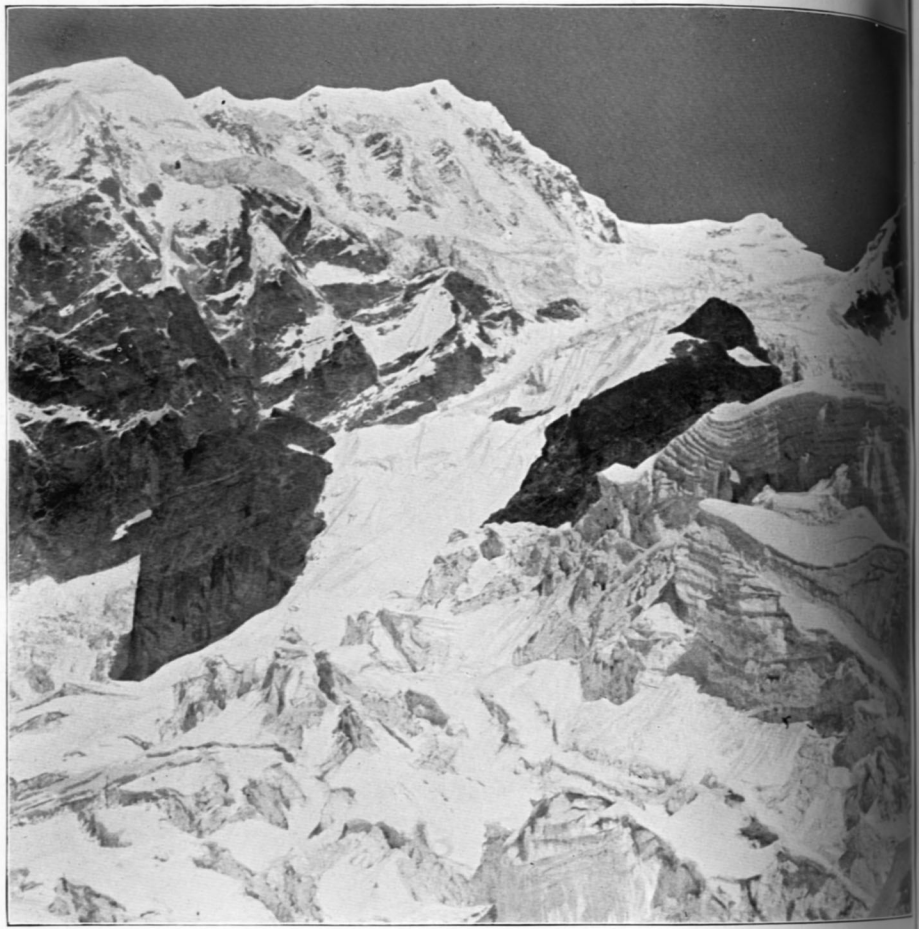
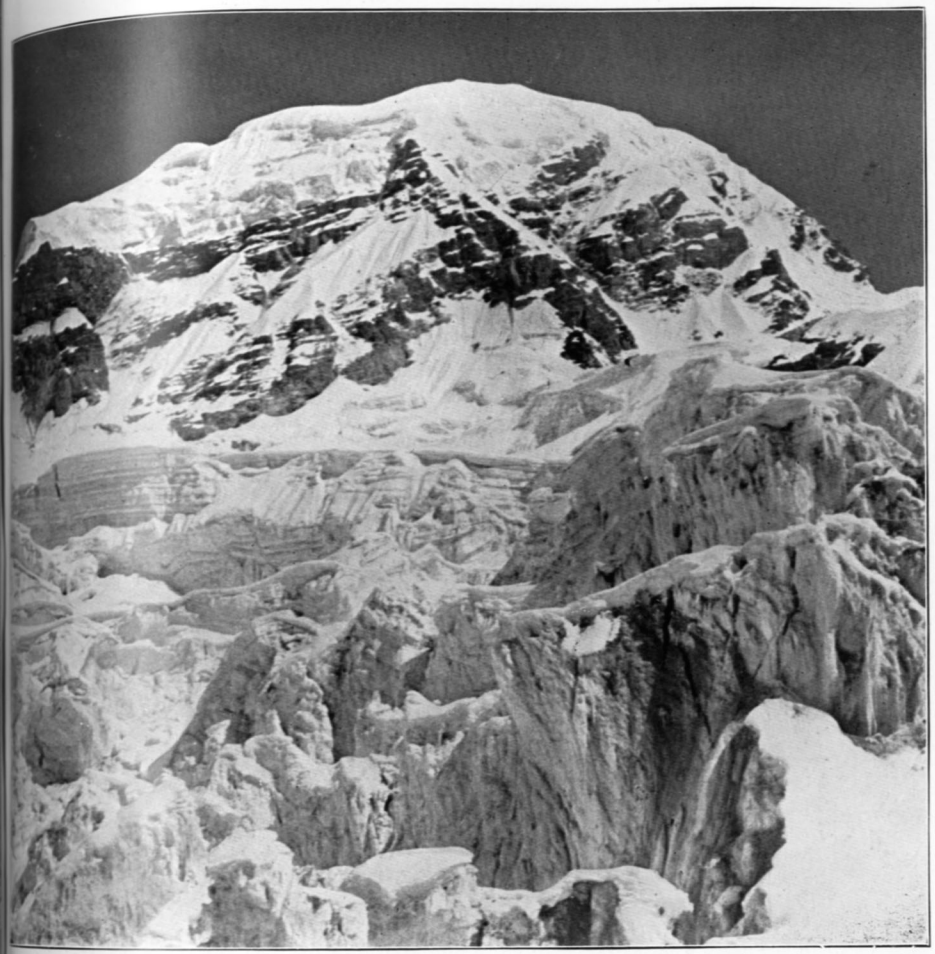


