tea planters, missionaries, merchants, and officials. The Homes have proved a most beneficial institution, and may be visited by anyone interested in them. The children are not only educated and started in life, but a carefully devised system has been adopted to instill in them principles of self-reliance and a respect for manual labour, no servants being kept at the cottages the work of which is done by the children themselves. Many recruits to the Colonies, the Army, Navy, various trades, and the nursing service have emanated from the Homes for the initiation and success of which the Rev. Dr. Graham, C.I.E., and the late Mrs. Graham, of the Scotch Mission, have been mainly responsible.

Below the bazaar is the Demonstration Farm for the district which is conducted by the Colonial Homes under the guidance of the Bengal Agricultural Department.

Between the bazaar and Deolo Hill is the Buddhist Monastery which the traveller should visit if he has not previously visited that at Darjeeling or Ghum.

On the lower slopes of Deolo Hill, and nearly two miles from Kalimpong bazaar along the road to Pedong, is the house built by the late Prime Minister to the Bhutan Durbar, Rajah Ugyen Dorji, and now occupied by his son and successor. This house is well worth a visit. The Dalai Lama stayed in it for  $4\frac{1}{2}$  months when he fled from the Chinese and one of the rooms used by him has been kept as a chapel and a kind of museum which with its trophies and fittings cannot fail to please all who are interested in Tibet and the Buddhist religion.

At the southern extremity of the Kalimpong saddle rises by gradual slopes the ridge of Rinkingpong, on which are situated the Post Office, Inspection Bungalow (available for travellers on application to the Deputy Commissioner, Darjeeling), Magistrate's Court, Jail and a few private houses. The crest of Rinkingpong rises to 4,700 feet and the walk of two miles up to the summit affords the traveller excellent views. A magnificent panorama of the snowy peaks, rivalling that seen from Darjeeling, lies open to view to the north, while immediately below at a depth of 4,000 feet, is seen the winding course of the Teesta River to where it debouches from the mountainous area on to the plains of Bengal.

The Government of Bengal have recently started a development scheme and offered for sale building sites at Rinkingpong. The object of the scheme is to develop an additional sanitarium in the Bengal Himalayas and to relieve congestion at Darjeeling. The ultimate area for development will be nearly four square miles but initial development is confined to the northern half of the ridge. It is proposed to rebuild the Teesta Bridge to make it available for motor traffic, and to re-align the cart road from Teesta to Kalimpong for the same object. A cart road suitable for motor traffic will also be constructed circling the Rinkingpong spur at an altitude of 4,000 feet. The road will form an excellent level track of some eight miles in length, and other portions of the ridge will be connected with this main road by motor

and rickshaw roads. The roads have already been surveyed and some have been commenced. Furthermore a water scheme by which water for the new station will be brought from the Rilli River springs, 16 miles distant, is being taken in hand. The altitude of the new settlement will lie between 3,500 feet and 4,500 feet above sea-level.

There is little doubt that Kalimpong will become a thriving and popular hill station, seeing that it enjoys exceptional climatic advantages. There is much sunshine and the average rainfall is only 84



