

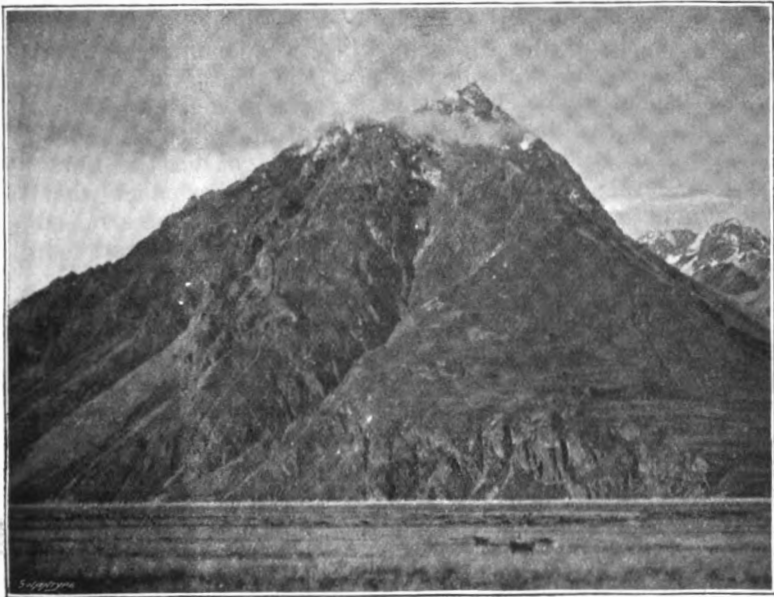
THE NEW ZEALAND ALPS.

By O. J. BAINBRIDGE.

PART II.

The Ascent of Mount Blackburn and the Climbers' Col.

AN entry in my diary dated March 22 reads, 'The storm that raged when we returned from the Tasman Valley continued for three or four days and the snow line has been considerably lowered. I was glad of a day or two's rest, but



MOUNT BLACKBURN.

though the weather has cleared a little, the wind is still from the N.W. and our chances for to-morrow are rather doubtful.'

We had decided to make an attempt on Mt. Blackburn, or Rotten Tommy, as it is familiarly known. From some points of view this peak has a commanding individuality; it rises over five thousand feet from the Tasman River, and from the point where we made our examination, some three or four

miles away, seemed to present no difficulty. Situated, as it was, outside the region of ice and snow, we had less to fear from the inclemency of the weather. We wished to make an examination of the Nun's Veil, with a view to climbing this peak as well, and Rotten Tommy we knew would give us all the information we required.

The most important consideration with us, however, was that the latter peak had never been previously ascended, and we thought it would be quite wrong to leave the district without making at least one new ascent.

On Sunday, the 23rd, therefore, we started off to ford the Tasman River. The weather was threatening, the N.W. winds tearing across the sky. Besides the pack-horses we had two ponies, and we took Hans Fluckinger to look after them. Clark of course accompanied us. We were making for a stockranger's hut which lies at the side of the river at a point about a mile below the ridge we intended to follow. To one not used to fording rivers the experience was sufficiently interesting, especially as when I got on the horse behind Clark I was subjected to unpleasant movement when the animal gracefully, though with extreme suddenness, raised his hind legs from the ground. No other mishap occurred, however, and we reached our hut in safety.

We set about making arrangements for our comfort, and after dinner climbed up the hill a few hundred feet to see if we could get a view of Mt. Sealy, which looks very well from here. Unfortunately, the mountain was hidden in cloud.

We were very anxious for the morrow, as the N.W. wind was blowing very strongly. In the hut we found it so close that we were obliged to keep the door open all night. We both slept badly, not entirely owing to the warmness of the atmosphere or the sound of the wind beating against the corrugated iron walls of the hut. The cause, I fancy, was a more animated one.

At 6 A.M. on Monday morning it was sufficiently light to start, so we rode up the bed of the river until we came to a convenient place from which to attack the grass slopes which led to the S.W. arête. Here we dismounted, arranging with Hans that he should take the horses further on to the next hut, which we expected to meet by a traverse of the mountain.