C. W. Rubenson, Photo.

KABRU.



THE DOME.

Kabru in 1907.

By C. W. RUBENSON, Member of the Norske Tinde Klub.

(Read before the Alpine Club, June 2, 1908.)

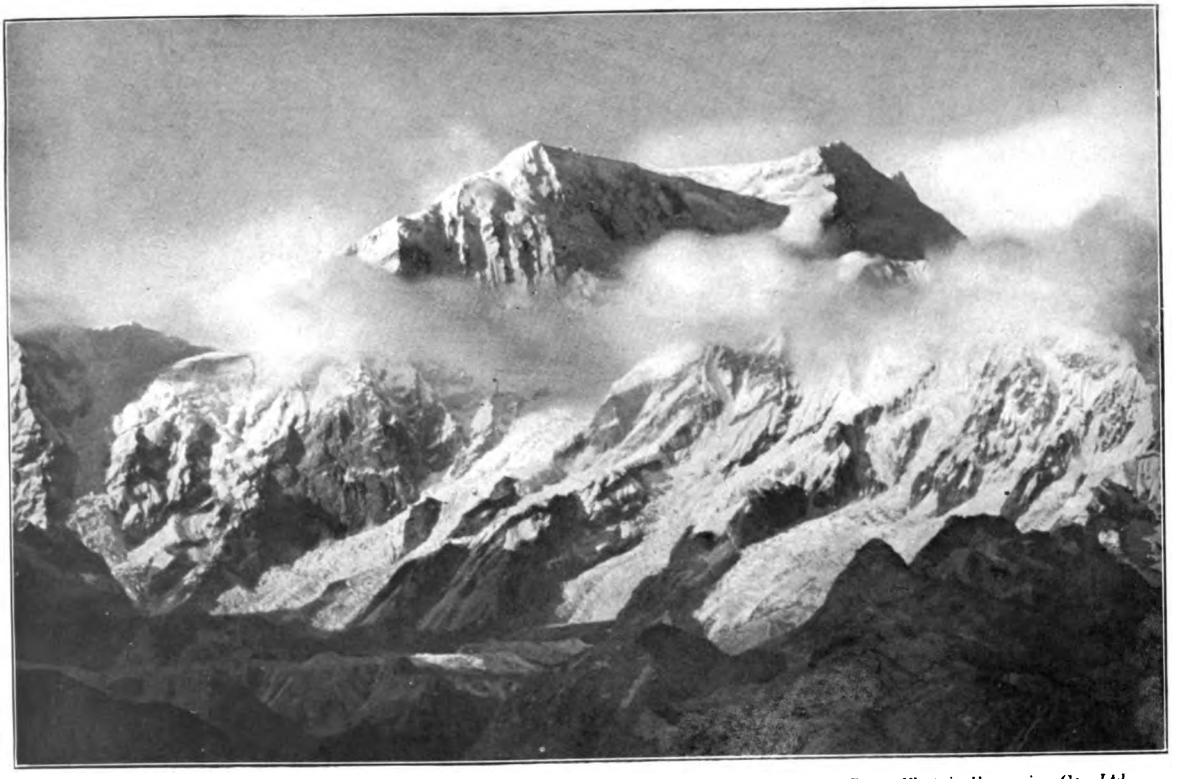
NEITHER Monrad-Aas nor myself claim the distinction of being expert mountaineers; in fact my friend had never, previous to the Kabru expedition, climbed a mountain of any description. All my own experience had been gathered in the mountains of Norway, where since my boyhood I have been scrambling about, as a rule without any guide.