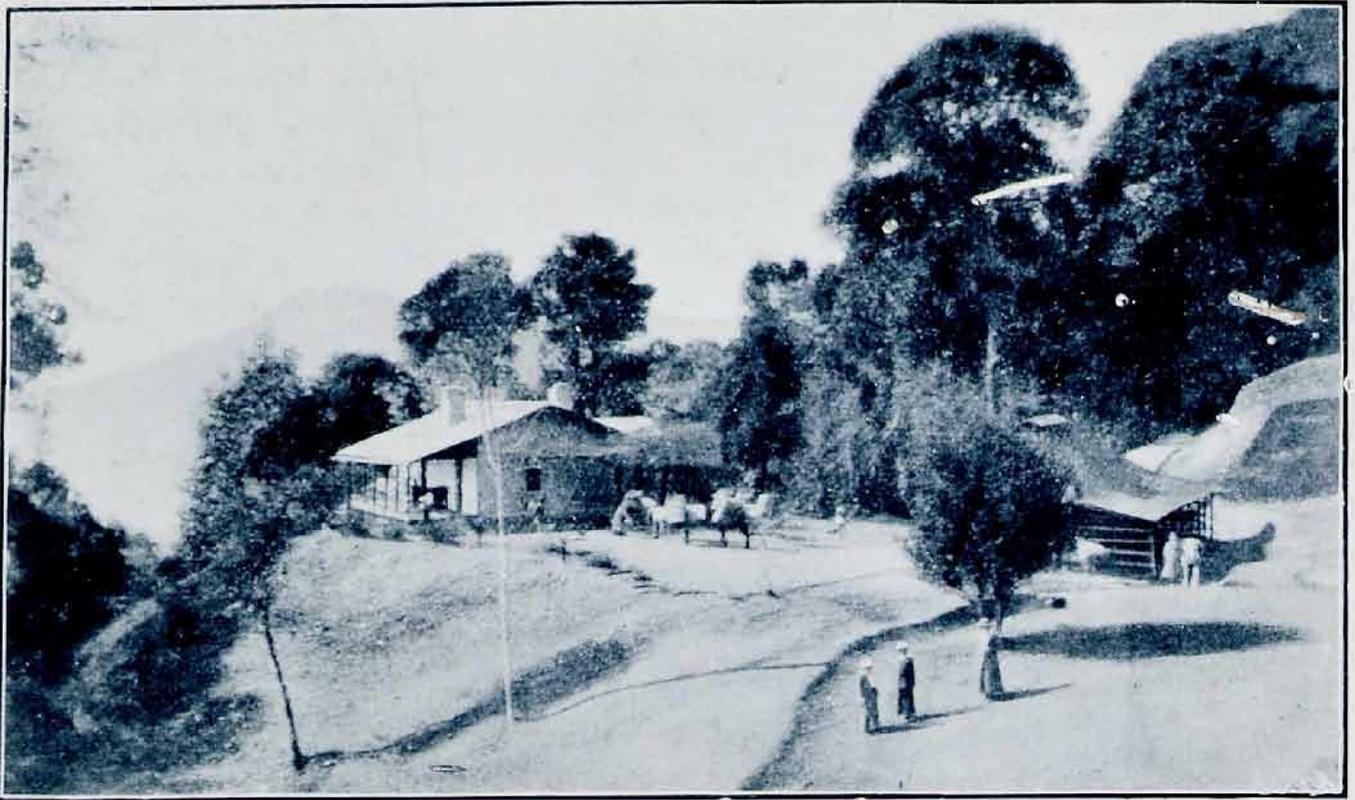
RINKINGPONG, THE SITE OF THE NEW SANITARIUM AT KALIMPONG.

*F.L.B.*

inches; in July, the hottest month of the year, the temperature ranges from 82 degrees to 68 degrees, while in January, the coldest month, the range is from 63 degrees to 46 degrees.

Kalimpong forms an excellent base from which to make tours into Sikkim and to the passes that overlook Tibet. Information regarding the preliminary arrangements required for such excursions, passes for bungalows, coolies, etc., has been given already and will not be repeated here, but for the convenience of visitors to Kalimpong and of those travellers to Darjeeling who wish to visit the Tibet passes outlines of tours are given.

There are two routes from Kalimpong to Gangtok, the capital of Sikkim. The first route follows the beautiful valley of the Teesta River for two or three marches, the second route is mainly on the heights and follows the road to Tibet for the first march.



A REST HOUSE IN SIKKIM.

