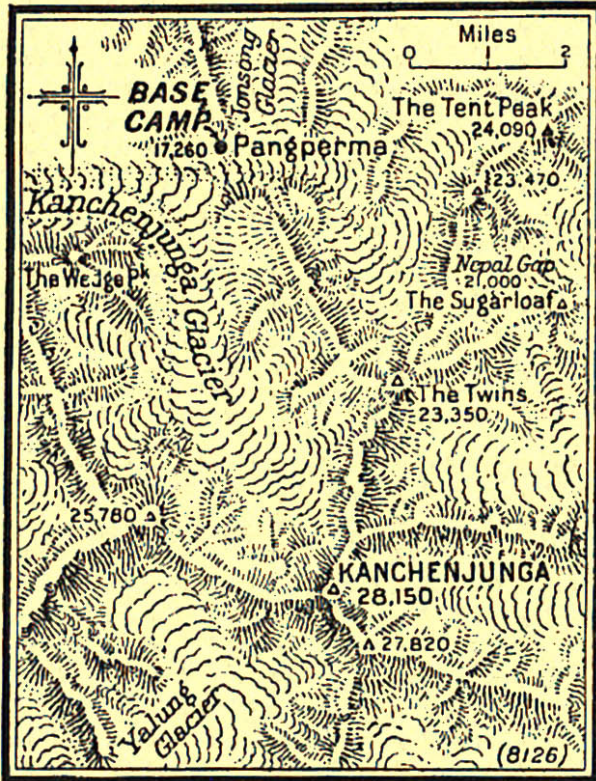


CHAPTER X

THE BASE CAMP

The temperature dropped to zero Fahrenheit in the night, and the morning of May 27 dawned cold and clear. As I pulled aside the frozen tent flaps discomfort was forgotten. It was a morning of silver and blue, silver where the rising sun sparkled on the crystals of newly formed snow, blue in the shadows. Opposite the Base Camp, rising in one clean sweep of 8,000 feet above the Kangchenjunga Glacier, was the Wedge Peak. It is appropriately named. Other mountains may be termed fanged, or sugar loafed, but the Wedge Peak seen from the north is nothing more or less than a gigantic elemental wedge. It is a brutal mountain, possessing neither the structural massiveness of Kangchenjunga, nor the fairy-like ethereal remoteness of Siniolchum. The last named mountain has been called the "Embodiment of Inaccessibility," yet who would think of Siniolchum in terms of accessibility or inaccessibility? it is too beautiful to be defiled by man. The Wedge Peak is different, its very aggressiveness challenges the mountaineer to pit himself against it, yet what mountaineer would accept that challenge? Even as I watched, it flung an icy gauntlet to the glacier, and the still morning air trembled to the dull boom of an avalanche. Look at it through glasses, if you will, and seek a way up the sliced granite precipices, but when your gaze has passed up these, it will halt aghast upon the ice slopes

above. Even imagination will boggle at the thought of having to climb them, at cutting and cutting for hour after hour, and getting—nowhere. Even imagination slips and is cast headlong down the precipices. Turn to the skyline.



By courtesy of *The Times*

There ice, not ordinary ice, sharp-edged and unbroken, but ice hacked and tortured by the winds, clings to the ridges; thin flakes of ice through which the sun gleams with a cold fire; pinnacles of fairy-like delicacy, elegant busts, daring minarets, extravagant mushrooms, a strange

goblinesque procession, drunken and tottering, frozen in a downward march.

I tore eye and mind away. Eastwards rose the Twins : peaks more staid and comfortable, not merely elemental and savage, but displaying that dignity and grandeur of the nobly proportioned and adequately buttressed. Framed in this magnificent gateway is Kangchenjunga. It is farther away, but distance enhances rather than detracts from its intrinsic grandeur, so great is its scale. It is built up of icy terraces one above the other. Rock cliffs separate each terrace. Glaciers rest on the terraces, their lower edges forming ice walls anything up to 1,000 feet in height—tiers of fortifications guarding the precipices from assault.

If the difficulties of the Wedge Peak are blatantly obvious, those of Kangchenjunga are less obvious. At first sight, the difficulties of Kangchenjunga on this side fail to impress. Glancing at the apparent angle of the mountain, with its sloping snow-covered terraces, one tended to exclaim involuntarily "It will go!" But, gradually, as first general impressions were superseded by a closer analysis, optimism was ruthlessly uprooted; the easy became difficult, the difficult impossible, and the impossible appalling.