The original intentions of the expedition were not in the direction of scientific exploration, but merely for pleasure. When we left Norway we had no idea of accomplishing anything out of the ordinary; we did not even take Swiss guides with us, as we desired to see what we could accomplish ourselves without any help.

In the autumn of 1906 we went to India. I must confess that our ideas of the Himalayas and everything connected with them were very vague. We certainly could have obtained better information about everything had we taken sufficient pains; but, owing to our negligence in this respect, we did not know when on board the steamer to what part of the Himalayas we were going. It was, as you see, more or less by chance that we happened on these particular mountains. Our lack of knowledge showed itself also very plainly in that we chose the wrong season of the year for our climb. Every one we met in India who had any ideas of mountaineering (there were not many) warned us of the impossibility of climbing in the winter-time. However we thought we would make a sporting effort, as we had taken the trouble of coming thus far.

As could be easily foreseen the expedition proved an absolute failure. We went out with the intention of climbing Mount Kabru, but only reached the foot of it at a place called Jongri, at an altitude of about 13,000 feet. We were out altogether six weeks, and we had a most interesting journey in Sikkim, but what proved of greater value to us was the experience gained in the way of organisation. Without having had this experience we should hardly have been able to accomplish anything later on, unaccustomed as we were to the ways of the natives.

Now, for some time we had to postpone our plans, as we could not again make the attempt before the autumn of 1907. In the meantime we travelled about in the East. This was not



Burlington-Smith, Photo *Swan Electric Engraving Co., Ltd.*

KABRU, FROM DARJILING.

the right kind of training for mountaineers, as the heat encouraged us to be lazy beyond measure.

In August we were back again in India, making preparations for a further ascent.

Kabru is situated on the border between Sikkim and Nepal, and, on account of the restrictions in the case of Nepal, we had to keep in Sikkim all the time. The geography of Sikkim is in fact very complicated, but I will try to make it simple. There is only one river and one mountain—the Teesta River and the Kinchinjunga. The tributaries of the Teesta and the ranges belonging to the Kinchinjunga group fill out the whole country.

The natural starting point for a journey in Sikkim is the small hill town of Darjiling, situated at an altitude of 7,000 feet. From there one has a splendid view of the snows. In the middle lies Kinchinjunga; to the left of it is Kabru. The soft, unbroken outline towards the peak is peculiar to this mountain.

I will not bore you with lengthy descriptions of our preparations. As you know Sikkim is such a poor country and with such bad communications that we were forced to take all our edibles with us by means of coolies. We had a good helper in the person of a Mr. Mason, a Scotchman, who was also with us on our first expedition as interpreter.

There was one thing to which we paid special attention, and that was the outfit of our coolies. This I think a matter for more consideration than has generally been given to it; frequently such items have been neglected.

On September 16 everything was ready. A hundred coolies had been sent off the preceding day. Fifty of them were extra coolies whom we were going to take with us only as far as the last village.

We were able to ride the first three days, and this we did, as we did not think it necessary to exert ourselves more than we were forced to. A day's march in Sikkim is as a rule from the top of a hill of 4,000 to 5,000 feet down into a valley and up again to the top of another hill.

I will not keep you too long below the snow line but will make a rapid journey through Sikkim and get up to the snows. The scenery in Sikkim is not very different from that in Norway, but one misses lake scenery, which gives more life to the view. A peculiar characteristic of the country is the way in which the population is spread. In Norway, for instance, the valleys are open and broad and thickly populated. Here in Sikkim you find all the villages spread

out on the higher slopes. The people live up to the height of 8,000 to 9,000 feet. The valleys are very narrow and are rendered uninhabitable by the intense heat and the fever, which ravages in the thick undergrowth. Not even for a single night may you pitch your tents here. In one valley we had a temperature of 95°.

The aborigines of Sikkim are the Lepcha, a very simple and timid race. Now they are forced to give way to people from the neighbouring provinces. But most of our men were descendants of Tibetans, and we had every reason to be well satisfied with them in nearly every respect. They were very strong, willing, and high-hearted people. On the other hand they were rather lazy and decidedly unclean.