*Photo—R. B. A.*

By the first route the first day's march is to Rungpo. The shortest route is gained by leaving Kalimpong at the northern end of the station and, after following the Sikkim Road for five miles, descending by a short cut to Tarkola (3 miles more). Thence the cart road is followed along the banks of the Teesta, affording most beautiful views of the river to Rungpo bungalow (13 miles in all). But if it is desired to avoid the very steep descent to Tarkola the traveller may reach Rungpo by descending from Kalimpong to Teesta by the cart road and short cuts (6 miles), and thence follow the valley of the river (20 miles in all). On the second day Shamdong is reached (10 miles) and on the third day Gangtok (14 miles). Between Rungpo and Shamdong the Teesta River and its tributary the Rongni are very fine; between Shamdong and Gangtok is the interesting Ramtek Monastery. At Gangtok there are excellent views of the snowy range seen above wooded mountains. There is moreover a third road which starting from the Victoria Memorial joins the Teesta Valley at Melli (5 miles) from which the distance to Rungpo is 11 miles.

By the second route to Gangtok the first day's march is to Pedong bungalow (12 miles) by the road leading from the northern end of

Kalimpong bazaar. Good views over the Teesta and Rilli valleys are obtained. Next day there is a descent to the Rishi River crossed by a substantial bridge, whence the road passes through Rhenok, and after crossing the Rungcho and Roro Rivers by bridges, ascends to Pakyong (14 miles) where is perhaps the prettiest staging bungalow in Sikkim. On the third day Gangtok is reached after a march of 10 miles through magnificent forests and gorges, and over uplands.

The tour may be extended from Gangtok to the Nathu La Pass. The first march from Gangtok is to Karponang (9 miles) through wild and grand scenery. Thence next day to Changu bungalow (12,600 feet) a romantic march past water falls, below steep cliffs, and along the shores of a lake (9 miles). On the third day the ascent to the Nathu La Pass and the return to Changu is accomplished (12 miles). The Pass is 14,400 feet above sea-level, and the traveller obtains from it an extensive view over the forbidden land of Tibet. Return *viâ* Karponang to Gangtok (5 days out and back).

It is not however necessary to go *viâ* Gangtok in order to visit the passes into Tibet, and a direct route from Kalimpong will now be described. The first day's march is to Pedong (12 miles) or to Rississum bungalow (12 miles) through fine forest scenery. Thence next day to Ari (12 miles) through further woodland scenery. On the third day the march is to Sedonchen (12 miles). This march is through forests, river valleys, and mountain heights that command distant views. On the fourth day Gnatong (12,300 feet) is reached after a grand march over rugged heights of 9 miles. Next day Jelep La Pass (14,390 feet) is ascended *viâ* Kapup (8 miles from Gnatong to the Jelep), and a return is made to Kapup bungalow for the night (11 miles in all). This bungalow stands at the end of a lake half a mile long. From the small plateau on the summit of the Jelep La Pass a superb view is obtained over the Chumbi valley and the great tableland of Tibet.

From Kapup the return to Kalimpong may be made either by the same route as described above *viâ* Gnatong and Sedonchen, or *viâ* Changu, Karponang and Gangtok, thus affording opportunity to visit the Nathu La Pass and Changu Lake.

On the north slope of the great ridge which runs from Deolo to Pedong is the extensive Government Cinchona Plantation on which



A PASS INTO TIBET.

Photo—Johnston & Hoffmann.

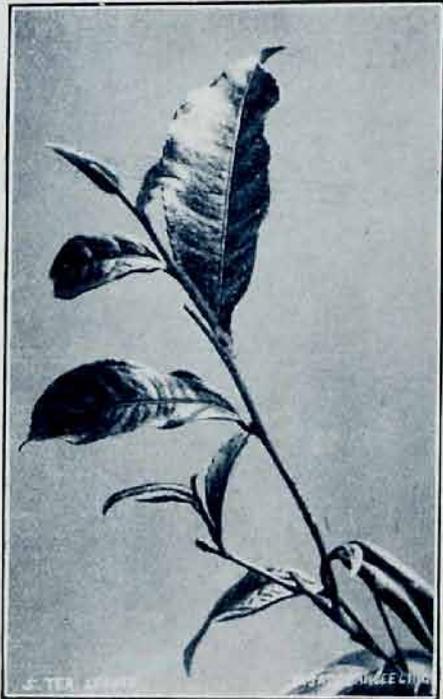
is grown much of the bark which is manufactured into quinine at Mungpoo.