The face of the mountain is nearly 10,000 feet in height. Compare this to some of the greatest Alpine mountainsides. The southern side of Mont Blanc rises 11,000 feet from the Val Veni, yet compared to Kangchenjunga, this cannot strictly be called a genuine mountain face, for the lower part of it is grass and forest covered, whilst it is broken up into a series of ribs and ridges radiating from

the summit of Mont Blanc. The west face of Kangchenjunga is a mountain wall of almost equal height, rising not from a green valley, but from a glacier, and cloaked in snow and ice. To compare Kangchenjunga with the Alps is like comparing a pygmy with a giant. But it is the only possible form of comparison, and the only one which the reader unacquainted with Himalayan conditions will be able to appreciate. It is a better comparison than to state that it is equal to so many Snowdons piled one on top of another, a comparison which only vaguely suggests height. Height and scale can only be thought of in terms of a more direct comparison.

The view we were looking at was similar to that seen by Mr. Freshfield. His camp, however, was a little farther up the glacier, on the corner he calls Pangperma, where the Jonsong Glacier unites with the Kangchenjunga Glacier. One thing was very clearly impressed upon us at the start, and that was that if such an expert mountaineer as Mr. Freshfield considered that Kangchenjunga offered the greatest chance of attack on this side, it must indeed be a formidable mountain.

There is probably no great peak in the Himalayas on which so much snow is precipitated every year. Strictly speaking, it is not on the main watershed of the Himalayas which separates the arid plateaux of Thibet from the northern states of India, it juts out like a rugged peninsula from the main mountain coast. The Everest group is on the main coastal watershed, and by reason of the intervention between it and the plains of India of many inferior ridges, receives the south-west monsoon after much of its fury has been spent. Such hills as there are separating



THE WEDGE PEAK FROM THE BASE CAMP

Kangchenjunga from the plains are not high enough to break the monsoon, and the mountain, and its satellite peaks, receives almost the full force of it. It would be interesting to know what the annual precipitation is on Kangchenjunga as compared to Mont Blanc. It is possible that the amount of snow that falls on the upper part of the mountain is two or three times greater than that of the Alpine giant. Only evaporation prevents the glaciers of Kangchenjunga from extending far down into the lower valleys.¹

Mr. Freshfield's analysis of the possibilities of this side of Kangchenjunga was a shrewd one. He considered that the greatest difficulties would be experienced on the lower part of the mountain. Once the upper terrace immediately under the highest summit had been gained, he considered that the final climb would be practicable. "The mountaineer," he writes, "should search to the left between the saddle which connects Kangchenjunga and the Twins." Unfortunately, this saddle is hidden by the shoulder of the Twins, and he did not see it. Had he done so, his report could not have been anything but a pessimistic one, and we, in all probability, would not have planned an attack on this side of the mountain. As it was, we hoped to find a way on to the North Ridge which connects the highest summit to the Twins.

Though Mr. Freshfield considered that the Kangchenjunga Glacier was the most likely line of attack, he was seriously under-estimating the difficulty of the mountain when he wrote that "the peak is hardly likely to be gained with less than two nights spent on its actual face." We

¹ See Appendix: "Glaciology: Snow Conditions, and Avalanches."

estimated that a minimum of six camps would be required. It is necessary to add, however, that when Mr. Freshfield made his journey, little was known about the effects of great altitude upon climbers, or the difficulties of snow, ice, and weather above 23,000 feet. On Everest six camps were established above the Base Camp, and Everest is, technically speaking, an easy mountain. Kangchenjunga is in everything but actual height an infinitely more difficult mountain than Everest.

The Base Camp was separated some five miles from the foot of the western face. At this distance it is difficult to form a just estimate of mountain difficulties and dangers. Also, we were not far enough away to escape the illusive effects of foreshortening, or near enough to be able to see whether or not a route might be found even up the glacier, that was not likely to be swept by avalanches from the huge hanging glaciers of Kangchenjunga and the Twins. Mr. Freshfield found himself in a similar predicament when examining Kangchenjunga, and although of the opinion that the most practicable route existed on this side, wisely committed himself to no definite statement. While admitting that "the whole face of the mountain might be imagined to have been constructed by the Demon of Kangchenjunga for the express purpose of defence against human assault, so skilfully is each comparatively weak spot raked by ice and rock batteries," he was yet not prepared to say Kangchenjunga was not possible. "Perseverance and good judgment may meet their reward."