One difficulty in dealing with the natives here is their great superstition, but I am sure this has been greatly overestimated by previous travellers. It is quite natural therefore that they made religion a reason for refusing to do various tasks set them. Before starting I told them that I did not want to hear of any devils in inconvenient places.

It took us five days to get to the last village, Yoksun. Here we heard, to our regret, that our old friend of the last expedition, the headman, had been deposed. The new kadji was a very promising man, but did not keep his promises, as we discovered to our cost later on. From this place we sent our fifty extra coolies back. Yoksun was going to be our first base from which supplies could be forwarded on to us, and with which we wanted to keep up communications all the time.

So far we had enjoyed rather nice weather, but now the rain started in earnest and nearly drowned us. A forest like the Sikkim forests during rain becomes absolutely sodden. Another unpleasant thing was the number of leeches found everywhere. They beggar description. They apparently intended to make the most of us, as I suppose they seldom get the chance of a decent meal.

Up at about 13,000 feet we got on to the plateau—the open mountain pastures, which in many ways resemble those of Norway, except that the colours are not so vivid. At Jongri we built a camp. This was the last place at which we arrived on our first expedition. It was really the first place where we found sufficient room to pitch our camp properly. Here we bought a lot of sheep from the shepherds to take with us for the coolies. We also tried a few yaks for transport. These yaks are very strong and sure-footed, but we found great difficulty in making them go the way we wanted them to take,

C. W. Rubenson, Photo.

A VALLEY IN SIKHIM.

C. W. Rubenson, Photo. *Swan Electric Engraving Co., Ltd.*

A VILLAGE IN SIKHIM.

as they appeared to have their own ideas as to the route they should pursue.

There have not been many mountaineering expeditions into these parts of the Himalayas. Mr. Freshfield's party, as you know, was prevented from making very high ascents on account of the bad conditions prevailing during their wonderful journey. But rather a long time ago, in 1883, Mr. Graham accomplished several remarkable ascents in this district; amongst other things he claimed to have climbed Kabru up to some 50 feet from the summit. The opinions as to whether he really did this, or was mistaken as to his whereabouts, as far as I can understand are somewhat conflicting. As for myself, I must confess that I found it hard to realise that Mr. Graham could have made so much progress as he claims to have made in one day; but Mr. Longstaff on his last expedition proved that such rapid progress was not impossible, and I do not venture to dispute Graham's statements any longer. On the other hand my opinion is not of any great value, as I was not able to see the side of the mountain where he may have made the ascent. He went up from the eastern side. We went up the valley to the Rathong glacier. Of recent attempts up these mountains there have been very few. You will remember Mr. Crowley's unlucky try. He tried Kinchinjunga from the west in 1905.

We had two camps a short distance from each other waiting for supplies from Yoksun, which did not, however, turn up. After having waited a couple of days in vain we had to send Mr. Mason back again to Yoksun to look after our welfare. We did not see him again for three weeks. We were now left more or less to the mercy of our men, as we were ignorant of their language. They could easily have made things unpleasant for us if they had wanted to, but instead of that they proved most faithful and helpful and we naturally grew quite attached to them.

At last we got on to the glacier. Now we couldn't lay our hands, of course, on any wood for fires. So much more exasperating was it to discover that our coolies had stolen all our methylated spirit. They had used it to make up fires in the forest, and, in order to hide their sins, they had filled up the bottles with water, and thus, of course, ruined the remainder. On account of this we had to carry with us wood, even up to the very highest camp in the mountains.

Several times through the valley and even through the moraine we had been able to follow a small path which we thought at first was caused by sheep or other animals, but

afterwards we made the discovery that it was a path leading over to Nepal, across the glacier. This path was not known to Mr. Freshfield and is not marked down on his map.

Up to about 16,000 feet, close to the foot of our mountain, we were surprised to find a most beautiful little spot with a small tarn and grassy slopes. It was quite an ideal spot for a camp, and we at once decided to make it the base for our actual climb. Our tents we pitched just below a big rock. We used the rock for climbing practice during the days we stayed here, and put up prizes for the best climbers among the coolies, and they took a keen interest in the competition. We stayed here a couple of days collecting provisions, which now started to come on slowly. As regards ourselves we got for the most part only the things which were not really necessary. Our food for the next fortnight consisted practically only of tinned meat; vegetables and bread we hardly tasted. In spite of all we flourished, or perhaps on account of it.