We began the ascent at 6.30 A.M. This grass slope was no worse than other grass slopes, but seemed a little longer. The Sealy range of hills was enveloped in cloud, and the Tasman and Hooker Valleys seemed to be enjoying the usual West Coast weather.

Knowing that if we joined the ridge too soon we should have to descend two hundred feet to a col from which the actual climbing began, we endeavoured to traverse along that on the south side of the ridge, but when the grass slopes gave way to shaly and rotten rock we found it more convenient to take to the ridge. When we had reached the point where it was necessary to descend to the col, we had opportunity of making a close examination of the work before us. Beyond the col the arête seemed blocked by huge obstructions in the way of gendarmes. Higher up there was no sharp arête, but the rocks had an extremely rotten appearance; we feared our 60 ft. rope would in many places be worse than useless.

The descent to the col was an excellent example of the work we expected higher up. We each descended the gully in turn, dislodging an avalanche of stones in front of us, and then finding a convenient place for a rest and breakfast. There was no water, but we carried, besides a bottle of whisky, a water-bottle holding a quart of oatmeal and water. The other provisions were a tin of sardines, a tin of herrings, some raspberry jam, bread, butter, and one lemon. An occasional wineglassful of oatmeal and water, whisky, and squeezed lemon proved very refreshing.

Soon after leaving the col we came across the first of the gendarmes which block the arête. Here we put on the rope. For some way after this we found the climbing much more interesting than we had hoped for, but progress was rather slow, as no sooner had we mounted one obstruction than we were confronted by another. To have left the arête would have necessitated unpleasant traverses on very rotten ground, while here at least we had interesting climbing and fairly good rock. On the other hand, we had to face the possibility of finding when one gendarme had been conquered that we could not get down to the next. Such seemed to be the case when after an hour or two we found ourselves separated from what appeared to be the final ridge by a sheer descent of a hundred feet. Clark proposed avoiding the difficulty by going to the left, but, as this would mean a long and uninteresting descent, we determined to try a long steep chimney on the right. I went down to explore with the whole length of the rope, and reported that it would go. Then, unroping and moving out of the chimney to avoid the stones which preceded Tennant's descent, let him pass me to the bottom of the chimney. Then came Clark, with the rope hitched round a rock, and when he had joined me I put on the rope again and continued down the face to safer ground.

This difficulty had caused us some delay and the expenditure of much energy, so we had another breakfast. We were thoroughly enjoying the ascent, as we found it much more interesting than either Mt. Sealy or Mt. Darwin as far as the climbing was concerned, though we did not have the advantage of sampling any snow or ice work. We pushed on again after a short rest, for time was flying, and we could not hope for many hours of daylight so late in the season. We found, too, that we were not on the final slope, as other gendarmes appeared ahead of us. In this way the climbing continued interesting, and when at last the arête gave place to an extremely rotten slope we thought it wise to take off the rope. I made for a snow couloir on the left, Tennant followed Clark to the right, and thus we continued till better ground was reached.

We had mentioned at the Hermitage that we hoped to reach the summit between 11 A.M. and noon; but it was long past that time before we reached a point where our difficulties were at an end. Half an hour along an easy ridge brought us to the summit. We had been 10 hrs. in the ascent. A cairn was erected, and our names inscribed on a piece of slate.

Unfortunately the mountains were in cloud, otherwise we should have seen a panoramic view of the whole chain. As it was, Nun's Veil was the only peak we could see to advantage, and we found that the valley below (details of this part do not appear in the maps), taking a northerly direction, led right up to the base; but an ascent from this side (the S.) seemed rather a tedious matter, as the hut at the bottom of the valley was too far off, and, even if a suitable encamping ground could be found near the mountain, the rocks introducing the glacier which led to the summit appeared extremely rotten.