Our plan, then, boiled down to this, we must reach the North Ridge, if possible, at the lowest point—the col

between Kangchenjunga and the Twins. We must climb this ridge, and make our last camp somewhere on the upper of three glacier-covered terraces, about 1,500 feet, beneath the summit under the final rock pyramid.

There was one alternative, to gain the first or lowest terrace, and from it climb directly up the mountain face, past the second to the upper terrace. If the first terrace could be gained, the upper difficulties did not appear to be insuperable. It was by no means certain, however, what sort of climbing would be found on the rocks and ice between the three terraces. Also, in the event of a heavy snowfall, retreat would be impossible, owing to the danger of snow avalanches, for the obvious route between the terraces formed a natural funnel down which they might be expected to sweep. But the chief difficulty would be in gaining the lower terrace. So far as we could see from the Base Camp, the ice wall forming the lower edge of this ran without a break across the mountainside. Only on the extreme right did there seem any possibility of getting up to it, but even if this was accomplished, the mountaineer would be exposed for over a mile to the risk of ice avalanches while traversing to the left towards the second terrace.

Kurz had previously suggested this route, but one glance at the mountain was enough, it was hopelessly and desperately dangerous. Owing to the interposing shoulder of the Twins, we could not tell whether or not the lower ice wall petered out to the left, but the general lie and form of the mountainside suggested that it swept right round to beneath the col between Kangchenjunga and the Twins. A prolonged examination revealed the disturbing truth

that there was no chance of successfully attacking any portion of the mountainside visible from the Base Camp, and that any direct assault on the face from the head of the main Kangchenjunga Glacier was foredoomed to failure. The only hope was that held out by Mr. Freshfield, that rocky shelves might lead easily upwards from the Eastern Tributary of the Kangchenjunga Glacier to the col between Kangchenjunga and the Twins. The fate of the expedition would be decided by what lay round the shoulder of the Twins.

It was a fascinating, yet depressing view. It was fascinating to let eye and mind wander over that huge mountain wall, to pass up the granite precipices, and over the defending bastions of gleaming ice, resting finally on the summit where the streamers of wind-blown snow were being torn off by the westerly wind. But it was depressing to think that where the eye might wander so easily, the body could not follow.

The weather had relapsed into a capricious vein. The morning was a beautiful one, and under the warm sun the snow vanished as one looked at it. But towards mid-day dank, snow-charged clouds began to gather. A cold and hostile wind was signalled, and came rushing up the valley ; snow began to whip across, frothing the ground.

A base camp must be something more than a starting point, it must be the G.H.Q., the hospital, and provision dump of an expedition, and not least, the peaceful haven at which tired and worn-out climbers can recuperate their strength. In fact, the psychological importance of a good base camp to a Himalayan climbing party is great both to Europeans and porters.



KANGCHENJUNGA, SHOWING PROPOSED ROUTE, FROM THE BASE CAMP

The thick, peaty turf lent itself admirably to the building of huts for the porters. Duvanel, Wood Johnson, and myself were the leading surveyors, architects, and builders. A piece of ground was levelled, and the construction of a building that was to serve both as a cookhouse and porters' quarters was commenced.

The methods adopted by Wood Johnson and myself were primitive. Having prised out stones, we piled them on top of each other, filling up the intervening spaces with clods of earth. Duvanel, however, was not so easily pleased. He displayed a praiseworthy and unexpected aptitude for the work. With that meticulous accuracy and attention to detail that are such admirable qualities in the Swiss, he proceeded to build a wall that will stand through all time. Not for him clods of earth piled higgledy piggledy, but stones that fitted into one another; and corners that *were* corners, and not tottering masses of stones and turf.

At length the task was completed. With a large sheet of canvas stretched from wall to wall as a roof, and with a low front, it presented such a curious pavilion-like appearance that it inspired me to nail to it a notice that read, "M.C.C. Members Only." Then we stood back with a sigh of satisfaction to admire the result of our labours. But the next moment a puff of wind came up the valley, and the whole front of the pavilion, which had been constructed by Wood Johnson and myself, collapsed, leaving Duvanel's wall alone standing. Perhaps our type of architecture was too Gothic in its conception; Duvanel's was Norman, and so his wall stood. Generations hence, when the descendants of Sir Henry Lunn and Mr. George Lunn run fortnightly

tours to the Pangperma Palace Hotel and Kangchenjunga, people on their way to the Helicopterdrome for the ascent of Kangchenjunga will pause and gaze in astonishment on Duvanel's Wall. Honeymoon couples will sit under it in the moonlight, and hoarse-voiced local guides will bellow opinions and lies as to its origin and antiquity.