There is a road from Kalimpong to the Dooars branching off at Algarah, 9 miles from Kalimpong on the Pedong road. A night can be spent at Rississum (12 miles) or at the Forest Bungalow of Pashiting (20 miles). The road emerges at Meenglass Tea Estate (15 miles from Pashiting) whence the Railway station of Mal on the Bengal Dooars Railway is easily reached. For 5 miles on the northern slopes the road is very steep but it is quite rideable on a strong pony and the scenery in the crossing of the mountains to the height of 8,000 feet well repays the labour.

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X.

## TEA.



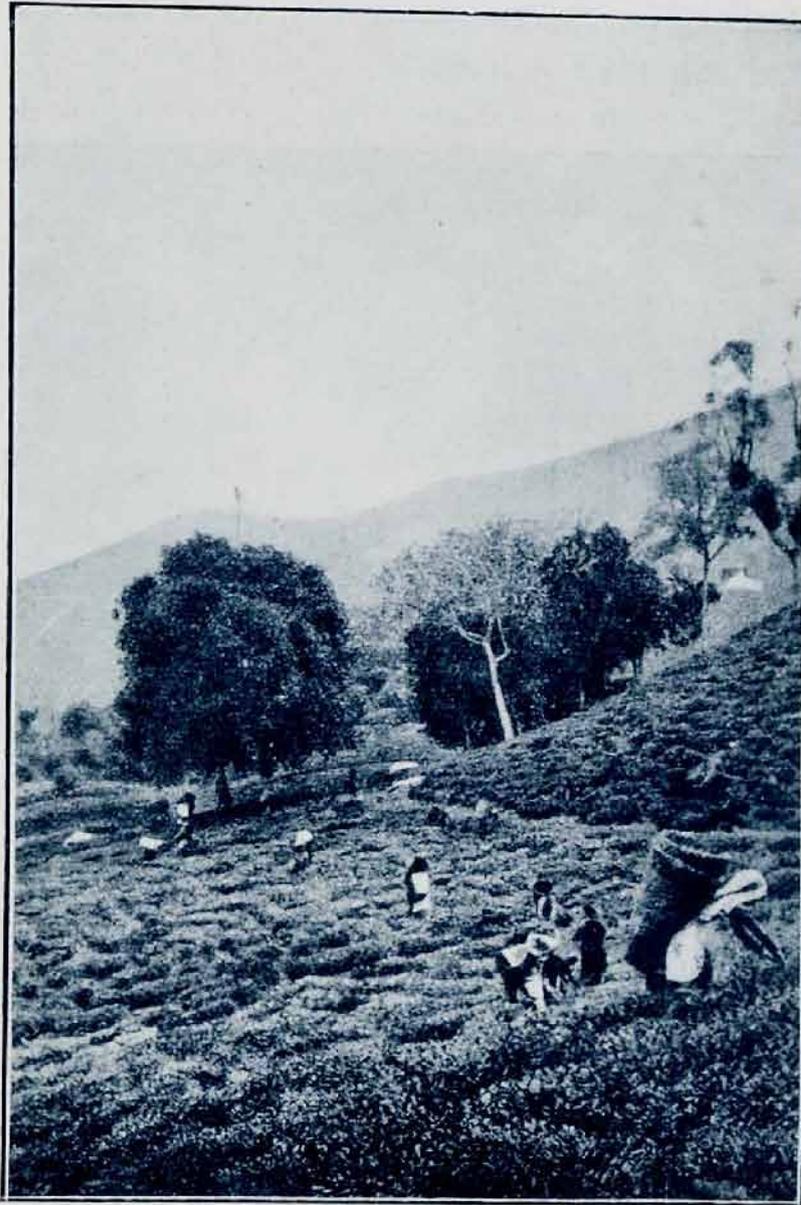
Photo—M. Sain.  
TEA LEAVES.