We finished the oatmeal and water, and had some bread and jam (unfortunately, the sardines and herrings had been finished below), and then, as we had only three hours of daylight left, we confronted the problem of how to get down. To return on our tracks was obviously impossible if we wished to reach shelter that day, for, though there were numerous gullies leading down the northern face of the mountain from different points along the arête, there was one leading direct from the summit which we had no reason to consider was any worse than any other. It was obviously the gully to follow if we wished to descend in that manner. To continue down the N.E. arête would be also inviting delay, as the

rocks were steep and very rotten. We set off, therefore, unroped, going one at a time, at first, as quickly as we could, for fear of dislodging stones; we also kept a sharp look-out for anything that might fall from above. Good progress was made in this way at first, as the ground was so steep that we could almost glissade in the soft shingle. Soon we came to water, which was much needed; but it introduced more difficult ground, for as the water increased so did the size and smoothness of the boulders we had to descend. We were soon brought to a stop by a sheer precipice, which closed the gully as a practicable route for the descent. We traversed out of the gully to the face in the hopes of finding a practicable route elsewhere. We were now among scrub, snow-grass, and a particularly unpleasant growth called Spaniard, which was apt to resuscitate failing energies in a sudden and unlooked-for manner if one chanced to sit down or slip on it. We separated a little to explore, and Clark called out that he thought he had found a way. It was down a precipitous, partly overhanging pitch of rock to a sloping grass ledge. Fifteen feet below this, again, was easy ground, and I went down on the rope to see if there was any way off the ledge. I had to traverse an awkward slab, and then swing for it, which I did in mid-air for an uncomfortable second, getting a sleeve full of water before catching a hold which brought me to comparative safety. There was a vertical chimney leading from the ledge which seemed possible, so I called back that it would be all right if Clark could find a suitable anchorage for the rope. Meanwhile, Tennant came to the edge of the slab and enjoyed a period of extreme thoughtfulness. The result of much discussion was to abandon the scheme, as the only possible rock for anchoring the rope was in an unsuitable position. I was therefore hauled up again, and, traversing still further round to the S., we found ourselves separated from another gully by some steep rocks, which, however, presented no difficulty. When nearly in the gully, Tennant, who was alone and in front, unroped (it was getting dark, and we were neither in the mood for, nor had time to waste in, extra caution), found an interesting ledge-traverse, which brought him to easy ground again. Clark and I were still roped, and we were in the middle of negotiating the traverse (it was about 60 ft. long) when a clatter and a whiz and a sudden jerk on the rope introduced to us the only risk there was in descending down the northern face. One small stone had struck the rope. We crouched against the rock until the interruption

had passed, and then joined Tennant in the gully, where we congratulated ourselves on a difficulty overcome, and finished the whisky.

Perhaps there was not much cause for congratulation, as we had wasted half an hour, and it was quickly growing dark. We left the gully again a little lower down, reaching the grass slopes we had been making for before. All went merrily for a time, but here my bump of locality fails me, as it was almost dark. At one point we would be making use of the tufts of snow-grass to descend steep bits; at another we would be negotiating the boulders in ravines. We were finally brought to a stop by another waterfall and its accompanying piece of precipice.

Half an hour more of daylight and we should at least have been on comfortable ground, as this was the last piece which required any climbing. As it was, in our frantic efforts to get down we only succeeded in landing ourselves in a most uncomfortable position, and we considered ourselves fortunate when we managed to find a place where there was at least sitting room for three.

Here we spent the night. Overhanging ground above provided some shelter, while the rope tied firmly to some scrub rendered our position safe. It was not at all comfortable, however, as there was a grassy precipice below, and our ledge had an uncomfortable slope in the wrong direction. Water was so close that we could feel the spray from the waterfall, which the gusts of wind liberated through the night. But it was now too dark to move, and we had to do without it. Luckily, the N.W. wind was warm, and though the storm was raging in the Hooker and Tasman Valleys we remained protected. Our supper consisted of a teaspoonful of jam and a piece of bread, after which we settled ourselves as comfortably as possible and tried to sleep. We were very fortunate in escaping rain, as we had to remain for 10 hrs. on the ledge awaiting daylight. This came very suddenly at about 6 A.M., and after eating a small piece of bread we looked about for a way to descend. A rock traverse and a long vertical chimney, where the tufts of snow-grass provided suitable hold, brought us to the final slopes of débris, and then we had nothing to do but walk down the valley (this valley joins the Tasman from the E. at right angles) to the hut. I was feeling so empty that a stone in one of my boots provided a suitable excuse for a rest; the others went on to prepare a meal. It was a rough walk down, and occasionally the boulders of the stream had to be relinquished in favour