A day or two after we had dug ourselves in, a large pole was carried up from below Kangbachen and various prayer flags were affixed to it, not only as a propitiation to the gods in the future, but in expiation for our crimes in the past. Most important of these latter was the releasing of sundry devils by the rash removal of stones during our building operations. It appeared that the sole function of stones is to act as a shelter for devils, and by moving stones we had evicted any number of them. As a result they were highly indignant with us, and unless propitiated might wreak dire vengeance upon us.

A special medicinal tent was allotted to Dr. Richter, the atmosphere of which soon became impregnated with the unpleasant and insidious odours associated with the profession of medicine. During the march Richter had trained one of the porters in elementary first-aid. This man had been presented with a Red Cross armband, the psychological effect of which, combined with Richter's teaching, had produced such an excellent effect, that he had become quite expert in the art of applying iodine and bandaging.

Soon after we arrived at the Base Camp we were submitted to the usual tests of breath-holding, pulse rate, lung pressure and capacity, etc. Though the height was but 16,500 feet, I found that I was still unacclimatized, and

could only hold my breath for twenty-five seconds. It is interesting to note that three weeks later, at a height of 20,000 feet, I was able to manage thirty-five seconds.

Acclimatisation is, of course, one of the most important factors in high Himalayan climbing. In the short season available for attempting peaks such as Kangchenjunga and Everest, it is very desirable that the climber should become acclimatised as quickly as possible. Whether a climber climbs better after he has become quickly acclimatised or slowly acclimatised is doubtful. Experience on Everest would seem to show that the likeliest man to reach the summit is not the man who acclimatises quickly early on in the expedition, but the man who acclimatises so slowly that he is at his best towards the end of the expedition. The experience of Mr. Odell on the last Everest Expedition affords an interesting example of a man who acclimatised so slowly that he was not at his best until nearly the end of the expedition, at which stage he was fitter than those who acclimatised earlier.

Against slow acclimatisation on Everest and Kangchenjunga must always be set the all important factor of time. We could not reasonably expect more than a month of good weather in which to attempt Kangchenjunga, and even this short period might well be curtailed by the early breaking of the monsoon.

It was with this in mind that Dr. Richter had devised two methods which he hoped would aid the climbers in acclimatising quickly. The first was by withdrawing 200 cubic centimetres of blood from each climber. The object of this was to lessen the blood pressure, in order to counteract to some extent the low pressure of the atmosphere.

Mountain sickness (lack of acclimatisation) is due not only to lack of sufficient oxygen in the air, but to the low pressure of the atmosphere as compared to that to which the body is accustomed normally. This low pressure reacts unfavourably on the blood and nervous centres, producing headaches, general lassitude, and in some cases, nausea.

These ill effects are automatically countered by the body, which increases the number of hæmoglobins in the red corpuscles of the blood. So far as it is known, it is only by increasing the number of these hæmoglobins that the body is able to adapt itself to the low pressure and lack of oxygen at high altitudes. It was difficult, therefore, to see what practical use withdrawal of blood could be. For one thing, taking such a large quantity of blood away must inevitably result in a temporary weakening of the body, and therefore the climber's powers. Also, it is well known that the body quickly remakes and replaces any blood that has been lost. At all events, I refused to part with my blood, and so, too, did the rest of the party with the exception of Professor Dyhrenfurth and Duvanel. The first, no doubt, through a sense of duty towards the scientific objects of the expedition, and the latter because he seemed to like it. The remaining members withstood the doctor's vampirish entreaties for their blood.