**I**NTEREST in the cultivation of tea will have been awakened in the traveller to Darjeeling by the frequent glimpses of tea gardens and of the white buildings of tea factories and bungalows that the journey up the mountains has afforded. A brief account of the cultivation and manufacture of tea in the Darjeeling hill tracts will therefore be now given.

The steep mountain sides that are now seen laid out with lines of tea bushes were formerly clothed with thick forests and the felling of the virgin wood had first to be accomplished. Then the steep flanks of the hill side had to be graduated by the cutting and throwing up of terraces, and careful drainage works had to be laid to prevent the surface soil from being carried down the slopes by the heavy downpourings of rain. A system of roads was next required to enable labour to get readily about the estate and to facilitate the removal of leaf to the factory. This road-building in the pioneer gardens had also to include the opening of communications between the estate and the outside world for many miles.

After this preparation the tea is planted in the terraces on the mountain slopes, either as seed or in the form of young plants taken from a nursery, usually the latter method is followed. In the planting of the shrubs care has to be taken that they may obtain the fullest exposure possible to the sun's rays, so that when they reach maturity the plucking surface which is dependent on the sun's rays may be

as great as possible. Within 3 or 4 years, according to the altitude of the garden, the young plants are fit to be lightly plucked but require careful treatment for several years. The age to which a tea bush can attain and still bear healthy shoots is uncertain, but



A TEA GARDEN.

there are healthy bushes of over 60 years of age in many tea gardens in the Himalayas.

Plucking is perhaps the most important part of the business of tea and it requires careful teaching and supervision on the part of the planter. Only the young soft shoots of the bushes are used for tea manufacture and the finer the leaf the better the quality of the tea,

so that if an extra fine quality is required only the bud and two leaves at the end of each shoot will be taken, if a large return is required four or five leaves from the top of the shoot downwards may be plucked, but not more. From the bud is got the "orange pekoe" and "broken orange pekoe," the next leaves produce "pekoe" and the coarser leaves "pekoe souchong." Coolies become very expert in leaf picking and can fill the baskets, which they carry suspended by



*Photo—M. Sain.*

COOLIE PLUCKING TEA.

ropes from their heads and into which they drop the leaf over their shoulders, with 30 or 40 lbs. of leaf within a day, yet each leaf is carefully chosen. One pound of tea is as a rule yielded by four pounds of green leaf. Most of the plucking on the gardens is done by women and they look very picturesque with their bright complexions, quaint jewellery, and coloured shawls as they stand intent upon their work among the tea bushes. They can earn as much as twelve annas a day, especially at a "big flush," that is when the bushes put forth an abundance of new shoots after heavy rain and sunshine.

If left unpruned the tea plant would grow into a tree of some twenty feet in height, so in addition to the constant check on the