of the slopes; but the hut was reached at about 8.15, and I followed Tennant's example in throwing myself into the ice-fed stream before enjoying the bacon and eggs which were being cooked by Clark.

It was almost reasonable to suppose that when Hans saw two of the party returning after being out all night he would have shown some curiosity as to what had happened to the third. But it was not, apparently, a matter that caused him the slightest anxiety, as he did not even inquire where I was.

The time occupied from hut to hut was 26 hrs. An hour's rest after breakfast thoroughly refreshed us, and as the rain was coming on we prepared to cross the Murchison and Tasman rivers. The fords were successfully negotiated, and as on approaching the Hooker we found the cage on the other side, Clark took the horses over and brought the cage over for us. We came into the full fury of the storm in the Hooker Valley, which rather spoilt the thirst we were accumulating for the Hermitage, but we did not despise a pint apiece when we got there, and by the time we were re clothed lunch was ready.

Rotten Tommy proved a pleasant surprise, as we found a good deal more mountaineering work than we expected; at the same time there were none of the problems to be found in the Alps or Tyrol, nor was the climb particularly exposed. On a fine day the panoramic view from the summit of the chain of peaks from Mt. Sefton to Mt. Elie de Beaumont would be one of the finest that could be got from the east side of the range; but the expedition is probably too long and troublesome to become a popular one.

On Thursday the 26th the weather changed again, and a cloudless sky invited further expeditions. Meanwhile new visitors had arrived at the Hermitage, and among them was a lady journalist who was most anxious to ascend Mt. Cook. This project unfortunately had to be given up, and an excursion up the Tasman Glacier was arranged instead. Mr. Nanson, from Calgoorlie, formed one of the party, while Tennant was sufficiently energetic to make the third. I found the luxuries of the Hermitage too enticing to undertake the 24 miles journey a second time, perhaps without the chance of making any ascents at the other end, so I arranged to have a carrier pigeon taken up, and if Mt. Green seemed in condition I would go up to the Maltebrun hut in one day. I saw them off as far as the Hooker crossing, while Clark went round to bring the cage across.

The 27th was fine again, and at 5.30 p.m. the pigeon re-

turned from the Maltebrun hut, making the 24 miles across the Tasman Glacier over the Cook Range in under an hour. I was informed that the rocks leading to the col between Mt. Green and the Coronet Peaks were fairly free from snow, that they were going to examine them closely on the following day, and, 'would I bring them some bread?'

Saturday was fine, and I rode down with Smith, who arranged to see me over the Hooker. I took my camera, a loaf of bread, and some butter. The Hooker, curiously enough, was low, and when Smith left me on the other side the way seemed clear enough, but the streams of the Tasman were much swollen, and at one place I had some difficulty. Eventually I found a fordable place and reached the Ball hut in 3½ hours. I was sampling some of the tinned provisions when Hans turned up; he seemed rather annoyed that the horse had escaped and was making his way back to the Hermitage, but I fancy his chagrin was lost in the enjoyment he got from some chops and potatoes which he had managed to raise from the Hermitage.

I left him there (he had come to get more provisions), and made my way up the Tasman Glacier alone. Four hours' walking brought me to the Maltebrun hut, just as the others were returning from their examination. They reported that the rocks seemed good, but very steep, and that small stones had fallen when they were there.