One day Monrad-Aas and I, with two of our best men, went up to explore the mountain. Up to 18,000 feet we went on some loose rocks. From here we had a most wonderful view towards the mountain. The lower part of the Kabru glacier is a perfect chaos of broken-up ice, crevasses, and grottoes, beautiful with their greenish shades. This was the first time that Monrad-Aas looked into the real fairyland of the mountains. And it made a great impression upon him. With regard to myself, my delight was by no means unmixed. To cross the glacier here was impossible; personally I could not help but feel the responsibilities of my position, as I was the only one among the party who knew anything about mountaineering. But I had already seen from Darjiling a narrow white strip below the Dome. Here I had thought the glacier would prove possible to cross. My anticipations proved correct. We went up that day to about 19,400 feet, and looked at a suitable place for a camp a bit higher up. Then we went down again to our base camp.

The day after, on October 7, we went up again with fourteen of our best men. We took with us provisions for one week, thinking that it couldn't take us longer if we should succeed at all. At a height of 18,000 feet we made a camp just where we had to leave the rocks for the snow. We were not going to touch rock again for a considerable time. We had with us four tents.

The next day we went on in glorious weather.

The light being reflected by the snow in these altitudes the

C. W. Rubenson, Photo. *Swan Electric Engraving Co., Ltd*

CAMP AT 19,500 FEET.

glare is very trying. In spite of ample protection for the eyes the strong light caused a very unpleasant sensation of headache and fatigue. With regard to mountain sickness, we had not experienced anything so far, except that perhaps we felt more lazy than usual. I believe that the effects of the light have often been mistaken for mountain sickness. Some writers mention that they find the symptoms of mountain sickness more severe in sunshine than in cloudy weather, which seems to bear out my argument. In Norway, for instance, at Easter time there is plenty of opportunity of experiencing the effects of this strong glare on the human frame at quite low altitudes.

We had no difficulty in crossing the glacier. We followed the track we made on our first visit and went up still a bit higher, pitching our tents at about 19,500 feet. This was the highest point of which we had been able to form any ideas, and it was with great anxiety we took in the view that now presented itself to us. A few hundred feet from our tent we had an outlook towards the Kabru glacier.

I must confess that I felt somewhat down-hearted on gazing upon the labyrinth of crevasses in this broken-up icefall. I did not feel very hopeful of getting our coolies over, though I didn't think the glacier impossible to force for a light party of mountaineers. And here there was absolutely no way round it. On our right-hand the precipices of 'the Dome,' a southern buttress of Kabru, towered above us.

In our camp at 18,500 feet we stopped for 5 days. Such a long time it took us to work our way slowly through the icefall. Contrary to expectations the coolies proved very eager. They often took the initiative when they thought they had a good idea. Very often when we came to a difficulty impossible to overcome we had to return and start anew; but as a rule we got on a bit further every day.

In the evenings we returned to our old camp, where we had the precipices of the Dome in the background. Down this wall we continuously heard big avalanches thundering along. During the days we stayed here the wind was often very strong indeed, specially in the night-time. It often grew into quite a gale. Several nights Monrad-Aas and I lay awake for hours with a lamp burning, expecting every moment to be hurled, together with our tents, into the valley below. But fortunately we had dug deep into the snow for a foundation to our tents and the wind could not get at them properly.

After having been trained in the use of a rope and ice axe our men proved quite mountaineers. We always took the coolies over difficult places without burdens before we allowed them to cross with them. In this way they gained confidence. When they went without their burdens they always used the rope, but they didn't care to use it when they had something to carry. Their idea was that if loaded they would not be able to help a comrade if he slipped. And they thought it better for one to be killed than all of them. Though it isn't the way a European mountaineer would look at things yet there is a good deal of common sense in their reasoning.

We crossed several rather difficult places, but the snow was everywhere very hard and in good condition, and there was no danger from avalanches.

At last we got up to our small plateau in the icefall at about 21,000 feet, where we decided to make a camp. One of our tents we left behind with a couple of our men, as we had to keep up communication with the 'lower world,' considering that we had to get up firewood. This camp, which we used to call the 'Half-way House,' was situated close to a big ice wall, which bordered off the séracs on the left side and towered up in the air to a height of from 200 to 500 feet. The sun shining on the ice displayed all the colours of the rainbow. Spread out close to our tents were huge ice boulders, the remains of previous avalanches. But we had no fear of future catastrophes, as it was now pretty late in the autumn. At this place we spent two nights. The minimum temperature at nightfall went down to below zero.