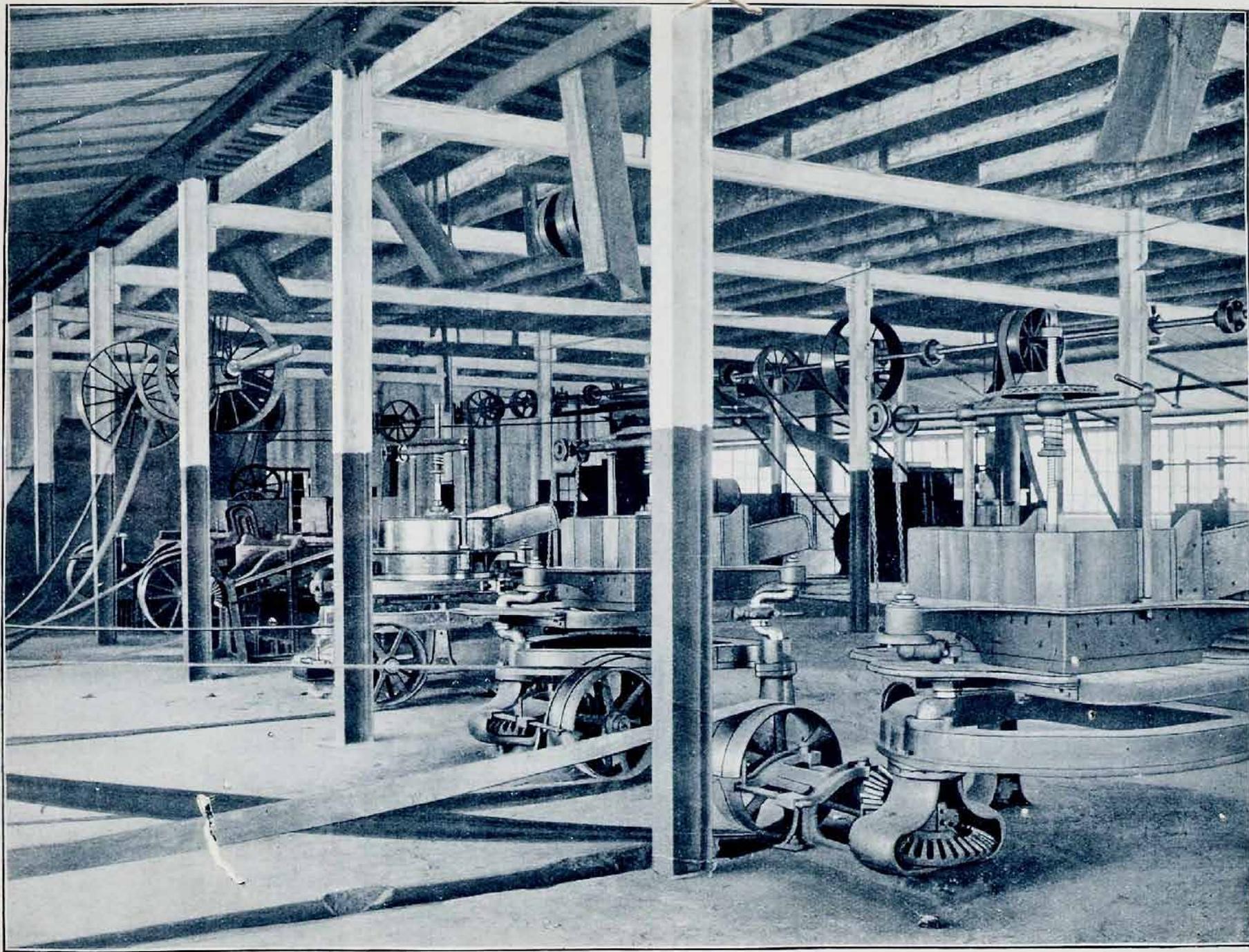


A TEA FACTORY.

F.L.B.

bush which the plucking itself entails periodical heavy pruning is practised. After a number of years of plucking the bush loses its vitality to send forth new shoots, and its branches are then mercilessly lopped off to within a few inches of the ground; but the bush soon bursts forth again with renewed vigour. Plucking is carried on throughout the year from April to October, and heavy pruning usually takes place about every 15 or 20 years.

The care of the bushes includes very frequent weeding of the terraces, manuring, and the prompt removal of any diseased bush from the neighbourhood of its healthy fellows. The outdoor work of the garden generally employs a large staff of men, women and children. These, including the pickers of the leaf, are accommodated in coolie lines on the estate itself, where they may be seen sitting in groups after the day's work is done. And judging from the rich woollen



ROLLING MILLS IN A TEA FACTORY.

*Photo—Burlington Smith.*

striped materials of the women's clothing, the warm jackets of the men, the abundance of gold and silver jewellery and coins hung about the persons of both, and the happy laughing faces of the groups generally, it is clear that coolie work on the hill gardens is remunerative and popular.

Having now seen how the raw material, the leaf, is obtained the traveller will wish to know how it is converted into the finished article, the tea, and for this purpose the factory itself must be visited.