We rose at a quarter to four in the morning, and after a breakfast of bacon and bread and jam we descended to the glacier and began the long trudge in the direction of the Hochstetter Dom. The day was beautifully fine, and the pace was sufficiently easy to allow appreciation of the beauty of the scene around us. The small glacier leading to the foot of the rocks was broken by huge crevasses, but owing to the steps that had been cut the day before our progress was uninterrupted, and we reached the foot of the rocks in two hours and a half.

While breakfasting we examined the snow route, which had seemed from the hut too broken by crevasses to be feasible in March. A closer examination, however, gave us a different opinion on this point. But once at the foot of the rocks we found them too attractive-looking to relinquish, and though, even from where we were, the southern arête of Green seemed sharp and difficult, owing to the huge slabs of rock which introduced the climb, we should have at least on the col the advantage of getting a close view of some of the glaciers and peaks on the W. of the range, while we hoped if

the arête was impracticable to find a route by crossing over on the W. face (from a point on the Tasman Glacier opposite to De la Bèche, a small piece of the western side of Green can be seen ; it appears as if a snow-slope led to the summit). There was only one place where the rocks could be attacked, as a bergschrund everywhere else divided the mountain from the glacier.

For 200 ft. the rocks rose almost vertically, and the succession of chimneys we had to follow were subject to a fall of stones. Clark was leading, and patches of hard snow which had to be cut away or carefully proven retarded his progress. Ascending vertically for 12 ft., the way led round for a few yards across the face to the S., introducing a chimney, at the top of which another small traverse was necessary northwards, and then came a long difficult chimney, blocked at the top by a boulder, which had to be climbed before we were in the gully down which the stones had fallen the day before.

Our progress to this point was very slow, one moving at a time, and even then the position of the anchored man was none too secure. Clark left the rucksack and the axes at this point while he crossed into the gully, and when I arrived at the obstacle I offered to put it on (the rucksack). This proved to be none too easy, as my foothold was not sufficiently secure to allow the use of both hands, and the sack was heavy. When at last word was called down for me to follow, my progress was so impeded that I made use of the rope in surmounting the rock and climbing the chimney which followed. The climbing was still steep, but hardly so exposed, but we had left the good rock behind and we found the comparatively short pitches in the gully more dangerous than anything; for, as is generally the case, an unknown route provides difficulties which seem to fade away when the mountain is 'cleaned' by successive parties. Anxious to get out of the gully as soon as possible, Clark traversed over some loose ground (again northwards), and when he was hidden in another chimney Tennant followed. The unaccustomed weight in difficult work made my balance sufficiently insecure, and I was anxious about the position the man ahead of me was in before I made a start ; but the possibility of the rope coming off never struck me, and when, after negotiating the traverse, I looked down to find the rope all but free, the position was quite uncomfortable. However, our work for the moment was nearly over, and Clark resuming the sack, we were soon able to leave the gully, and on a ridge which

guards it on the northern side we found a suitable place for breakfast. We had taken 2 hrs. to reach this point, and as the descent over the same ground occupied half as much, it will be seen that our progress was a good deal slower than it ought to have been.

We were now out of the range of falling stones, and had a meal of bread and jam. The rum had leaked and was all gone, but we had oatmeal and water to drink.

The Hochstetter Dom and the snow-fields of the Tasman Glacier looked well from here in the morning light, and the western face of Darwin, still in shadow, stood out in strong relief. The precipices of Maltebrun caught the eye, while far away to the S. could be seen the mountains of the Sealy Range, and the hills which guard Pukaki.

The formidable ice slope leading to the col was still hidden by intervening rocks, but the southern arête of Mt. Green stood sharply against the sky, and the eastern precipices of ice and rock were a sight to be remembered.

The ridge we were on continued for about 50 ft., and then steep rocks again barred the way, and as we had to choose between these and traversing northwards to the col—a feat which would require much step-cutting and loss of time, as there were ice-slopes intermingling with patches of rock—we chose the former.