The route from here and further on was not so difficult as the part we had passed, but was much more dangerous. We had to pass close under the ice wall, where we could never be quite certain of falling ice boulders and avalanches. Some of the crevasses which we had to cross gave us some little trouble.

In order to give an insight into the good relationship between the coolies and ourselves I will relate to you a little incident that took place. Monrad-Aas lost his hat down one of the crevasses, and, as he had plenty more, we told the coolies it did not matter. We continued our climb, when about ten minutes later one of the coolies overtook us and, wreathed in smiles, presented Monrad-Aas with his hat. He had been let down by his comrades twenty feet or so to obtain it.

Our next camp was at a height of about 22,000 feet, up on

that open snow-flat which can be seen so plainly from Darjiling, and which we had been longing to reach, hoping that we had left our worst difficulties behind us. Here we were met by our old enemy the wind, and it was only with great difficulty we were able to pitch our tents. We were now on a level with 'the Dome.'

As a rule the clouds were lying below us like a still sea during the three days we stayed here, but when it was broken we had a very extensive view, and even imagined we could see the plains of India. As a curiosity I may mention that we received the mail from Europe here, undoubtedly the highest point at which a mail has ever been delivered.

From here we thought of climbing the summit. We accordingly went out one day in excellent weather with the very best of intentions. But the day was very hot; we felt very lazy, and when we tapped the ridge connecting the north-eastern peak of Kabru with 'the Dome' we sat down, smoked our pipes, enjoyed the beautiful view, and decided to have our tent brought up a bit higher the next day. From this outlook at a height of about 22,700 feet we saw our great neighbour Kinchinjunga for the first and only time during our climb, and secured a photograph. From the same place we got a photograph of 'the Dome.'

The day after we had our tent brought up to about 22,600 feet. This was our highest camp. Our coolies we sent down to our former camp and only kept our two boys with us, who slept huddled together in our small tent.

During these last days we had run very short of food. We had stayed away from our base camp much longer than we had anticipated doing. What we had got up afterwards in the way of provisions was very insignificant. The two last days we had lived practically on one tin of ox tongue, and somehow or other since then I've lost all taste for ox tongue. One thing which we found of very much use in 'keeping our pecker up' was brandy; even in this matter the coolies were at one with us. But of course we took nothing before the evening.

The next day, October 20, we started for a final ascent. We couldn't wait any longer, as semi-starvation is hardly the right training for strenuous work. The weather was not so good as we could have wished for. The minimum temperature for the night was 20° below zero Fahr. A nasty wind was blowing and the result was that we did not get out of our warm sleeping-bags till rather late in the morning. Not until after 9 did we make a start.

One of our boys expressed a wish to accompany us, and he did so, but after a while began to feel the pangs of hunger and returned. We were now for the first time during our expedition quite alone.

The slope was not very steep at first, but, on account of the hard snow, we could only advance very slowly. We had to slice five or six times for making a step. From previous experience we found it advisable to discard our nailed boots for ordinary ones, as the nails conducted the cold too much. Good step-cutting was, therefore, more essential than usual.