Each coolie bears his own basket of green leaf to the factory, where it is weighed and passed on to an upper-storey. Here the first process, that of withering, is effected. The leaf is spread out thinly on shelves made of wire where the air can pass freely through it in a dry atmosphere. The object is to allow the leaf to assume a certain degree of softness and flaccidity, which makes it sure of a good twist when put in the rolling machine at the next process.

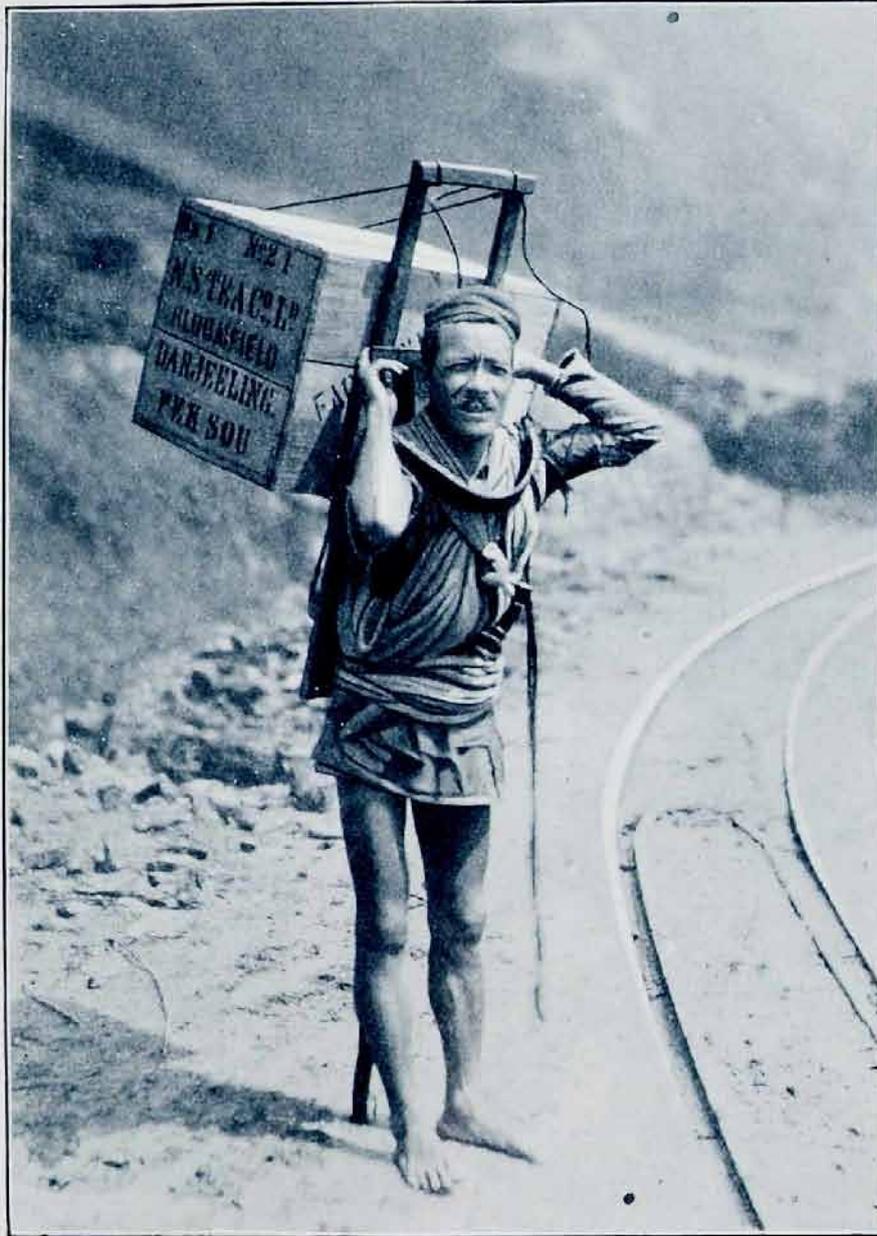
The leaf is then sent through a shoot to a lower floor and put into the rolling machine. This machine consists broadly of two parts which are moved in a rotary direction by a crank; it gives the leaf a good twist and by breaking up the cells induces fermentation.