There was more to be said for the second experiment. The state of an acclimatised body at a high altitude closely resembles the effect of anæmia at a normal altitude. Anæmia is a poverty of blood due to the lack of red corpuscles and hæmoglobins, but it has been found that ordinary liver eaten by the patient has the effect of

increasing these, and thereby the quantity of blood. The mountaineer at a high altitude suffers not so much from poverty of blood, but from a lack of the essential hæmoglobins. It was hoped that eating a concentrated liver preparation would have the effect of increasing these hæmoglobins, and hastening acclimatisation. High altitude also induces wastage of the body, so that anything which would strengthen the blood is advantageous. Therefore, each climber was presented with a bottle filled with tablets of concentrated liver, three of which had to be taken three times a day. I regret to say that being somewhat absent-minded by nature, I took mine for only two days, after which I usually forgot to take them at all. Sometimes, however, I would find the bottle in my pocket, or at the bottom of my rucksack, and I would then swallow a large number of tablets at once in an endeavour to make up for what I had forgotten. Such irregularities are to be deplored, and it is to be feared that the liver tablets were not so beneficial as they might have been had I taken them more regularly. Schneider was, however, meticulous as to taking them, and I used to see him rolling his ration meditatively round his tongue, instead of swallowing them as per instructions, after meals.

In the evening we would gather in the mess tent, where, muffled up to the ears in sweaters, we would eat our dinner and endeavour to preserve some semblance of cheerfulness while wind and snow beat without. In order to delude ourselves into thinking that we were really enjoying life a porter would be told off every evening to work the gramophone, which he would keep in full blast for the duration of the meal. Once or twice the temperature was so low

that it froze up the vitals of the gramophone, which after slowing down into a dismal dirge, would finally stop altogether with a protesting groan.

It was necessary to remain at the Base Camp some days in order to rest the porters, and prepare the plan of campaign. As yet, owing to the non-arrival of the second and third parties, we were still without much necessary equipment, and what news there was as to the state of the transport was not altogether satisfactory. In fact it seemed probable that the delay to Colonel Tobin's bandobast on the Kang La, which had been caused by bad weather and lack of porters, owing to desertions from our party and our consequent inability to send back sufficient help, might result in a serious shortage of food. It was, therefore, decided to slaughter a yak which had been sent up from Kangbachen. I felt sorry for this yak, for it was a depressed looking beast, and its sad brown eyes seemed always to follow us about piteously, as though aware of its impending fate. Wood Johnson was its executioner, and the fell deed was done with Professor Dyhrenfurth's rifle. Although Wood Johnson tried on several occasions to get near to wild sheep it must be confessed that this was the only useful rifle shooting accomplished, unless the assassination of a tame pigeon at Khunza is included.

On April 29, we decided to explore two peaks, both of about 20,000 feet, to the north of the Base Camp. It was arranged that Wieland should tackle one, and Wood Johnson and myself the other. The weather was good when Wood Johnson and I set off up the stony moraine slopes above the Base Camp. From the crest we had an excellent view of our objective, a cone-like peak with

a sharp summit of snow, which formed the culminating point of a long rock ridge set at a comparatively easy angle.

We halted for some minutes in the sun to enjoy the glorious panorama of Kangchenjunga and its neighbouring peaks and glaciers. From the Tent Peak to the Wedge Peak nothing was hidden, save only the two upper tributaries of the Kangchenjunga Glacier, and in particular, the bay of the Eastern Tributary Glacier and the slopes to the North Ridge, on the feasibility of which so much depended. The upper ridges were smoking with blown snow, telling of a fierce westerly wind. One silvery banner from the crest of Kangchenjunga streamed far out against the blue sky. Since we had arrived at the Base Camp we had not seen the mountain unassailed by wind. Was it always so, we wondered. The chances of climbing the North Ridge in the face of such a relentless opponent would be nil.

Himalayan peaks are cruel. The Alps are the "Playground of Europe," the Himalayas the Playground of the gods. The Alps provide physical and æsthetical enjoyment, the Himalayas, the fiercer joys of achievement. In the Alps, when you have climbed a mountain, you want to climb it by other routes, to explore every ridge, tramp every glacier, to make a friend of it. You get to know its moods, learn to appreciate its weather vagaries. There is nothing friendly about a Himalayan peak. You feel that it is coldly hostile, that it resents intrusion. It allows no latitude, it seizes upon the slightest mistake. It will kill you if it can. And so if you climb it, you climb it only to conquer it for the sake of achievement. To do so you may

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have to mortify the flesh, steeling yourself to overcome bodily and mental weariness. When you have reached its summit, you have finished with it. There is no desire to renew acquaintances, or make a friend of Himalayan peaks, they resent familiarity. And always they will kill you—if they can.