When the ridge and a short ice slope brought us to the rocks, single movement was again imperative. Our direction was a gradual bearing to the right, and the traverse which ensued was difficult and insecure. After this the angles of the rocks and ice slopes grew easier, but this was counter-balanced by the increased necessity for caution, for the rocks were very rotten. The sun's rays caught us as we rose, and the glare necessitated the use of goggles.

Nothing further however transpired to interrupt the ascent, and we reached the rocks on the ridge above the col at half-past eleven o'clock (6½ hrs.). To cross the col to the arête would have been simple enough, but a glance at the terrible slabs which rose on the ridge proclaimed the ascent by that route out of the question.

The word 'impossible' is a large one to use when one knows what has been done among the Aiguilles of the Chamonix Valley, otherwise I should have had no hesitation in using the word in regard to this arête. Seen from across the Tasman Glacier, the angle of the rocks is inviting, but from the col the appearance is greatly changed. Even had the route appeared feasible, the time taken in ascending to the

col would have made the ascent impossible. With only 12 hrs. daylight it would not do to risk another night out, especially as we were in the midst of the region of ice and snow; nor could we descend with any hopes of working round the western face, for the same reason.

Our efforts were at least rewarded by the splendid view the West Coast gave us. Below was a wonderful array of glacier and serac, which would have made a pass to the West Coast at that time of the year an exceedingly difficult problem.

We could see the River Kellery winding to the sea between bush-clad hills, nor did the bank of silver cloud float up the valley before we had seen the breakers dashing on the western



THE CLIMBERS' COL.

shore. Southwards, beyond the broken ridge which leads to the Coronet Peaks, the upper snowfields of the Franz Josef Glacier showed with startling brilliance. If the eye could avoid for a moment the wonderful southern arête of Green, one could see in almost transparent whiteness the beautiful western arête of Elie de Beaumont beyond.

To the N., again, the Hochstetter Dom looked well, while beyond the snowfields of the Tasman Glacier we seemed to look upon the sea again in the pale blue sky.

We had subsisted for 7 hrs. on bread and jam, so we opened the sardine tin on the col and made a fit repast, after which, as is often the case, it was all we could do to keep

awake. The reaction from hard exercise caused a feeling of languor, of which even the beautiful and varied scenery was unable to relieve us. But an hour and a half was sufficient to put most of our rocks in shade, and we donned the rope again. I was leading in the descent, and the special enjoyment of re-discovering our route was tempered by the condition of the ice slopes, which the sun had not improved.

When we arrived at the point in the ridge which overlooked the stone-swept gully where we had made our first halt in the ascent, one of us proposed a rest. Some jam and biscuits were still left in the rucksack, and we had just got nicely settled when an avalanche of stones descended from above. For a moment we could see huge blocks against the sky, the next we were crouching against the rock, unprotected but unhurt, except for a splinter which caught Tennant in the eye. It must have been merely a speck, sufficient to inflame without damaging the eye. Most of the stones, however, made for the gully, and thence to the glacier, quite blackening it in places.

This gave us a bit of a turn, and as we were obliged to follow the route into the gully we wasted no time in admiring scenery, but plunged *in medias res*. It may have been the cause for haste or the consequence of knowing our rocks which made the descent seem easier than we had anticipated. We had, it is true, a spare rope, which we anchored in convenient places, but it was an unnecessary precaution, though it helped us in our movements.

We threw our axes and the sac down to the glacier from a convenient place, mine reaching the bergschrund between the rocks and the glacier (for even where we left the glacier there was a small schrund), and as this was a trap for falling stones I negotiated the short scramble in double quick time.

It was a relief to be out of danger, and there was nothing left to do but to descend the glacier to the hut. We arrived in darkness at a quarter to eight. Even Hans bestirred himself for once, and the fried sardines, tongue, stewed pears, and coffee which formed our dinner was an excellent conclusion to a very enjoyable day.

Perhaps it would be difficult to defend the 15 hrs. taken on the expedition. Moving on unknown ground is, however, often slow, and our party, in spite of Clark's excellence as guide and companion, comparatively speaking, was not a strong one. As the col is unmarked in the maps, we can hardly claim that the expedition or the photographs which we took of the West Coast mountains are of any particular

advantage to mountaineers or topographers. It gave us, however, the best bit of climbing we had in the district, and I was glad enough that the pigeon had not lost his way.