The next process is that of fermenting. The leaf is spread out on a wooden framework and covered with wet cloths. It is allowed to ferment until it assumes a bright brown tint like the leaves have when infused in the tea pot. The process goes on for some time but over-fermentation has to be guarded against as it spoils the quality of the tea. There is a deliciously fragrant smell in the fermenting room.

The fermented leaf is then fired. Placed on wire trays the tea is pushed into a heater and a current of hot air over 200° Fahr. is passed over it, which renders it dry and brittle and black in colour. The tea is now completely manufactured and all that remains to be done before it is packed is to pass it through the sifting machine.

The sifter is composed of a number of sloping trays with wire bottoms of different meshes. Through the topmost tray all but the coarsest tea will sift, through the second tray only the somewhat finer tea will pass, and so on to the bottom tray through which tea dust alone will filter, each sieve arresting a particular grade of tea. The trays are made to oscillate at a high speed by the factory engine and eject the various grades of tea through apertures when it is collected in baskets for the final firing which renders it fit for packing.

Finally there is the packing in chests. Tea chests are of various kinds from the locally made, lead-lined, to the highly-finished aluminium lined. They are placed on a platform which is made to



Photo—Burlington Smith.

COOLIE WITH TEA CHEST.

oscillate at many hundreds of revolutions a minute, so that as the tea is poured into the chest it is well shaken down and the chest is filled to its utmost capacity. A sheet of lead is then soldered down on the top and the wooden lid is nailed on, the contents being thus

secured from air or moisture. The chest of tea is then ready to be marked with the estate name and the weight and grade of the tea within it, and to be despatched to the tea market.

The life of the tea planter who controls the cultivation and manufacture is active and busy. It is necessary for him to be constantly on the move about his garden and to keep a close supervision over every branch of the work both within and without the factory. He is not only responsible that the outturn of the garden shall be satisfactory but that the quality of the tea made shall be up to the highest possible standard. He becomes an expert in tea tasting and the little line of cups and saucers with various grades of tea ready for his inspection is a familiar sight in his office room at the factory. By his tea tasting he satisfies himself whether the manufacture is being properly ordered. With so many responsibilities on the estate the planter is not able to leave his garden often or for any but brief intervals without proper relief. But the sociability of the planter is proverbial and even the most remote little group of gardens has a small club where tennis fours are made up and social evenings occasionally enjoyed. At Mirik, indeed, twenty-five miles from Darjeeling, is a small polo ground levelled among the upland slopes of a lofty mountain at the initiative of the planters of the district, and here polo and gymkhanas are held at intervals.

The growth and expansion of the tea industry in the Eastern Himalaya has been rapid. Dr. Campbell, the first Superintendent of Darjeeling, introduced the Chinese plant in 1840 but it was not till 1856 that the industry can be said to have been fairly established in the district on a commercial basis. Tea planting in the Himalayas was started with the Chinese variety only but this soon gave place largely to the Assam hybrid. Within ten years of 1856 there were forty gardens in existence and nearly 300 acres of tea under cultivation. During the next ten years the number of gardens rose to over a hundred and the acreage to nearly 550 acres. There are now over 150 gardens in the district covering nearly 54,000 acres and the annual output of tea exceeds 17 million pounds.

The British Government does not allow the tea industry to enter the protected state of Sikkim, but concessions have been obtained by a syndicate for the cultivation of tea in Bhutan which will lead to a further expansion of the industry. That the industry will continue

to thrive is the desire of all well-wishers of India, and Dr. Campbell and a few other pioneers who first sowed the tea seed in the Eastern Himalaya deserve recognition for the part they played in sowing the seeds of India's prosperity.