How is it that the mountaineer should gain such an impression? Is it merely the height, the scale, the distance from civilisation, the weather, the clearness of the atmosphere, the unknown? Theoretically, I suppose, a combination of all these things. Actually, you cannot help feeling that these peaks are imbued with a fanatical hatred towards the intruder. They are as conservative in their attitude towards modernity and progress as the humans who dwell in the valleys beneath them.

We continued on our way, passing under the snout of a small glacier that descends from the north-west slopes of the Cone Peak, as we subsequently called it. This glacier is very broken, yet there were a few crevasses in it. The ice, which is curiously stratified, was hummocked and pinnacled, for its surface had been raised and broken by internal pressure. There were few actual crevasses, and many of the ice pinnacles were markedly bent. In the Alps such bending would be impossible without a fracture, and one is led to the conclusion that Himalayan ice is more plastic than Alpine ice. This plasticity is doubtless due to an enormous range of temperature.¹

Toiling up a slope of scree, we found ourselves on the crest of an easy rounded ridge of loose stones, leading upwards towards the summit. We began to experience wind,

¹ See Appendix : "Glaciology : Snow Conditions and Avalanches."

and worse still, the weather began to cloud up for the usual afternoon snowstorm.

Wood Johnson and our two servants, Ondi and Nemu, whom we had taken with us, were going slowly, but my own progress was funereal. Though we were but 18,000 feet or so above sea level, I was feeling the height severely. Every step was an effort, and every flat stone suggested a rest.

Snowflakes began to whip across, stinging our cheeks with their icy particles. Grey mist rags writhed over the ridge. We donned our spare clothing and gloves, and with heads bowed to the blast, struggled on.

The hog-backed ridge narrowed to a nearly horizontal ice ridge, abutting against the summit cone of rock and ice, which rose steeply for perhaps 200 feet. With crampons it would have been an easy matter to have walked along the crest, or on one side of this ice ridge, but without them we had to cut steps. The ridge was not possible on the side sheltered from the wind, and the crest bore the brunt of its fury. We were forced, therefore, to cut along the exposed side, which consisted of steep unbroken ice slopes falling to the glacier beneath.

We tied on the rope, and leaving the porters in a sheltered place under some boulders, advanced to the attack. There was nothing to break the cruel force of the wind. But if it was cruel, it possessed one good attribute, it completely banished my lassitude. I felt fit for anything, fit enough to cut steps for hours in the ice.

I cut steps as quickly as possible, until the whole length of rope between us was out. It was Wood Johnson's first experience of ice-work, but he is an excellent rock climber

and his sure-footedness precluded a slip. The wind was no longer blowing steadily, it was coming in gusts of increasing strength that threatened to blow us from our steps. Our clothes were becoming sheeted in ice, and our fingers were rapidly losing sensation. Retreat was inevitable. With axe picks driven well in at every step, we slowly descended the ice to the friendly rocks. According to an aneroid, we had reached a height of 20,000 feet, about 150 feet from the summit.

Our servants were glad to see us back, for sheltered from the wind as they were, it had nevertheless been a chilly wait for them. After slow movement on the ice, it was a relief to feel the blood circulating again in tingling fingertips. We rattled down the easy ridge. It had been an interesting experience. If this wind at 20,000 feet had been sufficiently strong and cold to turn us back, what would such a wind be like on the summit ridge of Kangchenjunga?

We arrived back in camp to find that Hannah and his porters had come up that day. Wieland had been more successful than us. His peak had proved a lower and easier one, and he had reached the top without difficulty, and descended before the storm broke. As this peak was to the west of ours, he had been able to look into the Eastern Tributary of the Kangchenjunga Glacier, but his report of what he had seen was not encouraging. There were no easy rock shelves leading to the North Ridge. A cirque of sheer cliffs and hanging glaciers walled in the head of the glacier, apparently barring approach to the North Ridge.

With the arrival of Hannah and much of the vital equipment necessary for establishing the high camps, Professor Dyhrenfurth decided to start on the morrow, June 1. He

hoped to establish camps One and Two. The route to the North Ridge would have to wait until a closer inspection would enable us to estimate its difficulties and dangers.

The weather would have to improve a lot. At present, it was still wintry. Only with its aid would Kangchenjunga be climbed.

That evening, Wood Johnson harangued the porters. He said, "You have had a hard time, you will have a much harder time, and you will be faced with privations and dangers. Let any man who wants go back to Darjeeling." None did. They replied with burst after burst of cheers.