On the following day, Monday, March 30, we returned to the Hermitage. At the Ball hut we met two ladies whom Clark had been expecting for some days, and who made later with Miss Barnicoat and W. G. Tennant an expedition to the West Coast over FitzGerald's Pass. We took their horses on to the Hermitage, while they continued their journey on foot to the Maltebrun hut. Unfortunately they came into the bad weather we were leaving behind, and were snowed up there for a whole day.

Nothing more remains to be recorded of our experiences of the New Zealand Alps. On Friday, April 3, I left the Hermitage; on the same date Tennant started on his West Coast trip, and it was a fortnight before we met again at Greymouth.

The season was a bad one as regards weather, but in spite of this Clark found his hands full for the greater part of the time.

For twelve weeks, besides the tourists whom, as the representative of the Tourist Department, he was obliged to cater for, there were mountaineers as well; only three of us altogether, Mr. MacDonald for the first six weeks and Tennant and myself for the second, but quite a sufficient number considering there was no one besides Clark at the Hermitage who had done any real mountaineering work at all. If we were unfortunate in the weather, we were fortunate at least in finding in the only guide an enthusiastic climber and a splendid companion. Situated as he is, his opportunities of ascending peaks have in the past been limited, as very few mountaineers have visited the Hermitage. In spite of this he has accumulated a knowledge of the subject which only enthusiasm could give him.

If we had received the impression that he would prove an unsafe companion on a mountain our fears were quickly set at rest.

Perhaps recognising that an occasion had come which he could hope for in few seasons, he did all he could to secure success for the few expeditions we were enabled to make. Combining as he does a very fair knowledge of mountaineering with a facility for carrying heavy weights, we could not have had a better man.

We owe him an expression of appreciation all the more in consideration of the special circumstances of the case,

circumstances which we only happened to discover when we came to examine the tariff for our ascents.

The tariff, by the way, would need revision if much mountaineering work were done in the district, as all high peaks are classed the same, irrespective of difficulties.

We found out in conversation that he gained nothing by climbing mountains, as the tariff went to the Government, and beyond his salary as Government guide he did not receive a percentage on the ascents made. This being so, it would almost have been excusable if he had never climbed at all, instead of being able to claim, as he can, most of the important first ascents (important from a climbing point of view) which have been done in the Mt. Cook district.

HOW TO CLIMB KANGCHENJUNGA: A TOPOGRAPHICAL NOTE.

By DOUGLAS W. FRESHFIELD.

IN my recent volume 'Round Kangchenjunga' I referred in somewhat discouraging terms (pp. 171-2) to the possibility of a way to climb the mountain being found on its N.W., Nepalese, flank by the cirque at the head of the Kangchen Glacier. The problem to be faced in any attack on Kangchenjunga from the north is how to reach the gap between it and the peak (23,350 ft.) I have called 'The Twins.' On the Zemu side, unfortunately, this gap is defended by apparently impracticable and avalanche-swept precipices, while the singular buttress which, starting from the northern ridge halfway between the gap and the peak, falls into the upper basin of the Zemu glacier, is of the most repulsive aspect.*

But on the western, or Kangchen Glacier, side it is not impossible that a fairly safe line of ascent to the before-mentioned gap may be discovered. It is true that the centre of the cirque under Kangchenjunga at the head of this glacier consists of a series of rocky cliffs and icy shelves, which, even if practicable, must be too much exposed to avalanches to offer a reasonable or legitimate route to mountaineers. But at the back of 'The Twins,' † and to the left (as one looks into it) of the cirque, lies a recess which deserves a close

* See the illustration opposite p. 114 of my book.

† See panorama opposite p. 173 of my book. On p. 181 of volume xx. of this Journal I expressed myself unfavourably to this route, which commended itself from the first to Garwood.