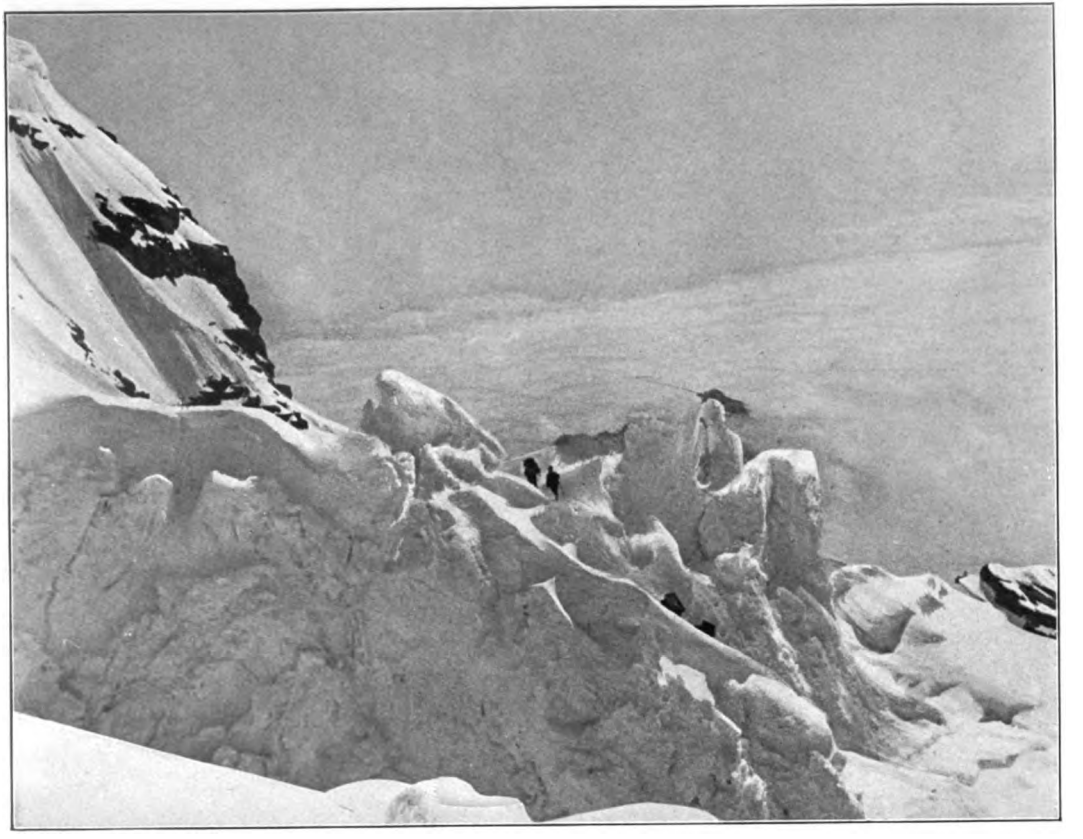
Very often we were forced to stop and turn round when we were met by an extra-strong gust of wind. The rocks just under the peak did not seem to get any nearer at all. We worked on steadily. Neither of us suffered any inconvenience on account of the height, except that Monrad-Aas felt sick and giddy once for a few minutes. I myself felt more fit up here than several times before at lower altitudes.

Our plan was to get up to the saddle which joins the two peaks and then to climb one or the other. But a strong wind which came sweeping down across the saddle forced us to seek comparative shelter under the eastern side of the mountain and then try to climb straight up to the north-eastern peak.

At last at nearly five o'clock we got up to the lower rocks and sat down to rest for a moment below a big rock. Our hands and feet were numb with cold and we felt very hungry.

From this point and upwards the climbing began to get rather difficult, steep, slippery rocks alternating continually with snowy slopes. We now ascended quicker. After one hour's work we could see the saddle below us, and the height from the saddle up to either peak is not more than 200 to 300 feet. Which one is the higher I am not quite certain; at any rate the difference is insignificant. We could plainly see the ridge leading up to the south-western peak. It was rather broad and rounded, and there seemed to be no difficulty in climbing under good conditions.

The sun was now touching the horizon, and we thought of giving up the whole thing and returning. The cold had increased immensely and our teeth were chattering violently. But a short distance above us we saw a dark-hued rock, which we thought was the actual summit, and we made our last effort to reach it. When getting up to the foot of this rock we saw a snow slope, rather level, in front of us, and a small snow ridge topping it, which was the real summit.



C.W. Rubenson, Photo. *Swan Electric Engraving Co Ltd*

CLIMBING THE ICEFALL.

Under ordinary conditions it would have taken us about a quarter of an hour to get there, but up here, so close underneath the ridge, the wind met us with all its force, and we did not dare to continue.

Thus we did not gain our object, for we were about fifty or sixty feet from the summit. We didn't even get a view over to the other side, a view which would indeed have been the most wonderful upon which the human eye had ever gazed. Our position, in fact, was very precarious. Below us we had a difficult descent. The sun had now absolutely disappeared. We knew that the moon was coming up, else of course we could never have gone so far.

We now started our descent, which we did as quickly as we could with any degree of safety.

During the descent something happened which might have easily put an unpleasant end to both our hopes and ourselves. Walking down a steep snow slope I, who was at the tail end of the rope, slipped, fell on my back, and slid past Monrad-Aas at great speed. It was quite a marvel that he was able to check my career by throwing himself flat down against the snow slope. The rope was rather long and the pull on it had been so great that it nearly broke. There was only a small strand left. I may add that it was a Swiss Alpine rope, and that I am not going to use one again.

The descent didn't take us more than about an hour. At a little past 7 o'clock we reached our tents in a rather miserable condition. Here we discovered that Monrad-Aas had two of his toes frozen, a thing which marred the pleasure of the rest of the journey as far as he was concerned.

The day after we descended to our base camp at the foot of the mountain, picking up our coolies on the road.

I can assure you that we appreciated the comforts of comparative civilisation. From this point Monrad-Aas had to be carried all the way back to Darjiling. The coolies proposed to apply their own remedy to his feet, a glowing iron, but he objected very strongly to this treatment. This is the only mishap which befell the expedition. Monrad-Aas suffered from the effects of it for a considerable time, but I am glad to be able to say that he is now perfectly well again.

On October 30 we reached Darjiling.

When I now look back upon the experiences of the expedition I must confess I made many mistakes, but I pride myself on the great care which was shown on every occasion.

As regards the heights I have given I do not pretend that they are absolutely accurate, as they were all taken with aneroids. The greatest height we reached, about 23,900 feet, is calculated according to the measured peak. I was afterwards able to follow the last part of our route through a strong telescope from Darjiling.

With regard to our experiences, they differ very much in several points from those of other mountaineers at great heights. It was of very great interest to me during a visit to London to listen to Mr. Longstaff's lecture on his last interesting expedition, as his ideas on many questions are just the opposite to mine.

Our party suffered very little from mountain sickness, though of course our advance was slower when we got higher up, and we easily grew tired. We did not suffer from any real physical inconveniences. Very few of our men got sufficiently ill to make it necessary to send them back again. And upon some of them the altitude seemed to have no effect whatever. With regard to sleeplessness, we slept very well all the time, and so did nearly all our men, though it may be that we, as Mr. Longstaff remarked, were more than usually good sleepers.

The height we reached, even if it was not the highest hitherto attained, still was pretty near the limit to which human beings have been able to reach. But I don't regard this as the most interesting feature of the expedition. Several parties have got up to above 23,000 ft. What I consider of more importance was the long stay of 12 or 13 days we made up at a height of 19,500 ft. and higher. This is, so far as I know, something quite unique, and it inspires one with the hope of the possibility of reaching to even much greater heights. I fully agree with Mr. Longstaff in his opinion that even Gaurisankar is climbable. But I should think one would have to stay on the actual mountain for a considerable time in order to get slowly accustomed to the low pressure, working one's way carefully upwards from one camp to another.

In choosing a method of this kind it will be easily understood that the outfit would be of the utmost importance. In conversation with Mr. Freshfield and Dr. Nansen I got the impression that many of the experiences gathered during Polar expeditions with regard to outfit and provisions might be followed with advantage during mountaineering expeditions of this kind.

Another thing in which our experiences differed from those

C. W. Rubenson, Photo. *Swan Electric Engraving Co Ltd*

THE DOME FROM ABOVE, TAKEN AT A HEIGHT OF 22,700 FEET.

of most other mountaineers who have been in this part of the world was in regard to the usefulness of the natives on such expeditions. We found them very keen and interested people. It is only to their courage and many other good qualities that we owe our success so far. Of course it is no good fitting oneself out like a Polar bear if one does not look after the men in the same way. One must always remember that they have no personal interest in the success of the expedition.

The natives whom we found most plucky were Nepalese Tibetans, the so-called Sherpahs. If they are properly taught the use of ice axe and rope I believe that they will prove of more use out here than European guides, as they are guides and coolies in one, and don't require any special attention. My opinion is that if they get attached to you they will do anything for you.

The Bec de l'Invergnan by the E. Ridge.

By HAROLD RAEBURN.

'THE amazing black precipices of the Bec de l'Invergnan (3,608 m.=11,838 ft.), just S.W. of the village (Notre-Dame de Rhèmes), seem to dwarf everything else and afford one of the most glorious sights in the Alps.' 'The superb summit of the Bec de l'Invergnan.' 'This magnificent peak.' Such is the language of Ball's 'Guide' with regard to this mountain, and the writer, for one, is far from saying that it is not fully justified.

Rising with extraordinary steepness above the village of Notre-Dame de Rhèmes, it slopes more gently, clad in shining glaciers, to the Val Grisanche, on the W. Its summit forms the culminating point in the jagged ridge separating the beautiful valleys of Rhèmes and Grisanche, whose torrents hurry down, to the Dora Baltea, the drainage of many a great glacier clothing the E. slopes of the Franco-Italian frontier. Were it not that it is situated between two valleys, even now quiet backwaters in the stream of Alpine traffic, it would long ago have emerged from the comparative obscurity and neglect in which it has remained since its first ascent in 1874.

The climbing history of the Bec de l'Invergnan is not a long one.

In 1863 * it was visited by a party composed of Messrs.

* *Alpine Journal*, vol. i. p. 200.